

ASIAN DEVELOPMENT BANK

PROJECT ADMINISTRATION MEMORANDUM

For the

**ROAD REHABILITATION - 2 PROJECT
(LOAN 2184-INO)**

**IN THE
REPUBLIC OF INDONESIA**

October 2006

CURRENCY EQUIVALENTS

(as of 18 July 2006)

Currency Unit	–	Rupiah (Rp)
Rp1.00	=	\$0.000108
\$1.00	=	Rp9,295

NOTE

In this report, "\$" refers to US dollars

ABBREVIATIONS

AC	– Asphaltic Concrete
ADB	– Asian Development Bank
BAPPENAS	– Badan Perencanaan Pembangunan Nasional (National Agency for Program Development)
BINTEK	– The Directorate of Technical Affairs
BAPEDALDA	– Badan Pengendalian Dampak Lingkungan Daerah (Regional Environmental Impact Management Agency)
CPFPG	– Compensation Policy Framework and Procedural Guidelines
CTC	– Core Team Consultant
DGH	– Directorate General of Highways
DGLT	– Directorate General of Land Transport
DIP	– Daftar Isian Proyek (Annual Budget Allocation)
DPR	– Dewan Perwakilan Rakyat (Parliament)
DSC	– Design and Supervision Consultant
EA	– Executing Agency
EIRR	– Economic Internal Rate of Return
EIRTP	– Eastern Indonesia Region Transport Project
FY	– Fiscal Year
GOI	– Government of Indonesia
HRS	– Hot Rolled Sheet
IA	– Implementing Agency
ICB	– International Competitive Bidding
IEE	– Initial Environmental Examination
IRMS	– Inter Urban Road Management System
IS	– International Shopping (Now LIB – Limited International Bidding)
KPKN	– Kantor Perbendaharaan Kas Negara (Treasury Office)
NCB	– National Competitive Bidding
LLAJ	– Lalu Lintas Angkutan Jalan (Traffic and Transportation Management Agency)
MOF	– Ministry Of Finance
MOT	– Ministry of Transportation
MPW	– Ministry of Public Works
P2JJ	– Perencanaan dan Pengawasan Jalan dan Jembatan Provincial Agency for Planning and Supervision of National Road Works
PCR	– Project Completion Report
PIU	– Project Implementation Unit
PMM	– Project Management Manual
PMU	– Project Management Unit
PPR	– Project Performance Report

ABBREVIATIONS

PPTA	- Project Preparation Technical Assistance
PU	- Pekerjaan Umum (Public Works)
ROW	- Right of Way
RRSP	- Road Rehabilitation (Sector) Project
SC	- Steering Committee
SPM	- Surat Perintah Membayar (Payment Order)
SPP	- Surat Permintaan Pembayaran (Payment Request Form)
TOR	- Terms Of Reference
VAT	- Value Added Tax
VOC	- Vehicle Operating Cost
WIM	- Weigh In Motion

CONTENTS

	Page
LOAN PROCESSING HISTORY	(ii)
SECTOR PROJECT FRAMEWORK	(iii)
I. PROJECT DESCRIPTION	1
A. Project and Project Area	1
B. Objectives and Scope	1
C. Project Components	1
D. Special Features	3
II. COST ESTIMATES AND FINANCING PLAN	6
A. Cost Estimates	6
B. Financing Plan	7
C. Allocation of Loan Proceeds	7
III. IMPLEMENTATION ARRANGEMENTS	8
A. Executing and Implementing Agencies	8
B. Project Management Organization	8
IV. IMPLEMENTATION SCHEDULE	9
V. DETAILED COST ESTIMATES AND FINANCING PLAN DURING IMPLEMENTATION	9
VI. CONTRACT AWARDS AND DISBURSEMENT PROJECTION	10
VII. CONSULTANT RECRUITMENT	10
A. Core Team Consultants (CTC)	10
B. Design and Supervision Consultants (DSC)	10
C. Consultants for Enforcing Controls Over Truck Overloading	10
D. Consultants for Road Safety Awareness Campaign	11
E. Consultants for Road Maintenance Management,	11
F. Consultants for Capacity Building	11
VIII. PROCUREMENT	11
IX. DISBURSEMENT PROCEDURES	12
X. PROJECT MONITORING AND EVALUATION	14
A. Monitoring and Review	14
B. Inception Mission	14
C. Review Mission	14
XI. REPORTING REQUIREMENTS	14
XII. AUDITING REQUIREMENT	16
XIII. LOAN COVENANTS	16
XIV. KEY PERSONS INVOLVED IN THE SECTOR PROJECT	16
A. For the Government:	16
B. For Project Management Unit (PMU):	17
C. For the Asian Development Bank:	17
XV. ANTICORRUPTION	18

APPENDICES

- 1 The List of Road and Bridge Rehabilitation Works
- 2 Project Organization Chart
- 3 Implementation Schedule
- 4 Detailed Cost Estimates and Financing Plan
- 5 Contract Awards and Disbursements
- 6
 - A TOR for Core Team Consultants (CTC)
 - B TOR for Design and Supervision Consultants (DSC)
 - C TOR for Consulting Services for enforcing controls on truck overloading
 - D TOR for Consulting Services for implementing a road safety awareness campaign
 - E TOR for Consulting Services for training in project management and support services
 - F TOR for Consulting Services for strengthen DGH's capability in environmental and social impact management
- 7 Contract Summary (Sample)
- 8 Withdrawal Application Form (Sample)
- 9 Project Performance Report (Sample)
- 10 Executing Agency's Progress Report (Outline)
- 11 Project Completion Report (Outline)
- 12 Audit Letter (Sample)
- 13 Major Loan Covenants
- 14
 - A Copy of ADB's Anticorruption Policy
 - B Fiduciary Control, Fraud and Anti-Corruption Action Plan

LOAN PROCESSING HISTORY

MILESTONE EVENT	DATES
a. PPTA Fact-finding	-
b. PPTA Approval	-
c. PPTA Tripartite Meetings	22 January 2004 – 6 February 2004
d. PPTA Draft Final Report Submission	22 December 2003
e. Initial Consultation with Regional and Sustainable Development Department	-
f. Loan Fact-finding Mission	22 January 2004 – 6 February 2004
g. SIEE Board Circulation	03 June 2004
h. Management review meeting (MRM)	02 April 2004
i. Appraisal Mission	08-24 September 2004
j. Staff review committee (SRC)	15 October 2004
k. Loan and technical assistance coordination committee (LTACC)	-
l. Loan negotiations	31 May 2005 – 2 June 2005
m. Board consideration and Approval	25 September 2005
n. Loan agreement signing	16 June 2006
o. Loan effectiveness	12 September 2006

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>A. Impact</p> <p>Foster economic growth and improve living conditions in poor areas of Sumatra and Kalimantan.</p>	<p>Provincial gross domestic product increase at national rate</p>	<p>Provincial socioeconomic statistics and structured interview surveys of 10 selected representative communities</p>	<p>Assumptions</p> <ul style="list-style-type: none"> Overall economic growth for Indonesia maintained <p>Risks</p> <ul style="list-style-type: none"> Inadequate financial resources for road funding
<p>B. Outcome</p> <p>1. Improved vehicular access on strategic national/international roads in Sumatra and Kalimantan (including Asian and ASEAN Highways)</p> <p>2. Reduction of road transport costs</p> <p>3. Reduced premature breaking of roads</p> <p>4. Improved road safety awareness</p> <p>5. Improved governance in project implementation</p>	<p>5% annual increase in the average daily traffic; Transport time savings on all project roads.</p> <p>Decline in average one-way passenger cost and freight transport rates on 10 selected road trips.</p> <p>Reduction in average truck axle loads of 20%</p> <p>Safe road-use practices by vulnerable pedestrians.</p> <p>Reduction of complaints and related delays</p>	<p>Periodic traffic counts and surveys</p> <p>Periodic surveys</p> <p>Measurement by both weighbridges and nearby weigh-in-motion (WIM) equipment.</p> <p>Structured interview surveys of 10 representative communities</p> <p>Progress reports, project review missions, PCR, and post-evaluation reports</p>	<p>Assumptions</p> <ul style="list-style-type: none"> Central government commitment to implement new road policies Appropriateness of road sector responsibilities at central and subnational level Competitive road transport services industry <p>Risk</p> <ul style="list-style-type: none"> Irregular operation of facilities <p>Assumptions</p> <ul style="list-style-type: none"> Commitment of DGLT to awareness campaign Fiduciary Control, Fraud and Anti-corruption Action Plan sufficient to bring improvements
<p>C. Outputs</p> <p>1. Civil Works</p> <p>Reconstruction of 431 kilometers (km) of road; resurfacing and widening of 861 km; replacement or widening of 40 bridges</p> <p>2. Road Sector Policies</p> <p>2.1a Controls over truck overloading strengthened</p> <p>b. equipment provided to enforce vehicle axle-weight limits</p>	<p>Pavement roughness index lowered to less than 5m/km</p> <p>One weighbridge in Sumatra and three in Kalimantan installed and operating effectively under private-sector management</p>	<p>Direct measurement, progress reports, PCR, and post-evaluation reports</p> <p>Progress reports, project review missions, PCR and post evaluation report</p>	<p>Assumption</p> <ul style="list-style-type: none"> Good quality contractor performance <p>Risk</p> <ul style="list-style-type: none"> Insufficient funds for routine maintenance <p>Assumptions</p> <ul style="list-style-type: none"> Effective private-sector management in collaboration with the governmental agencies

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
2.2 Affected communities aware of road safety issues	Community leaders actively involved and informed Changes in road-related behavior	Surveys conducted, progress and task completion reports, project review missions and PCR	<ul style="list-style-type: none"> Targeted communities apply the road safety principles, especially for vulnerable groups
2.3 New approach in road maintenance developed	Diagnostic assessment of the road agencies Existing means and methods of road maintenance programs and procedure reviewed New road maintenance and management procedures developed and implemented	Consultant progress and task completion reports, project review missions, and PCR	<ul style="list-style-type: none"> DGH is willing to apply new approach in road maintenance
3. Capacity Building and Training			
3.1 Project Management and Engineering Support Practices	400 road agency staff in the provinces trained	Consultant progress and task completion reports, project review missions, and PCR	<ul style="list-style-type: none"> Diagnosis, methods, procedures, and training efficiently applied in working practices.
3.2 Strengthened environmental and social impact management	300 staff of the regional departments trained	Progress report and task completion reports, project review missions, and PCR	<ul style="list-style-type: none"> Training applied in road design.
4. Fiduciary Control, Fraud, and Anticorruption Action Plan	Actions implemented as required	Progress reports, project review missions, and PCR	<ul style="list-style-type: none"> Action plan properly designed to improve governance
D. Activities			Inputs <ol style="list-style-type: none"> Civil works and supervision consulting services for \$65.1 million foreign currency costs and \$62.5 million local currency costs (total \$127.6 million) funded by ADB Consulting services for \$3.9 million for road sector policies Consulting services for \$0.6 million for capacity building and training Government funding of civil works local costs of \$37.8 million Government counterpart staff and resources for local consulting services
1. Recruit international and domestic consultants by November 2006			
2. Review designs and contract packages for first year links by October 2006			
3. Award first year rehabilitation contracts by December 2006			
4. Rehabilitate selected road sections and bridges by March 2010			
5. Implement improved procedures for controlling overloaded trucks by June 2008			
6. Implement road safety awareness campaign by December 2007			
7. Implement strengthened road maintenance management by June 2008			
8. Implement strengthened environmental and social impact management by April 2008			

ADB = Asian Development Bank, ASEAN = Association of Southeast Asian Nations, DGH = Directorate General of Highways, DGLT = Directorate General of Land Transportation, m = meter, PCR = project completion report, P2JJ = road and bridges planning and management unit, the provincial level representative of DGH.

I. PROJECT DESCRIPTION

A. Project and Project Area

1. The Project is designed to support the Government's program of rehabilitating strategic national road links in Sumatra and Kalimantan. The links lie in trans-island corridors and serve interregional trade and local traffic, providing a corridor from Indonesia to the Association of South East Asian Nations (ASEAN) highway through links with Malaysia and Brunei. The Project will strengthen the capacity of central and provincial agencies to maintain and protect road surfaces and reduce the risk of accidents in areas of growing traffic. The Project includes training and capacity building subcomponents. The executing agency of the Project is the Directorate General for Highways (DGH) of the Ministry of Public Works (MPW).

2. The road and bridge works are being implemented in two phases: Phase 1 consisting of 15 road sections packages and Phase 2 consisting of 11 road section packages. The civil works comprise reconstruction, periodic maintenance, road betterment, and bridge rehabilitation and replacement.

B. Objectives and Scope

3. The main objectives of the project are to foster mobility, trade, investment and economic growth, help reduce poverty and maintain national cohesion by rehabilitating **1,292** km of deteriorated links in the strategic national road networks of Sumatra and Kalimantan. The chosen links lie along trans-island corridors of Sumatra and Kalimantan that are the main interregional routes linking producing areas and markets in the country's two largest islands.

4. In support of this, and to secure sustainability of benefits, the project also aims to:

- (i) ensure that physical works are carried out to standards acceptable to ADB and Government;
- (ii) ensure that potential negative impacts on adjacent communities and the environment are eliminated or managed carefully and fully compensated;
- (iii) strengthen the capacity of central and regional agencies in project provinces to plan, fund, execute and monitor effective road maintenance;
- (iv) strengthen enforcement of regulations designed to prevent truck overloading in selected project provinces, thereby reducing the risk of road pavement damage; and
- (v) raise community awareness of the risks of traffic accidents

C. Project Components

5. The Project consists of three major components: (i) Road Rehabilitation, (ii) Road Sector Policy, and (iii) Capacity Building and Training. Detailed features of the components and the associated consulting services are in Table 1.

Table 1: Project Component

Component	Feature	Consultant Services Required
Road Rehabilitation	<ol style="list-style-type: none"> 1. Total length of works is 1,292 km: 2. 654 km in Sumatra 3. 638 km in Kalimantan. 4. 40 timber/log bridges 	<ol style="list-style-type: none"> 1. Core Team Consultant 2. Two Teams for Design and Supervision Consultant
Road Sector Policy	<ol style="list-style-type: none"> 1. Axle-Load controls to reduce damage to project links – 4 weigh stations with WIM 2. Development of new approaches to road maintenance management 3. Community road safety awareness campaign 	<ol style="list-style-type: none"> 1. Truck Overloading Control Consultant 2. Road Maintenance Management Consultant 3. Road Safety Awareness Campaign Consultant
Capacity Building and Training	<ol style="list-style-type: none"> 1. Training in Project Management and Engineering Support Practices 2. Strengthening capabilities in environmental and social impact management 	<ol style="list-style-type: none"> 1. Training Consultant 2. Environmental and Social Impact Consultant

1. Road Rehabilitation Component

6. The project's road rehabilitation component comprises **1,292** km of works: **284** km of betterment and **370** km of periodic maintenance over 20 links in North Sumatra, West Sumatra, Riau, Jambi, South Sumatra and Lampung, and **474** km of betterment and **164** km of periodic maintenance over 13 links in West, Central, South and East Kalimantan. 19 timber/log bridges in North Sumatra and 21 timber/log bridges in West, Central and South Kalimantan will be replaced. The periodic maintenance and betterment works for roads and bridges will bring their condition to a level where they can be maintained with normal maintenance. The quality and reliability of this maintenance will be enhanced through complementary activities under the project's capacity-building component.

7. The periodic maintenance works for roads mostly comprise asphaltic concrete (AC) or hot-rolled sheet (HRS) overlays, reshaping of shoulders and improved side and cross drains. Betterment works will be on sections too heavily damaged for periodic maintenance. They will include pavement reconstruction, drainage improvements, strengthening and minor widening (within the existing Right of Way - ROW) of pavements and shoulders, and resurfacing. Pavement marking and safety barriers and signs will be included to improve safety. No land acquisition, compensation or resettlement will be required.

8. Consulting services arranged into a core team and two field teams for Sumatra and Kalimantan region that will assist in (i) identifying road link subprojects for implementation, (ii) reviewing designs, (iii) evaluating tenders, (iv) supervising and certifying satisfactory completion of civil works, (v) ensuring quality standards satisfactory to DGH and the ADB, and (vi) monitoring project impacts.

2. Road Sector Policy Component

9. To reduce road damage by overloaded trucks, weighbridges will be upgraded, new equipment provided and management arrangements involving the private sector introduced, following the model developed under the Road Rehabilitation Sector Project (RRSP). These will be in three locations in Kalimantan, and one in Sumatra where overloading occurs. A consultant will assist with site selection, supervision of minor civil works, installation of equipment, award of management contracts and monitoring of effectiveness.

10. To reduce the risk of traffic accidents involving pedestrians during and following project implementation, a community road safety awareness campaign will be carried out to make local communities aware of the increased risks associated with higher-speed traffic. This will focus on vulnerable groups in areas newly-exposed to higher traffic volumes and speeds, notably children and the aged, and will be followed by a review of its effectiveness in raising levels of safety awareness. A consultant from an organization skilled in community awareness campaigning will assist provincial DGLT staff in this task.

11. To ensure the sustainability of investments in road construction and rehabilitation, routine and periodic road maintenance is essential. Although road maintenance in Indonesia is increasing, it is still limited. A consultant will assist determining new approaches and assess provincial capabilities and training and develop pilot projects for implementation.

3. Capacity-Building and Training Component

12. Capacity building and training components will be included in the Project to help secure sustainability of benefits by strengthening arrangements and procedures for:

- Construction Contract Law
- Landslides control, Slope stability and Retaining Wall
- Financial Management and Control
- Road & Bridge Maintenance
- The role of Specification in Road & Bridge works
- strengthening DGH's capacity to identify and manage environmental and social impacts; and strengthening DGH's support for regional road agencies

D. Special Features

1. Civil Works for Road Rehabilitation

13. To increase project readiness, the consultants recruited under the RRSP were used to prepare the Project under advance procurement action. The contract of RRSP core team and design and field team consultants have been amended to incorporate the detailed designs, and bidding documents for the rehabilitation works scheduled to be implemented in the first year of the Project is being prepared by the bridging consultants under TA3989-INO.¹

14. The assessment of rehabilitation needs for each link has been based on Inter-Urban Road Management System (IRMS) condition and traffic data and information collected and inspections made during field surveys. Widening was considered when the existing road failed to meet DGH pavement and shoulder width standards. The proposed rehabilitation in West and

¹ TA3989-INO: Road Rehabilitation 2 Project

Central Kalimantan will require significant amounts of fill with long haul distances, so a soil-cement base design has been used there because stone aggregates are scarce and traffic volumes low. In Sumatra stone aggregates are readily available.

15. The proposed road and bridge rehabilitation works are summarized in **Appendix 1**. The total length of works is **1.292 km**: **654 km** in Sumatra and **638 km** in Kalimantan.

2. Axle-Load Control to Reduce Damage to Project Links

16. Past efforts to control truck overloading has been unsuccessful. The attempt being made under the RRSP in Jambi and West Java Provinces with private-sector management of weighbridges and independent weigh in motion (WIM) monitoring, will provide incentives for more effective enforcement. The Project therefore includes a component to extend the experiment into three locations in Kalimantan and one in Sumatra where road damage due to heavily-laden trucks is a problem. At each selected site, the existing weighbridge will be rehabilitated and modern, computer-controlled equipment installed. Contracts will be let, based on competitive tender, for management of the sites. Strict record-keeping and reporting arrangements will be required as a condition of contract, monitored by WIM equipment installed nearby. Provision is made in the project for underwriting the cost of operations over 24 months, with effectiveness monitored and evaluated by consultants.

3. Road Safety Awareness

17. Efforts to improve traffic safety by treating accident black-spots and establishing investigation units are underway under the RRSP; additional assistance with implementing road safety policies is also provided for. An aspect of road safety not covered by these, however, is the poor level of awareness of accident risk among children and other vulnerable groups in communities living adjacent to rehabilitated roads. On project links in Kalimantan rehabilitation will result in higher traffic volumes and vehicle speeds. Villagers will be unfamiliar with the increased accident risk. A program to enhance community awareness, focused on schools and community meetings, with suitable materials prepared for distribution among the most vulnerable, is included as a component of the project.

4. Road Management and Engineering Support Practices for Project Sustainability

18. The economic evaluation of rehabilitation for each project link assumes that it will be maintained under an appropriate regime of periodic and routine maintenance for at least 20 years. This is determined by IRMS based on the type, condition and residual strength of the road pavement, the type of rehabilitation applied and levels of traffic (hence axle-loads) the road is predicted to carry. If this does not eventuate, the project's EIRR will be less than predicted.

19. To ensure that it does eventuate, the Project will train staff of Provincial Agency for Design and Supervision of National Road works (P2JJ) and Provincial Public Works Services (Dinas PU) in construction contract law, landslides control, slope stability and retaining wall, financial management and control, road & bridge maintenance, and the road & bridge works specification.

5. Environmental Management

20. The proposed project is classified as Environmental Category B. The links lie on three main trans-island corridors in Sumatra and Kalimantan. Initial environmental examination (IEE) reports have been prepared in accordance with ADB guidelines. Environmental impacts are analyzed in corridor basis and found that there will be no major adverse environmental impacts. All road rehabilitation will be along existing alignments with no land acquisition. Potential adverse environmental impacts are temporary, minor, localized and easily mitigated. The project will provide monitoring and mitigation measures, including prevention of soil erosion and vegetation damage, proper drainage, protection of nature reserves and protected forests from construction activities, protection of endangered species and their habitats, road safety measures and prevention of exposure to potentially hazardous materials and wastes.

6. Social Aspects and Poverty Reduction

a. Poverty Reduction

21. The Project will make transport services more affordable. This will benefit the poor directly and indirectly. To the extent that they use transport services to access income and welfare opportunities, the poor will benefit directly, though those below the poverty line are a small proportion of commercial transport users and their basic welfare services are available close to most villages. Over the longer term, lower transport costs and better service availability will encourage inward investment and in-migration, raising community spending and increasing cash-earning opportunities. Better accessibility will make teachers and health workers more willing to take positions locally, helping raise education and health standards. This is more significant in the remote areas served by project roads in Kalimantan than along established routes in more developed parts of Sumatra.

b. Involuntary Resettlement

22. Project road alignments all follow the existing centerline and remain within the existing ROW. Pavement and shoulder widening will also remain within the existing ROW in all cases. Surveys during project preparation determined that there is no settlement or economic activity within the ROW requiring relocation. Links with any possibility of land acquisition or resettlement were deleted from further consideration at the screening stage. The project will require no displacement of residents or business activities nor land acquisition. It will have no adverse impacts on adjacent property or religious, cultural or historical sites. To cope with the unlikely event that land acquisition or resettlement might be necessary following detailed design, DGH has prepared a Compensation Policy Framework and Procedural Guidelines (CPFPG) to codify procedures for verifying road works impacts, deciding compensation eligibility and entitlements, undertaking and monitoring resettlement and compensation, and providing for redress in case of complaint or grievance.

7. HIV/AIDS and Transports

23. A “piggy back” Technical Assistance (TA), titled HIV/AIDS and Transport, was proposed to be undertaken by the ADB to address specific HIV/AIDS issues identified during project appraisal, particularly the risks to mobile workers engaged under subproject contracts. The proposed implementing agency for the TA is the Agency for Construction and Human Resources Development (Badan Pembinaan Konstruksi dan Sumber Daya Manusia – BPKSDM) of the Ministry of Public Works and services as expected to be provided in parallel to

civil works packages. The draft TOR and consulting services will be provided to DGH for comments prior to finalization.

II. COST ESTIMATES AND FINANCING PLAN

A. Cost Estimates

24. The Project is estimated to cost **\$215.7** million (Table 2). This includes-value added tax, supervision costs, physical and price contingencies on all base costs, capitalized interest, and commitment fees charged during construction. The foreign exchange cost of **\$76.2** million accounts for **35%** of the total cost. The local currency component of **\$139.5** million equivalent constitutes the remaining **65%**.

**Table 2: Cost Estimates
(\$ million)**

Item	Foreign Exchange	Local Currency	Total
A. Base Cost^a			
1. Road and Bridge Rehabilitation			
a. Civil Works			
i. Road Rehabilitation (Sumatra)	36.6	49.6	86.2
ii. Road Rehabilitation (Kalimantan)	25.8	44.2	70.0
b. Consulting Services			
i. Core Team ^b	1.5	1.7	3.2
ii. Field Teams	1.2	4.7	5.9
2. Road Sector Policies/Community Assistance			
a. Enforcing Controls over Truck Overloading			
i. Consulting Services	0.2	0.3	0.5
ii. Civil Works	0.4	0.1	0.5
iii. Equipment ^c	1.4	0.7	2.0
b. Road Safety Awareness	0.0	0.2	0.2
c. New approaches to road maintenance management	0.2	0.4	0.6
3. Capacity Building and Training			
a. Environmental and Social Management	0.0	0.3	0.3
b. Project Management and Engineering Support Practices	0.0	0.3	0.3
Subtotal (A)	67.4	102.5	169.8
B. Contingencies			
1. Physical ^d	0.0	6.8	6.8
2. Price ^e	0.0	3.7	3.7
Subtotal (B)	0.0	10.4	10.4
C. Taxes^f	0.0	18.0	18.0
D. Interest during Construction and Other Charges	8.8	8.6	17.4
Total	76.2	139.6	215.7

^a 2004 prices.

^b Including incremental operational costs for the project management unit (PMU).

^c Including trial operation and maintenance costs for private operators.

^d 4% of base cost.

^e International and domestic cost escalation factors applied.

^f Including value-added tax, customs, and duties.

Source: ADB estimates.

B. Financing Plan

25. The Government has requested that ADB provide a loan of **\$151.0** million to finance 100% foreign exchange costs of (**\$76.2** million equivalent) and **54%** of local currency costs (**\$74.8** million equivalent). The remaining **\$64.7** million in local currency costs will be borne by the Government. Table 3 summarizes the project financing plan. Of this amount, 70% of the project costs will be funded from the project loan and 30% from government resources.

Table 3: Financing Plan
(\$ million)

Source	Foreign Exchange	Local Currency	Total Cost	%
ADB	76.2	74.8	151.0	70
Government	0.0	64.7	64.7	30
Total	76.2	139.5	215.7	100

Source: ADB estimates.

C. Allocation of Loan Proceeds

26. The allocation of loan proceeds is detailed in Table 4. The table sets forth the categories of goods, services and other items to be financed out of the proceeds of the Loan and the allocation of amounts of the Loan to each such Category or subcategory.

Table 4: Allocation of Loan Proceeds

CATEGORY				Percentage of ADB Financing
Category Number	Item	Amount Allocated (\$'000)		Percentage
		Category	Subcategory	
1	Civil Works	118,985		69*
1A	Road and Bridge Rehabilitation – Sumatra		65,345	69*
1B	Road and Bridge Rehabilitation – Kalimantan		53,130	69*
1C	Enforcing Controls over Truck Overloading		510	91*
2	Equipment	2,030		100**
3	Consulting Services	11,020		100**
3A	Consulting Services for DGH		9,670	100**
3B	Consulting Services for DGLT		750	100**
3C	Consulting Services for BAPPENAS		600	100**
4	Interest and Commitment Charge	17,465		100
5	Unallocated	1,500		
	Total	151,000		

Note:

* percentage from total expenditures including taxes

** percentage from foreign or local expenditures excluding taxes and duties

III. IMPLEMENTATION ARRANGEMENTS

A. Executing and Implementing Agencies

27. The overall Project Organization is shown in **Appendix 2**, and particular aspects are reviewed in this section. The Executing Agency (EA) and the lead Implementing Agency (IA) for the Project is DGH of MPW. Three Project Implementing Units: (i) DGH for road-related civil works, consulting services and training components, (ii) DGLT for project components associated with controls over truck overloading and road safety awareness and (iii) BAPPENAS for project component for new approaches to maintenance management have been established to implement the Project. A Steering Committee (SC) representing BAPPENAS, MOF, MPW and MOT will be established under the chairmanship of BAPPENAS to monitor and coordinate project implementation.

B. Project Management Organization

1. Project Management

28. The Directorate of Planning (Bina Program) in DGH will be responsible for overall project management, which will be undertaken on a day-to-day basis by a Project Management Unit (PMU) established within DGH. Project components relating to design and implementation will be managed by the Directorate of Road and Bridge-Eastern Region for provinces in Kalimantan, and by the Directorate of Road and Bridge - Western for provinces in Sumatra Region. The Directorate of Technical Affairs, Subdirectorates of Road Engineering is responsible for checking road designs. The DGH has administrative units located in each province (P2JJ) that are responsible for supervising the design and supervision consultant in the respective province.

29. The PMU will be headed by a manager experienced in managing donor loan projects. He/she will be responsible for day-to-day implementation and preparation of progress reports, ensuring that financial and reporting requirements are met and ADB procurement procedures followed with full coordination with PIU. The PMU will be established under Directorate of Planning, DGH, is chaired by the Director of Planning in DGH. The PMU will be assisted by full-time competent staff in adequate numbers and supported by a core team of consultants and two regional design and supervision consultants. The PMU and its consultants will determine annual works program, monitor progress in project implementation and compliance with Bank policies, procurement, performance indicators, physical achievements and expenditures and preparation and submittal to the ADB of monthly, quarterly and annual progress reports on overall project implementation.

30. Standards and procedures for environmental management and monitoring will be prepared by the Sub-Directorate for Environmental Engineering of the Directorate of Technical Affairs and administered by Regional Environmental Impact Management Agencies (BAPEDALDA) in each Province.

31. DGLT will be responsible for truck overloading and road safety components. It will also appoint a PIU headed by an experienced project manager to be responsible for day-to-day implementation and progress reporting. He/she will ensure financial and reporting requirements are met and ADB procurement procedures followed. Consultants financed under the project to assist with strengthening controls over truck overloading will assist him/her. Through the PIU and Dinas LLAJ units in the project provinces, DGLT will be responsible for preparing and

awarding consulting services contracts (including services for the road safety awareness campaign), minor civil works, weighbridge/WIM equipment procurement and installation, and operational management contracts in accordance with ADB procurement procedures and standards.

32. BAPPENAS will be responsible for new approaches to road maintenance management and related consulting services. It will also appoint a PIU headed by an experienced project manager to be responsible for day-to-day implementation and progress reporting, ensuring that financial and reporting requirements are met and ADB procurement procedures followed. Consultants financed under the project to assist with developing new approaches to road maintenance management will assist him/her. Through the PIU, BAPPENAS will be responsible for preparing and awarding consulting services contract and implementing pilot road maintenance projects in accordance with ADB procurement procedures and standards.

33. ADB noted during the inception mission that BAPPENAS reiterated their previous request to ADB to change the financing of the Developing New Approaches to Road Maintenance Management component, to be implemented by BAPPENAS, from the Loan to a grant. The Mission advised that whilst limited grant funding has been identified, it is not sufficient to cover the full scope of these services. As ADB requires this policy component to be implemented, further discussions are required between BAPPENAS, the EA and ADB to revise the scope of services to match with available grand funding.

2. Project Management Manual

34. Project management and administration will, mostly, be undertaken by staff of the various implementing agencies throughout the region. The PMU will prepare a comprehensive Project Management Manual (PMM), that documents all requirements and procedures that must be followed by all parties, covering such areas as:

- (i) Procurement procedures and requirements
- (ii) Budgeting, accounting, disbursement, auditing and financial management
- (iii) Project management information and reporting systems and procedures

35. Because of the very large number of separate agencies, project managers and procurement committees involved, a comprehensive training program will be required to be undertaken prior to project implementation.

IV. IMPLEMENTATION SCHEDULE

36. The tentative implementation schedule is provided in **Appendix 3**. The project implementation schedule should be regularly monitored. An S-Curve should also be established to determine the completion rate, and has to be included in the quarterly reports.

V. DETAILED COST ESTIMATES AND FINANCING PLAN DURING IMPLEMENTATION

37. The PMU will prepare detailed project cost estimates for all major project components and a detailed financing plan for the Project shown in **Appendix 4**. These tables will be revised and updated annually or more often if necessary, based on progress with contract awards and actual implementation of the Project, and attached to the quarterly progress reports to ADB. The

VI. CONTRACT AWARDS AND DISBURSEMENT PROJECTION

38. PMU will also prepare annually the forecast of contract awards and disbursements under the Project on a quarterly basis for one year ahead, in the format shown in **Appendix 5**. This should be submitted to ADB by 15 January of each year.

VII. CONSULTANT RECRUITMENT

39. A number of consultants will be required to support the Government in the undertaking of works associated with this loan. The consultants, consisting international and national consultants will be required to assist with (i) design, design review, coordination and construction supervision of civil works, (ii) strengthening enforcement of truck axle-load limits, (iii) a road safety awareness campaign, (iv) develop new approaches to road maintenance management, (v) capacity building in environmental and social impact management, and (vi) project management and engineering support practices. The consultants will be engaged in accordance with ADB's Guidelines on the Use of Consultants and other arrangements satisfactory to ADB for engaging domestic consultants.

A. Core Team Consultants (CTC)

40. The terms of reference (TOR) for CTC are described in **Appendix 6A**. They will comprise a number of foreign and national experts with inputs over a total period of 50 months. The CTC will assist DGH with project implementation by (i) overall project implementation and coordination, (ii) reviewing updated designs and cost estimates prepared by P2JJ and the design and supervision consultants, (iii) advising DGH and the P2JJ in the preparation, evaluation, and awards of tenders for civil works, (iv) coordinating construction supervision, (v) monitoring contractors' conformity with environmental and social impact controls and (v) monitoring selected project impacts.

B. Design and Supervision Consultants (DSC)

41. TOR for DSCs are described in **Appendix 6B**. There will be two separate consultant packages; DSC1 for Sumatra region, and DSC2 for Kalimantan region. The consultants will comprise a number of foreign and domestic experts with inputs on site during preparation and implementation of each project. The objectives will be to assist P2JJ units, working through the Directorate of Road and Bridge Eastern Region for provinces in Kalimantan and the Directorate of Road and Bridge Western Region for provinces in Sumatra, with design review (Phase 1 projects) and design preparation (Phase 2 projects), the preparation, evaluation and awards of tenders for civil works, and supervision and certification of construction works. The total period of services about 36 months for DSC-1 and 39 months for DSC-2.

C. Consultants for Enforcing Controls Over Truck Overloading

42. The TOR for the consulting services for enforcing controls over truck overloading are described in **Appendix 6C**. They will comprise a number of foreign and national expert inputs over a two-year period. The objective will be to reduce the incidence of axle-loads in excess of legal limits. This will be done in conjunction with DGLT and Dinas LLAJ units by establishing four privately-managed weighbridges at selected locations in Sumatra and Kalimantan where trucks are commonly overloaded and road pavements susceptible to damage. The tasks will involve assisting with selection of suitable locations, design of weighbridge rehabilitation works,

specifications for new weighbridge and WIM equipment, preparation and award of tenders for site rehabilitation, equipment installation and weighbridge operation, supervision of site preparation, monitoring of operators' performance and evaluation of their effectiveness in reducing overloading.

D. Consultants for Road Safety Awareness Campaign

43. The TOR for consulting services for road safety awareness campaign are described in **Appendix 6D**. This campaign will be carried out by a number of foreign and national experts experienced in social marketing and public awareness campaigning. The aim will be to help Dinas LLAJ reduce the risk and severity of road traffic accidents on project roads in West, Central and South Kalimantan where exposure to traffic is relatively recent and roadside communities vulnerable. This will be done by raising the level of community awareness, particularly among children and other vulnerable groups, through a campaign making effective use of available media and involving briefings at schools and other community forums. The effectiveness of this campaign in changing community attitudes to accident risk will also be monitored. The total period of services about 12 months

E. Consultants for Road Maintenance Management,

44. The TOR for consulting services for new approaches to road maintenance management are described in **Appendix 6E**. The objective is to strengthen the capacity and procedures in the project provinces to undertake delegate responsibilities for maintaining national roads. This will be achieved through developing new approaches, such as combined hands-on technical advice, on-the-job training and formal workshops in selected province and Jakarta. Topics to be covered will include all aspects of maintenance planning, maintenance contract types, scheduling, execution and supervision. The services will comprise of a number of foreign and domestic experts with inputs over a total period of **14** months.

F. Consultants for Capacity Building

45. The TOR for consulting services for training are described in **Appendix 6F**. TOR for training services to aim to strengthen DGH's capabilities in funding, scheduling, executing and monitoring road maintenance and in the project provinces' regional road agencies procurement, project management and implementation and financial management skills. They will comprise a number of foreign and domestic experts with inputs over a total period of 12 months. This consultant will provide training workshops and the supply of training materials.

46. The TOR for training services to strengthen DGH's capabilities in environmental and social impact management are described in **Appendix 6G**. They will comprise a number of domestic experts together with training workshops and the supply of training materials. The aim will be to establish the capability and procedures for incorporating environmental and social impact evaluation and management in the routine process of project preparation, implementation and monitoring. The total period of services about 18 months.

VIII. PROCUREMENT

47. All procurement for civil works to be financed from the Project loan should be in accordance with ADB's *Guidelines for Procurement*. Contracts valued in excess of \$1.0 million for goods and \$1.5 million for civil works will be procured by international competitive bidding

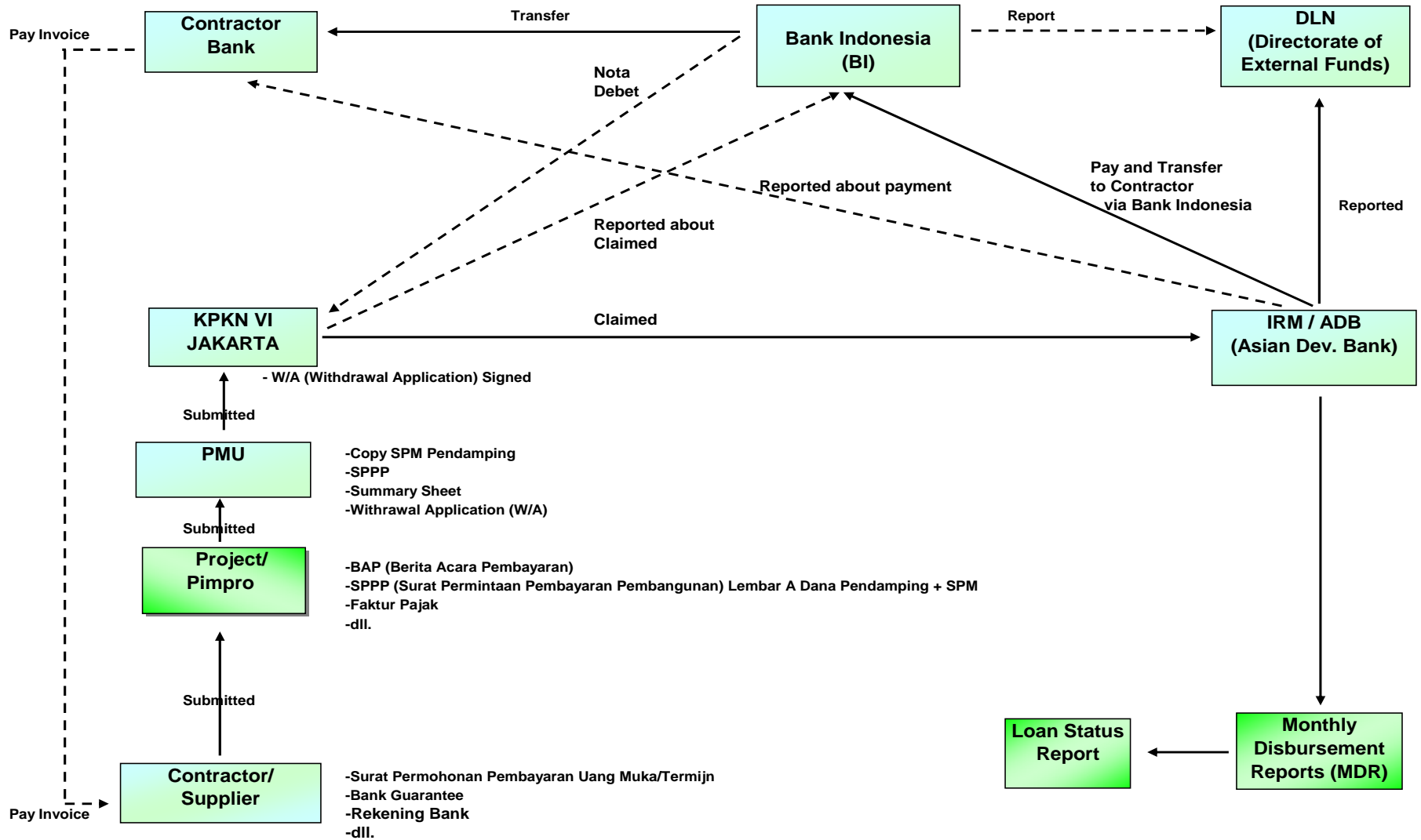
(ICB), with smaller civil works contracts by national competitive bidding (NCB). Supply contracts not exceeding \$1.0 million will be procured through limited international bidding (formerly international shopping/IS). A summary of contract should be attached in any submission of signed contract to ADB (**Appendix 7**).

IX. DISBURSEMENT PROCEDURES

48. Payments should be certified by the Engineer in the form of monthly interim payment certificate for the civil works contracts. The monthly certificates will then be split into the relevant funding portions for each contract (ADB and the Government) by the sub project manager. The sub-project manager will provide payment request form (SPP) and if this is in order and supported by approved DIP, the treasury department (KPKN VI Jakarta) will issue a Payment Order (SPM). The treasury department (KPKN VI Jakarta) will submit a separate Withdrawal Application for each request for each currency. The application must include the claim or invoice from the contractor and summary of work progress certified by the Engineer and approved by the borrower's authorized representative. The ADB share of the payment will be credited to the contractor's account via Bank of Indonesia. Details of the above process are provided in Table 5 below.

49. The loan proceeds will be disbursed in accordance with ADB's Loan Disbursement Handbook (2001). The loan document provides for the EA to establish an Imprest Account of \$1,500,000 no later than 2 months after the loan is effective, which is to be utilized for payment less than \$150,000. However, since all procurements will be conducted on central and provincial basis, an imprest account is not relevant and that direct payment method should be used. The sample of withdrawal application form for direct payment is in **Appendix 8**.

TABLE 5 DIRECT PAYMENT PROCEDURES FOR ADB (ASIAN DEVELOPMENT BANK)



X. PROJECT MONITORING AND EVALUATION

A. Monitoring and Review

50. ADB and DGH will carry out a comprehensive review on all aspects of the Project in respect of the project implementation or at intervals agreed upon by the both parties. Based on the findings of this review, adjustments in the scope of the Project, design and implementation arrangements may be considered by the both parties.

B. Inception Mission

51. An inception mission was fielded in September 2006 to ensure that all administrative matters pertaining to the Project are properly in place, and a working relationship is established between concerned ADB staff and DGH, DGLT and BAPPENAS staff. Details relating to loan effectiveness, report requirements, accounting system, compliance with loan covenants, disbursements procedures and withdrawal applications has been clarified during the mission. At the completion of the inception mission, a Project Administration Memorandum (PAM) is delivered.

C. Review Mission

52. Review missions will be conducted to monitor overall progress of the Project, review expenditures and cost estimates and discuss problems and issues causing delays in project implementation. First review mission is tentatively set in March 2007 and succeeding review missions will be fielded as and when required, at least once a year. Special Project Administration Missions will be fielded to review specific subprojects that are facing implementation delays to determine time bound solutions to remedy the problems. A mid-term review (MTR) mission will be fielded when the project reach approximately 50%. The MTR mission assesses whether attainment of a project's immediate objective (purpose in terms of the design and monitoring framework) is still likely, and to propose necessary correction when required.

XI. REPORTING REQUIREMENTS

53. A major project management function of the PMU and its consultants will be to monitor the overall performance of the project and its implementation. A number of separate monitoring and reporting tasks can be identified:

- (i) The administrative, physical and financial progress of implementation of the project components;
- (ii) The extent to which required implementation procedures are being complied with; and
- (iii) The extent to which project objectives are being achieved.

54. The monitoring and reporting arrangements for the first two tasks are enumerated below.

1. Project Performance Reports (PPRs).

55. PMU with the assistance of the Core Team Consultant should prepare PPRs on monthly basis. The reports will monitor progress of the project implementation, contract awards and disbursement projection, project implementation issues, the status of expected impact and outcome, covenants, and various aspects to be agreed, as shown in **Appendix 9**.

2. Monthly and Quarterly Reports

56. The PMU shall review and consolidate all reports prepare by the project consultants, including monthly and quarterly progress reports during their assignments, and submit the reports to ADB. The outline of the report is in **Appendix 10**.

3. Technical and Final Reports of Consultants.

57. PMU shall provide copies of technical reports of the project consultants to ADB.

4. Annual Progress Report on the Project.

58. With the assistance of CTC, the PMU shall prepare an annual progress report summarizing all aspects of project implementation over the preceding 12 months, and detailing project implementation plans for the coming year.

5. Project Completion Report.

59. Within six months of the loan closing date, DGH shall submit to ADB a Project Completion Report in an agreed format as shown in **Appendix 11**.

6. Performance Monitoring.

60. Requirements for Performance Monitoring are shown in Table 4.

Table 4: Performance Monitoring Indicators

No.	Indicator	Responsibility
(i)	Average road roughness over the rehabilitated road segments, measured in IRI unit.	DGH
(ii)	Continuous 24-hour classified traffic counts, carried out over a 1-day period under representative conditions in April or November	DGH
(iii)	Annual expenditures on maintenance (routine and periodic) of roads and bridges in the national road network in the project province.	DGH
(iv)	Average one-way passenger fares and freight transport rates for general cargo to and from pre-determined points on the rehabilitated road corridors.	DGLT
(v)	Through structured interview surveys determine the social impacts of the roads improvement on the lives, time savings, increase in the income, economic activities of representative communities.	DGH
(vi)	Evidence obtained from structured interview surveys of the impact of the roads safety awareness campaign on attitudes towards road safety and safe pedestrian practices.	DGLT
(vii)	Truck axle loads, as measured both by the four weighbridges brought under private-sector management through the project and by nearby WIM monitoring equipment.	DGLT

XII. AUDITING REQUIREMENT

61. DGH, BAPPENAS and DGLT will maintain separate accounts for all project components financed by ADB and Government and have them audited by independent auditors acceptable to ADB. The audit will include: (i) an assessment of the adequacy of accounting and internal control systems used to monitor expenditures and other financial transactions and ensure safe custody of project financed assets; (ii) a determination as to whether the borrower has maintained adequate documentation of all relevant transactions; (iii) verification that all expenditures submitted to ADB are eligible for financing; and (iv) identification of any ineligible expenditures. The audited project accounts and auditor reports will be furnished to ADB within six months of the end of each FY. Sample of Audit Letter is in **Appendix 12**.

XIII. LOAN COVENANTS

62. The loan covenants as shown in **Appendix 13** should be complied with. PMU should monitor the compliance of the respective agencies involved in the Project to the loan covenants, and update the status of the compliance in quarterly basis.

XIV. KEY PERSONS INVOLVED IN THE SECTOR PROJECT

63. The following are the key persons responsible for the implementation/administration of the Project :

A. For the Government:

Name	Position	Address	Contact Numbers
Agus Suprijanto	Director Directorate of External Funds Management, Directorate General of Treasury, Ministry of Finance	Jl. Lapangan Banteng Timur No.2-4 Jakarta Pusat 10710	Tel. 62-21-3865330 Fax 62-21-3812859
Umiyatun Hayati Triastuti	Director Directorate of Transportation, BAPPENAS	Jl. Taman Suropati No.2 Jakarta Pusat	Telp. 62-21-3148550 Fax. 62-21-3148550
Delthy Simatupang	Director Foreign Multilateral Financing, Bappenas	Jl. Taman Suropati No.2 Jakarta Pusat	Telp. 62-21-31934203 Fax. 62-21-31934203
Sri Apriatini Soekardi	Director Directorate of Planning, Ministry of Public Works	Jl. Pattimura No.20 Jakarta Selatan	Telp. 62-21-7200281 Fax. 62-21-7200281
Anton Simbolon	Secretary to Director General for Land Transportation	Jl. Medan Merdeka Barat No.8 Jakarta	Tel. 62-21-3506135 Fax. 62-21-3506123

B. For Project Management Unit (PMU):

Name	Position	Address	CONTACT NUMBERS
Sugiarto	Head of PMU	Jl. Pattimura No.20 Jakarta Selatan	Tel. 62-21-7247389 Fax 62-21-7247389
Reiza Setiawan	Assistance of Planning and Programming	Jl. Pattimura No.20 Jakarta Selatan	Tel. 62-21-7247389 Fax 62-21-7247389
Kusmulyati	Assistance of Implementation	Jl. Pattimura No.20 Jakarta Selatan	Tel. 62-21-7247389 Fax 62-21-7247389
Ni Komang Rasminiati	Assistance of Implementation	Jl. Pattimura No.20 Jakarta Selatan	Tel. 62-21-7247389 Fax 62-21-7247389
Nurmala Simanjuntak	Assistance of Environmental Monitoring	Jl. Pattimura No.20 Jakarta Selatan	Tel. 62-21-7247389 Fax 62-21-7247389
Ganda Suraperwata	Assistance of Financial and Reporting	Jl. Pattimura No.20 Jakarta Selatan	Tel. 62-21-7247389 Fax 62-21-7247389

C. For the Asian Development Bank:

Name	Position	Address	Contact Numbers
Edgar Cua	Country Director, Indonesia Resident Mission (IRM)	Asian Development Bank, Indonesian Resident Mission	Tel. 62-21-5798-0600 Fax 62-21-5798-0700 ecua@adb.org
John Cooney	Director, SEID	Asian Development Bank, Headquarters, Manila	Tel. (632) 632-6433 Fax (632) 636-2336 Email jcooney@adb.org
Jean Marie Lacombe	Head Portfolio Management, ADB IRM Jakarta	Asian Development Bank, Indonesian Resident Mission	Tel. 62-21-5798-0600 Fax 62-21-5798-0700 jmlacombe@adb.org
Robert Valkovic	Project Implementation Specialist, ADB IRM Jakarta	Asian Development Bank, Indonesian Resident Mission	Tel. 62-21-5798-0600 Fax 62-21-5798-0700 rvalkovic@adb.org
H.S Soewartono	Senior Project Implementation Officer, ADB IRM Jakarta	Asian Development Bank, Indonesian Resident Mission	Tel. 62-21-5798-0600 Fax 62-21-5798-0700 hssewartono@adb.org
Sandie Hitojo	Control Officer, ADB IRM Jakarta	Asian Development Bank, Indonesian Resident Mission	Tel. 62-21-5798-0600 Fax 62-21-5798-0700 shitojo@adb.org

XV. ANTICORRUPTION

64. ADB defines corruption as “the abuse of public or private office for personal gain.” ADB will systematically identify, in consultation with its member countries opportunities for reducing corruption as part of its broader emphasis on improving good governance and sound development management. The institutional arrangements and reporting mechanisms referred to in the PAM are put in place to enable monitoring and accounting of the use of ADB resources. ADB’s Anticorruption Policy has set the guidelines and procedures in addressing fraudulent or corrupt practices. Anyone coming across evidence of fraud or corruption associated with the project must contact ADB’s Office of the General Auditor, which will investigate such allegations. *ADB’s Anti Corruption Policy* has been provided separately to DGH, and is also available on ADB’s website at www.adb.org. Copy of the ADB’s Anticorruption Policy and Fiduciary Control, Fraud and Anti-Corruption Action Plan is provided in **Appendix 14**.

**Proposed Road Rehabilitation Works
(Road + Bridges)**

1 US\$ = Rp. 8,800.00

Province	Contract Package	Link No.	Link Name	Pavement		Width m	Proposed Road Rehabilitation Treatments										Bridges			Detail Engineering Design (DED)		
				Existing	Proposed		Road										No Of Bridge	Type of work	Tot.Length (m)	Est. Cost		
							Reconstruction		Widening+ Reconstruction		Widening+ Resurfacing		Resurfacing		Shoulder Improvement					Effective Length Kms	Rp million	US\$ million equiv.
							Kms	Width	Kms	Width	Kms	Width	Kms	Width	Kms (L+R)	Width						
North Sumatera	SU-01	019.1	Padang Sidempuan-Bts. Tapanuli Selatan II	AC	AC-WC	4.7-6.0	1.47	6.0	-	-	35.39	6.0	-	-	73.7	1.5	36.86				57,955.78	6.59
	SU-02	057.1	Sp. Kawat - Bts. Labuhan Batu	AC	AC-WC	6.0-6.2	0.16	7.00	-	-	45.07	7.0	0.77	10.0	92.0	1.5	46.00	6	a / b	65.10	53,775.98	6.11
	SU-03	057.2	Bts. Labuhan Batu - Rantau Prapat	AC	AC-WC	6.0-6.4	0.25	7.00	0.30	7.00	49.45	7.0	-	-	100.0	1.5	50.00	10	b	103.70	64,693.80	7.35
	SU-04	057.2, 058, 060	Bts. Labuhan Batu - Rantau Prapat - Aek Nabara - Sp. Kota Pinang	AC	AC-WC	6.0-6.5	-	-	0.80	7.00	38.40	7.0	0.30	7.0	79.0	1.5	39.50	4	b	19.20	55,826.48	6.34
West Sumatera	SB-02	029	Bukit Tinggi - Lubuk Sikaping	AC	AC-WC		-	-	-	-	-	-	64.00	6.0	104.0	1.5	64.00				65,415.00	7.43
	SB-03	030	Bts Kota Lubuk Sikaping - Panti	AC	AC-WC		-	-	-	-	-	25.30	6.0	50.6	1.5	25.30				27,958.00	3.18	
	SB-03	032	Panti - Bts. Sumut	AC	AC-WC		-	-	-	-	-	35.80	6.0	71.6	1.5	35.80				41,986.00	4.77	
Riau	RI-01	019.1	Sp. Batang - Sp. Balam	AC	AC-WC	5.0-6.0	5.95	7.0	-	-	45.04	7.0	3.30	7.0	108.6	2.0	54.29				110,136.50	12.52
	RI-02	019.2	Sp. Balam - Bagan Batu	AC	AC-WC	5.0-6.0	-	-	-	-	9.30	7.0	18.24	7.0	55.1	2.0	27.54				34,577.97	3.93
Jambi	JM-01	011.1, 011.2,3	Muara Tembesi - Bts. Sarko	AC-WC	AC-WC	5.5-6.0	13.50	6.0	-	-	-	-	-	26.0	1.5	13.50				17,711.00	2.01	
	JM-01	011.2,3	Bts. Sarko - Sarolangun	AC-WC	AC-WC	5.5-6.0	24.60	6.0	-	-	-	-	-	49.2	1.5	24.60				34,705.00	3.94	
South Sumatera	SS-01	010	Lubuk Linggau - Terawas	AC	AC-WC	7.0-15.0	-	-	-	-	-	-	27.20	7.0 - 16,	54.4	2.0	27.20				33,266.01	3.78
	SS-02	011	Muara Enim - Sp. Sugih Waras	AC	AC-WC	6.0-6.5	5.35	6.00	-	-	-	-	46.20	6.0 - 10,	103.1	1.5	51.55				58,112.53	6.60
	SS-03	013	Baturaja - Martapura	AC	AC-WC	6.0	-	-	-	-	-	-	30.00	6.0	60.0	1.5	30.00				30,112.00	3.42
	SS-03	014	Martapura - Bts.Lampung	AC	AC-WC	6.0	-	-	-	-	-	-	8.00	6.0	16.0	1.5	8.00				8,118.00	0.92
Lampung	LP-01	002.1	Tegineneng - Gn. Sugih	AC	AC-WC	7.0	-	-	-	-	-	24.95	7.0	49.9	1.0	24.95				31,126.45	3.54	
	LP-02	003	Gn. Sugih - Terbanggi Besar	AC	AC-WC	7.0	-	-	-	-	-	12.40	7.0	19.7	1.0	12.40						
LP-02	004	Terbanggi Besar - Kotabumi	AC	AC-WC	7.0-8.0	-	-	-	-	-	-	38.20	7.0	76.4	2.0	38.20				27,902.00	3.17	
Total, Sumatera							60.58		1.10		222.65		369.66		1,277.3		653.99	20	188.00	798,845.11	90.78	
West Kalimantan	BU-01	079.1	Tayan - Teraju	SCB/S	HRS-WC and Sand Sheet	4.7-5.0	8.45	4.5	-	-	-	-	20.80	4.5	58.5	1.0	29.25				12,444.24	1.41
	BU-01	079.2	Teraju - Bts. Balai Bekuak	SCB/G/S	Sand Sheet		50.75	4.5	-	-	-	-	-	-	50.7	1.0	50.75	4	c	36.00	57,930.57	6.58
	BU-02	079.3	Bts. Balai Bekuak - Aur Kuning	G/S	HRS-WC		79.00	4.5	-	-	-	-	-	-	158.0	1.0	79.00	3	c	36.00	41,416.00	4.71
Central Kalimantan	BV-01	010.2	Km 65 - Sampit	HRS	HRS-WC	4.5	11.70	4.5	-	-	-	-	-	23.5	1.0	11.70				14,411.50	1.64	
	BV-02	024.1	Sp. Runtu - Runtu	HRS	HRS-WC	4.5	8.97	4.5	-	-	-	-	12.42	4.5	42.8	1.0	21.39				15,567.29	1.77
	BV-02	024.2	Runtu - Kujan	HRS/Soil	HRS-WC	4.5	34.81	4.5	-	-	-	-	7.52	4.5	68.6	1.0	42.33	7	c	140.00	69,958.15	7.95
	BV-03	024.3	Kujan - Penopa	Soil	HRS-WC	8.0	60.40	-	-	-	-	-	-	-	89.4	1.0	60.40				96,881.00	11.01
BV-04	024.4	Penopa - Kudangan	Soil	HRS-WC	8.0	44.50	4.5	-	-	-	-	-	-	89.0	1.0	44.50	2	c	40.00	74,362.40	8.45	
South Kalimantan	BX-02	035	Sebamban - Pagatan	HRS	HRS-WC	4.6-5.5	-	-	3.79	6.0	15.43	6.0	13.80	6.0	65.5	1.5	33.02	1	c	5.00	23,799.71	2.70
	BX-02	036	Pagatan - Batu Licin	HRS	HRS-WC	4.6-7.0	-	-	7.38	6.0	14.23	6.0	2.53	6.0	48.3	1.5	24.13				19,764.83	2.25
	BX-01	039	Kintap - Sebamban	HRS	HRS-WC	4.5-7.0	-	-	5.82	6.0	56.53	6.0	7.12	6.0	138.7	1.5	69.47	4	c	44.00	62,191.18	7.07
	BX-03	047.1	Sei. Kupang - Magalau	HRS	HRS-WC	4.5-5.5	-	-	-	-	-	-	50.00	4.5	100.0	1.0	50.00				28,015.00	3.18
BX-04	047.2	Magalau - Bts Kaltim	HRS	HRS-WC	4.5-5.5	-	-	-	-	-	-	50.00	4.5	100.0	1.0	50.00				30,441.40	3.46	
East Kalimantan	BW-01	026.4	Sp. Batu Ampar - Sp.Perdau	AC/SCB	AC-WC	5.0-7.5	72.50	4.5	-	-	-	-	-	145.0	1.0	72.50				168,902.40	19.19	
Total Kalimantan							371.08		16.99		86.18		164.19		1,177.8		638.44	21	301.00	716,085.66	81.37	
Total All Provinces							431.66		18.09		308.83		533.85		2,455.1		1,292.43	41	489.00	1,514,930.76	172.15	

BRIDGES REHABILITATION IN SUMATRA

											(Include Tax)
Province	Link No	Link Name	Bridge No	Bridge Name	Km	Span (m)	Existing Type	Proposed Type	Est. Cost (Rp mln)	Total Cost (Rp mln)	Note
North Sumatera	057.1	Sp. Kawat - Bts. Labuhan Batu	N/A	Sei. Separit 1	189.300	3.0	RCC deck-girder	RCC deck-girder	54.8		Minor Rehabilitation
			N/A	Sei Parit 2	189.700	3.0	RCC deck-girder	RCC deck-girder			Minor Rehabilitation
			N/A	Sei Parit 3	199.050	3.5	RCC deck-girder	RCC deck-girder			Minor Rehabilitation
			N/A	Sei Ledong Barat	214.900	13.6	RCC deck-girder	RCC deck-girder			Minor Rehabilitation
			N/A	Sei Masehi	191.400	21.0	RCC deck-girder	RCC deck-girder	562.9	Widening	
			N/A	Aek Ledong	213.900	21.0	RCC deck-girder	RCC deck-girder	586.8	Widening	
										1,204.5	
	057.2	Bts. Labuhan Batu - Rantau Prapat	N/A	Aek Sidua-dua	258.750	3.0	Box culvert	Box culvert	110.2	Widening	
			N/A	Aek Batang Garut	243.200	3.0	Box culvert	Box culvert	110.2	Widening	
			N/A	Aek Siola 2	238.700	3.5	Box culvert	Box culvert	130.0	Widening	
			N/A	Aek Damulih 1	228.500	4.0	Box culvert	Box culvert	145.2	Widening	
			N/A	Aek Silingsing	242.320	15.0	RCC deck-girder	RCC deck-girder	98.8	Widening	
			N/A	Sei. Pamengke	254.750	3.7	Box culvert	Box culvert	146.2	Widening	
			N/A	Aek Merah	261.990	9.5	RCC deck-girder	RCC deck-girder	295.9	Widening	
			N/A	Aek Kota Batu	262.550	25.0	RCC deck-girder	RCC deck-girder	152.0	Widening	
			N/A	Aek Tapa	266.920	15.0	RCC deck-girder	RCC deck-girder	426.5	Widening	
			N/A	Aek Milano	277.200	22.0	RCC deck-girder	RCC deck-girder	109.3	Widening	
										1,724.3	
	057.2, 058, 060	Bts. Labuhan Batu - Rantau Prapat - Aek Nabara - Sp. Kota Pinang	N/A	Aek Taiyas	278.337	4.0	RCC deck-girder	RCC deck-girder	172.2	Widening	
			N/A	Sei Wing	305.460	2.2	Box culvert	Box culvert	97.0	Widening	
			N/A	Pematang Selen 1	311.175	6.0	RCC deck-girder	RCC deck-girder	184.9	Widening	
			N/A	Pematang Selen 2	313.025	7.0	Box culvert	Box culvert	161.5	Widening	
										615.7	
	Total, North Sumatera:									3,544.5	
	US\$ equiv. (million):									0.4	
	(1US\$=Rp. 8800)										

Note: Tabulated data refers to latest DED documents checked by Bridging Consultant of RR2P and Sub Directorate of Engineering Design and Supervision (Subdit Perencanaan dan Pengawasan) Western Region.

BRIGES REHABILITATION IN KALIMANTAN

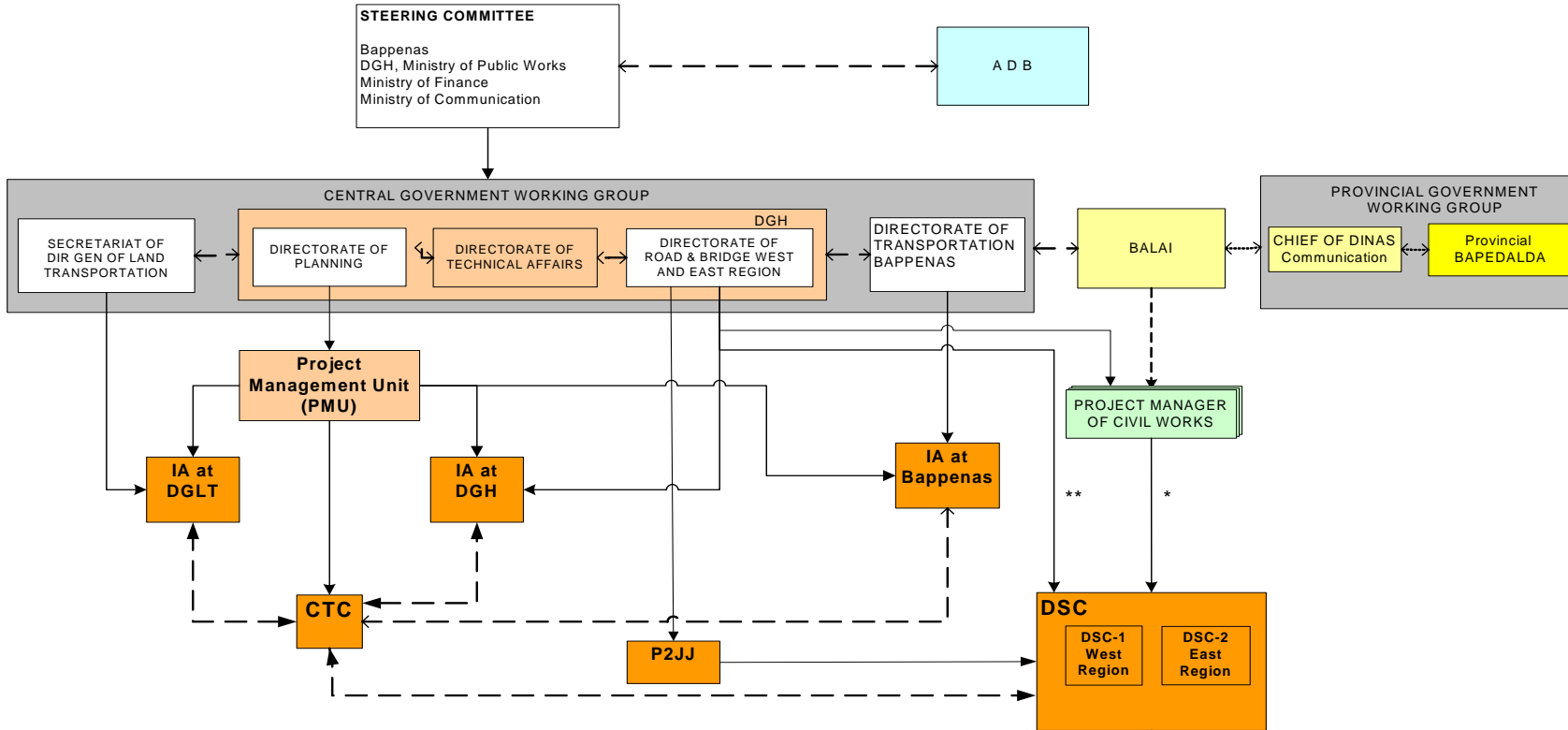
(Include Tax)												
Province	Link No	Link Name	Bridge No	Bridge Name	Km	Span (m)	Existing Type	Proposed Type	Est. Cost (Rp mln)	Total Cost (Rp mln)	Note	
West Kalimantan	079.2	Teraju - Bts. Balai Bekuak	N/A	Empari	339.272	8.0	Timber	RCC deck-girder	665.7	2,995.6	Replacement	
			N/A	Mangkup	343.922	10.0	Timber	RCC deck-girder	832.1		Replacement	
			N/A	Gendulan	344.809	10.0	Timber	RCC deck-girder	832.1		Replacement	
	079.3	Bts. Balai Bekuak - Aur Kuning	N/A	Penair Kabang	345.247	8.0	Timber	RCC deck-girder	665.7		2,004.9	Replacement
			N/A	N/A	356	12.0	Timber	RCC deck-girder	668.3			Replacement
			N/A	N/A	362	10.0	Timber	RCC deck-girder	556.9			Replacement
			N/A	N/A	374	14.0	Timber	RCC deck-girder	779.7			Replacement
Total, West Kalimantan:									5,000.5			
Central Kalimantan	024.2	Runtu - Kujan	32.024.002.1	Sei. Kunup	436.347	20.0	Log	RCC deck-girder	3,041.5	15,072.0	Replacement	
			32.024.021.1	Sei Sulat	464.645	20.0	Log	RCC deck-girder	2,011.9		Replacement	
			32.024.027.1	Sei Kujang	477.432	20.0	Log	RCC deck-girder	2,028.6		Replacement	
			N/A	Sei Danau	448.840	20.0	Log	RCC deck-girder	2,031.1		Replacement	
			N/A	Sei Danau-1	450.835	20.0	Log	RCC deck-girder	1,983.9		Replacement	
			N/A	Sei Sulung	458.300	20.0	Log	RCC deck-girder	1,967.3		Replacement	
			N/A	Sei Sulung-1	460.825	20.0	Log	RCC deck-girder	2,007.7		Replacement	
	024.4	Penopa - Kudangan	N/A	Sei Lupus	N/A	20.0	Timber	RCC deck-girder	1,800.0	Replacement		
N/A	N/A	N/A	Sei Lupus-1	N/A	20.0	Timber	RCC deck-girder	1,800.0	Replacement			
Total, Central Kalimantan:									18,672.0			
South Kalimantan	035	Sebamban - Pagatan	36.035.005.0	Dua Gardi II	216.600	5.0	Timber	RC Box culvert	173.4	173.4	Replacement	
	039	Kintap - Sebamban	36.039.006.0	Sei Tengah II	149.284	6.0	Timber	RC Box culvert	194.0	3,632.0	Replacement	
			36.039.008.0	Sei Duri II	151.032	9.0	Timber	RC Box culvert	287.3		Replacement	
			36.039.012.0	Sei Anak I	154.155	9.0	Timber	RC Box culvert	248.8		Replacement	
			36.039.027.0	Sei Setarap I	186.456	20.0	Timber	RC deck - girder	2,901.9		Replacement	
Total, South Kalimantan:									3,805.4			
Total, all Provinces:									27,477.8			
US\$ equiv. (million):									3.1			
(1US\$=Rp. 8800)												

Note:

: Phase 1. Tabulated data refers to latest DED documents checked by Bridging Consultant of RR2P and Sub Directorate of Engineering Design and Supervision (Subdit Perencanaan dan Pengawasan) Central Region.

: Phase 2. All of data refer to Feasibility Study documents done by Dainichi Consultant.

ROAD REHABILITATION 2 PROJECT - A D B PROJECT ORGANIZATION

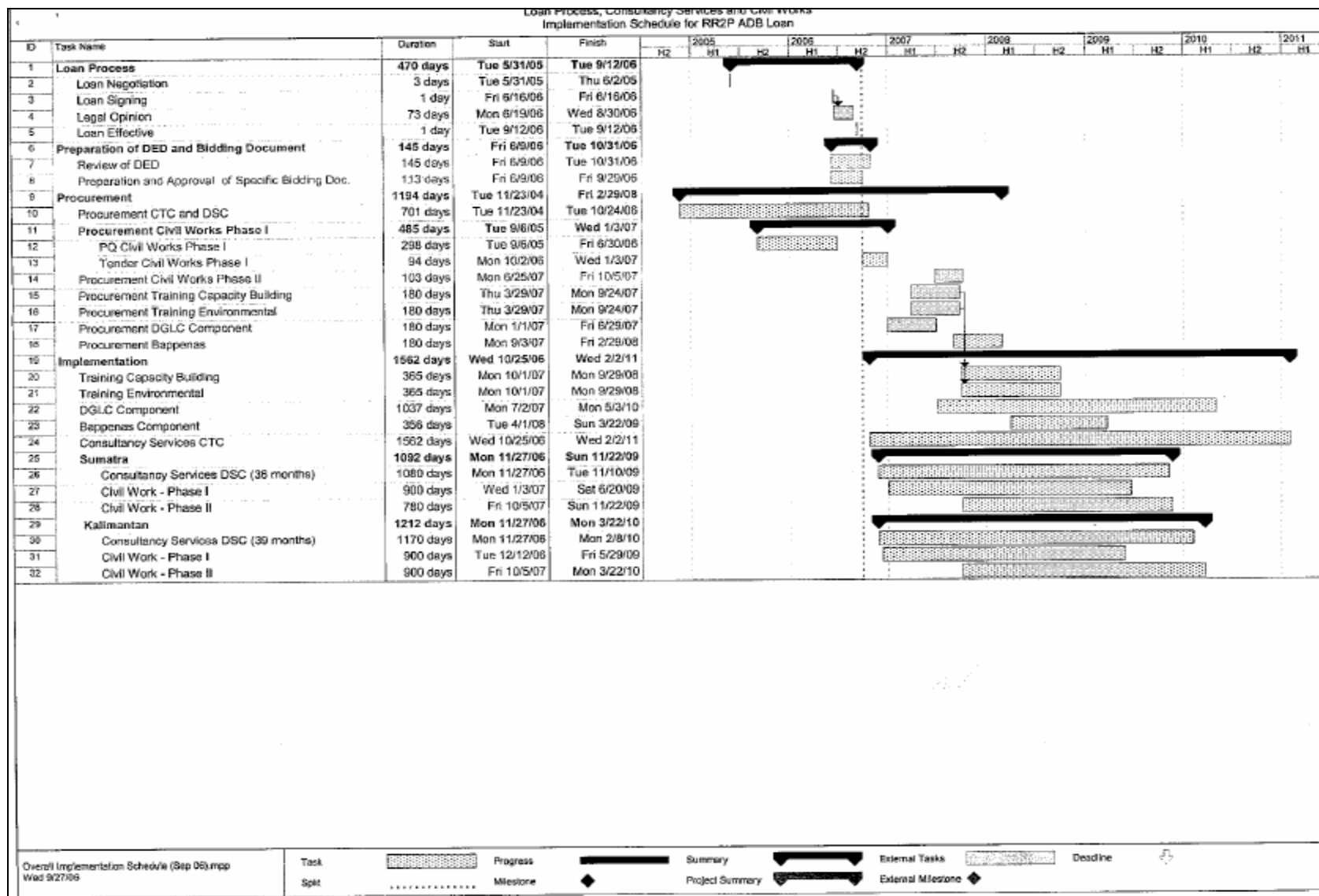


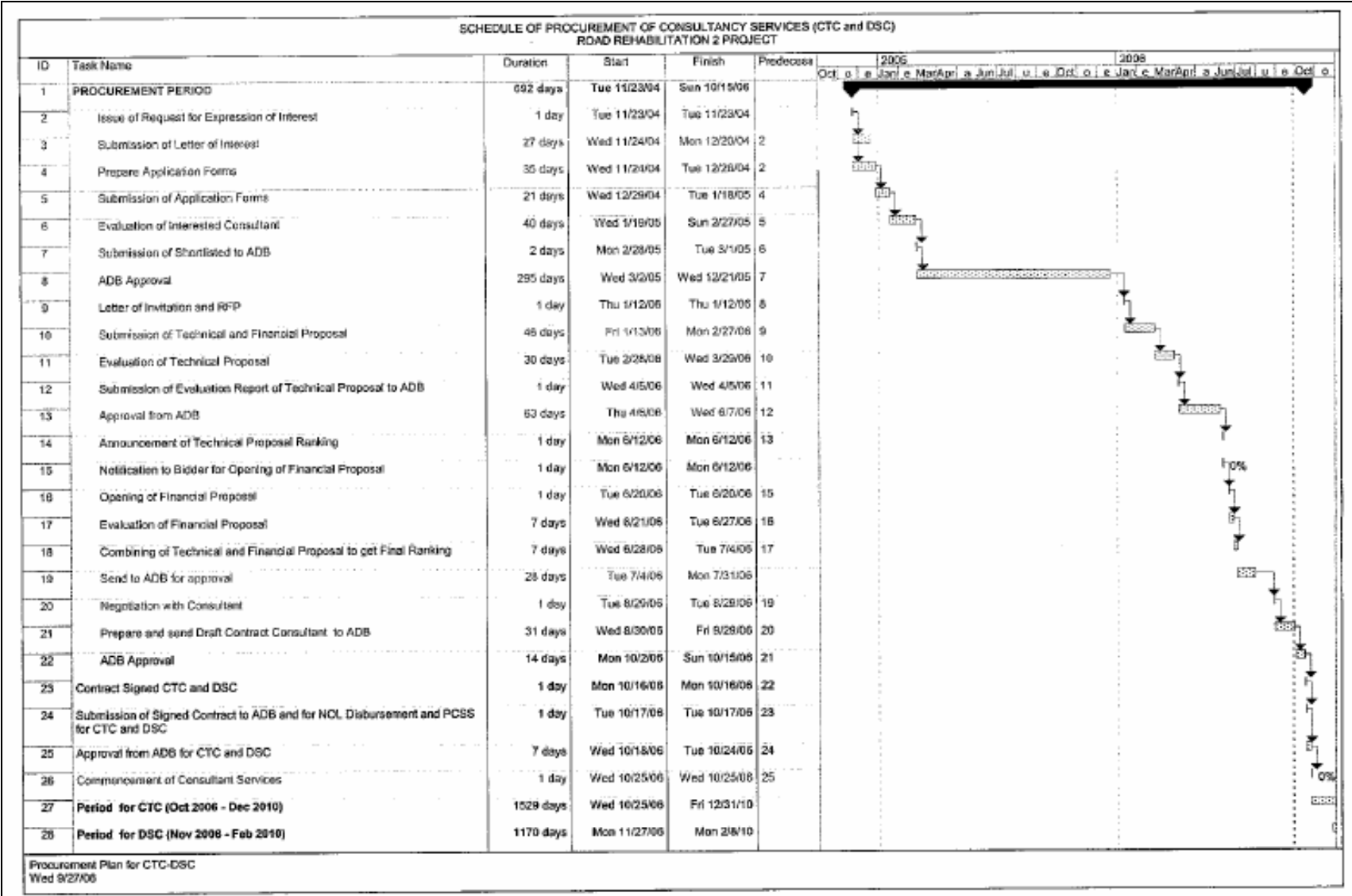
- Abbreviations:
- Bapedalda = Badan Pengendalian Dampak Lingkungan Daerah
 - Bappenas = Badan Perencanaan Pembangunan Nasional
 - CTC = Core Team Consultant
 - DSC = Design Supervision Consultant
 - DGH = Director General of Highways
 - Kimpraswil = Perumahan dan Prasarana Wilayah
 - P2JJ = Perencanaan dan Pengawasan Teknik Jalan dan Jembatan
 - Prov. = Province
 - Dir Gen = Directorate General
 - IA = Implementing Agency
 - DGLT = Directorate General of Land Transportation

Legend :

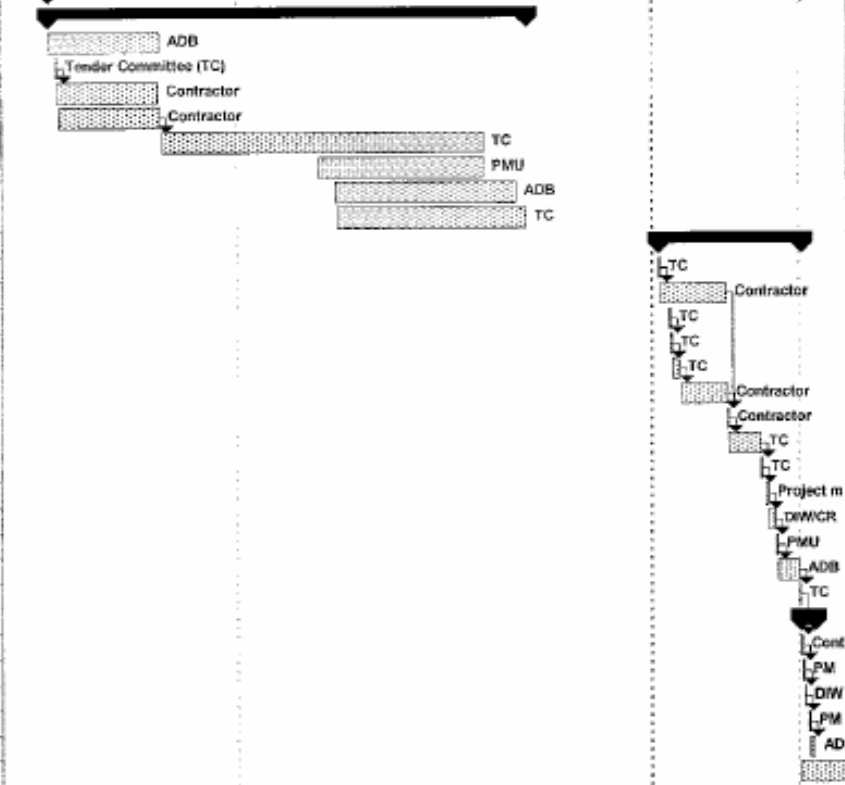
- * Terkait dengan pelaksanaan kontrak fisik
- ** Terkait dengan pelaksanaan kontrak konsultasi
- Command Line
- ← - - - Coordination Line
- - - - Assignment/Assistance

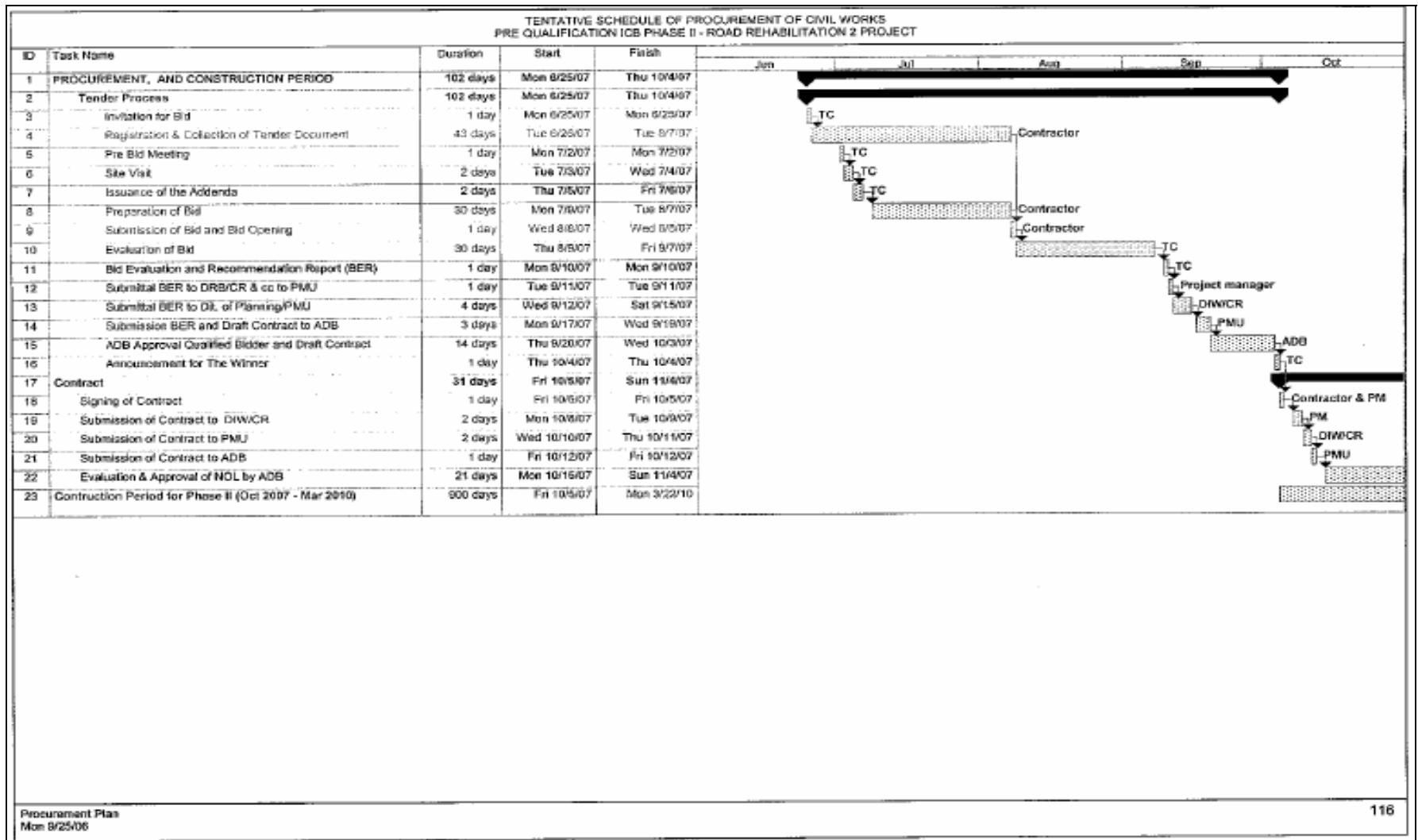
Implementation Schedule





TENTATIVE SCHEDULE OF PROCUREMENT OF CIVIL WORKS PRE QUALIFICATION ICB PHASE 1 - ROAD REHABILITATION 2 PROJECT					2006												2007					
ID	Task Name	Duration	Start	Finish	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
1	PROCUREMENT, AND CONSTRUCTION PERIOD	489 days	Thu 9/1/05	Tue 1/2/07																		
2	Prequalification Process	310 days	Thu 9/1/05	Fri 7/7/06																		
3	Announcement of PQ on ADB Business Opportunity	72 days	Thu 9/1/05	Fri 11/11/05																		
4	Announcement of Prequalification on News	1 day	Tue 9/6/05	Tue 9/6/05																		
5	Registration and Collection of PQ Document	95 days	Wed 9/7/05	Thu 11/10/05																		
6	Submission of PQ Document	65 days	Thu 9/8/05	Fri 11/11/05																		
7	Evaluation	208 days	Mon 11/14/05	Fri 6/9/06																		
8	Submission of Shortlisted Bidder to ADB	107 days	Thu 2/23/06	Fri 6/9/06																		
9	Shortlisted Bidder Approval by ADB	117 days	Mon 3/6/06	Fri 6/30/06																		
10	Announcement of Shortlisted PQ	123 days	Tue 3/7/06	Fri 7/7/06																		
11	Tender Process	93 days	Mon 10/2/06	Tue 1/2/07																		
12	Invitation for Bid	1 day	Mon 10/2/06	Mon 10/2/06																		
13	Registration & Collection of Tender Document	43 days	Tue 10/3/06	Tue 11/14/06																		
14	Pre Bid Meeting	1 day	Mon 10/9/06	Mon 10/9/06																		
15	Site Visit	1 day	Tue 10/10/06	Tue 10/10/06																		
16	Issuance of the Addenda	5 days	Wed 10/11/06	Sun 10/15/06																		
17	Preparation of bid	30 days	Tue 10/17/06	Wed 11/15/06																		
18	Submission of Bid and Bid Opening	1 day	Thu 11/16/06	Thu 11/16/06																		
19	Evaluation of Bid	21 days	Fri 11/17/06	Thu 12/7/06																		
20	Bid Evaluation and Recommendation Report (BER)	1 day	Fri 12/8/06	Fri 12/8/06																		
21	Submital BER to DRB & cc to PMU	2 days	Mon 12/11/06	Tue 12/12/06																		
22	Submital BER to DRB of Planning/PMU	4 days	Wed 12/13/06	Sat 12/16/06																		
23	Submission BER and Draft Contract to ADB	1 day	Mon 12/18/06	Mon 12/18/06																		
24	ADB Approval Qualified Bidder and Draft Contract	14 days	Tue 12/19/06	Mon 1/1/07																		
25	Announcement for The Winner	1 day	Tue 1/2/07	Tue 1/2/07																		
26	Contract	9 days	Wed 1/3/07	Thu 1/11/07																		
27	Signing of Contract	1 day	Wed 1/3/07	Wed 1/3/07																		
28	Submission of Contract to DRB	1 day	Thu 1/4/07	Thu 1/4/07																		
29	Submission of Contract to PMU	1 day	Fri 1/5/07	Fri 1/5/07																		
30	Submission of Contract to ADB	1 day	Mon 1/8/07	Mon 1/8/07																		
31	Evaluation & Approval of NOL by ADB	3 days	Tue 1/9/07	Thu 1/11/07																		
32	Construction Period for Phase I (Jan 2007 - June 2009)	900 days	Wed 1/3/07	Sat 6/20/09																		





DETAILED COST ESTIMATES

Status: 18 September 2006 1 US\$ Rp. 8800

Item	Project Component	Initial Contract Price/Estimate		Anticipated Final Cost		
		USD	IDR	USD	IDR	USD Equiv.
A. BASE COST						
1	Road and Bridge Works					8800
	a. Civil Works					
	i. Phase 1		758,480,800,000		758,480,800,000	86,191,000
	ii. Phase 2		616,554,400,000		616,554,400,000	70,063,000
	Sub-Total (a) Civil Works		1,375,035,200,000		1,375,035,200,000	156,254,000
	b. Consulting Services					
	i. Core Team Consultant					
	Core Team Consultant	3,200,000		3,200,000		
	Sub Total (i) CTC	3,200,000		3,200,000		
	ii. Design Supervision Consultant					
	1 DSC-1 Sumatra	3,000,000		3,000,000		
	2 DSC-2 Kalimantan	2,899,000		2,899,000		
	Sub Total (ii) Design Supervision Coi	5,899,000		5,899,000		
	Sub Total (b) Consulting Services	9,099,000		9,099,000		
	Sub-Total (1)	9,099,000	1,375,035,200,000	9,099,000	1,375,035,200,000	165,353,000
2	Road Sector Policies / Community Assistance					
	a. Enforcing Control Over Truck Overloading					
	i. Consulting Services	554,000		554,000		
	ii. Civil Work	510,000		510,000		
	iii. Equipment	2,031,000		2,031,000		
	Sub Total (a)	3,095,000		3,095,000		
	b. Road Safety Awareness	204,000		204,000		
	Sub-Total (b)	204,000		204,000		
	c. Developing New Approaches to Road Mainter	600,000		600,000		
	Sub-Total (c)	600,000		600,000		
	Sub-Total (2)	3,899,000		3,899,000		
3	Capacity Building and Training					
	a. Training in Environmental and Social Management	300,000		300,000		
	b. Strengthening Project Management Practices	277,000		277,000		
	Sub-Total (3)	577,000		577,000		
	Sub-Total A	13,575,000	1,375,035,200,000	13,575,000	1,375,035,200,000	169,829,000
B. CONTINGENCIES						
	a. Physical	6,793,000		6,793,000		
	b. Price	3,653,000		3,653,000		
	Sub-Total B	10,446,000		10,446,000		
C. TAXES						
	Sub-Total C	18,027,000		18,027,000		
C. INTEREST DURING CONSTRUCTION						
	Sub-Total D	17,443,000		17,443,000		
	Total	59,491,000	1,375,035,200,000	59,491,000	1,375,035,200,000	215,745,000

Note: The cost estimate is based on the price at appraisal and needs to be further updated. 35% Increase is observed.

FINANCING PLAN

Item	Project Component	Anticipated Final Cost		% Fin.	ADB Financing		Total ADB eq. USD	% Fin. Government Financing		Total GOI eq. USD	Total ADB + GOI eq. USD
		USD	IDR		USD	IDR		USD	IDR		
		8800									
A. BASE COST											
1	Road and Bridge Works										
	a. Civil Works										
	i. Phase 1	758,480,800,000		69	523,351,752,000	59,471,790	31	235,129,048,000	26,719,210.00	86,191,000.00	
	ii. Phase 2	616,554,400,000		69	425,422,536,000	48,343,470	31	191,131,864,000	21,719,530.00	70,063,000.00	
	Sub-Total (a) Civil Works	1,375,035,200,000		69	948,774,288,000	107,815,260	31	426,260,912,000	48,438,740.00	156,254,000.00	
	b. Consulting Services										
	i. Core Team Consultant										
	Core Team Consultant	3,200,000		100	3,200,000	3,200,000	-	-	-	3,200,000.00	
	Sub Total (i) CTC	3,200,000		100	3,200,000	3,200,000	-	-	-	3,200,000.00	
	ii. Design Supervision Consultant										
	1 DSC-1 Sumatra	3,000,000		100	3,000,000	3,000,000	-	-	-	3,000,000.00	
	2 DSC-2 Kalimantan	2,899,000		100	2,899,000	2,899,000	-	-	-	2,899,000.00	
	Sub Total (ii) Design Supervision Consultant	5,899,000		100	5,899,000	5,899,000	-	-	-	5,899,000.00	
	Sub Total (b) Consulting Services	9,099,000		100	9,099,000	9,099,000	-	-	-	9,099,000.00	
	Sub-Total (1)	9,099,000	1,375,035,200,000	100	9,099,000	948,774,288,000	-	426,260,912,000	48,438,740.00	156,254,000.00	
2	Road Sector Policies / Community Assistance										
	a. Enforcing Control Over Truck Overloading										
	i. Consulting Services	554,000		100	554,000	-	-	-	-	554,000.00	
	ii. Civil Work	510,000		91	464,100	-	9	45,900	-	510,000.00	
	iii. Equipment	2,031,000		100	2,031,000	-	-	-	-	2,031,000.00	
	Sub Total (a)	3,095,000			3,049,100					3,095,000.00	
	b. Road Safety Awareness	204,000		100	204,000	-	-	-	-	204,000.00	
	Sub-Total (b)	204,000		100	204,000	-	-	-	-	204,000.00	
	c. Developing New Approaches to Road Maintenance	600,000		100	600,000	-	-	-	-	600,000.00	
	Sub-Total (c)	600,000		100	600,000	-	-	-	-	600,000.00	
	Sub-Total (2)	3,899,000			3,853,100					3,899,000.00	
3	Capacity Building and Training										
	a. Training in Environmental and Social Management	300,000		100	300,000	-	-	-	-	300,000.00	
	b. Strengthening Project Management Practices	277,000		100	277,000	-	-	-	-	277,000.00	
	Sub-Total (3)	577,000		100	577,000	-	-	-	-	577,000.00	
	Sub-Total A	13,575,000	1,375,035,200,000		13,529,100	948,774,288,000	121,344,360	45,900	426,260,912,000	48,484,640.00	169,829,000.00
B. CONTINGENCIES											
	a. Physical	6,793,000		7	475,510	475,510	93	6,317,490	-	6,793,000.00	
	b. Price	3,653,000		27	986,310	986,310	73	2,666,690	-	3,653,000.00	
	Sub-Total B	10,446,000			1,461,820	1,461,820		8,984,180		10,446,000.00	
C. TAXES											
	Sub-Total C	18,027,000		-	-	-	100	18,027,000	-	18,027,000.00	
	Sub-Total D	17,443,000		100	17,443,000	17,443,000	-	-	-	17,443,000.00	
	Sub-Total D	17,443,000		100	17,443,000	17,443,000	-	-	-	17,443,000.00	
	Total	59,491,000	1,375,035,200,000		32,433,920	140,249,180		27,057,080	426,260,912,000	48,484,640.00	215,745,000.00

Note: The figures are based on the unit price at appraisal. The unit price need to be further reviewed.

CONTRACT AWARDS AND DISBURSEMENT PROJECTIONS

Worksheet for Quarterly & Yearly Contract Awards/Commitments & Disbursement Projections (\$ Million)

(Important: Before completing this form, please read carefully the instructions printed at the back of this form. Refer to PAI Nos. 5.02. Issued in December 2001.)

Asian Development Bank

PROJECT: _____ LOAN/GRANT NO. _____ SEGMENT NO. _____ FUNDS (OCR, SF, ADF-IX, ATF²) _____ COUNTRY (Acronym) _____ PROJECTIONS MADE IN: _____ (Month, Year)

REF. L I M E	Category SI	CONTRACT/COMMITMENT ITEM 1/	Contract Awarded in Previous Years		QUARTER I January, February, March 20__				QUARTER II April, May, June 20__				QUARTER III July, August, September 20__				QUARTER IV October, November, December 20__				TOTAL PROJECTED FOR THE YEAR 20__ (YF) = (QA) + (QP)	
			Month, Year Contract Awarded (Book Amount)	QP	QA	Disbursement Amounts Related to the Contract/ Commitment (2)	QP	QA	Disbursement Amounts Related to the Contract/ Commitment (4)	QP	QA	Disbursement Amounts Related to the Contract/ Commitment (6)	QP	QA	Disbursement Amounts Related to the Contract/ Commitment (8)	QP	QA	Contract Value/ Commitment (3) QA = (1+2+3+4+5+6+7+8)	Disbursement Amounts Related to the Contract/ Commitment (9) = (2+4+6+8)			
				QP	QA		QP	QA		QP	QA		QP	QA								
				Contract Value/ Commitment (1)	Contract Value/ Commitment (1)		Contract Value/ Commitment (1)	Contract Value/ Commitment (1)		Contract Value/ Commitment (1)	Contract Value/ Commitment (1)		Contract Value/ Commitment (1)	Contract Value/ Commitment (1)								
TOTAL (Carried Forward) FROM PREVIOUS PAGE ___ of ___ PAGES																						
1																						
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
0																						
TOTAL OF THIS PAGE ___ of ___ PAGES (To be carried on next page)																						
GRAND TOTAL (LAST PAGE)																						

^{1/} In accordance with the allocation of loan proceeds as defined in the loan documents, or any other detailed breakdown if found useful.
^{2/} ATF = Asian Trusts Fund; Projections should be for the ADB-ATF-financed component only.
 QA = Quarterly Actual (already awarded/committed/disbursed, when project loans are prepared).
 QP = Quarterly Projected (to be awarded/committed/disbursed, when projections are prepared).

NOTES AND REMARKS:

Page ___ of ___ pages

QP-01-20 _____

ROAD REHABILITATION-2 PROJECT (RR2P)
TERMS OF REFERENCE (TOR)
For
CORE TEAM CONSULTANT (CTC)
To
SUPPORT THE PROJECT MANAGEMENT UNIT (PMU)

I. OBJECTIVES OF THE SERVICES

The primary objectives to be achieved by the CTC as a result of this technical assistance are as follows:

Provide day to day support to the PMU in Project Management;
Assist PMU to Monitor and audit of the Design and Supervision Consultant (DSC) for their supervision activities;
Assist PMU to review of the tender documents and tendering process to ensure ADB and GOI regulations are observed;
Assist SDEA or any successor to Monitor environmental impacts and their management;
Assist SDEA or any successor to Monitor social impacts and their management;
Assist PMU to Successfully undertake loan administration and monitoring;
Assist PMU to Successfully undertake financial management; including contract management (disbursement and work progress);
Assist PMU to Measure performance indicators;
Assist in the completion of all required reporting for PMU.
Assist another TA related with the project,
Assist PMU to verify contractor's performance base on the report produce by DSC.

Full details of the tasks to be undertaken to achieve these objectives are shown in Section 2 below.

2. DETAILED SCOPE OF WORK

There are distinct areas to be addressed by these services, in addition to the general responsibility of supporting the PMU and DGH in management of the Project.

The following task descriptions are intended only as a guide and as the minimum requirements. The CTC is encouraged to use initiative in expanding on the tasks in order to successfully achieve the objectives in a manner satisfactory to the Employer.

2.1. Day to Day Support of the PMU in Project Management

The PMU will be responsible for the day-to-day management of the project, and ensuring the overall technical quality of the project implementation, with the assistance of the CTC.

Specific responsibilities for supporting the PMU are listed below.

- i Assist PMU to prepare the Project Management for Implementation and monitor the roject to ensure that it is being used correctly.

- ii Preparing and maintaining a detailed project implementation schedule for all project components including key activities to be undertaken, and key milestones to be achieved in accordance with the Loan Agreement;
- iii Liaison with the PMU on management of the Project, provision of specialist advice as necessary;
- iv Draft responses to communications received by the PMU as and when required by the PMU.

2.2. Monitoring and Auditing of the Design and Supervision Consultant (DSC) for their Supervision Activities

The PMU will be responsible for the monitoring of progress and auditing of the DSC. The CTC will give support towards the effective and efficient fulfillment of this function by assisting the PMU in this activity. Specific tasks to be undertaken as part of this assistance include:

- i. Audit the Construction Management Manual of the DSC appointed under the project to carry out field supervision of contractor performance in carrying out the works;
- ii. Hold regular review meetings with the PMU and The DSC to review;
- iii. Audit the DSC to ensure they are complying with the DSC Construction Management Manual;
- iv. Establish efficient procedures for auditing DSC with regard to their reporting progress and problems in a timely manner to DGH, progress reports, quality control reports, quantity survey records, requests for variation or change orders, contractor's claims and invoices;
- v. Review and help DGH decide on proposals by the DSC for any changes in the scope or schedule of works that may be deemed necessary, assessing the effects the changes may have on contracts, overall progress and disbursements, and review any necessary variation orders;
- vi. Audit the DSC to ensure that they have fulfilled commitments on the measures needed to maintain a safe working environment, protect the safety of road users and pedestrians, and ensure all other negative social, health and environmental impacts on local communities are controlled and minimized.
- vii. Audit the DSC to ensure that they monitor the contractors to allow their workers to attend HIV/AIDS Awareness Campaign to reducing the risk of infection of the local community.
- viii. Review and help DGH decide on proposals by the DSC for contract variations;
- ix. In consultation with SDEA or any successor, prepare a generic EMMP (Environmental Management and Monitoring Plan) for use by the DSC and the contractors. This EMMP will form the basis of the monitoring and audition activities to be undertaken under 2.4 Monitoring of Environmental Impacts below.

2.3. Review of the Tender Documents and Tender Process

The PMU will be responsible for ensuring all tender documents and the tendering process comply with ADB guidelines and procedures. The CTC will give support towards the effective and efficient fulfilment of this function by assisting the PMU in this activity. Specific tasks to be undertaken as part of this assistance include:

- i. Review the procedures to be used by Project in invitation, evaluating and awarding tenders for civil works construction, having regard to the Government's and, ADB's requirements for anti-corruption measures and transparency; and
- ii. Review all tender documents for all proposed contract packages.

2.4. Monitoring of Environmental Impact Management

The PMU coordination with SDEA or any successor will be responsible for ensuring that proper environmental management, mitigation and monitoring measures are implemented as part of this project. The implementation measures will be undertaken by the contractors in accordance with the EMMP and will be supervised by the DSC. The CTC will give support towards the effective and efficient fulfilment of these functions by assisting the PMU and SDEA or any successor in this activity. Specific tasks to be undertaken as part of this assistance include:

- i. Prepare a checklist of compliance for each contract package during construction; the details of the checklist will be agreed beforehand with SDEA or any successor;
- ii Audit the DSC to ensure they monitor environmental impacts using the checklist of compliance;
- iii Compile the results of the environmental monitoring in monthly reports.

2.5. Monitoring of Training Consultant

2.6.

The Main Objective of the Training Consultant is to strengthen DGH's capabilities in environmental and social impact management, and road maintenance and engineering support such as Construction Contract Law, Landslides Control, Slope Stability and Retaining Walls, Financial Management and Control, Road and Bridge Maintenance, and The role of Specification in Road & Bridgeworks.

The PMU will be responsible for monitoring the performance of this consultant .The CTC will give support towards the effective and efficient fulfilment of this function by assisting the PMU in this activity. Specific tasks to be undertaken as part of this assistance include:

- i. Monitor the performance of the Training Consultant through project manager of relevant department to ensure that this consultant has fulfilled their commitments as given in the Term of Reference. Hold regular meetings with this consultant and provide advice as necessary. Include in the project summary report, details of the monthly activities of the Consultant.

2.6 Monitoring of Road Safety Awareness and Enforcing Controls over Truck Overloading

The primary objective of the Road Safety Awareness and Enforcing Controls over Truck Overloading Consultant is:

- (a) Assisting in developing a process to reduce the incidence of axle-loads in excess of the legal limits specified in MOC and provincial regulations for national roads. This will be done in conjunction with DGLC and the relevant Dinas LLAJ units by establishing on a trial basis four privately-managed weighbridges and associated controls at locations where trucks are commonly overloaded and road pavements susceptible to damage; and
- (b) Help reduce the risk and severity of road traffic accidents on roads rehabilitated under RR2P in the provinces of West, Central, and South Kalimantan where exposure to traffic is relatively recent and roadside communities are vulnerable. They will do this by raising the level of community awareness, particularly among children and other vulnerable groups, through a campaign making effective use of available media and involving briefings at schools and other community forums.

The PMU will be responsible for monitoring the performance of this consultant and reporting to the ADB on that performance. The CTC will give support towards the effective and efficient fulfillment of this function by assisting the PMU in this activity. Specific tasks to be undertaken as part of this assistance include:

- ii. Monitor the performance of the Road Safety Awareness and Enforcing Controls over Truck Overloading to ensure that this consultant has fulfilled their commitments as given in the Term of Reference. Hold regular meetings with DGLC and this consultant and provide advice as necessary. Include in the project summary report, details of the monthly activities of the Consultant.

2.7. Loan Administration and Monitoring

PMU will be responsible for the administration of the loan and monitoring of the performance of the loan. The CTC will give support towards the effective and efficient fulfilment of this function by assisting the PMU in this activity. Specific tasks to be undertaken as part of this assistance include:

- i. Establishing, maintaining and monitoring a uniform project accounting system for preparation & consolidation financial Project reports;
- ii. Monitor project disbursements and review and initiate action for loan adjustments as a result of revised costs for project financing requirements and disbursement schedules;
- iii. Prepare Project Management for implementation including procurement procedures, budgeting, accounting, disbursement, auditing and financial management, project management information, reporting systems and procedures and an anti corruption plan;
- iv. Assist Project Manager to develop and to run training programs in environmental and social impact management, and road maintenance and engineering support;
- v. Advising on alternative courses of action when physical or financial progress towards project outputs deviates from agreed targets and limits.

2.8. Financial Management

It is the responsibility of the PMU to ensure that financial requirements of the loan are met and reporting of the various financial aspects of the loan are complied with.

The CTC will give support towards the effective and efficient fulfilment of this function by assisting the PMU in this activity. Specific tasks to be undertaken as part of this assistance include:

- i. Enhance the financial management system, which has been developed for use by the provincial agencies in monitoring the physical and financial progress of the project;
- ii. Assist PMU to prepare expenditure forecasts and withdrawal applications for all components of disbursements under the Project;
- iii. Provide supporting procedures for data and information storage and retrieval in the PMU to serve all components of the project;
- iv. Provide capability in the system for keeping an historical record of works by location;
- v. Keep abreast of GOI regulations to satisfy auditing requirements of the GOI;
- vi. Keep abreast of ADB financial requirements to satisfy loan conditions and its auditing requirements;
- vii. Monitor the implementation of the financial management procedures and prepare detailed guidelines on the procedures recommended. Propose modification to procedures as necessary;

- viii. Provide facilities to enable the PMU to establish the hardware and disseminate the financial management system and keep provinces informed on important developments and deadlines; and
- ix. Prepare the Project Monitoring Reports on schedule for the PMU to submit to the Bank and concerned agencies.

2.9. Performance Indicators

A set of indicators for monitoring and evaluating the performance of the project in relation to its goals, purposes and expected outputs will be agreed between DGH and the ADB prior to loan negotiations. Shortly 2 months before project implementation, baseline values will be established by DGH.

PMU will be responsible for providing combined reports to the ADB. The CTC will give support towards the effective and efficient fulfilment of this function by assisting the PMU in this activity. Specific tasks to be undertaken by the CTC as part of this assistance include:

- i. Review the proposed indicators provided by PMU and make final modifications prior to commencement of surveys;
- ii. In accordance with the monitoring plan specified in the loan agreement, baseline values for DGH will be established for (i) traffic volume, (ii) average roughness, (iii) annual expenditures on maintenance (routine and periodic) for national road network, (iv) social and economic impact indicators and monitor DGLC consultant to measured baseline values for (i) impact of road safety awareness campaign, (ii) truck axle loads as measured at the four weighbridges and weigh-in-motion monitoring equipment, (iii) average one-way passenger fares and freight transport rates for general cargo for selected routes (as agreed by DGLC and ADB).
- iii. Evaluation the results performance monitoring and report to the PMU with recommendations on enhancement of the performance.

2.10. Reporting

A large number of reports will be prepared throughout the duration of this project. The PMU will be responsible that these reports are submitted in timely fashion and are of adequate quality.

The CTC will give support towards the effective and efficient fulfilment of this function by assisting the PMU in this activity. Specific tasks to be undertaken as part of this assistance include:

- i. Reporting to the steering committee as required on any problems that may arise during the implementation of the Project.
- iii. Reporting to the Bank as required by the Loan Agreement or RRP
- iii Based on information supplied by the DSC, prepare:

Inception Report. Within 30 days after commencement of the services, the Consultant will submit an Inception Report, giving a detailed work plan, assignments for individuals and proposed methodology.

The Inception Report will be submitted in 20 copies, including the original hard copy and an electronic version format (10 copies in English).

Monthly reports, will be submitted within 10 days from the end of each month. The reports will include an overall summary and cover activities and reports produced during the month, and highlight any recommendations for actions to be taken by the various parties.

The Consultant will submit 20 copies (10 copies in English), including the original in hard and compact disk format.

Interim Report. This will be submitted with ten days after the middle of services. It will cover the activities up to the middle of services.

The Consultant will submit 20 copies (10 copies in English), including the original in hard and compact disk format.

Draft Final Report. It will be submitted one month before the completion of the services. The Draft final report will be presented by the Consultant to DGH officials.

The Consultant will submit 20 copies (10 copies in English), including the original in hard and compact disk format.

Final Report (Including Executive Summary). Based on the outcome of the presentation, the draft final report will be revised and submitted as Final Report to the client at the completion of services.

The Consultant will submit 20 copies (10 copies in English), including the original in hard and compact disk format.

Special Report. During the consultancy services a series of special report will be prepared and submitted by the Consultant.

Project Progress Report, Monthly Report, and Quarterly PPR will be submitted to PMU for ADB purposed as stated on Project Implementation Plan.

3. STAFFING

3.1 Time Schedule

The consulting services covered by these Terms of Reference are for a 54 months period commencing around June 2006 and terminating around December 2010.

3.2 Suggested Staffing

Key personnel on the staff may include international and national experts. The skills considered to be required to undertake the services are listed below. The Consultant is free to suggest modifications to this staffing and should define their inputs following their reading of these TOR and discussion with DGH.

All experts international must be proficient in both written and spoken English. A basic knowledge of the Indonesian language by the foreign experts is desirable. A basic knowledge of English by the domestic experts is also desirable.

During the course of the assignment should the need arise for different skills, or for shorter or longer inputs of the identified skills, the Consultant will be expected to make changes to the staffing at the request of the Project Manager.

Table 3 - Indicative Skills Required for Core Team Consultant

International

Expert	No	Total
Team Leader	1	54
Highway Engineer (on basis needed)	1	5
Quality Engineering Specialist / Contracts Specialist	1	24
Transport Economist (on basis needed)	1	2
Environment Specialist	1	8
Total	5	93.977

Domestic

Expert	No	Total
Deputy Team Leader/Highway Engineer	1	54
Pavement Geotechnical Engineer	1	20
Transport Economist	1	8
Structural Bridge Engineer	1	12
Local Independent Quality Advisors	4	216
Financial Management Specialist	2	108
Procurement Specialist	1	24
Environmental Specialist	1	25
Socio-Economic Specialist	1	20
Contract Specialist	1	8
<i>Total</i>	14	495

All the team members shall be generally stationed in Jakarta and assist PMU in implementation of the Project. They will visit the project sites to give direction and advice to DSC Consultant as necessary to fulfill the requirements of these TOR.

3.3 Staff Requirement.

1. Team Leader – International

Responsible for liaison with PMU and GOI agencies and managing the CTC team to ensure that they achieve all objectives and tasks specified in this TOR. Responsible for review of all designs to ensure that the designs meet the latest agreed national standards.

The Team Leader will be a senior engineer with bachelor degree (S1) in civil engineering and a minimum of 15 years of relevant experience covering project management of large highway projects, monitoring, design and supervision of road construction projects, of which at least five years should have been spent in developing countries and at least two years in Indonesia.

2. Highway Engineer – International

Responsible for review of all design on behalf of PMU to ensure that the designs meet the latest agreed national standards.

The Highway Engineer Specialist will be a senior engineer with bachelor degree (S1) in civil engineering and a minimum of 12 years of relevant experience covering design of road construction project and contract documentation of which at least five years should have been spent in developing countries and at least two years in Indonesia.

3. Quality Engineering Specialist/Contracts Specialist – International

Responsible for auditing of all activities of the DSC to ensure that they achieve all objectives and tasks specified in their contract and to ensure that construction meets the specifications and standards as defined in construction contract documents and the latest agreed national standards. Responsible for reviewing all contract documentation to ensure that it meets latest standards, is accurate and relevant.

The Quality Engineering Specialist/Contracts Specialist will be a senior engineer with bachelor degree (S1) in civil engineering and a minimum of 12 years of relevant experience covering design and supervision of road construction projects, auditing and contract documentation of which at least five years should have been spent in developing countries and at least two years in Indonesia

4. Socio-Economic/Environmental Specialist – International

Responsible for providing assistance to DGH's Sub-Directorate of Environmental Affairs (SDEA) or any successor to undertake analyses of socio economic and environmental impacts of all works associated with this project.

The Socio-Economic/Environmental Specialist will be a senior specialist with relevant bachelor degree (S1) and a minimum of 12 years of relevant experience covering socio-economic poverty and environmental issues associated with construction projects of which at least five years should have been spent in developing countries.

5. Transport Economist – International

Responsible for assisting PMU in the economic analysis to confirm viability of any new roads selected during the course of the project. All phase 1 and 2 roads currently selected have already undergone economic analysis to confirm viability.

The Transport Economist will be a senior engineer with relevant bachelor degree (S1) and a minimum of 12 years of relevant experience covering transport economics of which at least five years should have been spent in developing countries.

6. Deputy Team Leader/Highway Engineer – Domestic

Responsible for assisting the Team Leader in all aspects of project administration and to provide additional support with highway engineering issues. Responsible for collecting all performance indicator data and production of these reports.

The Deputy Team Leader/Highway Engineer will be a senior engineer with bachelor degree (S1) in civil engineering and a minimum of 10 years of relevant experience covering project management of large highway projects, monitoring, design and supervision of road construction projects.

7. Pavement/Geotechnical Engineer – Domestic

Responsible for reviewing inventory of existing pavement conditions, proposed pavement designs and checking the designs of flexible pavements, costing of pavement works and maintenance

The Pavement/Geotechnical Engineer will be a senior engineer with bachelor degree (S1) in civil engineering and a minimum of 10 years of relevant experience covering pavement design and geotechnical investigations for road construction projects.

8. Structural Bridge Engineer – Domestic

Assist the Team Leader in checking the Phase 1 and 2 designs provided for new bridges, make recommendations for modifications and audit construction quality of all new bridges when under construction.

The Structural Bridge Engineer will be a senior engineer with bachelor degree (S1) in civil engineering and a minimum of 10 years of relevant experience covering bridge design.

9. Transport Economist – Domestic

Assist the Transport Economist in the economic analysis to confirm viability of any new roads selected during the course of the project. All phase 1 and 2 roads currently selected have already undergone economic analysis to confirm viability.

The Transport Economist will relevant bachelor degree (S1) and a minimum of 5 years of relevant experience covering transport economics.

10. Local Independent Quality Advisors (x4) – Domestic

Responsible for providing communications between the regional agencies, DSC field teams and PMU for all aspects. Participate in quality audits for all aspects of the contract. Provide advice and recommendations on design and construction issues. Collect all data for performance indicators.

The Independent Quality Advisors will be senior engineer with bachelor degree (S1) in civil engineering and a minimum of 10 years of relevant experience covering road and bridge design.

11. Environmental Impact Specialist – Domestic

Responsible monitoring and auditing the environmental impacts of the project. Assist in developing checklists and other tools for measurement of environmental impact.

The Environmental Impact Specialist will be a senior specialist with relevant bachelor degree (S1) and a minimum of 5 years of relevant experience covering environmental issues associated with construction projects.

12. Socio-Economic Specialist – Domestic

Responsible for monitoring and auditing the social impacts of the project . Assist in undertaking the socio-economic aspects of the project performance monitoring.

The Socio-Economic Specialist will be a senior specialist with relevant bachelor degree (S1) and a minimum of 5 years of relevant experience covering socio-economic and poverty issues associated with construction projects.

13. Financial Management Specialist (x2) – Domestic

Responsible for ensuring that financial requirements of the loan are met and reporting of the various financial aspects of the loan are complied with.

The Financial Management Specialist will be a senior specialist with relevant bachelor degree (S1) and a minimum of 5 years of relevant experience covering financial management of International Loan projects.

14. Procurement Specialist – Domestic

Responsible for ensuring that procurement requirements of the loan are met and all tendering and evaluations are fully in accordance with ADB requirements.

The Procurement Specialist will be a senior engineer with relevant bachelor degree (S1) and a minimum of 5 years of relevant experience covering procurement for loan funded projects.

15. Contracts Specialist – Domestic

Responsible for ensuring that all contract documentation is of the highest possible standard and meets latest standards, is accurate and relevant.

The Contracts Specialist will be a senior engineer with relevant bachelor degree (S1) and a minimum of 5 years of relevant experience covering contract documentation for loan funded projects.

4. FACILITIES TO BE PROVIDED BY THE CONSULTANT

The following facilities should be provided for in the Consultant's cost estimate:

- Office rental in the close vicinity of DGH's office, with sufficient space for The Consultant's staff.
- Office supplies, office equipment and furniture.
- Vehicles and travel.
- Communication.
- All other facilities necessary for the successful completion of the Consultant's services and not provided by the Employer.

5. PROVISIONAL SUM

- The team will need office, equipment, transportation, operational facilities.
- The team will require Sub Professional Staff & Supporting Staff that are not listed in this TOR.

Provisional Sum for Financial Proposal

▪ Duty Travel	US\$ 276,136
▪ Equipment: (Office Equipment & Furniture)	US\$ 67,045
▪ Workshops	US\$ 25,227
Total Provisional Sum	US\$ 368,408

6. FACILITIES TO BE PROVIDED BY THE EMPLOYER

Facilities to be provided by the Employer are limited to those shown below:

- All reports, tender documents, designs, produced by DGH and the consultants necessary for the successful implementation of the project.

TERMS OF REFERENCE (TOR)
for
DESIGN AND SUPERVISION CONSULTANT (DSC-1)
SUMATRA REGION

I INTRODUCTION: THE REQUIRED SERVICES

The Road Rehabilitation-2 Project (RR2P) from ADB's ordinary capital resources provided under ADB's LIBOR-based lending facility. It is scheduled to begin around June 2006, and will continue until the end of June 2009.

The Executing Agency will be Directorate General of Highways (DGH), Ministry of Public Works with Project Implementation Units (PIU) for Road Rehabilitation 2 Project of 6 provinces in Sumatra which represented by Satuan Kerja Sementara Pembangunan Jalan or Satuan Kerja Sementara Pemeliharaan Jalan in each province.

A Design and Supervision Consultant (DSC) will provide the following services to the DGH (The Employer) act as Engineer and they will provide the following services:

- Provide day to day management support to the DGH.
- Supervise implementation of Phase1 and 2 Works Program;
- Review Design if required;
- Assist PIU to review of the tender document and tendering process for phase 2 (pre-contract activities) related with ADB and GOI regulation.
- Assist in the completion of all required reporting for PIU.
- Verifying contractor performance.
- Assist P2JJ related with project implementation.
- Assist DGH to monitor Environmental Impact based on EMMP (Environmental Management and Monitoring Plan) produced by CTC.

Full details of the required objectives and tasks of the DSC are shown in Section 4 and 6 of this TOR. Other Consultants employed under this project include Core Team Consultant (CTC) will provide management support to the PMU and will be responsible on behalf of the PMU for monitoring and auditing of the DSC;

2. PROJECT DESCRIPTION

The proposed project will support the Government's program of rehabilitating strategic national links in Sumatra to promote economic growth and reduce poverty. The links lie on Trans island corridors and serve both inter-regional trade and local traffic. The project will also help strengthen the capacity of central and provincial agencies to maintain and protect road pavements and reduce the risk of accidents in areas newly exposed to traffic.

Since 1997/98, Government budget allocations for maintaining national roads have fallen short of needs and the condition of the network has deteriorated. A backlog of rehabilitation has built up. In Sumatra, it has raised transport costs between provincial central and between plantation areas and ports; some national roads have even become impassable for parts of the year. By reinstating the condition of high-priority links, the project will improve accessibility and living conditions in isolated areas with potential growth prospects in Sumatra.

The main objective will be to support growth and reduce poverty by rehabilitating 653,99 km of national roads and 20 bridges in 6 provinces in Sumatra. To ensure that the rehabilitated roads do not deteriorate prematurely and secure sustainable benefits, the project will also include measures to reduce pavement damage caused by overloaded trucks, strengthen the planning, programming and execution of maintenance, and reduce the risk of accidents among roadside communities by raising levels of awareness of accident risk.

2.1 Project Description

2.1.1 Project Schedule

The project will be implemented in two phases. Projects to be implemented in Phase 1 will be fully prepared (final design and documentation and economic evaluation) during the project preparation period. Final preparations for Phase 2 will also be completed during project implementation period, together with detailed transition arrangements.

2.2.2 Civil Works Component

The overall content of the civil works (road and bridge) components to be implemented under the project is summarized in Table 1 and Table 2 below.

TABLE 1. Bridge Rehabilitation Works for Kalimantan

											(Include Tax)
Province	Link No	Link Name	Bridge No	Bridge Name	Km	Span (m)	Existing Type	Proposed Type	Est. Cost (Rp mln)	Total Cost (Rp mln)	Note
West Kalimantan	079.2	Teraju - Bts. Balai Bekuak	N/A	Empari	339.272	8.0	Timber	RCC deck-girder	665.7		Replacement
			N/A	Mangkup	343.922	10.0	Timber	RCC deck-girder	832.1		Replacement
			N/A	Gendulan	344.809	10.0	Timber	RCC deck-girder	832.1		Replacement
			N/A	Penair Kabang	345.247	8.0	Timber	RCC deck-girder	665.7	2,995.6	Replacement
	079.3	Bts. Balai Bekuak - Aur Kuning	N/A	N/A	356	12.0	Timber	RCC deck-girder	668.3		Replacement
			N/A	N/A	362	10.0	Timber	RCC deck-girder	556.9		Replacement
			N/A	N/A	374	14.0	Timber	RCC deck-girder	779.7	2,004.9	Replacement
Total, West Kalimantan:									5,000.5		
Central Kalimantan	024.2	Runtu - Kujan	32.024.002.1	Sei. Kunup	436.347	20.0	Log	RCC deck-girder	3,041.5		Replacement
			32.024.021.1	Sei Sulat	464.645	20.0	Log	RCC deck-girder	2,011.9		Replacement
			32.024.027.1	Sei Kujang	477.432	20.0	Log	RCC deck-girder	2,028.6		Replacement
			N/A	Sei Danau	448.840	20.0	Log	RCC deck-girder	2,031.1		Replacement
			N/A	Sei Danau-1	450.835	20.0	Log	RCC deck-girder	1,983.9		Replacement
			N/A	Sei Sulung	458.300	20.0	Log	RCC deck-girder	1,967.3		Replacement
			N/A	Sei Sulung-1	460.825	20.0	Log	RCC deck-girder	2,007.7	15,072.0	Replacement
			024.4	Penopa - Kudangan	N/A	Sei Lupus	N/A	20.0	Timber	RCC deck-girder	1,800.0
N/A	Sei Lupus-1	N/A			20.0	Timber	RCC deck-girder	1,800.0	3,600.0	Replacement	
Total, Central Kalimantan:									18,672.0		
South Kalimantan	035	Sebamban - Pagatan	36.035.005.0	Dua Gardi II	216.600	5.0	Timber	RC Box culvert	173.4	173.4	Replacement
	039	Kintap - Sebamban	36.039.006.0	Sei Tengah II	149.284	6.0	Timber	RC Box culvert	194.0		Replacement
			36.039.008.0	Sei Duri II	151.032	9.0	Timber	RC Box culvert	287.3		Replacement
			36.039.012.0	Sei Anak I	154.155	9.0	Timber	RC Box culvert	248.8		Replacement
			36.039.027.0	Sei Setarap I	186.456	20.0	Timber	RC deck - girder	2,901.9	3,632.0	Replacement
Total, South Kalimantan:									3,805.4		
Total, all Provinces:									27,477.8		
US\$ equiv. (million):									3.1		
(1US\$=Rp. 8800)											

Note:

: Phase 1. Tabulated data refers to latest DED documents checked by Bridging Consultant of RR2P and Sub Directorate of Engineering Design and Supervision (Subdit Perencanaan dan Pengawasan) Central Region.

: Phase 2. All of data refer to Feasibility Study documents done by Dainichi Consultant.

Table 2: Detail Road Rehabilitation Works for Kalimantan

1 US\$ = Rp. 8,800.00

(Include Tax)
TABLE 1

Province	Contract Package	Link No.	Link Name	Pavement		Width m	Proposed Road Rehabilitation Treatments										Bridges			Detail Engineering Design (DED) Est. Cost		
				Existing	Proposed		Road										No Of Bridge	Type of work	Tot.Length (m)	Rp million	US\$ million equiv.	
							Reconstruction		Widening+ Reconstruction		Widening+ Resurfacing		Resurfacing		Shoulder Improvement							Effective Length Kms
							Kms	Width	Kms	Width	Kms	Width	Kms	Width	Kms (L+R)	Width						
West Kalimantan	BU-01	079.1	Tayan - Teraju	SCB/S	HRS-WC and Sand Sheet	4.7-5.0	8.45	4.5	-	-	-	-	20.80	4.5	58.5	1.0	29.25				12,444.24	1.41
		079.2	Teraju - Bts. Balai Bekuak	SCB/G/S	Sand Sheet		50.75	4.5	-	-	-	-	-	-	50.7	1.0	50.75		4	c	36.00	57,930.57
	BU-02	079.3	Bts. Balai Bekuak - Aur Kuning	G/S	HRS-WC		79.00	4.5	-	-	-	-	-	-	158.0	1.0	79.00		3	c	36.00	41,416.00
Central Kalimantan	BV-01	010.2	Km 65 - Sampit	HRS	HRS-WC	4.5	11.70	4.5	-	-	-	-	-	-	23.5	1.0	11.70				14,411.50	1.64
	BV-02	024.1	Sp. Runtu - Runtu	HRS	HRS-WC	4.5	8.97	4.5	-	-	-	-	12.42	4.5	42.8	1.0	21.39				15,567.29	1.77
		024.2	Runtu - Kujan	HRS	HRS-WC	4.5	34.81	4.5	-	-	-	-	7.52	4.5	68.6	1.0	42.33	c	140.00	69,958.15	7.95	
	BV-03	024.3	Kujan - Penopa	HRS	HRS-WC	8.0	60.40	-	-	-	-	-	-	-	89.4	1.0	60.40				96,881.00	11.01
BV-04	024.4	Penopa - Kudangan	HRS	HRS-WC	8.0	44.50	4.5	-	-	-	-	-	-	89.0	1.0	44.50	2	c	40.00	74,362.40	8.45	
South Kalimantan	BX-02	035	Sebamban - Pagatan	HRS	HRS-WC	4.6-5.5	-	-	3.79	6.0	15.43	6.0	13.80	6.0	65.5	1.5	33.02	1	c	5.00	23,799.71	2.70
		036	Pagatan - Batu Licin	HRS	HRS-WC	4.6-7.0	-	-	7.38	6.0	14.23	6.0	2.53	6.0	48.3	1.5	24.13				19,764.83	2.25
	BX-01	039	Kintap - Sebamban	HRS	HRS-WC	4.5-7.0	-	-	5.82	6.0	56.53	6.0	7.12	6.0	138.7	1.5	69.47	4	c	44.00	62,191.18	7.07
	BX-03	047.1	Sei. Kupang - Magalau	HRS	HRS-WC	4.5-5.5	-	-	-	-	-	-	50.00	4.5	100.0	1.0	50.00				28,015.00	3.18
BX-04	047.2	Magalau - Bts Kaltim	HRS	HRS-WC	4.5-5.5	-	-	-	-	-	-	50.00	4.5	100.0	1.0	50.00				30,441.40	3.46	
East Kalimantan	BW-01	026.4	Sp. Batu Ampar - Sp.Perdau	AC/SCB	AC-WC	5.0-7.5	72.50	4.5	-	-	-	-	-	145.0	1.0	72.50				168,902.40	19.19	
Total Kalimantan							371.08		16.99		86.18		164.19		1,177.8		638.44	21		301.00	716,085.66	81.37

- Notes:
- AC = asphaltic concrete, WC = wearing course, SCB = soil cement base, S = soil/earth, HRS = hot-rolled sheet
 - Effective length = length of rehabilitation works
 - All cost estimates include VAT, customs and duties
 - Bridge, type of work: a = Rehabilitation, b = Widening, c = Replacement
 - : Phase 1. Tabulated data refers to latest DED documents checked by Bridging Consultant of RR2P and Sub Directorate of Engineering Design and Supervision (Subdit Perencanaan dan Pengawasan) Central Region.
 - : Phase 2. All of data refer to Feasibility Study document done by Dainichi Consultant.

2.2.1 Administration Framework

DGH will establish a Project Management Unit (PMU) to coordinate design, implementation, supervision and technical assistance activities under the project. DGH's project management in the 6 project provinces will be through P2JJ units as project officer to conduct technical aspects in implementation of work programmes.

DGH will be assisted by consultants funded under the project. Road and bridge rehabilitation works will be executed by contractors, and supervised by DSC.

2.2.2 An Anti-Corruption Framework

ADB's Anti-Corruption Policy has been explained to the Government and this will be described to each consultant at the commencement of their consultancy. The Government is committed to creating and sustaining a corruption-free environment, and has agreed to abide by the relevant provisions of ADB's *Anti-Corruption Policy* in preparing all documents and contracts during the bidding process and implementation of the project. A new Anti-Corruption Law gives the Government strengthened legal powers of investigation and enforcement in cases of corruption.

2.2.3 Emphasis on Achieving Improved Quality

The Project will emphasise the improvement of construction quality, and therefore additional responsibilities will be given to the DSC that will strengthen their control. Experience under previous projects has demonstrated again that the traditional triangular relationship between Contractor, Project Manager of Civil Works and Field Team is very detrimental to quality of works as it gives an opportunity for the Field Team (who is supposed to be 'the Engineer's Representative' under the contract documents) to be by passed by the Project Manager when approving Contractors' payment claims. This is compounded if the Field Team has no recourse to independent senior engineers who can address such problems. This has been addressed firstly by eliminating the "project management triangle" and requiring the Project Manager to communicate with the Contractor through the DSC on all aspects relating to implementation of the works, and secondly by giving the Field Team a stronger management profile.

2.2.4 Financial Management

DGH will submit to ADB monthly, quarterly and annual progress reports on project implementation, the form and content of which will be agreed with ADB. DGH will maintain separate accounts for all project components financed by ADB and Government and have them audited by independent auditors acceptable to ADB. The audit will include:

- (i) an assessment of the adequacy of accounting and internal control systems used to monitor expenditures and other financial transactions and ensure safe custody of project financed assets;
- (ii) a determination as to whether the borrower has maintained adequate documentation of all relevant transactions;
- (iii) Verification that all expenditures submitted to ADB is eligible for financing; and (iv) identification of any ineligible expenditures. The audited project accounts and auditor reports will be furnished to ADB

3. INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENTS

3.1 Institutional Arrangements

3.1.1 Implementation Agencies

A steering committee representing government agencies involved in national development planning, finance, roads and road traffic and transport will monitor progress on physical works, institutional capacity building and technical assistance activities.

DGH will establish a PMU to coordinate design, implementation, supervision and technical assistance activities under the project. Project management in the **6 project** provinces will be through Project Manager of Civil Work, representing DGH in the provinces, and assisted by consultants funded under the project. Road and bridge rehabilitation works will be executed by contractors and supervised by consultants.

3.1.2 Works Supervision

The project will be supervised by DSC and consist of a Regional Team lead by Team Leader will located in Palembang and a Field Team lead by Supervision Engineer. There will be one Field Team per each contract package.

The objectives of the services of the DSC are to assist DGH in each of the **six project** provinces with implementation of the Road Rehabilitation-2 Project by

- (i) Reviewing designs and cost estimates on behalf of the respective of Direktorat Jalan dan Jembatan Wilayah Barat (Directorate of Road and Bridge Western Region) or any successor;
- (ii) Providing field staff to supervise and certify construction in accordance with contract conditions;
- (iii) Monitoring contractor's conformity with required environmental and social impact controls.
- (iii) Reporting progress on civil works and disbursements to the Direktorat Jalan dan Jembatan Wilayah Barat (Directorate of Road and Bridge Western Region) and the Core Team established by DGH.

There will be **15** Field Teams, one for each contract package. The duration of work will vary for each contract package depending on the scope of rehabilitation works to be carried out. All works of the DSC will be monitored and audited by the CTC, reporting to DGH's PMU, and a Steering Committee.

3.1.3 Environmental Aspects

The project is classified as Environmental Category B. IEE, public consultation and SIEE reports have been prepared in accordance with ADB's Environmental Assessment Requirements and Environmental Review Procedures and Environmental Guidelines for Selected Infrastructure Projects. The IEEs indicate that there would be no major adverse environmental impacts. The project involves rehabilitation of existing roads on existing alignments and within existing Row, with no additional land acquisition. Potential adverse impacts are minor, localised and temporary, and will receive mitigation and monitoring under the project.

The project's mitigation measures will include controls over the location and operation of quarries, dust re-suspended from unpaved surfaces, vegetation damage, slope failure caused by inadequate drainage, use of firewood for heating bitumen and prevention of possible spread of, and exposure to, potentially hazardous materials and wastes. The project's features include: slope stabilisation and protection to reduce the risk of failure and protect watercourses; protection from landslides by retaining structures; proper drainage, with cross-falls in each pavement layer and cross and side-drains designed to cope with expected flows; preservation of protected areas (e.g. protected forests and nature reserves) by a special management plan through limited construction works, road signs, roadside warnings and protective fencing; recycling of construction materials, e.g. by using reclaimed asphalt in cold mixes or aggregates in surface material; incorporating safety features in engineering designs, including barriers, signs and road markings; and protecting communities from project activities by close consultation with community leaders and those affected, providing advance notice of construction schedules, and adopting a code of conduct for worker behaviour.

3.2 Implementation Arrangements

3.2.1 The Project Implementation Plan (PIP)

The Project Implementation Plan (PIP) is intended to be the main technical working document for use in the management of the implementation of all components of the project during the period of the loan. The PIP includes the implementation schedule, procurement plan, disbursement schedule, performance indicators and monitoring for the overall project and for individual sub-projects and activities. The PIP also indicates all implementation activities to be undertaken.

3.2.2 Works Program

For all projects to be implemented in Phase 1, full project preparation has already been undertaken as part of the preparation of RR2P, including economic evaluation, environmental review, and the preparation of final engineering design and bidding documents. Bidding may also have been carried out, and award of contract after review by the Bank may also have been completed. DSC will be required to review designs and contract modification proposed by the sub project.

The DSC will carry out the following activities Phase 1 and Phase 2 works. The services involve cost and time control and direct day-to-day supervision of the Civil Works including guidance to the contractor in performing works construction in accordance with the engineering design and technical specifications. The responsibility for the works quality remains with the contractor. The objectives of the supervision is to assist the DPUP / Dinas Praswil / Dinas Bina Marga in administering the Contract Documents in accordance with quality and quantity control procedures and guidelines of DGH, to pay fairly for work done.

3.2.3 Design Review and Design Revision / Design Completion and Planning Review

The intention under RR2P is that all designs will be completed and certified eligible before the tender process begins. If a design is not completed in full, the following procedure for design completion and planning review will be adopted:

- i The Project Manager of Civil Works shall postpone the start of tendering (advertisement) until bridge or pavement and drainage design has been completed at least up to the calculation of bills of quantities based on the required surveys of road-making materials, site

- soil conditions and topography, and the design cost has been certified eligible for funding under the Project by CTC.
- ii If road links are shortened in length to meet these requirements, with the remaining length designed during the early phase of the work and added to the Contract as an Addendum, the Planning Review will include confirmation that the shortened sub-project remains a viable planning entity,
 - iii Planning review by CTC as a condition for eligibility for funding under the Loan applies in principle to the designs used in tendering, not just to the sub-projects and cost estimates in the PIP. In order to meet this requirement in the circumstances envisaged above, CTC will provide a critical service early in Phase 2, and will therefore depend on the full cooperation of RDS in ensuring an efficient design process, with a well-scheduled flow of information on sub-project identity, cost and status of certification within both DSC and CTC.

4. OBJECTIVES OF THE SERVICES

The primary objectives to be achieved by the DSC as a result of their contract are as follows full details of the tasks to be undertaken to achieve these objectives are shown in Section 5 below.

5. DETAIL SCOPE OF WORK FOR DESIGN AND SUPERVISION CONSULTANT (DSC)

The following task descriptions are intended only as a guide and as the minimum requirements. The DSC is encouraged to use initiative in expanding on the tasks in order to successfully achieve the objectives in a manner satisfactory to the Employer.

5.1. Contract Supervision – General

- i Prepare construction management manual consist of organization structure, testing procedures, contract management procedures, staff management procedures, administration management procedures.
- ii Plan and provide a program of field supervision of contractor performance in carrying out the works in accordance with contract provisions.
- iii To assess the adequacy of all materials, equipment and labor provided by each contractor, the contractor's methods of work and rate of progress; take appropriate action to expedite progress when necessary.
- iv To ensure that "as-built" drawings are prepared for all works as construction progresses; update provincial IRMS databases to reflect as-built.
- v Taking action when physical or financial progress towards project outputs deviates from agreed targets and limits conditions.
- vi Evaluate Review Design & Contract Change Order.

5.2. Contract Variation

Where variations of the quantities are requested by the Contractor, the following information should be provided in relation to contract variations:

- i data on which the original as-tendered design was based
 - a. a complete record of all new design data which is relevant to the variation
- ii an as-built record showing the location and detailed dimensions of all works carried out to date under the contract
- iii a copy of all previously approved variations and Contract Addenda

- iv a copy of the contractor's bid document, including all the tendered Unit Prices and detailed Unit Price Analysis
- v a description of the design assumptions adopted where these differed in any way from DGH standards
- vi drawings clearly showing both the original design and the proposed variation, and
- vii a rescheduled list of quantities and costs, relevant to the proposed variation.

5.3. Task and Responsibility of The DSC Personnel

It is the responsibility of the **Team Leader / Chief Supervision Engineer** of the DSC to supervise the DSC staff to ensure each activity is carried out properly.

- i Direct and coordinate consultant team under guidance of DGH.
- ii Ensure all consultant staff is conversant and fully active with all his responsibilities and requirements;
- iii Ensure that preparation and submission of all reports and other documents is carried out;
- iv Liaison and coordination with local agencies and authorities;
- v Ensuring that all design review and detailed design activities are carried out to the appropriate technical standards;
- vi Supervision guidance and organization of constructions supervision teams;
- vii Establish and monitor construction quality assurance;
- viii Monitoring of construction schedules comparing actual progress to planned;
- ix Monitoring of costs and recommendation for approval of payments to contractors.
- x Support the Field Team, in supervision of the setting-up, organization and lay out of the Contractor's field laboratory and in monitoring the mobilization of the equipment.
- xi Check and clarify cumulative of the Monthly Payment Certificates, which are certify by the Supervision Engineer.

It is the responsibility of the **Assistant Chief Supervision Engineer / Pavement Engineer / Material Engineer** to carry out duties:

- i Act as Team Leader with his responsibilities when the Team Leader is temporary not available.
- ii Support the Field Team in their supervision of the setting up of the Contractor's stone crusher and Asphalt Mixing Plant (and soil cement batching Plant in relevant instances), to ensure that the specified requirements for such equipment are fully met;
- iii Check asphalt mixing plants and advice to the Field Team and Civil Work Project Manager whether AMP is incorrect forms and has no capabilities to produce specified asphalt mixtures.
- iv Support and advice the Field Team to evaluate the adequacy of all testing work carried out by the Contractor for the purpose of selection of materials sources or of control of the quality of materials or workmanships.
- v Prepare the guidelines for the quality control with statistic methods and provide the guidance to the Field Team.
- vi Check and summaries all control test data and also provide advice and assistance to Field Team with approval or rejection of the contractor's proposed for aggregate base, mix asphalt materials, soil cement and concrete.
- vii Assist The Team Leader with his various duties, in particular with the preparation of project-wide quality control reports for submission to the CTC and DGH.

- viii Arrange all of data management system, in particular with design reviewing, physical and financial progress.

It is the responsibility of the **Highway Engineer** to carry out duties;

- i Assisting P2JJ Project Manager in preparing the engineering design for Phase 2 works if there is review.
- ii Support and advice the Field Team to evaluate the engineering aspect for design review carried out by the Contractor for Phase 1 works.
- iii Review DGH standard for asphalt overlays, aggregate base designs, soil cement base designs, chip-seal surface dressing design.

It is the responsibility of the **Supervision Engineer** leading each supervision team:

- i Be act as Engineer to carry out continuous supervision of the construction of the works involving regular inspection of works being performed and providing written instructions to the Contractor to clarify the exact work requirements.
- ii To guide and advise each contractor on the measures needed to maintain a safe working environment, protect the safety of road users and pedestrians, and to monitor the contractors to allow their workers to attend HIV/Aids awareness campaign.
- iii Review contractor's health and safety management plan.
- iv Related to DSC Organization, Supervision Engineer has responsibility to Team Leader. Supervision Engineer also has responsibility to the Project Manager/Sub Project Manager of Civil Work.
- v Ensure that the Contractor correctly interprets the contract documents, carries out his work in strict compliance with the specifications and drawings, and applies construction techniques what are appropriate to the pertaining site conditions for the various work activities.
- vi Certify acceptance or rejection of doubtful work and questionable materials, and inform the Project Manager/Sub Project Manager of Civil Work when such decisions have been made.
- vii Plot the Contractor's daily work progress on the approved Progress Schedule.
- viii Closely monitor the progress of all works and reports in good time to both Dinas Bina Marga Chief and Project Manager/Sub Project Manager of Civil Work of the road and bridge works contract concerned when the contract is falling in excess of 10% behind schedule and when timely completion is seriously endangered. Make appropriate recommendations in writing as to how to make up for lost time in such cases.
- ix Carefully monitor all quantity measurements submitted by the Quality Engineer or/and Chief Inspector and be personally involved in the measurement of each completed segment of work.
- x Check and certify the Monthly Payment Certificates what are prepared by the Contractor and provide certification to the Project Manager/Sub Project Manager of Civil Work and a copy to Team Leader and the PMU, regarding the quality of completed works.
- xi Furnish full details, including appropriate sketches and necessary calculations, to justify all proposed changes in the works (Change Orders).
- xii Check the as-built drawings (Final Record Documents) prepared by the contractors, and supervise revisions as required before Preliminary Handover (PHO).
- xiii Maintain files of project correspondence, weekly reports, progress charts, measurements, etc.
- xiv Prepare reports on the physical and financial progress of the project under his jurisdiction and submit these reports to PMU and Directorate of Road and Bridge Eastern Region.

- xv Review the contractor's Environmental Management and Monitoring Plan (EMP) to ensure that it meets all project objectives with respect to environmental and social issues:
- To monitor environmental controls and impacts and prepare a checklist of compliance for each contract package during construction. The details of the checklist will be agreed before hand with SDEA or any successor and PMU through CTC;
 - To monitor the environmental and social impacts using the checklists which prepared by CTC;
 - To include latest environmental methods in all designs prepared for Phase 2 works; and
 - Foster the use of environmental safeguards at all stages of the works.

It is the responsibility of the **Quality Engineer** on each supervision team to:

- i Provide close supervision of the setting-up, organization and lay out of the Contractor's field laboratory and monitoring of the mobilization of the testing equipment, to ensure well in advance of the start of construction that the laboratory is adequately equipped and capable of performing all the specified testing requirements for the Contract.
- ii Provide close supervision of the setting up of the Contractor's equipment, including stone crusher and Asphalt Mixing Plant, to ensure that the specified requirements for such equipment are fully met.
- iii Provide daily supervision of all testing work carried out by the Contractor for the purpose of materials or workmanship quality control, and immediately notify the Supervision Engineer in writing of any deficiencies in the testing procedures used and any defects in materials or workmanship quality.
- iv Analyze all quality control test data, including earthworks, drainage, shoulders, sub-base, base , pavement, structure and also the Contractor's proposed mix recipes for aggregate base course, asphalt material and concrete, and formulate and submit to the Supervision Engineer written recommendation regarding the approval or rejection of materials, workmanship and job mix formulae.
- v Supervise all quality control test work including earthworks, aggregate base course, pavement , concrete test carried out by the Contractor, to ensure that the number of test and procedure taken is not less than the specified minimum requirement and is sufficient to enable a meaningful statistical evaluation of the works achieved.
- vi Check all materials delivered to the site to ensure that they conform to the specification;
- vii Submit to the Supervision Engineer before the 25th day of each month a monthly summary of all quality control test results has been done obtained during the previous month, for transmittal by the Supervision Engineer The report will contain all the detailed laboratory and field measurements as well as summaries of the data.
- viii Make every effort to ensure that the Contractor's site Laboratory Technicians are fully conversant with the specified method of testing including those for concrete and asphalt mix design and trial mix testing, and that the standardized laboratory forms are used for recording the mix design data.
- ix Provide assistance to visiting staff from DGH or their consultants in their works of collecting quality control, asphalt production and pavement performance data and with their on-site training of the site laboratory personnel in appropriate technology and the associated testing methodology.
- x In the event that the work is being carried out to a standard below that specified or with materials below the specified quality, and the Contractor either refuses, or fails within a reasonable time, to make good the defective work, the Quality Engineer shall notify to the

Supervision Engineer, the Project Manager/Sub Project Manager of Civil Work, and the PMU in writing.

It is the responsibility of the **Chief Inspector / Quantity Engineer** on each supervision team to:

- i Reside very close to the contract package he is nominated to supervise;
- ii Carefully study the Project Drawings and specification before the start of work;
- iii Travel up and down the works in progress that he is inspecting on a daily basis;
- iv Plot the Contractor's actual daily work progress on the approved Progress Schedule;
- v At all times follow the technical guidance and seek the advice of the Supervision Engineer with regard to the execution of his duties;
- vi Prepare detailed and quantified recommendation for any proposed Contract Variation, which involve major/minor changes in the designs or in the specifications.
- vii Prepare detailed and quantified recommendations for any additional designs, which are required during construction.
- viii Continuously supervise in person, and record and check, all measurements, quantity calculations and payment certification to ensure that the Contractor is paid strictly in accordance with the provisions of the Contract Documents;
- ix Keep a daily summary of the construction activities, weather, deliveries of materials, equipment on site, quantities of work completed, field measurements, special events, etc., using standard report forms which are to be submitted to the Supervision Engineer at the end of each day's work;
- x Maintain files of project correspondence, progress charts, measurement, etc;
- xi Assist the Supervision Engineer to take final measurements of fully completed segments of work;
- xii Check the Monthly Payment Certificates that are prepared by the Contractor, for acceptance of completed works as required by the specification;
- xiii Check the as-built drawings (Final Record Documents) prepared by the contractors on the basis of drawings and notes prepared by the Consultant's staff.
- xiv Provide continuous on-site supervision for all day-work operations, including the preparation of daily records of the equipment, manpower and materials used by the Contractor in carrying out such day-work;
- xv Supervise continuously the daily activities of the Contractor including earthworks and drainage works, shoulders, sub-base, base and hot-mix and check all mix, production, spreading and compaction of asphalt surfacing.
- xvi Continually inspect all locations on the site where construction work is being performed, and immediately advises the Supervision Engineer of any work which is not in full compliance with the Contract Documents. All such observations are to be reported in writing to the Supervision Engineer on the same day that the observations are made.

5.4. Design

- i. The update surveys of roads and bridges and detailed designs review and cost estimates; and ensure that the designs should reflect agreed national and international standards and give adequate attention to lateral and cross-sectional drainage needs and environmental controls for Phase 2 works;

5.5. Monitor and Evaluate Pre Contract Activities

The DSC will carry out the following activities :

- i Monitor the procedures and documentation being used for procurement of each packet compared with the requirements of ADB and the PMU;
- ii Monitor progress in pre-contract activities, and assist DPUP / Dinas PrasWil / Dinas Bina Marga staff in evaluations if requested;
- iii Monitor whether any land acquisition is completed before a contract for a sub project is signed with the contractor; and
- iv Prepare a report on the qualification and tender process for each package, including comments on the availability of information, and the efficiency, quality and transparency of implementation of procedures, the land acquisition status at the time of tendering, as well as any recommendations for improvement.

5.6 Reporting

- i. The DSC will prepare the following reports to the Project Manager within the Regional Directorate or any successor, with a copy to the P2JJ as Project Officer for the services, to the DPUP, PMU and the CTC. . The Field Team will prepare the following reports to the Project Manager/Sub Project Manager of Civil Work, Team Leader/Chief Supervision Engineer with a copy to the P2JJ, to the DPUP and PMU through PIU.

Inception Report. Within 30 days after commencement of the services, the DSC shall submit an Inception Report giving a detailed work plan, assignments for individuals of each of the supervision teams, and a description of the current status of programs of work within their area.

Monthly reports will be submitted within 10 days from the end of each month. The reports will include an overall summary and cover activities and reports produced during the month, and highlight any recommendations for actions to be taken by the various parties. This reports should be produce as brief as possible.

Final Report. One month before the completion of Consultant services, a draft final report shall be submitted, summarizing the method of construction, the construction supervision performed, recommendations on future maintenance requirements, all technical matters arising during the construction of the road works, potential problems on the newly constructed works which may be expected, and giving suggestions, if any, for various needed improvements in future projects of similar nature undertaken by Directorate General of Regional Infrastructure.

The Final Report shall also include a copy of all “As Built Drawings”. The Final Report shall be submitted at the completion of services, including any comments received on the draft final report.

All Reports and data collected or produced during the project, and all programs and other materials developed, prepared or obtained during the project, will be the property of GOI, and are to be provided as requested, or handed over at the end of the Project, to the Project Manager. Please note that the standard office software used by the Regional Directorates is WORD, EXCEL, and other MS Office components. All computer work undertaken within the DSC will be in this or such other standard formats as may from

time to time be determined, and all materials produced will use such formats as the basis for monitoring progress of the project;

- ii. Report to the steering committee as required on any problems that may arise during the execution of the construction contracts;
- iii. Provide required contributions to the Project Completion Report; and
- iv. Ensure that data is provided for the uniform project accounting system for preparation, consolidation and auditing of Project accounts by the PMU.

5.7 Resettlement

To cope with the unlikely event that land acquisition or resettlement might be necessary following detailed design, assist DGH in complying with Compensation Policy Framework and Procedural Guidelines (CPFPG) and deciding compensation eligibility and entitlements, undertaking and monitoring resettlement and compensation, and providing for redress in case of complaint or grievance.

5. STAFFING

6.1 Time Schedule

The consulting services covered by these Terms of Reference are for a 36 month period commencing around June 2006 and terminating around June 2009.

6.2 Suggested Staffing

Key personnel on the staff may include international and national experts. The skills considered to be required to undertake the services are listed below. The Consultant is free to suggest modifications to this staffing and should define their inputs following their reading of these TOR and discussion with DGH.

- i. The Team Leader / Chief Supervision Engineer (International) will be a senior engineer with tertiary qualifications in civil engineering and a minimum of 15 years of relevant experience covering design and supervision of road construction projects, of which at least five years should have been spent 5 (five) years in developing countries and at least two years in Indonesia.
- ii. The Assistant Chief Supervision will be a senior engineer with relevant tertiary qualifications in civil engineering and a minimum of 10 years of relevant experience in road construction project of which at least 5 years as a pavement and material engineer.
- iii. The Highway Engineer will be a senior engineer with relevant tertiary qualifications in civil engineering and a minimum 10 years of relevant experience in road construction project of which at least 5 years as highway engineer.
- iv. The Supervision Engineer will be an engineer with relevant tertiary qualifications in civil engineering and a minimum of 10 years experience on supervision of road construction project including national, provincial and local roads, and at least 5 years on quality control works,
- v. The Quality Engineer will be an engineer with relevant tertiary qualifications in civil engineering and a minimum of 8 years relevant experience of supervision of road construction project, including national, provincial and local roads, and at least 5 years on quality control works.

- vi The Quantity Engineer will be an engineer with relevant tertiary qualifications in civil engineering and a minimum of 8 years experience on supervision of road construction project, and at least 5 years on quantity surveyor works

All international experts must be proficient in both written and spoken English. A basic knowledge of the Indonesian language by the foreign experts is desirable. A basic knowledge of the English by the domestic experts is also desirable. During the course of the assignment should the need arise for different skills, or for shorter or longer inputs of the identified skills, the DSC will be expected to make changes to the staffing at the request of the Project Manager. The Team Leader must be expending fully of day work for his task.

International in Palembang (Regional Office)

Expert	No	Total
Team Leader/Chief Supervision Engineer	1	36
Total	1 persons	36

Domestic in Palembang (Regional Office)

Expert	No	Total
Assistant Chief Supervision Eng. /Pavement/Material Engineer	1	36
Highway Engineer	1	24
Total	2 persons	60

Domestic in Field

Expert	No	Total
Supervision / Site Engineer	15	328
Quality Engineer	15	328
Chief Inspector / Quantity Engineer	15	328
Total	45 persons	1,128

4. FACILITIES TO BE PROVIDED BY THE DSC

The following facilities should be provided for in the DSC cost estimate:

- Office rental of the Regional Office in Palembang and Field Team in Field (Sumatra).
- Office supplies, office equipment and furniture for the DSC in Palembang and Field Team in Field (Sumatra).
- Vehicles and travel for the DSC in Palembang and Field Team in Sumatra .
- All other facilities necessary for the successful completion of the Consultant's services and not provided by the Employer – see Section 9 below.

8. FACILITIES TO BE PROVIDED BY THE EMPLOYER

Facilities to be provided by the Employer are limited to those shown below:

- All reports, tender documents, designs, produced by DGH and their consultants necessary for the successful implementation of the project.

9. PROVISIONAL SUM

- Each team will need offices, equipment, transport, operational facilities.

- Each team will require Inspector, Lab Technician, Surveyor, Supporting staffs that are not listed in this TOR.
- Supervision Teams required at 15 locations

NO	LOCATION / PACKAGE	NO.PKG / TEAM	SE (Mth)	QE (Mth)	CI (Mth)	VEHICLE	
						CAR	M.C Y
A	REGIONAL TEAM					2	1
B	PROVINCIAL/FIELD TEAM						
I.	North Sumatera						
1	Pd. Siidempuan – Bts. Tap Sel II	SU-01	22	22	22	2*	3*
2	Sp. Kawat – Bts. Labuhan Batu	SU-02	21	21	21	2*	3*
3	Bts. Labuhan Batu – Rantau Prapat	SU-03	23	23	23	2*	3*
4	Bts. Labuhan Batu - Rantau Prapat – Aek Nabara – Sp. Kota Pinang	SU-04	19	19	19	2*	3*
II.	West Sumatera						
1	Kiliranjao – Sei Dareh - Junction	SB-01	21	21	21	2*	3*
2	Bukittinggi–Kumpulan–Lb. Sikaping	SB-02	25	25	25	2	3
3	Lb. Sikaping-Panti-Bts. Sumut	SB-03	25	25	25	2	3
III.	Riau						
1	Sp. Batang – Sp. Balam	RI-01	25	25	25	2	3
2	Sp. Balam – Bagan Batu	RI-02	19	19	19	2*	3*
IV.	Jambi						
1	Muara Tembesi–Bts. Sarko-Sarolangun	JM-01	25	25	25	2	3
V.	South Sumatera						
1	Terawas – Lb. Lingsgau	SS-01	19	19	19	2*	3*
2	Muara Enim – Sp. Sugih Waras	SS-02	25	25	25	2	3
3	Baturaja–Martapura–Bts. Lampung	SS-03	21	21	21	2*	3*
VI.	Lampung						
1	Tegineneng - G. Sugih - T. Besar	LP-01	19	19	19	2*	3*
2	Terbanggi Besar - Kotabumi	LP-02	19	19	19	2*	3*
Total						32	46
Purchase						12	16
Rental						20*	30*

Provisional Sum for Financial Proposal

A. Vehicle Purchase or Rent

- a. Purchase of project vehicle for the consultant
 - 2 Car to support Regional Team = Rp. 340 million = US\$ 38,636
 - 10 Car to support Field Team = Rp. 1,200 million = US\$ 136,364
 - 16 Motorcycle to support Regional/Field Team = Rp. 192 million = US\$ 21,818
- b. Rental of project vehicle for the consultant
 - 20 Car rental eq. with 406 months @ Rp 5 million/month = Rp. 2,030 million = US\$ 230,682

- 30 Motorcycle rental eq. with 609 months @Rp 0.5 million/month=Rp.304.5 million=US\$ 34,602
- c. Operation & Maintenance vehicle for the consultant
 - 32 Car eq. with 72 months @ Rp 1.00 million/month + 656 months @ Rp 0.75 million/month = Rp. 564 million. = US\$ 64,091
 - 46 Motorcycle eq. with 1,020 months @ Rp 0.2 million/month = Rp. 204 million=US\$ 23,182
- d. Vehicle Insurance for the consultant
 - 12 Car eq. with 72 months @ Rp 0.425 million/month + 250 months @ Rp. 0.300 million/month = Rp. 105.6 million. = US\$ 12,000
 - 16 Motorcycle eq. with 411 months @ Rp 0.03 million/month = Rp.12.33 million.= US\$ 1,401

Total Vehicle Purchase or Rent = Rp. 4,952,430,000.- = US\$ 562,776

B. Duty Travel

Duty Travel for DSC (Regional Team)	= Rp. 711,050,400,- = US\$ 80,801
Duty Travel for Field Team North Sumatra Province	= Rp. 230,013,000,- = US\$ 26,138
Duty Travel for Field Team West Sumatra Province	= Rp. 176,283,800,- = US\$ 20,032
Duty Travel for Field Team Riau Province	= Rp. 99,246,000,- = US\$ 11,278
Duty Travel for Field Team Jambi Province	= Rp. 47,616,000,- = US\$ 5,411
Duty Travel for Field Team South Sumatra Province	= Rp. 98,080,000,- = US\$ 11,145
Duty Travel for Field Team Lampung Province	= Rp. 63,846,000,- = US\$ 7,255

Total Duty Travel = Rp. 1,426,135,200.- = US\$ 162,061

Total Provisional Sum = Rp. 6,378,565,200.- = US \$ 724,837.- (1 US\$ = Rp. 8,800)

ABREVIATION

DGH	Directorate General of Highways
PMU	Project Management Unit
PIU	Project Implementation Unit
CTC	Core Team Consultant
TA	Technical Assistance
P2JJ	Road and Bridge Planning and Management Unit The Provincial Level Representative of DGH
IEE	Initial Environmental Examination
PIP	Project Implementation Plan
DPUP	The Provincial Level Representative of Ministry of Public Works
AMP	Asphalt Mixing Plant
CPFPG	Compensation Policy Framework and Procedural Guidelines

TERMS OF REFERENCE (TOR)
for
DESIGN AND SUPERVISION CONSULTANT (DSC-2)
KALIMANTAN REGION

I. INTRODUCTION: THE REQUIRED SERVICES

The Road Rehabilitation-2 Project (RR2P) from ADB's ordinary capital resources provided under ADB's LIBOR-based lending facility. It is scheduled to begin around June 2006, and will continue until the end of September 2009.

The Executing Agency will be Directorate General of Highways (DGH), Ministry of Public Works with Project Implementation Units (PIU) for Road Rehabilitation 2 Project of 4 provinces in Kalimantan which represented by Satuan Kerja Sementara Pembangunan Jalan or Satuan Kerja Sementara Pemeliharaan Jalan in each province.

A Design and Supervision Consultant (DSC) will provide the following services to the DGH (The Employer) act as Engineer and they will provide the following services:

- Provide day to day management support to the DGH.
- Supervise implementation of Phase 1 and 2 Works Program;
- Review Design if required;
- Assist PIU to review of the tender document and tendering process for phase 2 (pre-contract activities) related with ADB and GOI regulation.
- Assist in the completion of all required reporting for PIU.
- Verifying contractor performance.
- Assist P2JJ related with project implementation.
- Assist DGH to monitor Environmental Impact based on EMMP (Environmental Management and Monitoring Plan) produced by CTC.

Full details of the required objectives and tasks of the DSC are shown in Section 4 and 6 of this TOR. Other Consultants employed under this project include Core Team Consultant (CTC) will provide management support to the PMU and will be responsible on behalf of the PMU for monitoring and auditing of the DSC;

2. PROJECT DESCRIPTION

The proposed project will support the Government's program of rehabilitating strategic national links in Kalimantan to promote economic growth and reduce poverty. The links lie on Trans island corridors and serve both inter-regional trade and local traffic. The project will also help strengthen the capacity of central and provincial agencies to maintain and protect road pavements and reduce the risk of accidents in areas newly exposed to traffic.

Since 1997/98, Government budget allocations for maintaining national roads have fallen short of needs and the condition of the network has deteriorated. A backlog of rehabilitation has built up. In Kalimantan, it has raised transport costs between provincial central and between plantation areas and ports; some national roads have even become impassable for parts of the year. By reinstating the condition of high-priority links, the project will improve accessibility and living conditions in isolated areas with potential growth prospects in Kalimantan.

The main objective will be to support growth and reduce poverty by rehabilitating 638,44 km of national roads in 4 provinces in Kalimantan and replacing 21 bridges in Kalimantan. To ensure that the rehabilitated roads do not deteriorate prematurely and secure sustainable benefits, the project will also include measures to reduce pavement damage caused by overloaded trucks, strengthen the planning, programming and execution of maintenance, and reduce the risk of accidents among roadside communities by raising levels of awareness of accident risk.

2.1.1 Project Schedule

The project will be implemented in two phases. Projects to be implemented in Phase 1 will be fully prepared (final design and documentation and economic evaluation) during the project preparation period. Final preparations for Phase 2 will also be completed during project implementation period, together with detailed transition arrangements.

2.2.2 Civil Works Component

The overall content of the civil works (road and bridge) components to be implemented under the project is summarized in Tables 1 and 2 below.

TABLE 1. Bridge Rehabilitation Works for Kalimantan

											(Include Tax)
Province	Link No	Link Name	Bridge No	Bridge Name	Km	Span (m)	Existing Type	Proposed Type	Est. Cost (Rp mln)	Total Cost (Rp mln)	Note
West Kalimantan	079.2	Teraju - Bts. Balai Bekuak	N/A	Empari	339.272	8.0	Timber	RCC deck-girder	665.7	2,995.6	Replacement
			N/A	Mangkup	343.922	10.0	Timber	RCC deck-girder	832.1		Replacement
			N/A	Gendulan	344.809	10.0	Timber	RCC deck-girder	832.1		Replacement
			N/A	Penair Kabang	345.247	8.0	Timber	RCC deck-girder	665.7		Replacement
	079.3	Bts. Balai Bekuak - Aur Kuning	N/A	N/A	356	12.0	Timber	RCC deck-girder	668.3	2,004.9	Replacement
			N/A	N/A	362	10.0	Timber	RCC deck-girder	556.9		Replacement
			N/A	N/A	374	14.0	Timber	RCC deck-girder	779.7		Replacement
Total, West Kalimantan:									5,000.5		
Central Kalimantan	024.2	Runtu - Kujan	32.024.002.1	Sei. Kunup	436.347	20.0	Log	RCC deck-girder	3,041.5	15,072.0	Replacement
			32.024.021.1	Sei Sulat	464.645	20.0	Log	RCC deck-girder	2,011.9		Replacement
			32.024.027.1	Sei Kujang	477.432	20.0	Log	RCC deck-girder	2,028.6		Replacement
			N/A	Sei Danau	448.840	20.0	Log	RCC deck-girder	2,031.1		Replacement
			N/A	Sei Danau-1	450.835	20.0	Log	RCC deck-girder	1,983.9		Replacement
			N/A	Sei Sulung	458.300	20.0	Log	RCC deck-girder	1,967.3		Replacement
			N/A	Sei Sulung-1	460.825	20.0	Log	RCC deck-girder	2,007.7		Replacement
	024.4	Penopa - Kudangan	N/A	Sei Lupus	N/A	20.0	Timber	RCC deck-girder	1,800.0	3,600.0	Replacement
N/A			Sei Lupus-1	N/A	20.0	Timber	RCC deck-girder	1,800.0	Replacement		
Total, Central Kalimantan:									18,672.0		
South Kalimantan	035	Sebamban - Pagatan	36.035.005.0	Dua Gardi II	216.600	5.0	Timber	RC Box culvert	173.4	173.4	Replacement
	039	Kintap - Sebamban	36.039.006.0	Sei Tengah II	149.284	6.0	Timber	RC Box culvert	194.0	3,632.0	Replacement
			36.039.008.0	Sei Duri II	151.032	9.0	Timber	RC Box culvert	287.3		Replacement
			36.039.012.0	Sei Anak I	154.155	9.0	Timber	RC Box culvert	248.8		Replacement
			36.039.027.0	Sei Setarap I	186.456	20.0	Timber	RC deck - girder	2,901.9		Replacement
Total, South Kalimantan:									3,805.4		
Total, all Provinces:									27,477.8		
US\$ equiv. (million):									3.1		
(1US\$=Rp. 8800)											

Note:

: Phase 1. Tabulated data refers to latest DED documents checked by Bridging Consultant of RR2P and Sub Directorate of Engineering Design and Supervision (Subdit Perencanaan dan Pengawasan) Central Region.

: Phase 2. All of data refer to Feasibility Study documents done by Dainichi Consultant.

TABLE 2. Detail Road Rehabilitation Works for Kalimantan

(Include Tax)

1 US\$ = Rp. 8,800.00

Province	Contract Package	Link No.	Link Name	Pavement		Width m	Proposed Road Rehabilitation Treatments												Bridges			Detail Engineering Design (DED)	
							Road						Shoulder						Effective Length Kms	No Of Bridge	Type of work	Tot.Length (m)	Est.Cost
				Reconstruction			Widening+ Reconstruction		Widening+ Resurfacing		Resurfacing		Improvement		Kms (L+R)	Width	Kms	Rp million					US\$ million equiv.
				Kms	Width		Kms	Width	Kms	Width	Kms	Width	Kms (L+R)	Width									
West Kalimantan	BU-01	079.1	Tayan - Teraju	SCB/S	HRS-WC and Sand Sheet	4.7-5.0	8.45	4.5	-	-	-	-	20.80	4.5	58.5	1.0	29.25				12,444.24	1.41	
		079.2	Teraju - Bts. Balai Bekuak	SCB/G/S	Sand Sheet		50.75	4.5	-	-	-	-	-	-	50.7	1.0	50.75	4	c	36.00	57,930.57	6.58	
	BV-02	079.3	Bts. Balai Bekuak - Aur Kuning	G/S	HRS-WC		79.00	4.5	-	-	-	-	-	-	158.0	1.0	79.00	3	c	36.00	41,416.00	4.71	
Central Kalimantan	BV-01	010.2	Km 65 - Sampit	HRS	HRS-WC	4.5	11.70	4.5	-	-	-	-	-	23.5	1.0	11.70				14,411.50	1.64		
		024.1	Sp. Runtu - Runtu	HRS	HRS-WC	4.5	8.97	4.5	-	-	-	-	12.42	4.5	42.8	1.0	21.39				15,567.29	1.77	
	BV-02	024.2	Runtu - Kujan	HRS	HRS-WC	4.5	34.81	4.5	-	-	-	-	7.52	4.5	68.6	1.0	42.33	7	c	140.00	69,958.15	7.95	
		BV-03	024.3	Kujan - Penopa	HRS	HRS-WC	8.0	60.40	-	-	-	-	-	-	89.4	1.0	60.40				96,881.00	11.01	
BV-04	024.4	Penopa - Kudangan	HRS	HRS-WC	8.0	44.50	4.5	-	-	-	-	-	-	89.0	1.0	44.50	2	c	40.00	74,362.40	8.45		
South Kalimantan	BX-02	035	Sebamban - Pagatan	HRS	HRS-WC	4.6-5.5	-	-	3.79	6.0	15.43	6.0	13.80	6.0	65.5	1.5	33.02	1	c	5.00	23,799.71	2.70	
		036	Pagatan - Batu Licin	HRS	HRS-WC	4.6-7.0	-	-	7.38	6.0	14.23	6.0	2.53	6.0	48.3	1.5	24.13				19,764.83	2.25	
	BX-01	039	Kintap - Sebamban	HRS	HRS-WC	4.5-7.0	-	-	5.82	6.0	56.53	6.0	7.12	6.0	138.7	1.5	69.47	4	c	44.00	62,191.18	7.07	
		BX-03	047.1	Sei. Kupang - Magalau	HRS	HRS-WC	4.5-5.5	-	-	-	-	-	-	50.00	4.5	100.0	1.0	50.00				28,015.00	3.18
BX-04	047.2	Magalau - Bts Kaltim	HRS	HRS-WC	4.5-5.5	-	-	-	-	-	-	50.00	4.5	100.0	1.0	50.00				30,441.40	3.46		
East Kalimantan	BW-01	026.4	Sp. Batu Ampar - Sp.Perdau	AC/SCB	AC-WC	5.0-7.5	72.50	4.5	-	-	-	-	-	145.0	1.0	72.50				168,902.40	19.19		
Total Kalimantan							371.08		16.99		86.18		164.19		1,177.8		638.44	21		301.00	716,085.66	81.37	

- Notes:
- AC = asphaltic concrete, WC = wearing course, SCB = soil cement base, S = soil/earth, HRS = hot-rolled sheet
 - Effective length = length of rehabilitation works
 - All cost estimates include VAT, customs and duties
 - Bridge, type of work: a = Rehabilitation, b = Widening, c = Replacement
 - : Phase 1. Tabulated data refers to latest DED documents checked by Bridging Consultant of RR2P and Sub Directorate of Engineering Design and Supervision (Subdit Perencanaan dan Pengawasan) Central Region.
 - : Phase 2. All of data refer to Feasibility Study document done by Dainichi Consultant.

2.2. Project Implementation and Management: Major Features

2.2.1 Administration Framework

DGH will establish a Project Management Unit (PMU) to coordinate design, implementation, supervision and technical assistance activities under the project. DGH's project management in the 4 project provinces will be through P2JJ units as project officer to conduct technical aspects in implementation of work programmes.

DGH will be assisted by consultants funded under the project. Road and bridge rehabilitation works will be executed by contractors, and supervised by DSC.

2.2.2 An Anti-Corruption Framework

ADB's Anti-Corruption Policy has been explained to the Government and this will be described to each consultant at the commencement of their consultancy. The Government is committed to creating and sustaining a corruption-free environment, and has agreed to abide by the relevant provisions of ADB's *Anti-Corruption Policy* in preparing all documents and contracts during the bidding process and implementation of the project. A new Anti-Corruption Law gives the Government strengthened legal powers of investigation and enforcement in cases of corruption.

2.2.3 Emphasis on Achieving Improved Quality

The Project will emphasise the improvement of construction quality, and therefore additional responsibilities will be given to the DSC that will strengthen their control. Experience under previous projects has demonstrated again that the traditional triangular relationship between Contractor, Project Manager of Civil Works and Field Team is very detrimental to quality of works as it gives an opportunity for the Field Team (who is supposed to be 'the Engineer's Representative' under the contract documents) to be by passed by the Project Manager when approving Contractors' payment claims. This is compounded if the Field Team has no recourse to independent senior engineers who can address such problems. This has been addressed firstly by eliminating the "project management triangle" and requiring the Project Manager to communicate with the Contractor through the DSC on all aspects relating to implementation of the works, and secondly by giving the Field Team a stronger management profile.

2.2.4 Financial Management

DGH will submit to ADB monthly, quarterly and annual progress reports on project implementation, the form and content of which will be agreed with ADB. DGH will maintain separate accounts for all project components financed by ADB and Government and have them audited by independent auditors acceptable to ADB. The audit will include:

- (i) an assessment of the adequacy of accounting and internal control systems used to monitor expenditures and other financial transactions and ensure safe custody of project financed assets;
- (ii) a determination as to whether the borrower has maintained adequate documentation of all relevant transactions;
- (iii) Verification that all expenditures submitted to ADB is eligible for financing; and (iv) identification of any ineligible expenditures. The audited project accounts and auditor reports will be furnished to ADB

3. INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENTS

3.1 Institutional Arrangements

3.1.1 Implementation Agencies

A steering committee representing government agencies involved in national development planning, finance, roads and road traffic and transport will monitor progress on physical works, institutional capacity building and technical assistance activities.

DGH will establish a PMU to coordinate design, implementation, supervision and technical assistance activities under the project. Project management in the 4 project provinces will be through Project Manager of Civil Work, representing DGH in the provinces, and assisted by consultants funded under the project. Road and bridge rehabilitation works will be executed by contractors and supervised by consultants.

3.1.2 Works Supervision

The project will be supervised by DSC and consist of a Regional Team lead by Team Leader will located in Banjarmasin and a Field Team lead by Supervision Engineer. There will be one Field Team per each contract package.

The objectives of the services of the DSC are to assist DGH in each of the four project provinces with implementation of the Road Rehabilitation-2 Project by

- (i) Reviewing designs and cost estimates on behalf of the respective of Direktorat Jalan dan Jembatan Wilayah Timur (Directorate of Road and Bridge Eastern Region) or any successor;
- (ii) Providing field staff to supervise and certify construction in accordance with contract conditions;
- (iii) Monitoring contractor's conformity with required environmental and social impact controls.
- (iv) Reporting progress on civil works and disbursements to the Direktorat Jalan dan Jembatan Wilayah Timur (Directorate of Road and Bridge Eastern Region) and the Core Team established by DGH.

There will be **11** Field Teams, one for each contract package. The duration of work will vary for each contract package depending on the scope of rehabilitation works to be carried out. All works of the DSC will be monitored and audited by the CTC, reporting to DGH's PMU, and a Steering Committee.

3.1.3 Environmental Aspects

The project is classified as Environmental Category B. IEE, public consultation and SIEE reports have been prepared in accordance with ADB's Environmental Assessment Requirements and Environmental Review Procedures and Environmental Guidelines for Selected Infrastructure Projects. The IEEs indicate that there would be no major adverse environmental impacts. The project involves rehabilitation of existing roads on existing alignments and within existing Row, with no additional land acquisition. Potential adverse impacts are minor, localised and temporary, and will receive mitigation and monitoring under the project.

The project's mitigation measures will include controls over the location and operation of quarries, dust re-suspended from unpaved surfaces, vegetation damage, slope failure caused by inadequate drainage, use of firewood for heating bitumen and prevention of possible spread of, and exposure to, potentially hazardous materials and wastes. The project's features include: slope stabilisation and protection to reduce the risk of failure and protect watercourses; protection from landslides by retaining structures; proper drainage, with cross-falls in each pavement layer and cross and side-drains designed to cope with expected flows; preservation of protected areas (e.g. protected forests and nature reserves) by a special management plan through limited construction works, road signs, roadside warnings and protective fencing; recycling of construction materials, e.g. by using reclaimed asphalt in cold mixes or aggregates in surface material; incorporating safety features in engineering designs, including barriers, signs and road markings; and protecting communities from project activities by close consultation with community leaders and those affected, providing advance notice of construction schedules, and adopting a code of conduct for worker behaviour.

3.2 Implementation Arrangements

3.2.1 The Project Implementation Plan (PIP)

The Project Implementation Plan (PIP) is intended to be the main technical working document for use in the management of the implementation of all components of the project during the period of the loan. The PIP includes the implementation schedule, procurement plan, disbursement schedule, performance indicators and monitoring for the overall project and for individual sub-projects and activities. The PIP also indicates all implementation activities to be undertaken.

3.2.2 Works Program

For all projects to be implemented in Phase 1, full project preparation has already been undertaken as part of the preparation of RR2P, including economic evaluation, environmental review, and the preparation of final engineering design and bidding documents. Bidding may also have been carried out, and award of contract after review by the Bank may also have been completed. DSC will be required to review designs and contract modification proposed by the sub project.

The DSC will carry out the following activities Phase 1 and Phase 2 works. The services involve cost and time control and direct day-to-day supervision of the Civil Works including guidance to the contractor in performing works construction in accordance with the engineering design and technical specifications. The responsibility for the works quality remains with the contractor. The objectives of the supervision is to assist the DPUP/Dinas Praswil / Dinas Bina Marga in administering the Contract Documents in accordance with quality and quantity control procedures and guidelines of DGH, to pay fairly for work done.

3.2.3. Design Review and Design Revision / Design Completion and Planning Review

The intention under RR2P is that all designs will be completed and certified eligible before the tender process begins. If a design is not completed in full, the following procedure for design completion and planning review will be adopted:

- i The Project Manager of Civil Works shall postpone the start of tendering (advertisement) until bridge or pavement and drainage design has been completed at least up to the

calculation of bills of quantities based on the required surveys of road-making materials, site soil conditions and topography, and the design cost has been certified eligible for funding under the Project by CTC.

- ii If road links are shortened in length to meet these requirements, with the remaining length designed during the early phase of the work and added to the Contract as an Addendum, the Planning Review will include confirmation that the shortened sub-project remains a viable planning entity,
- iii Planning review by CTC as a condition for eligibility for funding under the Loan applies in principle to the designs used in tendering, not just to the sub-projects and cost estimates in the PIP. In order to meet this requirement in the circumstances envisaged above, CTC will provide a critical service early in Phase 2, and will therefore depend on the full cooperation of RDS in ensuring an efficient design process, with a well-scheduled flow of information on sub-project identity, cost and status of certification within both DSC and CTC.

4. OBJECTIVES OF THE SERVICES

The primary objectives to be achieved by the DSC as a result of their contract are as follows full details of the tasks to be undertaken to achieve these objectives are shown in Section 5 below.

5. DETAIL SCOPE OF WORK FOR DESIGN AND SUPERVISION CONSULTANT (DSC)

The following task descriptions are intended only as a guide and as the minimum requirements. The DSC is encouraged to use initiative in expanding on the tasks in order to successfully achieve the objectives in a manner satisfactory to the Employer.

5.1. Contract Supervision – General

- i Prepare construction management manual consist of organization structure, testing procedures, contract management procedures, staff management procedures, administration management procedures.
- ii Plan and provide a program of field supervision of contractor performance in carrying out the works in accordance with contract provisions.
- iii To assess the adequacy of all materials, equipment and labor provided by each contractor, the contractor's methods of work and rate of progress; take appropriate action to expedite progress when necessary.
- iv To ensure that "as-built" drawings are prepared for all works as construction progresses; update provincial IRMS databases to reflect as-built.
- v Taking action when physical or financial progress towards project outputs deviates from agreed targets and limits conditions.
- vi Evaluate Review Design & Contract Change Order.

5.2. Contract Variation

Where variations of the quantities are requested by the Contractor, the following information should be provided in relation to contract variations:

- i data on which the original as-tendered design was based
- ii a complete record of all new design data which is relevant to the variation;
- iii an as-built record showing the location and detailed dimensions of all works carried out to date under the contract ;

- iv a copy of all previously approved variations and Contract Addenda ;
- v a copy of the contractor's bid document, including all the tendered Unit Prices and detailed Unit Price Analysis ;
- vi a description of the design assumptions adopted where these differed in any way from DGH standards ;
- vii drawings clearly showing both the original design and the proposed variation; and
- viii a rescheduled list of quantities and costs, relevant to the proposed variation.

5.3. Task and Responsibility of The DSC Personnel

It is the responsibility of the **Team Leader / Chief Supervision Engineer** of the DSC to supervise the DSC staff to ensure each activity is carried out properly.

- i. Direct and coordinate consultant team under guidance of DGH.
- ii. Ensure all consultant staff is conversant and fully active with all his responsibilities and requirements;
- iii. Ensure that preparation and submission of all reports and other documents is carried out;
- iv. Liaison and coordination with local agencies and authorities;
- v. Ensuring that all design review and detailed design activities are carried out to the appropriate technical standards;
- vi. Supervision guidance and organization of constructions supervision teams;
- vii. Establish and monitor construction quality assurance;
- viii. Monitoring of construction schedules comparing actual progress to planned;
- ix. Monitoring of costs and recommendation for approval of payments to contractors.
- x. Support the Field Team, in supervision of the setting-up, organization and lay out of the Contractor's field laboratory and in monitoring the mobilization of the equipment.
- xi. Check and clarify cumulative of the Monthly Payment Certificates which are certify by the Supervision Engineer.

It is the responsibility of the **Assistant Chief Supervision Engineer / Pavement Engineer/Material Engineer** to carry out duties:

- i Act as Team Leader with his responsibilities when the Team Leader is temporary not available.
- ii Support the Field Team in their supervision of the setting up of the Contractor's stone crusher and Asphalt Mixing Plant (and soil cement batching Plant in relevant instances), to ensure that the specified requirements for such equipment are fully met;
- iii Check asphalt mixing plants and advice to the Field Team and Civil Work Project Manager whether AMP is incorrect forms and has no capabilities to produce specified asphalt mixtures.
- iv Support and advice the Field Team to evaluate the adequacy of all testing work carried out by the Contractor for the purpose of selection of materials sources or of control of the quality of materials or workmanships.
- v Prepare the guidelines for the quality control with statistic methods and provide the guidance to the Field Team.
- vi Check and summaries all control test data and also provide advice and assistance to Field Team with approval or rejection of the contractor's proposed for aggregate base, mix asphalt materials, soil cement and concrete.
- vii Assist The Team Leader with his various duties, in particular with the preparation of project-wide quality control reports for submission to the CTC and DGH.

- viii Arrange all of data management system, in particular with design reviewing, physical and financial progress.

It is the responsibility of the **Highway Engineer** to carry out duties;

- i Assisting P2JJ Project Manager in preparing the engineering design for Phase 2 works if there is review.
- ii Support and advice the Field Team to evaluate the engineering aspect for design review carried out by the Contractor for Phase 1 works.
- iii Review DGH standard for asphalt overlays, aggregate base designs, soil cement base designs, chip-seal surface dressing design.

It is the responsibility of the **Bridge Engineer** to carry out duties;

- i Assisting P2JJ Project Manager in Preparing the engineering bridge design, alignment and cross section if there is review.
- ii Check structural analysis and drawing for design of new bridge.

It is the responsibility of the **Supervision Engineer** leading each supervision team:

- i Be act as Engineer to carry out continuous supervision of the construction of the works involving regular inspection of works being performed and providing written instructions to the Contractor to clarify the exact work requirements.
- ii To guide and advise each contractor on the measures needed to maintain a safe working environment, protect the safety of road users and pedestrians, and to monitor the contractors to allow their workers to attend HIV/Aids awareness campaign.
- iii Review contractor's health and safety management plan.
- iv Related to DSC Organization, Supervision Engineer has responsibility to Team Leader. Supervision Engineer also has responsibility to the Project Manager/Sub Project Manager of Civil Work.
- v Ensure that the Contractor correctly interprets the contract documents, carries out his work in strict compliance with the specifications and drawings, and applies construction techniques what are appropriate to the pertaining site conditions for the various work activities.
- vi Certify acceptance or rejection of doubtful work and questionable materials, and inform the Project Manager/Sub Project Manager of Civil Work when such decisions have been made.
- vii Plot the Contractor's daily work progress on the approved Progress Schedule.
- viii Closely monitor the progress of all works and reports in good time to both Dinas Bina Marga Chief and Project Manager/Sub Project Manager of Civil Work of the road and bridge works contract concerned when the contract is falling in excess of 10% behind schedule and when timely completion is seriously endangered. Make appropriate recommendations in writing as to how to make up for lost time in such cases.
- ix Carefully monitor all quantity measurements submitted by the Quality Engineer or/and Chief Inspector and be personally involved in the measurement of each completed segment of work.
- x Check and certify the Monthly Payment Certificates what are prepared by the Contractor and provide certification to the Project Manager/Sub Project Manager of Civil Work and a copy to Team Leader and the PMU , regarding the quality of completed works.
- xi Furnish full details, including appropriate sketches and necessary calculations, to justify all proposed changes in the works (Change Orders).

- xii Check the as-built drawings (Final Record Documents) prepared by the contractors, and supervise revisions as required before Preliminary Handover (PHO).
- xiii Maintain files of project correspondence, weekly reports, progress charts, measurements, etc.
- xiv Prepare reports on the physical and financial progress of the project under his jurisdiction and submit these reports to PMU and Directorate of Road and Bridge Eastern Region.
- xv Review the contractor's Environmental Management and Monitoring Plan (EMP) to ensure that it meets all project objectives with respect to environmental and social issues:
 - To monitor environmental controls and impacts and prepare a checklist of compliance for each contract package during construction. The details of the checklist will be agreed before hand with SDEA or any successor and PMU through CTC;
 - To monitor the environmental and social impacts using the checklists which prepared by CTC;
 - To include latest environmental methods in all designs prepared for Phase 2 works; and
 - Foster the use of environmental safeguards at all stages of the works.

It is the responsibility of the **Quality Engineer** on each supervision team to:

- i Provide close supervision of the setting-up, organization and lay out of the Contractor's field laboratory and monitoring of the mobilization of the testing equipment, to ensure well in advance of the start of construction that the laboratory is adequately equipped and capable of performing all the specified testing requirements for the Contract.
- ii Provide close supervision of the setting up of the Contractor's equipment, including stone crusher and Asphalt Mixing Plant, to ensure that the specified requirements for such equipment are fully met.
- iii Provide daily supervision of all testing work carried out by the Contractor for the purpose of materials or workmanship quality control, and immediately notify the Supervision Engineer in writing of any deficiencies in the testing procedures used and any defects in materials or workmanship quality.
- iv Analyze all quality control test data, including earthworks, drainage, shoulders, sub-base, base, pavement, structure and also the Contractor's proposed mix recipes for aggregate base course, asphalt material and concrete, and formulate and submit to the Supervision Engineer written recommendation regarding the approval or rejection of materials, workmanship and job mix formulae.
- v Supervise all quality control test work including earthworks, aggregate base course, pavement, concrete test carried out by the Contractor, to ensure that the number of test and procedure taken is not less than the specified minimum requirement and is sufficient to enable a meaningful statistical evaluation of the works achieved.
- vi Check all materials delivered to the site to ensure that they conform to the specification;
- vii Submit to the Supervision Engineer before the 25th day of each month a monthly summary of all quality control test results has been done obtained during the previous month, for transmittal by the Supervision Engineer. The report will contain all the detailed laboratory and field measurements as well as summaries of the data.
- viii Make every effort to ensure that the Contractor's site Laboratory Technicians are fully conversant with the specified method of testing including those for concrete and asphalt

- mix design and trial mix testing, and that the standardized laboratory forms are used for recording the mix design data.
- ix Provide assistance to visiting staff from DGH or their consultants in their works of collecting quality control, asphalt production and pavement performance data and with their on-site training of the site laboratory personnel in appropriate technology and the associated testing methodology.
 - x In the event that the work is being carried out to a standard below that specified or with materials below the specified quality, and the Contractor either refuses, or fails within a reasonable time, to make good the defective work, the Quality Engineer shall notify to the Supervision Engineer, the Project Manager/Sub Project Manager of Civil Work, and the PMU in writing.

It is the responsibility of the **Chief Inspector / Quantity Engineer** on each supervision team to:

- i Reside very close to the contract package he is nominated to supervise;
- ii Carefully study the Project Drawings and specification before the start of work;
- iii Travel up and down the works in progress that he is inspecting on a daily basis;
- iv Plot the Contractor's actual daily work progress on the approved Progress Schedule;
- v At all times follow the technical guidance and seek the advice of the Supervision Engineer with regard to the execution of his duties;
- vi Prepare detailed and quantified recommendation for any proposed Contract Variation, which involve major/minor changes in the designs or in the specifications.
- vii Prepare detailed and quantified recommendations for any additional designs, which are required during construction.
- viii Continuously supervise in person, and record and check, all measurements, quantity calculations and payment certification to ensure that the Contractor is paid strictly in accordance with the provisions of the Contract Documents;
- ix Keep a daily summary of the construction activities, weather, deliveries of materials, equipment on site, quantities of work completed, field measurements, special events, etc., using standard report forms which are to be submitted to the Supervision Engineer at the end of each day's work;
- x Maintain files of project correspondence, progress charts, measurement, etc;
- xi Assist the Supervision Engineer to take final measurements of fully completed segments of work;
- xii Check the Monthly Payment Certificates that are prepared by the Contractor, for acceptance of completed works as required by the specification;
- xiii Check the as-built drawings (Final Record Documents) prepared by the contractors on the basis of drawings and notes prepared by the Consultant's staff.
- xiv Provide continuous on-site supervision for all day-work operations, including the preparation of daily records of the equipment, manpower and materials used by the Contractor in carrying out such day-work;
- xv Supervise continuously the daily activities of the Contractor including earthworks and drainage works, shoulders, sub-base, base and hot-mix and check all mix, production, spreading and compaction of asphalt surfacing.
- xvi Continually inspect all locations on the site where construction work is being performed, and immediately advises the Supervision Engineer of any work which is not in full compliance with the Contract Documents. All such observations are to be reported in writing to the Supervision Engineer on the same day that the observations are made.

5.4. Design

- ii. The update surveys of roads and bridges and detailed designs review and cost estimates; and ensure that the designs should reflect agreed national and international standards and give adequate attention to lateral and cross-sectional drainage needs and environmental controls for Phase 2 works;

5.5. Monitor and Evaluate Pre Contract Activities

The DSC will carry out the following activities :

- i Monitor the procedures and documentation being used for procurement of each packet compared with the requirements of ADB and the PMU;
- ii Monitor progress in pre-contract activities, and assist DPUP / Dinas PrasWil / Dinas Bina Marga staff in evaluations if requested;
- iii Monitor whether any land acquisition is completed before a contract for a sub project is signed with the contractor; and
- iv Prepare a report on the qualification and tender process for each package, including comments on the availability of information, and the efficiency, quality and transparency of implementation of procedures, the land acquisition status at the time of tendering, as well as any recommendations for improvement.

5.6 Reporting

- i. The DSC will prepare the following reports to the Project Manager within the Regional Directorate or any successor, with a copy to the P2JJ as Project Officer for the services, to the DPUP, PMU and the CTC. . The Field Team will prepare the following reports to the Project Manager/Sub Project Manager of Civil Work, Team Leader/Chief Supervision Engineer with a copy to the P2JJ, to the DPUP and PMU through PIU

Inception Report. Within 30 days after commencement of the services, the DSC shall submit an Inception Report giving a detailed work plan, assignments for individuals of each of the supervision teams, and a description of the current status of programs of work within their area.

Monthly reports will be submitted within 10 days from the end of each month. The reports will include an overall summary and cover activities and reports produced during the month, and highlight any recommendations for actions to be taken by the various parties. This reports should be produce as brief as possible.

Final Report. One month before the completion of Consultant services, a draft final report shall be submitted, summarizing the method of construction, the construction supervision performed, recommendations on future maintenance requirements, all technical matters arising during the construction of the road works, potential problems on the newly constructed works which may be expected, and giving suggestions, if any, for various needed improvements in future projects of similar nature undertaken by Directorate General of Regional Infrastructure.

The Final Report shall also include a copy of all “As Built Drawings”. The Final Report shall be submitted at the completion of services, including any comments received on the draft final report.

All Reports and data collected or produced during the project, and all programs and other materials developed, prepared or obtained during the project, will be the property of GOI, and are to be provided as requested, or handed over at the end of the Project, to the Project Manager. Please note that the standard office software used by the Regional Directorates is WORD, EXCEL, and other MS Office components. All computer work undertaken within the DSC will be in this or such other standard formats as may from time to time be determined, and all materials produced will use such formats as the basis for monitoring progress of the project;

- ii. Report to the steering committee as required on any problems that may arise during the execution of the construction contracts;
- iii. Provide required contributions to the Project Completion Report; and
- iv. Ensure that data is provided for the uniform project accounting system for preparation, consolidation and auditing of Project accounts by the PMU.

5.7 Resettlement

To cope with the unlikely event that land acquisition or resettlement might be necessary following detailed design, assist DGH in complying with Compensation Policy Framework and Procedural Guidelines (CPFPG) and deciding compensation eligibility and entitlements, undertaking and monitoring resettlement and compensation, and providing for redress in case of complaint or grievance.

6. STAFFING

6.1 Time Schedule

The consulting services covered by these Terms of Reference are for a 39 month period commencing around June 2006 and terminating around September 2009.

6.2 Suggested Staffing

Key personnel on the staff may include international and national experts. The skills considered to be required to undertake the services are listed below. The Consultant is free to suggest modifications to this staffing and should define their inputs following their reading of these TOR and discussion with DGH.

- i. The Team Leader / Chief Supervision Engineer (International) will be a senior engineer with tertiary qualifications in civil engineering and a minimum of 15 years of relevant experience covering design and supervision of road construction projects, of which at least five years should have been spent 5 (five) years in developing countries and at least two years in Indonesia.
- ii. The Assistant Chief Supervision will be a senior engineer with relevant tertiary qualifications in civil engineering and a minimum of 10 years of relevant experience in road construction project of which at least 5 years as a pavement and material engineer.

- iii The Highway Engineer will be a senior engineer with relevant tertiary qualifications in civil engineering and a minimum 10 years of relevant experience in road construction project of which at least 5 years as highway engineer.
- iv The Bridge Engineer will be a senior engineer with relevant tertiary qualifications in civil engineering and a minimum 10 years of relevant experience in road construction project of which at least 5 years experience in bridge construction.
- v The Supervision Engineer will be an engineer with relevant tertiary qualifications in civil engineering and a minimum of 10 years experience on supervision of road construction project including national, provincial and local roads, and at least 5 years on quality control works,
- vi The Quality Engineer will be an engineer with relevant tertiary qualifications in civil engineering and a minimum of 8 years relevant experience of supervision of road construction project, including national, provincial and local roads, and at least 5 years on quality control works.
- vii The Quantity Engineer will be an engineer with relevant tertiary qualifications in civil engineering and a minimum of 8 years experience on supervision of road construction project, and at least 5 years on quantity surveyor works

All international experts must be proficient in both written and spoken English. A basic knowledge of the Indonesian language by the foreign experts is desirable. A basic knowledge of the English by the domestic experts is also desirable. During the course of the assignment should the need arise for different skills, or for shorter or longer inputs of the identified skills, the DSC will be expected to make changes to the staffing at the request of the Project Manager. The Team Leader must be expending fully of day work for his task.

International in Banjarmasin (Regional Office)

Expert	No	Total
Team Leader/Chief Supervision Engineer	1	39
Total	1	39
	persons	

Domestic in Banjarmasin (Regional Office)

Expert	No	Total
Assistant Chief Supervision Eng. /Pavement/Material Engineer	1	39
Highway Engineer	1	18
Bridge Engineer	1	18
Total	3	75
	persons	

Domestic in Field

Expert	No	Packages	Total
Supervision / Site Engineer	1	11	267
Quality Engineer	1	11	27
Chief Inspector / Quantity Engineer	1	11	267
Total	3 persons	33	801

7. FACILITIES TO BE PROVIDED BY THE DSC

The following facilities should be provided for in the DSC cost estimate:

- Office rental of the Regional Office in Banjarmasin.
- Office supplies, office equipment and furniture for the DSC in Banjarmasin and Field Team in Kalimantan.
- Vehicles and travel for the DSC in Banjarmasin and Field Team in Kalimantan .
- All other facilities necessary for the successful completion of the Consultant's services and not provided by the Employer – see Section 9 below.

8. FACILITIES TO BE PROVIDED BY THE EMPLOYER

Facilities to be provided by the Employer are limited to those shown below:

- All reports, tender documents, designs, produced by DGH and their consultants necessary for the successful implementation of the project.

9. PROVISIONAL SUM

- Each team will need offices, equipment, transport, operational facilities.
- Each team will require Inspector, Lab Technician, Surveyor, Supporting staffs that are not listed in this TOR.
- Supervision Teams required at 11 locations

NO	LOCATION / PACKAGE	TOTAL MONTHS	NO.PACKAGE / TEAM	SE (Mth)	CI (Mth)	OLE (Mth)	VEHICLE	
							CAR	M.CY
I.	DSC	39					3	
II.	FIELD TERAM							
A.	West Kalimantan	39					1	
1.	Tayan – Teraju – B.Bekuak		BU-01	31	31	31	2	3*
2.	B.Bekuak – Aur Kuning		BU-02	25	25	25	2	3*
B.	Central Kalimantan	39					1	
1.	Km65 (Pundu) – Sampit		BV-01	13	13	13	2*	3*
2.	Sp. Runtu–Runtu–Kujan		BV-02	25	25	25	2	3*
3.	Kujan – Penopa		BV-03	31	31	31	2	3*
4.	Penopa – Kudangan		BV-04	25	25	25	2	3*
C.	South Kalimantan	39					1	
1.	Kintap – Sebamban		BX-01	25	25	25	2	3*
2.	Sebamban–Pagatan–B.Llicin		BX-02	25	25	25	2	3*
3.	Sei Kupang – Magalau		BX-03	18	18	18	2	3*
4.	Magalau – Bts. Kaltim.		BX-04	18	18	18	2	3*
D.	East Kalimantan	31					1	
1.	Sp.B.Ampar–Sp.Perdau		BW-01	31	31	31	2	3*
	Total Vehicles & Motor Cycle						29	33
	- Purchase						27	-
	- Rental						2	33

Provisional Sums for Financial Proposal

PROVISIONAL SUM

In Local Currency

NO.	POSITION	COST (Rp.)
A.	Transportation	
1.	Vehicle for Regional Team	676,725,000
2.	Vehicle and Motor Cycle for Field Team	
	- Vehicle and Motorcycle for BU-01 in West Kalimantan	414,850,000
	- Vehicle and Motorcycle for BU-02 in West Kalimantan	388,750,000
	- Vehicle and Motorcycle for BV-01 in Central Kalimantan	149,500,000
	- Vehicle and Motorcycle for BV-02 in Central Kalimantan	340,750,000
	- Vehicle and Motorcycle for BV-03 in Central Kalimantan	414,850,000
	- Vehicle and Motorcycle for BV-04 in Central Kalimantan	388,750,000
	- Vehicle and Motorcycle for BX-01 in South Kalimantan	388,750,000
	- Vehicle and Motorcycle for BX-02 in South Kalimantan	388,750,000
	- Vehicle and Motorcycle for BX-03 in South Kalimantan	362,650,000
	- Vehicle and Motorcycle for BX-04 in South Kalimantan	362,650,000
	- Vehicle and Motorcycle for BW-01 in East Kalimantan	414,850,000
Sub Total for : Transportation		4,691,825,000
in US \$		533,162
B.	Duty Travel	
1.	Duty Travel for Regional Team and PIU (2 person of Reg. Team and 2 person of PIU)	948,676,752
2.	Duty Travel for Field Team for :	
	- West Kalimantan	156,973,680
	- Central Kalimantan	149,175,000
	- South Kalimantan	99,365,000
	- East Kalimantan	61,702,740
Sub Total for : Transportation		1,415,893,172
in US \$		160,897
Total Provisional Sum		
in Rp.		6,107,718,172
in USD		694,058.88

ABBREVIATION

DGH	Directorate General of Highways
PMU	Project Management Unit
PIU	Project Implementation Unit
CTC	Core Team Consultant
TA	Technical Assistance
P2JJ	Road and Bridge Planning and Management Unit The Provincial Level Representative of DGH
IEE	Initial Environmental Examination
PIP	Project Implementation Plan
DPUP	The Provincial Level Representative of Ministry of Public Works
AMP	Asphalt Mixing Plant
CPFPG	Compensation Policy Framework and Procedural Guidelines

Terms of Reference Enforcing Control on Overloaded Truck

A. OBJECTIVES

The primary objective of the service is to reduce the excessive axle-load which is greater than the legal limit specified by MOC on provincial regulations for national roads. This will be done in conjunction with DGLT and relevant Dinas LLAJ units by establishing for new method of semi private weighbridges management and road pavement construction in selected three locations in Kalimantan.

This time being, IBRD's aid pilot projects of new semi-private operated weighbridge in Northern Sumatera has controlled payload of vehicles of goods transportation for more than two years since February 2004.

This new system is expected as a applied model for all over Indonesia.

B. SCOPE OF WORK

The consultant's scope of work will include assistance to DGLT and the respective Dinas LLAJ unit to:

1. Critically review progress on introducing semi privately – managed weighbridges in Sumatra under the Sumatra Region Roads Project and identify the factors are contributing to success or not as expected.
2. Survey and identify appropriate existing weighbridge site and prepare a detailed program, including monitoring and evaluation arrangement, and survey of topography and geotechnical and also design lay out and weigh bridge development.
3. Prepare designs and contract documents of refurbished the existing weighbridge facilities at the selected sites and specifications as well as contract documents for the installation of weighing equipment at those sites.
4. Supervising the whole work of construction and installation of weighstation and its equipment.
5. Prepare a contract document incorporating to appropriate controls and incentives for effective weigh stations management and operation by private companies in association with the existing weighbridge operational staff as enforcement officers.
6. To monitor the establishment, operations and effectiveness of the privatized weighbridge operations and introduce appropriate modifications to contract arrangements, as needed in close cooperation with LLAJ and weighbridge contractors.
7. To conduct training for the selected personnel assigned in the weighstation to follow respective operational procedure of new weighstation management system.
8. To prepare guidelines for the establishment of privatized weighstations on other routes and in other provinces.
9. To establish provincial operation budget commitment for future on going development of the program after the closing of the loan.

C. ORGANIZATION AND STAFFING

The aim of the project consultancy services are expected to be achieved over 24 months period by a consultant team which are comprising:

No	Position	Person Months
1	Team Leader/Road Transport	24
2	Co team/transport regulation	24
3	Publicity/public information	5
4	Senior vehicle weight advisor	20
5	Transport economist	8
6	Highway engineer	12
7	Institutional legal advisor	8
8	Building designer	4
9	Contracts/Document specialist	4

For team leader and co team leader should have at least ten years experience in the regulation of the vehicle weight and dimensions limits.

Job description every staff

The team leader specific responsibility is coordinating all activities and has full responsibility of the consultancy service.

Co team leader also as vehicle weight regulatory specialist/vehicle weigh control , and specific responsibilities include :

- Organizational arrangement of enforcing control on overloaded truck.
- Responsible for developing weigh station.
- Coordinating all supervised activities.
- Developing semi privately-managed weigh station
-

Publicity/public information, He/She should responsible as follows:

- To coordinate all campaign activities, including prepare the campaign material, campaign schedule, tender sponsorship company.
- To prepare target group for campaign, coordinate meeting with all related parties.
- To coordinate all training activities, including prepare the material for training.

Vehicle Weight and Dimension Enforcement Advisor, He/She should responsible as follows :

- To coordinate all implementation of improved new SOP of weighbridges management.
- Responsible for developing "Management of Weigh Station Privatization".
- To coordinate with the "Provincial Government" on an effectiveness in reducing overloads.
- To coordinate monitoring and supervising "Operation Management of Weigh Station Privatization".

Document/Contract/Tender Specialist and Civil Work Controller, should has specific responsibility include:

- Responsible for ensuring that all contract documentation must be in the highest possible standard for funded project.
- To coordinate bid document of "construction and installation of weighbridge" and "operational consultant management of semi private weigh station."

The services are expected to be provided over a 2-year period, it will not be necessary for all team members to be mobilized throughout this period but as required. The timing of their inputs will depend on progress of civil works, procurement, supply/installation and subsequent operation.

The team will be based in DGLT's office in Jakarta but will be expected to spend the majority of their time in the field, where office space will be provided by the provincial Dinas LLAJs.

D. SUPERVISION

A project officer will be attached to the consultant's team by DGLT and counterpart staff assigned from the respective Dinas LLAJ in the selected provinces. The performance of the consultants will be supervised by a PMU established within DGLT and a steering committee is established to oversee implementation of the RR2P as a whole operation.

At least two meeting of the steering committee will be held during the consultancy. A working group, representing the Dinas LLAJ in each of the four selected provinces, will also be established and will meet as required to ensure a coordinated approach to the resolution of issues raised during the project implementation.

E. TIME SCHEDULE

1. In the first 6 (six) months period the consultant have earned in order to recommend the location of the weigh station, coordination and socialization with the local government/provincial government.
2. In the second 6 (six) months period should establish relationship to truck industry and company and designing the weighing equipment and operational/office building.
3. In the remaining 12 months continuous for detail design,providing the consultants supervision to the development/construction of the weigh stations and also the implementation of the new system, and time schedule as detailed on figure 4.

F. OUTPUT

The consultant should prepare an inception report after the first two month and progress reports at bi-monthly basis. The inception report will consist of recommendations for site selection and the criteria used to provide it such Land Acquisition and Resettlement Plan. A draft final report should be submitted one month before completion of the service, documenting achievements and setting out the main findings, conclusions and recommendations concerning the effectiveness of private-sector management of weighstations.

The consultant should also assist DGLT in preparing a project completion report.

All report as well as the contract documents for the weighstation project should be in both English and Bahasa Indonesia.

Terms of Reference
ROAD SAFETY AWARENESS CAMPAIGN

1. INTRODUCTION

Road accidents are a huge economic and health problem facing Indonesia. Each year data recorded by National Police showed that over 10,000 of people are killed and there may be similar figure injured or crippled. Many of these persons will be disabled for the rest of their lives in some cases perpetuating poverty for their families. This costs Indonesia for around Rp.30,82 Trillion (US\$ 3,5 billions) through property damage, medical costs and lost productivity.

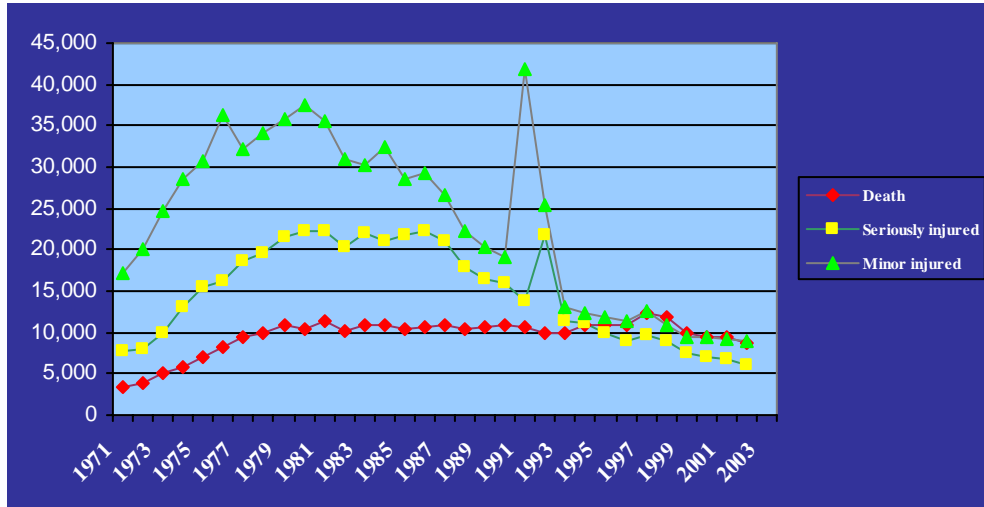


Figure 1: Casualties by Severity Recorded by the Indonesia National Police (1970-2002)

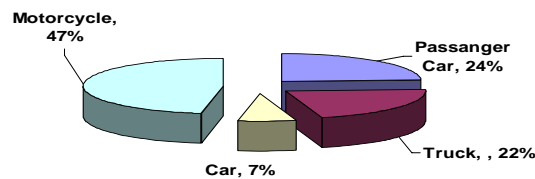


Figure 3: Casualties by Type of Vehicle (2002)

Figure 3 presents the casualties by type of vehicle. Among the road users, motorcycles contributed 74% of total vehicle in the country and also were involved in 47% of the accidents.

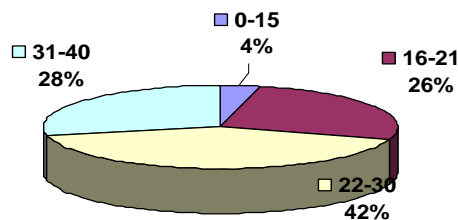


Figure 4: Casualties by Age Group (2002)

The productive age of 22-30 years old would fall under the most vulnerable road user with 42% involvement in accident. This would cause a great loss to the society because the age group contributes most of the economic output. Since 90% of the accident is caused by human factor (2002), it is **not** impossible to reduce the number of casualties, if only people realize that awareness worth life.

Road accidents also have a very serious economic impact to society. Fatality and injury due to accident incur medical, property damage, administrative costs and loss of output. For the year 2002 the cost of road accident based on deaths and injuries recorded in the Insurance statistics were **5.64 trillion Rp.** (approx **663 million US\$**) or about **0.34%** of the GDP. However these data are known to be under reported. Based on the calculation on deaths reported in hospital records and estimated injuries, the actual losses due to road accident in the year 2002 are at least **30.82 trillion Rp** (approx. **US\$3.5 billion**) or about **2.17%** of the GDP. These are the recurring annual loss which will continue or even increase year after year unless appropriate and urgent action is taken.

2. NECESSITY OF THE PROJECT

Asian Development Bank (ADB) through Road Rehabilitation 2 Project intended to rehabilitate roads in Kalimantan areas. The road rehabilitation in Kalimantan will lead to increasing speed and traffic that will create problem to roadside community. The road side community will be exposed by increasing traffic and higher speed of vehicle travelling better roads. Accident data showed that in the year 2003 the number of accident in Kalimantan were recorder at 1284 times with the casualties number of death 1057 people, seriously injured 422 and slightly injured 602 people. While in the year 2004 the total accident occurred 1492 with the number of casualties 995 people killed, seriously injured 537 and slightly injured 975 people.

With these high annual accident records and large number of casualties, it is essential to implement a comprehensive and effective road safety campaign program for increasing the safety awarenees of roadside community and to reduce the risk and severity of road accidents on roads rehabilitated under RR2P in the Kalimantan provinces especially for the most vulnerable road user (pedestrian and children). This safety awareness is required since the existing roads will be rehabilitated and upgraded will increase the exposure to traffic, through a campaign making effective use of available media and involving briefings at school and others community forums.

3. OBJECTIVES

Taking the current situation into account, the aim of this Road Safety Awareness Campaign on Roads Rehabilitation in Kalimantan provinces are as follows:

- Increase the level of roadside community safety awareness, particularly among children and other vulnerable road users or groups, through a campaign making effective use of available media and involving briefings at school and others community forums.
- Reduce the risk and severity of road accidents on roads rehabilitation under RR2P, where exposure to traffic will be expected increasing.

4. SCOPE OF WORKS

Scope of works of the Road Safety Awareness on Roads Rehabilitation in Kalimantan will be as follows:

- a. Identify target communities newly exposed to high-speed traffic and likely to be vulnerable to increased accident risk following completion of rehabilitation of national roads under RR2P in Kalimantan Provinces (using research data to identify vulnerable road users).
- b. In conjunction with DGLT, Dinas LLAJ/Perhubungan staff and other related institutions, preparing a plan and associated materials, including effectiveness-monitoring arrangements, for raising the awareness of road safety issues among selected communities.
- c. Undertaking a baseline survey of road safety awareness among the targeted vulnerable groups, as the basis for an evaluation of the effectiveness of the awareness campaign.
- d. Carrying out the public awareness campaign, making optimum use of public media, schools, community leaders, family groups and community meetings.
- e. Undertaking a follow-up survey of the effectiveness of the campaign in raising level of community awareness, particularly among children, elderly and other vulnerable groups.
- f. Conducting a short-course for Dinas LLAJ/Perhubungan staff in the managing, designing and continuing use of road safety public awareness campaigns in a capital city of each province.
- g. Field practicing based on the short-course for Dinas LLAJ/Perhubungan staff by conducting a pilot project on capital city of each province.
- h. Developing guidelines for managing a road safety campaign.
- i. Developing a road safety community and conducting a safety's training for trainer for its community.

5. EXPERTISE REQUIREMENTS

This road safety awareness work is expected to be carried out by local/domestic firm or NGO (since very limited budget) familiar with the communities and having proven experiences in social marketing techniques, carrying out surveys and delivering community-based campaigns using sensitive to local cultures. The expertises required in this work would be as follows:

EXPERTISE	M M
1. Public Communications Specialist/Campaign Coordinator	12
2. Road Safety Specialist	8
3. Sociology Specialist	8
4. Publicity Specialist	6
Total	34

The above required expertises will be supported by supporting staff which will be divided into 2 groups. Group 1 would be comprised group of researcher led by Research Team Coordinator. This group will responsible for the data collection at the field for targeted community groups. Group 2 would be office staff that comprises Office Manager, Secretary, and Office Boy.

6. IMPLEMENTATION SCHEDULE AND PROJECT COST

The implementation schedule of the project will be carried for 1 full year. This project will be estimated US\$ 204.000 according to project cost allocation in the RR2P.

7. SUPERVISION

DGLT has appointed Project Manager for the implementation of Road Safety Awareness Campaign to supervise progress on the services on a day-to-day basis.

8. REPORTING

The consultant will prepare an inception report 1 month after signing the contract, identifying the target groups and outlining the proposed work plan.

A Working Paper (Progress Report) will be submitted every 3 months (quarterly) outlining the progress of the works.

A Draft Final Report will be submitted on the 11th month documenting the achievement of the services and proposing for adoption by DGLT and other related institution in the regional level.

A Final Report will be submitted by the end of the services for the acceptance of the services.

**THIS PART IS BEING DISCUSSED WITH
BAPPENAS**

TERM OF REFERENCE

**CONSULTING SERVICES
FOR
DEVELOPING NEW APPROACHES TO
ROAD MAINTENANCE MANAGEMENT**

**TERM OF REFERENCE (TOR)
FOR
CONSULTING SERVICES IN TRAINING FOR PROJECT MANAGEMENT AND
ENGINEERING SUPPORT PRACTICES**

1. INTRODUCTION

The government of Indonesia seeks the assistance and support from ADB in funding for road sector programs and policies, with a four years time slice of the government civil works programs for priority roads in 10 provinces in Sumatera (West Sumatera, North Sumatera, Riau, Jambi, South Sumatera, Lampung,) and Kalimantan (South Kalimantan, East Kalimantan, West Kalimantan, Central Kalimantan). To assist in the efficient and proper implementation of these civil work programs, the ADB have agreed to finance a component for training and capacity building in project management and engineering support practices to build up the provincial staffs capabilities.

2. BACKGROUND

One of the functions of the Directorate General of Highway (the DGH) is to manage technical and evaluation assistance, which includes the institutional and human resource development in the context of road network management. Within the Directorate General of Highway, *Division of Personnel and Organization*, one of the units within the Secretary of Directorate General, has been responsible for implementation of this function of the DGH.

The function of the consulting services described in these terms of reference is to provide technical assistance to give support towards the effective and efficient fulfillment of the *Division of Personnel and Organization's* functions, that is in managing the institutional and human resource development. The Consultant is also expected to assist in the transfer of knowledge to the DGH officials.

The primary function of the consulting services outlined in these of to provide technical assistance in the development and delivery of training in road and bridge maintenance. With recent decentralization initiatives provinces have had to assume additional responsibilities for the maintenance and rehabilitation of roads and bridges. Road sector staff working in provincial *PU Dinas offices* is, however, limited and they currently lack the capacity to deliver quality maintenance services. Provincial road sector staff need, for example, to improve their ability to draw up contract documents according to new regulations. They are also particularly weak in landslides control, slope stability, and the construction of retaining walls.

Given the limited resources made available for road maintenance activities, financial planning and control for road maintenance also taken on added importance and are addressed in this TOR.

There is, therefore, an urgent need to improve the capacity of road sector staff to deliver maintenance services, hence the importance of the training programs proposed in this document.

With the technical assistance provided under this TOR, DGH believes it can substantially improve the quality of maintenance sector services in the ten (10) provinces targeted by this project.

3. OBJECTIVES

The primary aim of the training proposed in this TOR is to strengthen the capacity of road sector staff working in provincial *Dinas PU* Offices, to address road maintenance issues and deliver enhanced road maintenance services. It is expected that upon the completion of training, road sector staff will be better able to:

- Produce more effective contract documents
- Better plan, schedule, and implement routine road and bridge maintenance
- Better plan, schedule, and construct road utilities such as drainage, retaining walls, etc.
- Carry out quality control (including site supervision) based on specification, etc.
- Financially manage and control road maintenance activities (budgeting, contract disbursements, etc)

4. SCOPE OF SERVICES

The scope of works of the Consultant consists of two main parts:

4.1. Part A (Training Preparation) including:

- The Consultant will revise/update 1 (*one*) courses existing DGH Training courses :
 - (i) Road and Bridge Maintenance

The DGH will form the Technical Review Panel (TRP) to approve any changes required to the existing training materials. The Consultant will coordinate a one day workshop designed to allow the TRP to review and recommend changes, and to approve to revisions made by the Consultant. The workshop will be scheduled by the Consultant at the completion of the revision of training material. No implementation of the revised training material may be carried out without the approval from the Technical Review Panel, which will be formed by the DGH.

All courses to be reviewed by the Consultant will use the Competency Based Training (CBT) approach and to be delivered by the Consultant after revision.

- The Consultant will develop 3 (three) new courses. The courses targeted for development are:
 - (i) The Role of Specification In Road & Bridge works;
 - (ii) Landslides control, Slope stability and Retaining Wall
 - (iii) Financial Management and Control of Maintenance Works.

The final selection of courses will need to take into account the on-going training project and the stakeholders requirements. All courses to be developed will use the CBT approach for course development. The Consultant is also expected to conducted a Datum Forum (3 days) to determine Curriculum/ design, establish participant prerequisites, determine the exact course title, develop the course materials in modular format, conduct Training review Panel (TRP) workshops. The Consultant will also be responsible for the implementation of these courses/ modules.

- **Orientation in Jakarta**, for three persons from *Dinas PU/Praswil/Kimpraswil, Balai Diklat Kimpraswil* or *P3JJ* from each province (10 provinces) targeted by the project, these individuals will later assist with the implementation of the RR2P training program

at local government; they will play a key role in facilitating the implementation of training delivery

- The Consultant will prepare and be fully responsible for conducting a series of Training of Trainers (TOT) courses for future instructors from the Government officials within 10 Provinces and/or DGH. These instructors will later teach the courses developed under these consultancy services. The instructors will be selected by the Consultant and DGH based on their capability in CBT methods. The Consultant should ensure that the future instructors are thoroughly familiar with the contents of all training materials and are competent in the subjects that they will be expected to teach.

It is planned that two TOT courses will be held in Jakarta with 20 participants at each TOT course. The participants selected two or three candidates from each training course.

The total participants to be trained for TOT will be 40 Instructors (See Attachment 3).

4.2. Part B (Training Implementation / Training Delivery)

The training delivery activities are summarized as follows:

- Implementing the 5 (*five*) courses that have been developed/revised/up-dated as part of this contract or newly developed as part of this contract:
 - (i) Construction Contract Law (6 days)
 - (ii) Landslides control, Slope stability and Retaining Wall (max 5 days)
 - (iii) Financial Management and Control (max 5 days)
 - (iv) Road & Bridge Maintenance (max 6 days)
 - (v) The role of Specification in Road & Bridge works (6days)
- In order to implement the courses more efficiently, it is envisaged that the Training Delivery (TD) will consist of 15 course events within various locations within 3 (three) regions i.e. Region I (Northern Sumatera) (5 course), Region II (Southern Sumatera) (5 courses) and Region III (Kalimantan) (5 courses). A course implementation meeting should be held at each location prior to course delivery to facilitate coordination among Instructors, the local coordination committee, consultant and project personnel.
- Region I (Northern Sumatera):
 1. **Construction Contract Law** and **The Role of Specification in Road and Bridge works** will be delivered in Medan (North Sumatera)
 2. **Landslides control, Slope stability and Retaining Wall** and also **Road & Bridge Maintenance** will be delivered in Riau;
 3. **Financial Management and Control** will be delivered in Padang, West Sumatera;

Region I Northern Sumatera comprises of North Sumatera, Riau and West Sumatera. If training carried out in Medan, then the participants will be invited from Region I.

- Region II (Southern Sumatera):
 1. **Construction Contract Law** and **The Role of Specification in Road and Bridge works** will be delivered in Palembang (South Sumatera)
 2. **Landslides control, Slope stability and Retaining Wall** and also **Road & Bridge Maintenance** will be delivered in Jambi;
 3. **Financial Management and Control** will be delivered in Lampung

- In Region III (Kalimantan):
 1. **Construction Contract Law** and also **The Role of Specification in Road and Bridge works** will be delivered in South Kalimantan;
 2. **Landslides control, Slope stability and Retaining Wall** will be delivered in East Kalimantan;
 3. **Financial Management and Control** will be delivered in West Kalimantan; and
 4. **Road and Bridge Maintenance** will be delivered in Central Kalimantan

It is envisaged that each course will have 35 participants making a total of 525 staff to be trained under this consultancy services.

4.3. Other Activities

The following activities will be undertaken by the Consultant to support the tasks described in Part A and B above:

- The training program will be supported by Training Management Information System (TMIS) which maintains data from monitoring, evaluation and feedback (MEF) on all Training Deliveries;
- The Consultant will carry out a Training Impact Analysis by reviewing the data from the participants that had been previously trained under DGH. The Consultant will also visit the Provinces in order to collect data and distribute questionnaire. The questionnaires will investigate the impact of past DGH training on the careers of road and bridge personnel in these provinces. Evaluation procedures should use a statistical based approach. Impact on personnel who attended the training and the impact on organizational performance should be evaluated. In other words did the training strengthen individual capacities and did these individuals have an impact on the organization's performance as a whole.

5. SKILL AND STAFF REQUIREMENT

The Consultant team shall consist of domestic (national) experts in the fields of training and engineering. The domestic input will include local for specialists and technicians for the various assignments. All experts shall be proficient in both written and spoken English.

The skills considered to be required to undertake the services are listed below.

Table - Indicative Skills Required for Consultant

Total	8	59
	No	Person-month
Professional Staff		
Team Leader	1	12
Co Team Leader	1	12
Highway Engineering Specialist	1	8
Geotechnical Engineering Specialist	1	4
Financial management Specialist	1	4
Training Delivery Specialist (also as Regional training delivery specialist 1,2)	1	8
Regional Training Delivery Specialist 3	1	4
Evaluation Specialist	1	7

Supporting Staff	No	Person-Month
Highway Engineering Technician	1	8
Geotechnical Engineering Technician	1	4
Financial Management Technician	1	4
Training Delivery Technician (also as Regional training delivery technician 1,2)	1	8
Regional Training Delivery Technician 3	1	4
Evaluation Technician	1	7
Total	6	35

The work background, experiences of the professional and sub professional staff required to carry out this program are summarized as follows:

PROFESSIONAL STAFF

5.1 Team Leader

The Team Leader is required for 12 person-months to coordinate all activities and has full responsibility of the consultancy services. He/she should have a minimum educational level of Master Degree in management or engineering, preferably in highway and bridge engineering. He/she should have a minimum of 12 (twelve) years of related experience in training, road maintenance and relevant sector. He/ she should have excellent spoken and written English skills.

5.2 Co-Team Leader

Co-Team Leader, also as Training Specialist is required for 12 person-months to support the Team Leader in carrying out the overall works. He/she should have a minimum educational level of S1 degree in related discipline of Engineering and should have a minimum of 10 (ten) years of related experience in training. He/she has specific responsibilities including the following:

- Organizational arrangement of revising and development of training and other activities;
- Co-ordination of the Training Impact Analysis
- Co-ordination of the TOT (Training of Trainers) courses modules and selection instructor candidates for the TOT courses.

5.3 Highway Engineering Specialist

Highway Engineering Specialist should be a Civil Engineering and is required for 8 person-months to support the Team Leader/ Co team Leader. He/she should have a minimum educational level of Master degree in related discipline of Civil Engineering and a minimum of 8 (eight) years of related experience in training. His/her specific responsibilities include:

- To coordinate all revisions and new development of DGH modules; Responsible for developing the courses module of on Road Maintenance and the role of specification in Road and Bridge works; and
- To coordinate with the DGH advisors on training materials and CBT methods.

5.4 Geotechnical Engineering (GE)

Geotechnical Specialist (GS) is required for 4 (four) person-months for developing New DGH Modules. He/she should have a minimum of 6 (six) years experience and it should have a minimum educational level of Master degree in related field of Civil Engineering. His/she specific responsibilities include the following:

- Coordination all revisions and new develop of new DGH modules;
- Responsible for developing the module on “Landslides control, Slope stability and Retaining wall”; and
- To coordinate with the DGH advisors on training materials and CBT methods

5.5 Financial Management Specialist

Financial Management Specialist is required for 4 person-months for developing the new DGH modules related to highway engineering subject matter. He/she should have a minimum educational level of Master degree in related discipline of finance and a minimum of 6 (six) years of related experience in the area of finance. His/her specific responsibilities include:

- Coordination of course revisions and development of new DGH modules
- Responsible for developing the module of “Financial Management and Control”; and
- Coordination with DGH advisors on training materials and CBT methods.

5.6 Training Delivery Specialist 1,2

The Training Specialist is also Regional Training Delivery Specialist 1, 2 is required for 8 (eight) person-months to support Team Leader/Co Team Leader for training delivery. He/she should have a minimum educational level of S1 degree a minimum of 8 (eight) years of relevant experience in training.

His/her specific responsibilities include the following:

- In-coordination to DGH, to arrange all preparation related to training delivery, including selection of and invitation to participants, determining training venues, arranging for certificates of attendance in region I and II (North and South Sumatra)
- Arranging Instructors meeting before the course implementation
- Coordination of training delivery for all regions;
- Responsible directly for implementation of training in Region I (northern Sumatera) and region II (southern Sumatera)
- Preparation of training materials to be implemented;
- Collaboration with Provincial in carrying out the training;
- Arrangement of trainer, instructors and DGH official accommodation and meals.

5.7 Regional Training Delivery Specialist 3 (Kalimantan)

Regional Training Delivery Specialist 3 is required for 4 person-months to carry out the training in Kalimantan. He/she should have a minimum educational level of S1 degree or equivalent in related discipline of engineering. He/she should have a minimum of 6 (six) years of related experience in training.

His / her specific responsibilities include the following:

- In-coordination to DGH, to arrange all preparation related to training delivery, including selection of and invitation to participants, determining training venues, arranging for certificate s of attendance in region III (Kalimantan)
- Arranging Instructors meeting before the course implementation
- Coordination of training delivery for all regions;
- Responsible directly for implementation of training in Region III (Kalimantan)
- Preparation of training materials to be implemented;
- Collaboration with Provincial in carrying out the training;
- Arrangement of trainer, instructors and DGH official accommodation and meals.

5.8 Evaluation Specialist

The Evaluation Specialist is required for 7 person-months to support the training activity. He/She should have a minimum educational level of master degree who has experience in evaluation the asset HRD and in related discipline of engineering and minimum of 8 (eight) years of relevant experience in training. He/She will responsible for the monitoring, evaluation, feed-back and impact of training delivery activities; he will also be responsible for the development and implementation of the impact study.

He/she should have a general familiarity with computer hardware and data base software and an understanding of the KRMTTP and NPRMTTP TMIS.

His/Her specific responsibilities include:

- On the Job Training (OJT) monitoring;
- Monitoring, evaluation and feed back on the training delivery;
- In carrying out the works, he/she will discuss evaluation and feed-back with the DGH;
- Collecting data and information concerning the training participants; and
- Analyzing the training impact for participants who have been trained under DGH.
- The Evaluation Specialist work will commence at the beginning of delivery training for and continue thought the evaluation impact study

SUB-PROFFESIONAL STAFF

5.9 Highway Engineering Technician

Highway engineering technician is required for 8 person-months to support Highway Engineering Specialist. He/she should have a minimum educational level of D-3 (S0) degree in related discipline of Civil Engineering and a minimum of 4 (four) years of relevant experience in

training. He/she will be mainly responsible for reviewing the CBT manual related to module of Road and bridge maintenance and the role of specifications in road and bridge work.

5.10 Geotechnical Technician

The Geotechnical Technician is required for 4 (four) person-months for developing New DGH Modules. He/she should have a minimum of 4 (four) years experience and he/she should have a minimum educational level of D-3 (S0) degree in related of Civil Engineering. He/she will be mainly responsible for developing The CBT manual relevant to module of Landslides control, Slope stability and retaining wall.

5.11 Financial Management Technician

The Financial Maintenance Technician is required for 4 person-months to support the Highway Engineering Specialist. He/she should have a minimum educational level of D-3 (S0) in a related discipline of and finance and a minimum of 4 (four) years of relevant experience in financial management. He/She will be mainly responsible for developing The CBT manual for the Financial Management and Control Course.

5.12 Regional Training Delivery Technician 1, 2

A Regional Training Delivery Technician 1, 2 is required for 8 person-months to support the Training Delivery Specialist with training delivery specialist with training delivery in region 1,2. He/she should have a minimum educational level of D-3 (S0) in a related discipline of engineering and should have a minimum of 4 (four) years of relevant experience in training.

5.13 Regional Training Delivery Technician 3

A Regional Training Delivery Technician 3 is required for 4 person-months to mainly support the Regional Training Delivery Specialist 3. He/she should have a minimum educational level of D-3 (S0) in a related discipline of engineering and should have a minimum of 4 (four) years of related experience in training.

5.14 Evaluation Technician

An Evaluation Technician is required for 7 person-months to mainly support the evaluation Specialist. He/she should have a minimum educational level of D-3 (S0) in related discipline of engineering and should have a minimum of 4 (four) years of related experience in training.

6. REPORTING

The Consultant team shall prepare the following report and documents:

6.1 Inception Report

This Inception Report should be submitted within one (1) month from the commencement the consultancy services.

The Consultant will propose the work plan and work, analysis of the work and the proposed course titles in the draft report. This will be presented by the Consultant to DGH officials for

review and after this review will be revised as per the comments from the review and submitted to the DGH as a final inception report.

The final inception report will be submitted in 20 copies, including the original hard copy and an electronic version format. (10 copies In English and 10 copies in Bahasa Indonesia).

6.2 Implementation Report

Implementation reports will be submitted within 10 days from the end of each month. The reports will outline the schedule of activities, including the training delivery implementation; the problems encountered during implementation; and list of resources persons or agencies met during the month, as well as highlight any recommendations for actions to be taken by the various parties.

The Consultant will submit 20 copies (10 copies in English and 10 copies in Bahasa Indonesia), including the original in hard format and compact disk format.

6.3 Interim Report

This will be submitted with ten days after month six of services.

The report will serve as a progress report for activities undertaken during the first six months of services.

The Consultant will submit 20 copies (10 copies in English and 10 copies in Bahasa Indonesia), including the original in hard and compact disk format.

6.4 Draft Final Report

The draft final report will be submitted one month before the completion of the services.

The draft final report will be presented by the Consultant to DGH officials.

The Consultant will submit 20 copies (10 copies in English and 10 copies in Bahasa Indonesia), including the original in hard and compact disk format.

6.5 Final Report (including Executive Summary)

Based on the outcome of the presentation, the draft final report will be revised and submitted to the client at the completion of services.

The Consultant will submit 20 copies (10 copies in English and 10 copies in Bahasa Indonesia), including the original in hard and compact disk format.

6.6 Special Report

During the consultancy services a series of special reports will be prepared and submitted by the Consultant including:

- Revise module report
- Training Monitoring, Information Report (including Data Base);
- Training Impact Analysis Report (in English and Indonesia);
- Development module report.

Each draft report should be presented by the Consultant to DGH officials and based on the outcomes of the presentation a final report will be prepared and submitted to the client.

The final version of each report will be submitted in 20 copies, including the original and compact disk (10 copies in English and 10 copies in Indonesia) before completion of services.

7. TRAINING MATERIAL TO BE REVISED AND DEVELOPED

The Consultant will revise 1 existing course material and develop 3 new courses material as described in Scope of Services. The consultant will submit 15 copies in Indonesian, including the original and also in compact disk format.

These will be submitted after making revisions based on feed back (from training participants and others) following the implementation of the courses.

8. DOCUMENTS / INFORMATION TO BE PROVIDED BY DGH

To enable the Consultant to carry out their work and to ensure the relevant approach and standards are meet, the client will provide the Consultant with hard copies of the existing training material for the 1 (*one*) course that will be revised/updated. The DGH will also facilitate with the coordination with the other ongoing training projects in DGH to ensure a common standard and a common approach are adopted for materials development.

9. WORKING LANGUAGE

All projects documents and reports shall be prepared in the English and Indonesian language, except the training materials. The training material should be prepared only in Indonesian with a separate brief summary overview in English, which explains the course title, course modules, course and module objectives etc.

10. ESTIMATE BUDGET

The Estimated budget for Road Rehabilitation 2 Project (RR2P) for Consulting Services in Training for Road Maintenance and Engineering Support is USD 671,970 and is allocated under Secretariat of DGH.

11. OTHER FACILITIES

- Office rental in the vicinity of the DGH office, with space for the Consultant's staff and counterpart staff.
- Office supplies, equipment and furniture for the Consultant as well as for the counterpart staff.
- Rental of vehicles, and 2 motorcycle purchased for the used of counterpart staff

REGION	LOCATION	COURSES	NUMBER OF PARTICIPANT	NUMBER OF TRAINERS
I (Northern Sumatera)	Medan	Contract Law.	35	3
		The Role of Specification in Road and Bridge Work	35	3
	Riau	Landslides control, Slope stability and Retaining wall	35	2
		Road & Bridge Maintenance	35	3
Padang	Financial Management and Control	35	2	
II (Southern Sumatera)	Palembang	Contract Law.	35	3
		The Role of Specification in Road and Bridge Work	35	3
	Jambi	Landslides control, Slope stability and Retaining wall	35	2
		Road & Bridge Maintenance	35	3
Lampung	Financial Management and Control	35	2	
III (Kalimantan)	Kalsel	Contract Law.	35	3
		The role of specification in Road & Bridge Work	35	3
	Kaltim	Landslides control, Slope stability and Retaining wall	35	2
		Kalbar	Financial Management and Control	35
Kalteng	Road & Bridge Maintenance	35	3	
		TOTAL PERSONS	525	39

**TERMS OF REFERENCE FOR
CONSULTING SERVICES FOR STRENGTHENING CAPABILITIES
IN ENVIRONMENTAL AND SOCIAL IMPACT MANAGEMENT
IN ROAD DEVELOPMENTS**

I. BACKGROUND

Rehabilitation of road infrastructure can have both positive and negative environmental and social impacts, which need to be addressed in the planning, design and implementation stages. The Directorate General of Highway (DGH) has impact assessment and management procedures for roads projects, but these have not been fully effective in minimizing and managing such impacts. Issues which are not always fully or effectively dealt with in a timely manner under existing procedures include social impact, impact to protected forests/areas, and air and noise pollution.

To be more effective, environmental and social impact assessment and management procedures need to be updated and training programs need to be undertaken to improve the capability of 'road staff' at all levels in carrying out impact assessment and management for roads project, 'Road staff' include those in DGH (SDEA and Directorates of Implementation in the regions or any successor), and those in the provinces and projects (P3JJs, Dinas PU Province/Kabupaten, Supervising Consultants, DFTs and Contractors).

Based on these considerations there is a need to improve the capacity of Directorate General of Highway's Sub-Directorate of Environmental Affairs (SDEA) or any successor, especially in the area of social/poverty impact management. In the circumstance, it is appropriate to strengthen existing environmental/social management procedures, specifically in relation to the regulations/policies of the creditor (donor) and government regulations, in order to improve the capacity of the relevant 'road staff' involved in road infrastructure planning, design and implementation.

II. OBJECTIVES OF THE SERVICES

The objectives of the services are:

- a. to improve the capacity of DGH's Sub-Directorate of Environmental Affairs (SDEA) or any successor to undertake analyses and management of environmental and social impacts of rehabilitation projects;
- b. to prepare environmental and social impact management procedures in accordance with Government regulations and donor guidelines;
- c. to provide and deliver training on environmental and social impact management to DGH staff and the staff of Provincial Office (Dinas), Design and Field Team (DFT), and central/provincial parties concerned;
- d. to provide and deliver Implementation workshop/training for the personnel involved in project implementation (Supervising Consultant, Contractor, P3JJ, Sub-Project Manager and DGH Staff).

III. DESCRIPTION OF THE SERVICES

TASK A *Strengthening Sub-Directorate of Environmental Affairs (SDEA) or any successor and Related Colleagues in DGH*

A1. The purpose of this task is to improve Sub-Directorate of Environmental Affairs (SDEA) or any successor capabilities in performing assessment and management of environmental and social impact of road rehabilitation projects.

A2. The strengthening of capabilities will include individual capability improvement through training which is focussed to the Sub-Directorate of Environmental Affairs (SDEA) or any successor members and their closely related colleagues in the Directorate General of Highway and also include a preparation of environmental and social impact management procedures and guidelines which are in line with Government of Indonesia and donor policies and regulations.

The individual capability improvement through courses, as follows:

1. Course on AMDAL

The environmental courses include AMDAL A, AMDAL B, AMDAL C and Environmental Audit. The targets for these courses are DGH staff, (e.g. staff of Sub Directorate of Environmental Affairs, Sub Directorate of Technical Design and Supervision, Directorate of Technical Affairs, Sub Directorate of Road Network and Sub Directorate of Toll or any successors).

The participants for Environmental Courses are:

- a) AMDAL A (10 persons) – **20 days**
- b) AMDAL B (10 persons) – **40 days**
- c) AMDAL C (10 persons) – **20 days**
- d) Environmental Audit (10 persons) – **20 days**

These courses will be prepared and delivered by Training Institutions or University in Jakarta.

2. Course on air pollution and noise

The training will focus on the methods and means of identification, evaluation and reduction of air pollution and noise generated by road development. Target group of this course is DGH staff as mention in no. 1 above (10 persons).

These courses will be prepared and delivered by Training Institutions or University in Jakarta.

A3. Preparation of Guidelines Draft and Dissemination

Preparation of environmental and social impact assessment and management guidelines which will include but not be limited to:

1. Guidelines for Mitigation Standard Environmental Impacts (MSEI) on Road Construction

Road construction could generate negative significant impact on environment.

The scope of the guidelines will provide some of alternatives for Mitigations of Standard Environmental Impact. The standard environmental impacts include dust from quarries and aggregate spreading, noise from batching plants, soil pollution from spillage, etc.

The consultant will carry out the following services:

- a) An inventory of road construction on environments in the road construction activities.
- b) Describing technology, economy, socio-cultural and institutional approach as to mitigate the environment impact

- c) Preparing Draft Guideline for Standard Impact Environmental Mitigation on Road Construction Phase
- d) Disseminating the drafts guidelines to get input from the stakeholder and revising them.

2. Guidelines for the social impact of road development

The social impacts of road development are predominantly positive, especially in the long term, but there is a potential for negative short term impacts which must be managed.

The consultant will carry out the following services:

- a) Collecting materials concerning social impact issues according to donor's and relevant regional and/or central government guidelines or policies.
- b) Reviewing and analysing previous road development reports and case study concerning social impact assessment and management.
- c) Preparing guidelines for assessing and managing the social impacts of road development.
- d) Disseminating the drafts to get input from the stakeholder and revising them.

The dissemination of the guidelines to get input from the stakeholder will be in Jakarta.

A4. In addition to the above services, for **improvement in attitudes and skills of environmental and social impact management** in order to achieve sound environmental and social – road construction projects, the consultant will also prepare a proposal of future needs, which includes:

1. Reviewing prevailing government regulations and donor guidelines governing the assessment and management of environmental and social impacts of road rehabilitation projects
2. Preparing outline proposals for the longer term development of Sub-Directorate of Environmental Affairs (SDEA's) organization or any successor and capabilities
3. Preparing other short and long term staff training plan as necessary.

TASK B Training on Environmental Management

The Training will be prepared and delivered by the Consultant as:

B1. Based on the training need analyses, the consultant will review and improve the training modules for environmental and social impact management in road developments.

The topics of training to be updated are:

- The Environmental Management System in the General Planning Stage, Including the Feasibility Study Stage.
- The Environmental Management System in the Technical Design Stage and Construction Stage.

In carrying out the updating of training modules, the consultant shall:

1. Collect materials for the improvement of the modules (including mitigation of social impact).

2. Review the materials based on the all new regulations and organizations in relation to environmental management of road planning and construction.
3. Prepare revised training modules.

B2. Training on Environmental and Social Impact Management

Training on Environmental Management is divided in two categories:

Training 1 : Regular Training

- The purpose of this task is to deliver a training program on environmental and social management to the main stakeholders, in order to achieve environmentally and socially sound road developments through strengthening capabilities in planning, designing and implementing aspects.
- The targeted participants attending the training will come from Directorate General of Highway, Provincial Dinas/Sub Dinas Bina Marga/P3JJ, Provincial Bappeda and Bapedalda, Dinas PU Kabupaten, Bapedalda Kabupaten and other related institutions.
- The number of participants in each training group is 40 persons in maximum, and the training will cover 10 provinces (North Sumatera, West Sumatera, Riau, Jambi, Lampung, South Sumatera, West Kalimantan, Central Kalimantan, East Kalimantan and South Kalimantan).

The number of trainers (consultant) in each province/ location is about 6 persons.
The number of participants for this training is approximately 350 persons.

Training 2 : Training for Construction Implementation Personnel

Training for Construction Implementation Personnel in the form Workshop/Training is needed also for the main stakeholders related with project implementation. There are 3 locations of workshop/training and the participants from regional provinces (in Riau Province/Pekan Baru, South Sumatera Province /Palembang and East Kalimantan Province/Samarinda), which cover 10 provinces.

For this purpose, **2 days workshop** is sufficient, with the target group including:

- Supervising Consultant
- Contractor
- P3JJ Province
- Dinas PU Province/Kabupaten
- DGH Staff (SDEA, Directorate of Implementation West and Central Region or any successor).

There are 2 groups (1 group 2 days) in this workshop and the total of **number participants in this workshop/training** is about **239 persons for 3 locations.**
The number of trainers (consultant) in each location is 5 persons.

- B3. Based on the above scope of works, the consultant will carry out the following:
1. Undertaking training needs analyses for road development stakeholders including the implementation/construction personnel.
 2. Preparing a staff training plan and associated materials (modules).
 3. Delivering the two categories of training.
 4. Evaluating the trainings.
 5. Modifying the training modules as determined necessary.

6. Handing over the amended training modules to the project manager for use in the delivery of future training.
7. Preparing training reports.

IV. DURATION OF WORK

The duration of Consulting Services in Training for Strengthening Capabilities in Environmental and Social Impact management is **18 months calendar**.

V. STAFFING ORGANIZATION

To carry out the tasks under these consultancy services as previously outlined in section 3, the following resources will be required.

5.1. Duration and Expertise Required

5.1.1. Location and Duration

The training will be undertaken in North Sumatera, West Sumatera, Riau, Jambi, Lampung, South Sumatera, West Kalimantan, Central Kalimantan, East Kalimantan and South Kalimantan.

The consultancy services to be provided under these TOR will be required over 18 months period. The team will be based in Jakarta but some staff will be required to travel to provinces to prepare and conduct the training. The travel plan has to be agreed between the Project Manager and the Consultant. This travel plan and its arrangement should be included in the consultant's technical and financial proposal.

5.1.2. Comments on Terms of Reference

For the purpose of evaluation the proposal made by consultant should be based on assignment duration. However should aspirants consider the estimate to be inappropriate they should state their reasons in the "**Comment of the Terms of Reference**" section of the proposal.

5.1.3. Consultant's Organization

In order for the project to be managed easily and systematically by the Sub Directorate of Environmental Affairs or any successor, and to establish compatibility with the present Road Sector Training system, the consultancy services should cover three main areas, as mentioned before:

- Preparing environmental and social impact management guidelines.
- Updating the previous modules on Environmental and Social Impact Management.
- Implementation of the training on environmental and social impact management, to comply with government regulations and donor guidelines

5.2. Job Description of Each Required Professionals and Sub Professionals

5.2.1. Team Leader (Local)

The environmental specialist will be the training organizer and must have a minimum of 10 years experience in training environmental and social management in relation to road infrastructure projects. The specialist must possess a relevant post graduate degree preferably

Masters in Civil Engineering/Environmental Management. Team leader is required for 18 months.

He/she should be familiar with the Sub Directorate of Infrastructure Environment's area (or any successor) of responsibility in the context of the Environmental Management System for Road Construction. The Training Specialist will have been directly involved with the management and coordination of planning, programming, implementing, and monitoring activities of training organization and be conversant with training management system, delivery methodologies, evaluation techniques and project related training.

In general, he/she will hold the overall responsibility for the completion of all tasks as described in these TOR. Responsibilities include the establishment of close cooperation and good working relationship with Sub-Directorate of Environmental Affairs (or any successor) Project Officer, the related government agencies and other organizations that have a relationship to the project.

5.2.2. Social Poverty and Environmental Specialist (Expatriate)

The Social Poverty and Environmental specialist shall have minimum 8 years experience in designing, implementing, and monitoring social/environmental impact and poverty assessments, and must possess a relevant university degree preferably on post graduate level (Master/PhD). Experience working in Southeast Asian countries, preferably in Indonesia, for more than three years is desirable. He/she will assist Team Leader in preparing guidelines, organizing of training and preparing report. The Specialist is required for 5 months.

5.2.3. Training Delivery Specialist/Social Specialist (Local)

The Training Delivery Specialist/Social Specialist is required for 12 person months to support Team Leader in Training Delivery. He/she should have a minimum educational level of S1 degree in social-cultural expert with 8 years of related experience in training and some social-cultural analysis. The specific tasks include, but are not limited to the following:

- To coordinate Training Delivery System.
- Responsible for implementation of training
- Responsible for revisions to the modules based on feedback from the implementation of the courses.
- Collecting data and information concerning the training participants.
- Analysing and evaluating the training impact.

5.2.4. Curriculum/Material Development Specialist (Local)

The Curriculum Specialist/Material Dev Specialist is required for 10 person months to support Team Leader in Training Delivery. The required Curriculum/Material Development (CMD) Specialist will work on Updating training modules and preparing materials for:

- Environmental management in General Planning-feasibility study of project and
- Environmental management in Technical Design-Construction of road project.

He/She will have a wide ranging knowledge of procedures and processes involved in developing and/or reviewing guidelines and curricula based on related skill of environmental management system, in updating/design training modules and materials.

He/She will be a qualified professional (S1) of any discipline with 5 years experience in Curriculum/Material Development. He/She will also have a knowledge and experience in the assessment methods use to evaluate the effectiveness of the proposed training. The CMD Specialist will be fully familiar with the delivery methods employed to conduct various kinds of training courses implemented on competency based.

5.2.5. Social Cultural Specialist (Local)

The social-cultural specialist will assist CDM specialist on social-cultural, land acquisition and resettlement management aspect in designing training materials. He/She will be a qualified social-cultural expert (S1) with 4 years experience in some social-cultural analysis and land acquisition work. Some experience on land acquisition and resettlement work of road projects will be advantage. The Social Cultural Specialist is required for 16 person months to support Team Leader in Preparing Guideline Drafts and Training Delivery.

5.2.6 Highway Specialist/Engineer (Local)

The Highway Engineer will assist CMD specialist on road planning, design and construction management aspect in designing training material and preparing a draft of Guidelines. He/She will be a qualified highway engineer (S1) with 5 years experience in some planning, design and construction/supervision work of road project. Some experience on environmental management of road projects will be an advantage.

The Highway Specialist is required for 16 person months to support Team Leader in Preparing Guideline Drafts and Training Delivery.

5.2.7 Supporting Staff

The Professional Team will be assisted by a group of supporting staff.

Sub professional staff is Environmental Specialist and shall have 3 years of related experience in environmental (1) and sub-professional staff is required for 12 months to assist the Team Leader.

The other supporting staffs are required also to help the professional team as below:

- Bilingual Secretary
- Computer Operator (2)
- Office boy

VI. WORK SCHEDULE

The work schedule is attached in this Terms of Reference. The Consultant has to prepare a comment to that schedule.

VII. REPORT AND DOCUMENT

7.1. Report

- The Inception Report will be submitted by the consultant at the end of the first month of activities period (20 copies)
- The Bimonthly Report will be submitted by the consultant at the end of second until sixteenth month of activities period (9 x 5 copies)

- The Draft Final Report will be submitted by the consultant one month before completion covering summary activities of the consultant until the date of the report submission to be discussed with Project Officer. At the same time the report should also be submitted to the Bank's comment (20 copies).
- The Final Report at the end of the assignment will be submitted by the consultant, summarizing and evaluating the effectiveness of all activities performed during assignment period (20 copies).
- **All report will be in English with 5 copies** for each "Report" (Inception, Draft and Final Report) and **the other copies of report in Bahasa Indonesia.**

7.2. Documentation

- The training material will be divided into different topics, each of which consists of training modules.
- The topics of the General Planning Course consist of 10 modules including the Introduction of Competent Based Method modules; some cases studies and field visit studies.
- The topics of the Technical Design and Construction Implementation consist of 10 modules including the Introduction of Competency Based Method module, some cases studies and field visit studies.
- The draft of training modules (20 copies each) should be submitted to the Project Officer/Project Manager before training delivery for evaluation.
- The final training modules (20 copies each) should be submitted to the Project Officer/Project Manager at the end of the period.

The consultant will also provide the reports and documentation in 5 digital copies.

**PROCUREMENT CONTRACT SUMMARY SHEET
LOAN 1284-INO: Road Rehabilitation 2 Project**

For New Contract

Name of Package - Road Link																	
Name of Contractor/Consultant: Address Contract No. Date of Contract:																	
Contract Amount (Included VAT) Contract Amount (Excluded VAT) ADB Financing: Category: -----/-----% Contract Period	Rp Rp Rpdays	\$ \$ \$															
Date of ADB Approval on BER:																	
Contract Nature:	<ul style="list-style-type: none"> 1. Construction 2. Goods 3. Consulting Services 4. Turnkey 																
Procurement Mode: List of Participating Bidders	<ul style="list-style-type: none"> 1. International Competitive Bidding (ICB) 2. International Shopping (IS) 3. Local Competitive Bidding (LCB) 4. Direct Purchase/Direct Appointment 5. Force Account <table border="0" style="width: 100%;"> <tr> <td style="width: 40%;">1</td> <td style="width: 50%;"></td> <td style="width: 10%; text-align: right;">6</td> </tr> <tr> <td>2</td> <td></td> <td style="text-align: right;">7</td> </tr> <tr> <td>3</td> <td></td> <td style="text-align: right;">8</td> </tr> <tr> <td>4</td> <td></td> <td style="text-align: right;">9</td> </tr> <tr> <td>5</td> <td></td> <td style="text-align: right;">10</td> </tr> </table>		1		6	2		7	3		8	4		9	5		10
1		6															
2		7															
3		8															
4		9															
5		10															
Terms of Payment																	

WITHDRAWAL APPLICATION FORM (Form ADB-DRP/RMP)



Asian Development Bank
WITHDRAWAL APPLICATION
(Form ADB-DRP/RMP)

Date: _____
ADB Loan No.: _____

Application No.:

To: Asian Development Bank
P.O. Box 789
980 Manila, Philippines

Type of Disbursement: Direct Payment
 Reimbursement

Attention: Controller's Department - Disbursement Operations Division (CTDO)

Sr./Madam:

1. In connection with the Loan Agreement dated _____ between the Asian Development Bank (ADB) and the _____ (Borrower), please pay from the Loan Account:

_____ (Currency name)

_____ (Amount to be paid in figures)

The said amount is required for payment or reimbursement of eligible expenditures in the said currency as described in the attached Summary Sheet(s).

2. The undersigned certifies and agrees as follows:

- a. these expenditures were/are/will be made for the purposes specified in the Loan Agreement and the undersigned has not previously withdrawn from the Loan Account nor obtained or will obtain any other loan, credit, or grant for the purpose of fully or partially meeting these expenditures.
- b. the goods or services have been procured in accordance with the Loan Agreement and the cost and terms of the purchase thereof are reasonable and in accordance with the relevant contract(s).
- c. the goods or services were or will be produced in and supplied by a member country of ADB as specified in the attached Summary Sheet(s).
- d. for expenditures claimed on the basis of a Statement of Expenditures (SOE), all authenticating documents have been retained in the location shown on the individual SOE Summary Sheets and will be made available for review by auditors and ADB representatives upon request.
- e. as of the date of this application, there is no existing default under the Loan Agreement, the Project Agreement or the Guarantee Agreement, if any.
- f. if any funds withdrawn pursuant to this application are returned, the current value of such funds will be applied as credit to the Loan Account or, if the amount is small, applied to the next loan service payment due.

3. **PAYMENT INSTRUCTIONS**

a. **Payer's Name and Address**

- Payer's Name : _____
- Payer's Address : _____

b. **Name and Address of Payer's Bank and Account Number**

- Bank Name : _____
- Bank Address : _____
- Payer's Account No. : _____
- SWIFT Code : _____

c. **Correspondent Bank (If Payer's Bank is not located in the Country whose currency is claimed, enter the name and address of their bank's correspondent in the country whose currency is to be paid.)**

- Bank Name : _____
- Bank Address : _____
- Account No. of Payer's Bank : _____
- SWIFT Code : _____

d. **Special Payment Instructions and Other References**

4. This application consists of (number) page(s) including (number) page(s) of Summary Sheet(s):

By: _____
Signature(s) of Authorized Representative(s)

Name of Borrower

Print Name & Title of Authorized Representative(s)

PROJECT PERFORMANCE REPORT

As of 31 September 2006

SERIAL NO : 12
 DIVISION : IRM
 DEPARTMENT : SERD
 PROJECT NO. : 34159
 LOAN STATUS : ACTIVE

A. BASIC DATA						LAST:	CURR:	Targeting Classification		
NAME						: No	No	TI		
2184: ROAD REHABILITATION II						: S	S	Targeted Intervention Themes		
Impact and Outcome						: S	S	ECO Subthemes		
Implementation Progress (IP)						: No	No	Macroeconomic stability		
Potential Problem (PP)						: No	No	Fostering infra. dev.		
Override						: No	No			
-----CLOSING-----						PHYSICAL	ELAPSED	PROJECT	REVIEW	

LOAN NO(S)	APPROVAL	SIGNING	EFFECTIVITY	ORIGINAL	REVISED	ACTUAL	COMPLETION	LOAN PERIOD	PROGRESS	MISSIONS:
2184-INO	29 Sep 05	16 Jun 06		31 Dec 10	-	ORIG : Jun 10		ORIG. 18%	2%	LAST:
						REV :		REV. 0%		ACTUAL DAYS: 0
										(last 12 months)
										NEXT:06-09-2006
										PLANNED DAYS: 4
EXECUTING AGENCIES: Directorate General of Highways (BINA MARGA)										

B. FINANCING PLAN

	FOREX	LOCAL	TOTAL	COUNTERPART	CURRENT VALUE OF	BALANCE
PROJECT COST	76.2	139.6	215.800	FUNDS ADEQUATE	BANK LOAN:	AVAILABLE FOR
ADB	76.2	74.8	151.000	-	APPROVED : 151	COMMITMENT:
Government	0.0	64.8	64.800		NET :-	151.000

C. LOAN UTILIZATION

----- CUMULATIVE CONTRACT AWARDS -----				----- 2006 CONTRACT AWARDS -----					
	ADB	OTHERS	CUMULATIVE		1Q	2Q	3Q	4Q	TOTAL
Dec 05	0.000	0.000	CONTRACTS TO	PROJ	0.000	0.000	10.000	30.000	40.000
31 Aug 06	0.000	0.000	NET BANK	ACTUAL	0.000	0.000	0.000	0.000	0.000
Proj 06	40.000		LOAN(S):						
			0%						
----- CUMULATIVE DISBURSEMENTS -----				----- 2006 DISBURSEMENTS -----					
	ADB	OTHERS	CUMULATIVE		1Q	2Q	3Q	4Q	TOTAL
Dec 05	0.000	0.000	DISBURSEMENTS	PROJ	0.000	0.000	1.500	5.500	7.000
31 Aug 06	0.000	0.000	TO NET BANK	ACTUAL	0.000	0.000	0.000	0.000	0.000
Proj 06	7.000		LOAN(S): 0%						

D. COVENANTS

COMPLIANCE WITH COVENANTS:	AUDITED PROJECT ACCOUNTS / DELAY	AGENCY FINANCIAL STATEMENTS / DELAY	SECTOR COVENANTS	ENVIRONMENTAL COVENANTS	SOCIAL COVENANTS	FINANCIAL COVENANTS	ECONOMIC COVENANTS
	S / 0 mos.	S / 0 mos.					

E. MAJOR ISSUES/PROBLEMS (IP, Impact and Outcome, Covenants)

PROBLEM(S)	ACTION TAKEN/PROPOSED
None. The loan was signed on 16 June 2006. Prequalification for Batch 1 subprojects is progressing satisfactory. Three international consulting team are being required. Legal opinion received	
Name: H. S. Soewartono	Name: Robert Valkovic
Designation: PAU Assistant	Designation: PROJECT OFFICER

Update Control : Jean-Marie Lacombe; Robert Valkovic; H. S. Soewartono; Laksminingsih Munandar : Last updated by COSO Monthly Uploading

IMPACT AND OUTCOME

Impact		
Description Fostered economic growth and improved living conditions in poor areas of Sumatra and Kalimantan		
Outcome		
Description (with quantifiable / monitorable targets)	Rating (HS,S,PS,U)	Assessment of Current Status
1. Improved living conditions in poor areas of Sumatra and Kalimantan	S	Not yet due.
2. Help reduce transport tariffs	S	Not yet due
3. Improved road safety awareness	S	Not yet due
4. Improved vehicular access on strategic national/international roads in Sumatra and Kalimantan	S	Not yet due
5. Improved governance in project implementation	S	Not yet due
Key Assumptions/Risks	Rating (HS,S,PS,U)	Assessment of Current Status
Assumptions:		
1. Overall economic growth for Indonesia maintained	S	Being observed
2. Central Government commitment to implement new road policies	S	Being observed
3. Appropriateness of road sector responsibilities at central and subnational level	S	Being observed
4. competitive road transport services industry	S	Being observed
5. Commitment of DGLT to awareness campaigns	S	Being observed
6. Fiduciary Control, Fraud and Anit-corruption Action Plan sufficient to bring improvements	S	Being observed
Risks:		
	Mitigated (Y/N)	
1. Inadequate financial resources for rad funding	Yes	
2. Irregular operation facilities	Yes	
3. Insufficient funds for routine maintenance	Yes	
4. Road Traffic Accidents	Yes	
Overall Rating	S	NOTE: Overall Rating is based only on Assumptions and Risks until project completion. Thereafter, Immediate DO assessment will be included
Rating Upon Suspension (for COPP use only)		
New Impact and Outcome Rating:	Effective Date:	Date of Lifting:
Remarks:		

Recent Development (Date: 31/08/2006)	
The counterpart funds for 2006 is available. The prequalification for 9 subprojects under Phase 1 have been approved. Technical proposal evaluation for three consulting services have been approved. Specific subproject bidding documents are under review.	
Problems with Impact and Outcome	
	Description
None	Action Taken/Proposed None

Project Quality (one time input primarily for COPP)					
Capacity Building Component	Training Component	Participatory Process	Project Manager/Project Office prior to Loan approval	Incorporated Lessons Learned in Sector/Country	Logical Framework
Yes	Yes	Yes	No	Yes	Yes
Update Control : Jean-Marie Lacombe; Robert Valkovic; H. S. Soewartono; Laksminingsih Munandar					
Last Updated by : COSO Monthly Uploading					
Last Modified on : 20/09/2006 04:52 AM					
Created on : 10/10/2005 02:07 PM					

COVENANTS

Project and EA Accounts

EA	FY End	FY	Months Due After FY	Due	Date Received	Months Delayed	Acceptabl eY / N	Status of Compliance	Rating
Submission of Audited Project Accounts (APA):									
Directorate General of Highway (DGH)	Dec	06	6	30/06/2007	-	0	-	NYD	S
Submission of Agency Financial Statements (AFS):									
Directorate General of Highway (DGH)	Dec	06	6	30/06/2007	-	0	-	NYD	S
Overall Compliance and Rating:								NYD	S
Remarks:									

Project Specific Covenants

NOTE: To edit a specific covenant click on the section name shown in green below.

Sector	S
Environmental	S
Social	S
Financial	S
Economic	-
Others	S
Overall Rating	S

Problems/Remarks/Issues with Covenants

--

Update Control	: Jean-Marie Lacombe; Robert Valkovic; H. S. Soewartono; Laksminingsih Munandar
Last Updated by	: COSO Monthly Uploading
Last Modified on	: 20/09/2006 04:52 AM
Created on	: 10/10/2005 02:52 PM

Rating Criteria for the Assessment of Implementation Progress

Project: 34159 - ROAD REHABILITATION II

Loan Number:	2184-INO	Department:	SERD	Division:	IRM
Approval Date:	29/09/2005	Signing Date:	16/06/2006	Effectivity Date:	
Original Closing Date:	31/12/2010			Loan Status:	ACTIVE
Loans Not Yet Effective	As of : 31/08/2006			IP Rating	Satisfactory
	11.0 months after loan approval				
	2.5 months after loan signing				

Note: This is for recording purposes only and does not affect in any way the overall IP Rating
Project Progress: 2%

Override IP Rating (for COPP use only)		
New IP Rating:	Effective Date:	Date of Lifting:

Justification for Override	Justification for Lifting
-----------------------------------	----------------------------------

Rating Upon Suspension (for COPP use only)		
New IP Rating:	Effective Date:	Date of Lifting:
Remarks:		

Update Control	: Jean-Marie Lacombe; Robert Valkovic; H. S. Soewartono; Laksminingsih Munandar
Last Updated by	: COSO Monthly Uploading
Last Modified on	: 20/09/2006 04:58 AM
Created on	: 10/10/2005 03:02 PM

IMPLEMENTATION PROGRESS

Project Outputs

Description (with quantifiable/monitorable targets)	Assessment of Progress-to-date
Part 1 - Civil Works 1A - Road Rehabilitation - Sumatra 1B - Road and Bridge Rehabilitation - Kalimantan 1C - Enforcing Controls over Truck Overloading	ADB has approved the prequalification for 9 subprojects in Sumatra and Kalimantan.
Part 2 - Equipment Part 3 - Consulting Services 3A - Consulting Services for Directorate General of Highway (DGH) 3B - Consulting Services for Directorate General of Land Communication (DGLC) 3C - Consulting Services for BAPPENAS	Three consulting teams under DGH (CTC, DSC1 and DSC2) are being recruited. Contract negotiations underway for CTC and evaluation of tech. proposals approved for DSC1 and DSC2. Terms of Reference to be reviewed Terms of Reference to be reviewed

Key Project Inputs

(Loan Categories from LFIS/Logical Framework)

Remarks(Loan Categories from LFIS/Logical Framework)	Remarks
Improved vehicular access on strategic national/international roads in Sumatra and Kalimantan Reduction of road transport tariffs Reduced premature breaking of roads Improved road safety awareness Improved governance in project implementation	

Key Assumptions/Risks (Input-Output)	Assessment of Current Status
Central Government commitment to implement new road policies	being observed
Appropriateness of road sector responsibilities at central and subnationallevel	being observed
Competitive road transport services industry	being observed
Effective private-sector management in collaboration with the governmental agencies	being observed
Commitment of DGLC to awareness campaigns	being observed

Implementation Progress

Loans Not Yet Effective	As of : 30/08/2006	IP Rating
	11.0 months after loan approval	Satisfactory
	2.5 months after loan signing	

Design Changes

--

Recent Development (Date: 18/07/2006)

The loan was signed on 16 June 2006. GOI is processing the legal opinion for loan effectiveness.

Problems with IP

Description	Action Taken/Proposed

Update Control	Jean-Marie Lacombe; Robert Valkovic; H. S. Soewartono; Laksminingsih Munandar
Last updated by	COSO Monthly Uploading

POTENTIAL PROBLEM PROJECT

Rating Criteria	Flag (Yes/NO)	Actual Rating	Remarks
1. Project Implementation Delays	No	NYE	The PQ and recruitment of consultants underway
2. Poor Compliance with Covenants	No		
3. Established, Staffed, and Operating PMU/PIU	No	No Input	Established
4. Fielding of Consultants	No	No Input	Being recruited
5. Shortage of Counterpart Funds/Cofinancing	No	NYE	No
6. Cost Overrun	No	NYE	
7. Poor Compliance with Audited Project Accounts and Agency Financial Statements	No	S	
8. Environmental or Social Problems	No		
9. Significant Disbursement Delays	Yes	0.00	0.000 / 1.000= 0%
10. In Risk Sector in a Country with History of Past Problems	Yes	50%	
11. Project Fielded Missions	Yes	0	
Overall Rating	No		< 4 flags

Override PP Rating (for COPP use only)

New PP Rating:

Effective Date:

Date of Lifting:

Justification for Override**Justification for Lifting**

Update Control	:	Jean-Marie Lacombe; Robert Valkovic; H. S. Soewartono; Laksminingsih Munandar
Last Updated by	:	COSO Monthly Uploading
Last Modified on	:	20/09/2006 05:00 AM
Created on	:	10/10/2005 03:06 PM

OUTLINE OF QUARTERLY REPORT

CONTENTS

BASIC DATA

MAP (Title)

REPORT SUMMARY

- I. PROJECT DESCRIPTION
 - II. STATUS OF PROJECT IMPLEMENTATION
 - A. Overall Implementation Status (Provide S Curve) and Contract Awards and Disbursement
 - B. Consulting Services
 - 1. CTC
 - 2. DSC1 and DSC2
 - 3. Enforcing Controls Over Truck Overloading
 - 4. Road Safety Awareness
 - 5. Road Maintenance Management
 - 6. Capacity Building and Training
 - 7. Environmental and Social Impact Management
 - C. Civil Works for Road Rehabilitation
 - 1. Phase 1 – Subprojects
 - 2. Phase 2 – Subprojects
 - D. Civil Works on Enforcing Controls Over Truck Overloading
 - E. Project Implementation Schedule
 - F. Financial Status
 - G. Conditions and Covenants
 - H. Major Issues
-

III. TABLES

- 1. List of Consulting Services
- 2. Pre and Bidding Status
- 3. List of Awarded Contracts
- 4. Status of Implementation
- 5. Contract Variation
- 6. Status of Disbursement

Project Completion Report
General Guidelines for Preparing Project Completion Reports

CONTENTS

BASIC DATA
MAP² (TITLE)

² A revised map showing the impact of the project is to be included. Do not use the map in the report and recommendation of the President (RFP)

- I. PROJECT DESCRIPTION
- II. EVALUATION OF DESIGN AND IMPLEMENTATION
 - A. Relevance of Design and Formulation
 - B. Project Outputs
 - C. Project Costs
 - D. Disbursements
 - E. Project Schedule
 - F. Implementation Arrangements
 - G. Conditions and Covenants
 - H. Related Technical Assistance
 - I. Consultant Recruitment and Procurement
 - J. Performance of Consultants, Contractors, and Suppliers
 - K. Performance of the Borrower and the Executing Agency
 - L. Performance of the Asian Development Bank
- III. EVALUATION OF PERFORMANCE
 - A. Relevance
 - B. Efficiency in Achievement of Purpose
 - C. Efficiency in Achievement of Outputs and Purpose
 - D. Preliminary Assessment of Sustainability
 - E. Environmental, Sociocultural, and Other Impacts
- IV. OVERALL ASSESSMENT AND RECOMMENDATIONS
 - A. Overall Assessment
 - B. Lessons Learned
 - C. Recommendations

SAMPLE AUDIT LETTER

ASIAN DEVELOPMENT BANK

Regional Department
Sector Division / Regional or Resident Mission

[Date]¹
[The Borrower]
Dear Sir or Madam:

Subject: [Loan No. and Project Title]
FINANCIAL REPORTING AND AUDITING REQUIREMENTS

This letter IS to ensure your timely compliance with the loan covenants and the quality of financial information as required by ADB. ADB's *Handbook for Borrowers on the Financial Governance and management of Investment Project Financed by the ADB* (the Booklet) is enclosed to guide you.

AD, by its Charter, is required to ensure that the proceeds of any loan made, guaranteed, or participated in by ADB are used for the purposes for which the loan was approved. ADB requires accurate and timely financial information from its borrowers to be assured that expenditure was for the purposes stated in the loan agreement.

For this particular loan, the requirements are stipulated in sections _____² and _____³ of the Loan Agreement of _____ between ADB and [the Borrower] and sections _____⁴ and _____⁵ of the Project Agreement⁶ of _____ between ADB and [name of the EA].⁷ Copies of the Loan/Project Agreements are enclosed for onward transmission by your office to your EA and the auditor(s), together with a copy of this letter.

The following are the main requirements:

- ADB requires the EA to maintain separate project accounts and records exclusively for the Project to ensure that the loan funds were used only for the objectives set out in the Loan Project Agreements. The project accounts comprise the following:⁸
 -
 -

The first set o f project accounts to be submitted to ADB covers the fiscal year ending _____. As stipulated in the Loan or Project Agreements, they are to be submitted up to _____ month after the end of the fiscal year. For this loan, the deadline is by _____. A sample report format with explanatory notes, is attached as Annex A.

- The accounts and records for the project are to be consistently maintained by using sound accounting principles. Please stipulate that your external auditor is to express an opinion on whether the financial report has been prepared using international or local generally accepted accounting standards and whether they have been applied consistently.

ADB prefers project accounts to use international accounting standards prescribed by the International Accounting Standards Committee. Please advise your external auditor to comment on the impact of any deviations, by [name of the Executing Agency] from international accounting standards.

- Please ensure that your external auditor specifies in the Auditor's Report the appropriate auditing standards they used, and direct them to expand the scope of the paragraph in the Auditor's Report by disclosing the key audit procedures followed. Your external auditor is also to state whether the same audit procedures were followed for all supplementary financial statements submitted.

ADB wishes that auditors conform to the international auditing standards issued by the international Federation of Accountants. In case where other auditing standards are used, request that your external auditor to indicate in the Auditor's Report the extent of any differences and their impact on the audit.

- The external auditor's opinion is also required on whether
 - the proceeds of the ADB's loan have been utilized only for the project as stated in the Loan Agreement;
 - the financial information contains data specifically agreed upon between [name of the Borrower or EA] and ADB to be included in the financial statements;
 - the financial information complies with relevant regulations and statutory requirements; and
 - compliance has been met with all the financial covenants contained in the Loan or Project Agreements.
- The Auditor's Report is to clearly state the reasons for any opinions that are qualified, adverse, or disclaimers.
- Actions on deficiencies disclosed by the external auditor in its report are to be resolved by [name of Borrower or Executing Agency] within a reasonable time. The external auditor is to comment in the subsequent Auditor's Report on the adequacy of the corrective measures taken by [name of Borrower or EA].

Compliance with these ADB requirements will be monitored by review missions and during normal project supervision, and followed up regularly with all concerned, including the external auditor.

Yours sincerely,

Director /
Country Director
(Sector Division / Regional or Resident Mission)

cc: (EA
(External auditor of the Borrower or EA)

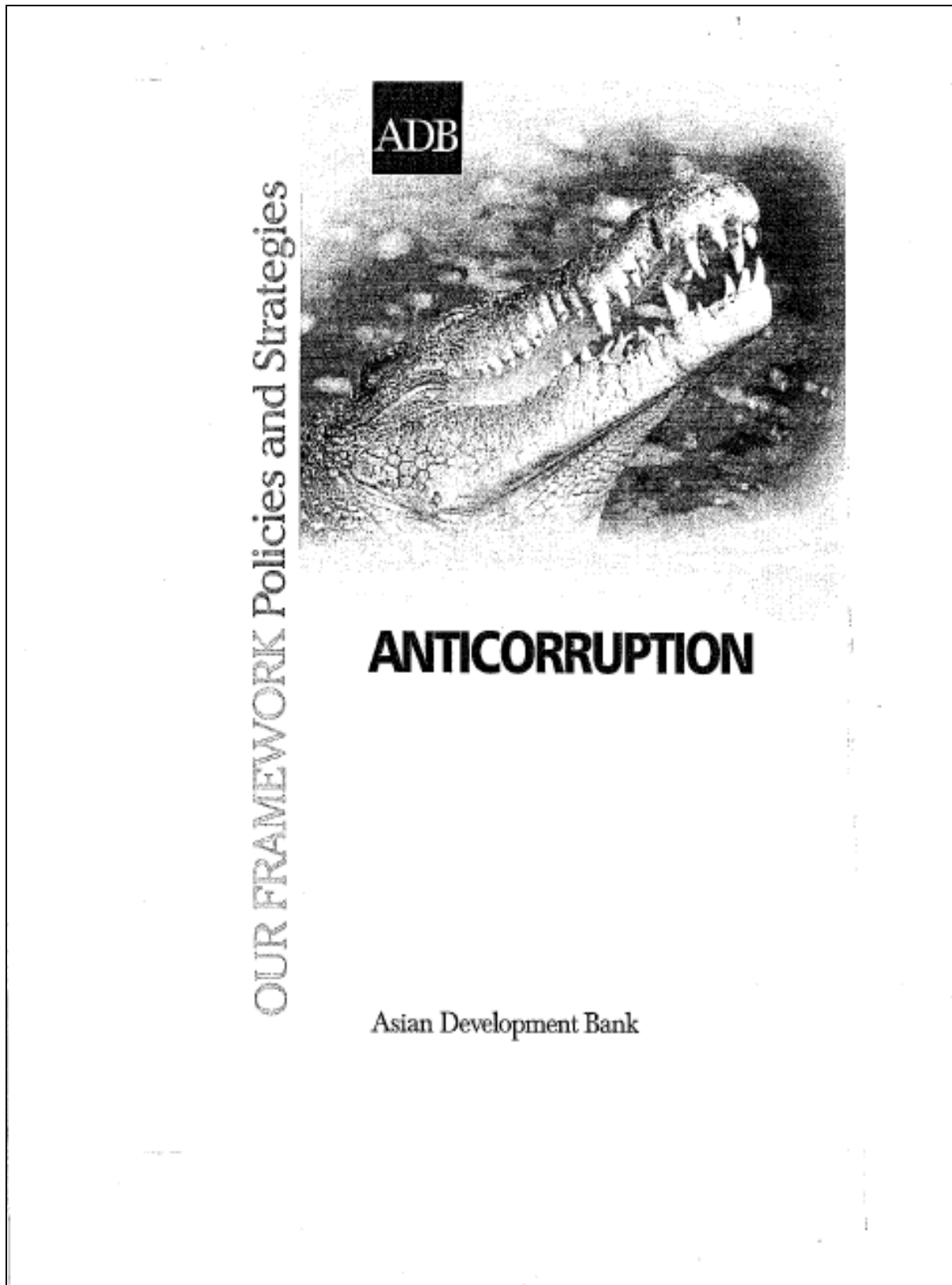
Loan Covenants

No.	Covenant	Reference	Status
1	<u>Project Implementation and Coordination</u> Directorate General for Highways (DGH) shall be responsible for overall supervision and coordination of the Project. DGH shall carry out all coordination and liaison responsibilities with DGLT and BAPPENAS. DGH shall appoint a PMU with responsibility for day-to-day implementation, preparation of Project reports, ensuring financial and reporting requirements are met and ADB procurement procedures implemented.	LA, Schedule 6, para 1, 3, 4	PMU appointed
2	A Steering Committee (SC) shall be established with representatives from BAPPENAS, MOF, MPW and MOC, under the chairmanship of BAPPENAS	LA, Schedule 6, para 2	Draft of Decree on SC has been prepared and it will be sent to Bappenas for Endorsement
3	The DGH shall act as implementing agency (IA) to coordinate design, implementation, supervision of road rehabilitation, road maintenance and capacity building components of the Project, and supervise the agency for planning and supervision of road and bridge works (P2JJ) units in the Project provinces. The P2JJ units shall supervise and manage road and bridge rehabilitation works and for pre-construction activities.	LA, Schedule 6, para 5, 6	Responsibilities assigned
4	The Directorate General for Land Transportation (DGLT) shall act as IA to implement the truck overloading and road safety awareness campaign components of the Project.	LA, Schedule 6, para 7	Responsibilities assigned
5	BAPPENAS shall act as IA to implement the developing new policy approaches to road maintenance and management component of the Project	LA, Schedule 6, para 8	Responsibilities assigned
6	<u>Counterpart Funding</u> The Borrower shall ensure implementation arrangements, the provisions of funds from the proceeds of the Loan, and counterpart contributions of the Borrower shall continue throughout the period of Project implementation	LA, Schedule 6, para 9	Counterpart funds available for 2006. 2006 DIPAs have been issued.
7	The Borrower shall ensure funding for (i) regular maintenance of roads rehabilitated under the Project and (ii) expenditures for weighbridge operations and training for operating and maintaining weighbridges installed under the Project	LA, Schedule 6, para 10	Not yet due.
8	<u>Reporting</u> The Project Management Unit (PMU) shall (i) collect and consolidate all Project reports and submit them to ADB and (ii) submit quarterly progress reports, midterm Project evaluation report and overall Project completion report	LA, Schedule 6, para 11	Not yet due.
9	The IAs shall (i) prepare site-specific activity	LA, Schedule 6,	Not yet due.

No.	Covenant	Reference	Status
	reports, (ii) collect and consolidate field data and feedback, and (iii) submit monthly and quarterly reports to PMU	para 12	
10	DGH shall periodically submit to ADB progress reports on the revised PSAP and consult with ADB on further road sector policy measures	LA, Schedule 6, para 13	Not yet due.
11	The Borrower will keep ADB informed and provide copies of all transport sector and road sub-sector studies and ensure ADB has the opportunity to comment on recommendations contained therein	LA, Schedule 6, para 14	Being Complied with.
12	The Borrower shall keep ADB informed of progress on financial mechanisms that may be available for maintenance of national roads	LA, Schedule 6, para 15	Not yet due.
13	<u>Environmental Management</u> The Borrower shall ensure the Borrower's laws and regulations governing environmental and social impact assessments, as well as ADB's <i>Environmental Policy (2002)</i> are followed	LA, Schedule 6, para 16	Not yet due.
14	The Borrower and DGH shall ensure contract documents for civil works include specific measures to mitigate negative environmental impacts caused by Project activities. The Borrower and DGH shall cause (i) the contractors to comply strictly with all environmental impact mitigation requirements, and (ii) construction supervision consultants monitor closely contractor compliance. DGH shall submit semi-annual reports on implementation of the EMP	LA, Schedule 6, para 17	The provisions have been incorporated in the master contract documents.
15	When roads rehabilitated under this Project are near protected or sensitive areas, the Borrower shall ensure that a monitoring program is in place and DGH shall monitor performance of contractors. The Borrower and DGH shall ensure that civil works contracts include a provision requiring implementation of identified environmental protective measures	LA, Schedule 6, para 18	The provisions have been incorporated in the master contract documents.
15	DGH shall establish an Environmental Management Plan (EMP) to ensure that environmental mitigation measures are implemented as planned. DGH shall make arrangements for independent monitoring of environmental mitigation measures of contractors	LA, Schedule 6, para 19	Not yet due. PMU with the assistance from CTC will prepare the EMP.
16	<u>Social Safeguards</u> In the event land acquisition or resettlement is needed, the Borrower shall ensure that a Resettlement Plan is developed and no civil works contract shall be awarded or works commence prior to completion of all approved resettlement activities. The Borrower shall ensure all land acquisition and resettlement activities are carried out in accordance with the CPFPG developed by DGH, the Borrower's laws, regulations and procedures and ADB's requirements defined in ADB's <i>Policy on Involuntary Resettlement (1995)</i> .	LA, Schedule 6, para 20	Not yet due.

No.	Covenant	Reference	Status
17	The Borrower shall ensure that, to the extent that any Indigenous peoples are likely to be effected, the measures in the CPFPG. The Borrower's laws, regulations, and procedures, and ADB requirements as defined in ADB's <i>Policy on Indigenous People (1998)</i> shall apply.	LA, Schedule 6, para 21	Projects not commenced yet
18	<u>Health and Safety</u> The Borrower shall ensure that civil works contract documents include health and safety provisions, allowance for workers to attend HIV/AIDS awareness campaigns, comply with labor laws for gender and equal pay and road safety measures for the Project	LA, Schedule 6, paras 22 - 24	Master Contract document contains the provisions
19	<u>Auditing</u> The Borrower shall ensure that any auditors financed from proceeds of the Loan shall be selected and engaged through competitive selection procedures	LA, Schedule 6, para 25	Not yet due
20	The Borrower shall ensure a separate accounting system for Project expenditures is maintained. All Project accounts shall be audited annually and submitted to ADB within 6 months of end of FY.	LA, Schedule 6, para 26	Being Complied with
21	The Borrower shall ensure that the Borrower's Inspectorate General performs audits required under the Borrower's laws and regulations and submit the Inspectorate General's full annual report to ADB.	LA, Schedule 6, para 27	Not yet due
22	Findings of ADB review missions shall be posted and made available to the public through the ADB web site or other means of public posting	LA, Schedule 6, para 28	Not yet due
23	<u>Fiduciary and Ethics Control</u> The Borrower and DGH shall ensure that the Fiduciary Control and Anti-Corruption Action Plan (FCACAP) is fully implemented in the carrying out of Project activities.	LA, Schedule 6, para 29	Being Complied with
24	<u>Monitoring</u> 2 months prior to civil works in a project province, DGH and DGLT shall have established Project indicators, as detailed in Section XI, Table 4 of the PAM and measure before and for three years after completion.	LA, Schedule 6, para 30 - 32	Not yet due
25	<u>Particular Covenants</u> The Borrower shall cause the Project to be carried out with due diligence and efficiency and in conformity with sound administrative, financial, engineering, environmental, and highway and bridge construction practices.	LA, Article IV, section 4.01(a)	Being Complied with
26	The Borrower shall make available, promptly as needed, the funds, facilities, services, land and other resources which are required, in addition to the proceeds of the loan.	LA, Article IV, section 4.02	Being Complied with
27	The Borrower shall cause competent and qualified consultants and contractors, acceptable to the ADB, to be employed.	LA, Article IV, section 4.03 (a)	Being Complied with

No.	Covenant	Reference	Status
28	The Borrower shall cause the Project to be carried out in accordance with plans, design standards, specifications, work schedules and construction methods acceptable to the ADB. The Borrower shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein.	LA, Article IV, section 4.0(b)	Being Complied with
29	Sound administrative policies and procedures in the activities of Borrower's departments and agencies	LA, Article IV, section 4.04	Being Complied with
30	The Borrower shall enable the ADB to discuss the Borrower's financial statements for the Project with the Borrower's auditors	LA, Article IV, section 4.05 (b)	Not yet due
31	The Borrower shall enable ADB's representative to inspect the Project, the goods financed out of the proceeds of the Loan, and any relevant records and documents	LA, Article IV, section 4.06	Not yet due
32	The Borrower shall ensure that the Project facilities are operated, maintained and repaired in accordance with sound administrative, financial, engineering, environmental, highway and bridge construction, and maintenance and operational practices	LA, Article IV, section 4.07	Not yet due



FIDUCIARY, CONTROL, FRAUD, AND ANTI-CORRUPTION ACTION PLAN

No.	Issue	Action	Responsibility, Funding	Remarks
1.	Strengthen implementation and procurement arrangements	Strengthen focus on detailed implementation and procurement arrangements. Measures to prevent fraud and corruption prepared and agreed during loan processing, and included in RRP and loan documents.	ADB, MPW, regional governments	Agreed
2.	Apply a code of conduct for project implementation	DGH (MPW), in consultation with MOF, ADB, regional governments, NGOs, and other stakeholders will develop a code of conduct, ethics, and sanctions to be observed by project implementing agencies, bidders, suppliers, contractors, consultants, and other stakeholders.	MPW, MOF, regional governments, ADB	Agreed
3.	Capacity of project management units (PMU) often weak due to lack of skills and high turnover of staff	<p>Ensure that PMU staff on central and regional levels are fully knowledgeable about government and ADB procedures including, but no limited to, procedures for (i) implementation, (ii) procurement, (iii) use of consultants, (iv) disbursement, (v) reporting, (vi) monitoring, and (viii) prevention of fraud and corruption.</p> <p>Conduct training on procurement at ADB/IRM. Develop CD-Rom-based training program on ADB's Guidelines for Procurement in Bahasa Indonesia, including case studies. Training material to be distributed to all personnel in ADB-assisted projects, including members of the tender committee and project staff.</p> <p>Assignments to key positions should be for the duration of the project implementation.</p> <p>Add responsibility of the bid evaluation to the contract of the core supervision team, in addition to standard tasks including, but not limited to. (i) management, (ii) administration, (iii) monitoring, (iv) procurement, and, if required, (v) construction supervision.</p>	<p>ADB, MPW, regional governments</p> <p>ADB/MPW</p> <p>MPW, regional governments</p> <p>ADB, MPW, regional governments. Loan financed</p>	Agreed
4.	Large number of small contracts resulting in inefficient procurement and weak monitoring.	Improve contract packaging by reducing the number of contract packages, as feasible. The transparency and competition remains the prime criteria.	ADB, MPW, regional governments	Agreed
5.	Transparency in operation of the procurement committees in the provinces	MPW will require agreement from regional governments participating in ADB-funded projects that procurement committees will include observers from a university or similar institution.	MPW	Agreed

No.	Issue	Action	Responsibility, Funding	Remarks
6.	Accountability and liability of consultants and other contractors clearly defined and enforced.	Strengthen contractual liability of contractors, suppliers, and service providers involved in the Project. Enforceable financial liability clauses to be included in the contract. Relevant clauses to be drafted in consultation with ADB.	MPW, regional governments	Agreed
7.	Independent consultant performance evaluation	MPW, in consultation with regional governments and other stakeholders, will develop and implement a system for independent consultant performance evaluation including, but not limited to, performance indicators, and sanctions against poor performers.	MPW	Agreed
8.	Transparency in review of project performance	Findings of ADB loan review missions on implementation progress, procurement, disbursement, compliance with loan covenants, and other relevant project issues will be made available to public.	ADB, MPW	Agreed
9.	Project information systems and ICT equipment are not appropriate. Quarterly reports do not contain sufficient information on progress and are not focused on relevant issues.	Develop and implement appropriate ICT-based project information and reporting system. Quarterly reports should include, but not limited to, updated financial and procurement related information.	MPW, regional governments, Loan financed.	Agreed
10.	Independent financial audit of projects	The Government will contract independent auditor for financial audit of project accounts.	MPW, Loan financed	Agreed
11.	Widen mandate of Inspectorate General in MPW	MWP will widen mandate for the Inspectorate General to effectively audit national projects as well as decision-making procedures and control mechanism within MPW.	MPW	Agreed
12.	Transparency and public participation to strengthen monitoring of project implementation	Develop website with relevant project information.	MPW, regional governments. Loan financed	Agreed
13.	Allegations of grant and financial fraudulent practices	Provisions developed by ADB to be included in the contracts (special conditions of contract) to specify the right for ADB to audit the accounts of contractors, suppliers and service providers.	MPW, regional governments, ADB.	Agreed

ADB=Asian Development Bank; DGH=Directorate General of Highways; ICT=Information and Communication technology; IRM=Indonesia Resident Mission; MOF=Ministry of Finance; MPW=Ministry of Public Works; NGO=non-government organization; PMU=project management unit.

Source: Asian Development Bank and Directorate General of Highway.