

Project Administration Manual

Project Number: 47085-002
Loan Number: LXXXX
December 2015

Lao People's Democratic Republic: Road Sector
Governance and Maintenance Project

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Project Administration Manual Purpose and Process

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with Government and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The Ministry of Public Works and Transport (MPWT) and the Department of Roads (DOR) are wholly responsible for the implementation of ADB financed projects, as agreed jointly between the Borrower and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by MPWT, and DOR of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At Loan Negotiations the Borrower and ADB shall agree to the PAM and ensure consistency with the Loan agreement. Such agreement shall be reflected in the minutes of the Loan Negotiations. In the event of any discrepancy or contradiction between the PAM and the Loan Agreement, the provisions of the Loan Agreement shall prevail.

After ADB Board approval of the project's report and recommendations of the President (RRP) changes in implementation arrangements are subject to agreement and approval pursuant to relevant Government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval they will be subsequently incorporated in the PAM.

Abbreviations

ADB	=	Asian Development Bank
ADF	=	Asian Development Fund
DMF	=	design and monitoring framework
DOR	=	Department of Roads
DPWT	=	Department of Public Works and Transport
ECDP	=	ethnic communities development plan
EMP	=	environmental management plan
ICB	=	international competitive bidding
IEE	=	initial environmental examination
km	=	kilometer
Lao PDR	=	Lao People's Democratic Republic
LAR	=	land acquisition and resettlement
MPWT	=	Ministry of Public Works and Transport
NCB	=	national competitive bidding
NGOs	=	nongovernment organizations
PAM	=	project administration manual
PIU	=	project implementation unit
QCBS	=	quality- and cost based selection
RMF	=	Road Maintenance Fund
RRP	=	report and recommendation of the President to the Board
SBD	=	standard bidding documents
SDR	=	special drawing right
SOE	=	statement of expenditure
SPRSS	=	summary poverty reduction and social strategy
TOR	=	terms of reference

I. PROJECT DESCRIPTION

A. Rationale

1. **Sector context.** As a landlocked country, the Lao PDR depends heavily on road transport for economic development. The road subsector dominates its transport sector, representing 98% of total passenger-km traveled, and 86% of freight moved in the country.¹ While the road network has expanded significantly in recent years, the growth in the number of vehicles was even faster. The road network in the Lao PDR consists of national, provincial, district, and rural roads, with a total length of about 46,000 km and a density of about 7.4 km per 1,000 persons, which is one of the highest in the region. Nonetheless, much of the road network, particularly in the provinces, is in poor condition for lack of proper maintenance.

2. The poor condition of the roads has led to frequent closures and has effectively cut off transport connections, constraining the movement of people and goods and impeding economic development. The lack of well-managed and well-maintained roads hinders people's access to markets and basic services, significantly contributing to poverty. Inadequate road maintenance reduces the country's economic competitiveness and slows the pace of poverty reduction.

3. Improving the delivery of public services in road asset management is a long-term strategic objective of the government. To achieve it, the government, with assistance from the World Bank and the Swedish International Development Cooperation Agency, embarked on a long-term plan in 2000 to improve road maintenance in the country, primarily by strengthening road maintenance capacity and capability.² Key outputs of the plan were the establishment of a Road Maintenance Fund (RMF) and the development of an appropriate road maintenance management system to help allocate funds and prioritize the maintenance needs of Lao PDR road assets in support of this new financing mechanism.³ In 2004–2010, the World Bank and the Swedish International Development Cooperation Agency financed Road Maintenance Program Phase 1 and Phase 2 to further support road maintenance in the country. The Japan International Cooperation Agency currently finances the Road Management Capability Project (2011–2016) to improve governance, planning, and management of sustainable road maintenance in Savannakhet and Vientiane provinces. In addition, the World Bank-financed Lao Road Sector Project (2010–2017) supports road maintenance works of the provincial network in Houaphan and Phongsali provinces.

4. **Key issues.** The road sector is under the overall jurisdiction of the Ministry of Public Works and Transport (MPWT). Following the decentralization policy initiated in 2000, road maintenance responsibilities of provincial road network have been delegated to the provincial departments of MPWT, provincial departments of public works and transport (DPWTs). As part of the devolution policy, the assistance provided by concerned development agencies has formed a robust sector development framework and strategy, which in turn created a comprehensive system for road asset management, guiding the government toward sustainable road maintenance. Despite this impressive sector development, the devolution of road maintenance responsibilities has continued to be constrained by inadequate governance, weak institutional capacity and insufficient funding for road asset management. The key challenges faced by MPWT and provincial DPWTs for undertaking road maintenance activities are

¹ Lao PDR National Statistics Center. <http://www.nsc.gov.la>

² Development Coordination (accessible from the list of linked documents in Appendix 2 of the RRP).

³ The Lao PDR established the Road Maintenance Fund (RMF) to finance road maintenance. The RMF commenced operations in 2001. It sits within the Ministry of Public Works and Transport (MPWT) and is supervised by the Road Maintenance Fund Advisory Board.

inadequate governance procedures for road maintenance planning, financial management, procurement, and contract supervision, lack of staff's technical capacity and experience in road maintenance management, and financial constraints for undertaking road maintenance responsibilities. Weak institutional capacity, poor governance and inadequate financial resources contribute to MPWT and DPWT's inability to carry out necessary road maintenance work at the provincial level, resulting in poor road condition in provinces. Hence, strengthening governance and institutional capacity for road maintenance activities and supporting physical maintenance work at the provincial level will facilitate efficient decentralization and effective delivery of road maintenance to provide successful future road asset management in the country.

5. The road network is deteriorating rapidly because of the steady growth in traffic, combined with overloading of vehicles. Overloading control is crucial to maintain roads in good condition during the design-life period of the road. The lack of effective axle load control has led to an increased number of overloaded trucks on the roads, which has resulted in the roads deteriorating much quicker than they should. Related to this issue is the lack of effective regulation(s) to provide updated policies and procedures, appropriate institutional setup, feasible measures, and practical enforcement for monitoring axle load. This is one of the major road maintenance governance issues that needs to be addressed.

6. Insufficient financial resources constrain road maintenance activities. With respect to road maintenance financing in Lao PDR, the main funding source is from the RMF. The main revenue source of the RMF is from the fuel levy, which accounts for 97% of total revenue.⁴ The total revenue of the RMF is about \$48 million in 2013. All of the RMF revenue is used to fund road maintenance in the country, with 90% of the RMF fund allocated to road maintenance of urban and national roads and 10% of the RMF fund allocated to maintenance of provincial and local roads. The funding level of the RMF is unable to meet the road maintenance need, in particular for provincial road network. The RMF regulation(s), which govern the financing mechanism and financial management of the RMF, need to be improved to increase RMF revenue level and strengthen governance of the RMF usage for ensuring sustainable road maintenance funding.

7. Since the funding for road maintenance is limited, prioritization and monitoring of road maintenance activities is crucial for effective road asset management. At present, no centralized record keeping system exists to provide such information. The absence of such record keeping system results in a governance issue, leading to difficulty in monitoring and audit of the road maintenance work. An establishment of a road asset management registry system with consolidated information about all stages of road maintenance work including planning, budgeting, procurement, and implementation will facilitate project prioritization and monitoring, and will improve governance and transparency.

8. The poor road condition of the road network is also caused by outdated road construction and maintenance standards, design and construction deficiencies, and inadequate institutional capacity in road maintenance and road asset management practices. The absence of standardized road asset management manuals and updated road construction technical specifications has resulted in poor road construction and maintenance standards as well as design and construction deficiencies. Upgrading and standardization of road asset management manuals and technical specification will be essential to improving road construction and maintenance standards, facilitating the upkeep of roads in good condition.

⁴ Assessment on Road Maintenance Fund (accessible from the list of linked documents in Appendix 2 of the RRP).

9. Weak institutional capacity for road asset management contributes to poor road condition. The project will implement capacity building programs for MPWT and DPWTs, private contractors and local communities to strengthen human resource capacity in technical issues concerning road asset management planning, implementation and management. The strengthening of institutional capacity will improve the delivery of road asset management by concerned stakeholders.

10. The project will rehabilitate and maintain 327 km of national and local roads in the provinces of Attapu, Salavan, and Xekong. The three provinces are amongst the poorest rural provinces in the country where large proportion of rural poor live. Much of the road network in these three provinces lacks proper maintenance due to limited road maintenance funding. Inadequate road maintenance has resulted in poor road condition which constrains rural access for the movements of people and goods, impeding economic development at the provincial level. The selected road sections for rehabilitation and maintenance are priority in terms of rural access. Although vital for transport within the provinces of Attapu, Salavan, and Xekong, and to cross-border transport and trade, most of these road sections are unpaved and/or in poor condition and unable to provide all-year accessibility. The rehabilitation and maintenance of these road sections will provide reliable all-year road access from provincial towns and agricultural rural areas to markets, employment centers, and social services in the three provinces, improving socio-economic living conditions of the rural population in the project regions.

B. Impact and Outcome

11. The expected impact of the project will be the improved delivery of public services in road asset management. The outcome will be that sustainable road maintenance is implemented in the provinces of Attapu, Salavan, and Xekong.

C. Outputs

12. The project will have three outputs.

13. **Output 1: Governance and practice for road asset management improved.** This output will provide improvement measures to overcome the identified inadequacy of governance and practice. The measures are crucial to delivering successful road asset management. They involve the (i) revision of axle-load monitoring regulation(s), (ii) revision of RMF regulation(s), (iii) development of a web-based road asset management registry for public disclosure, and (iv) upgrade of road asset management manuals and technical specifications.

14. Revised axle load monitoring regulation(s) put forward for government approvals (Output 1.1): This activity will support MPWT to strengthen the government's institutional framework, including procedures and regulations for overloading control, through planning and designing feasible measures for monitoring axle loads (including addressing modification of vehicles), drafting and proposing revision of the current axle-load control regulation, and provides support to institutional set-up for proper enforcement on overloading control.

15. Revised Road Maintenance Fund (RMF) regulation(s) put forward for government approvals (Output 1.2): This activity will support MPWT and RMFB to strengthen financing mechanism of RMF for sustainable road asset management, drafting a long-term financing plan and proposing a revised RMF regulation(s).

16. Web-based road asset management registry developed for public disclosure (Output 1.3): This activity will incorporate a web-based registry system into the on-going WB-supported ICT project in the MPWT (ICT Department of the Cabinet Office) that will establish a web-based platform for the road asset management system. This activity also includes procurement/development of (i) road condition survey tools (e.g., video recorder, image analysis system), (ii) road roughness survey tools (e.g., accelerometer, GPS devices, roughness analysis system) and (iii) computers/network/servers.

17. Upgraded road asset management manuals and technical specifications approved (Output 1.4): This activity will include updating of (i) Technical Specifications for Road Construction and Maintenance, (ii) Road Design Manual, (iii) Road Maintenance Manual, and (iv) improving performance-based maintenance contract documents for acceptance and approval of MPWT. This activity will standardize procedures for road maintenance planning, budgeting, procurement, and implementation.

18. **Output 2: Institutional capacity for road asset management strengthened.** This output will bolster national and provincial institutional capacity. It involves (i) strengthening the capacity of the MPWT for road asset management, (ii) improving contractors' capacity for road maintenance contract tendering and management, and (iii) improving community-based road maintenance capacity.

19. Capacity of MPWT and DPWTs for road asset management strengthened (Output 2.1): This activity will provide capacity building/training for the management and staff of concerned departments of MPWT and DPWTs for Output 1, based on assessment of needs and requirements of MPWT and DPWTs staff.

20. Contractors' contract tendering and management capacity improved (Output 2.2): This activity will improve contractors' capacity for preparing better tenders by providing training for the contractors in all components of the tender documents and the tendering process, including implementation of performance-based maintenance contracts.

21. Community-based road asset management capacity improved (Output 2.3): This activity will assist DOR and DPWTs to facilitate full range of community development support services including (i) setting up and managing Village Maintenance Committee,⁵ and (ii) improved routine road maintenance and management skills which will contribute to generating local employments and ownership of the project.

22. **Output 3: Road asset rehabilitation and maintenance completed.** This output will rehabilitate and maintain 327 km of selected national and local roads in the provinces of Attapu (166 km), Salavan (84 km), and Xekong (77 km).⁶ The selection of road sections is guided by multi-criteria analysis with respect to actual road conditions, economic benefits, social and environmental impacts, strategic importance and connectivity.⁷ Performance-based contracting

⁵ Community-based Maintenance (CBM) for road maintenance has been introduced and has been in practice for more than a decade in many provinces in Lao PDR, financed by both donors and the Lao government. This has proved that the communities, engaged in the maintenance work, can contribute to quality routine maintenance.

⁶ The maintenance work in the project refers to specific maintenance, which generally includes road drainage improvements, slope protection, minor upgrade of structural sections, pavement resurfacing, and provision of road furniture. Such maintenance is not ongoing task by nature and can be completed within a specific time frame.

⁷ The roads were evaluated via a quantitative evaluation against a set of criteria: (a) Macro Economy Criteria, (b) Social, Environmental and Safeguard Criteria and (c) Regional Development Criteria.

for civil works will be used to provide incentives for innovation and value engineering, cost reduction and improvement of maintenance efficiency.

Table 1: Road Rehabilitation and Maintenance Works

Sub-output	Province	Road Section (road no. from – to)	Length (km)
3.1	Attapu	National Road NR-18B (from Attapu City to Vietnam Border)	112
3.2	Attapu	Local Road LR-9001 (from NR-18B to Xanxai Village)	54
		Total 1 (Attapu) =	166
3.3	Salavan	National Road NR-20 (from Salavan City to Champasak Border)	56
3.4	Salavan	Local Road LR-6901 (from NR-13s to Mekong River Ferry Terminals)	27.5
		Total 2 (Salavan) =	83.5
3.5	Xekong	National Road NR-16 (from Champasak Border to Xekong City)	54
3.6	Xekong	Local Road LR-7615 (from NR1H- to NR-16)	22.7
		Total 3 (Xekong) =	76.7
		Grand Total =	326.20

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- (a) Macro Economy Criteria evaluates how the project would contribute to future economic development at the national level both positively and negatively. These criteria include (i) Road Class, (ii) Surface Condition, (iii) Roughness and (iv) Traffic Volume;
 - (b) Social, Environmental and Safeguard Criteria assess the environmental and social impacts caused by the project. These criteria include (i) Accessibility to Health Services, (ii) Accessibility to Schools, (iii) Potential Involuntary Resettlement and Land Acquisition and (iv) Impact on Environmental Reserves, Fauna and Flora;
 - (c) Regional Development Criteria evaluates how the project contributes to regional development and hence poverty reduction in the region. These criteria include (i) Agricultural Development Potential, (ii) Non-Agricultural Development Potential and (iii) Proximity with Development Projects.

Three sets of weighting scenarios were prepared under which different emphasis was given to the different criteria in turn and from the analysis, a shortlist of 6 roads (2 in each Province) were identified.

II. IMPLEMENTATION PLANS

23. Project implementation period will be from 1 April 2016 to 31 March 2021, and loan closing will be by 30 September 2021. The duration of the project implementation is 5 years. The implementation plan is in **B**. Below are the tables showing the project readiness main activities and the readiness filters for projects in Lao PDR.

A. Project Readiness Activities

Table 2: Project Readiness Main Activities

Indicative Activities	2015				2016				Responsible
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
Establish project implementation arrangements	X	X	X	X					MPWT
Advance contracting actions	X	X	X	X	X	X	X		MPWT
Loan Negotiations		X							ADB, GOL
ADB Board approval					X				ADB
Loan signing						X			ADB, MOF
Government legal opinion provided							X		MOJ
Loan effectiveness								X	ADB

ADB = Asian Development Bank, GOL = Government of Lao, MOF = Ministry of Finance, MOJ = Ministry of Justice, MPWT = Ministry of Public Works and Transport

Table 3: Project Readiness Filters – Lao PDR



	Key Project Preparation Elements	Stage of Project Preparation				First Disbursement (within 3 months after effectiveness)
		Appraisal/ fact-finding 20-29 April 2015	Negotiations 22 October 2015	Signing	Effectiveness (within 3 months after signing)	
1	Project is within Government development priority	Confirmed				
2	Project Administration Manual (PAM)	Discussed and drafted	Completed and agreed			
3	Discussion and agreement with Government on application of taxes and duties	Discussed and drafted	Completed and agreed			
4	Environment Impact Assessment, Social Impact Assessment, and Ethnic Communities Development Plan	Agreed	Action plans prepared and government budget approved	Implementation started		
5	Procurement Capacity Assessment	Completed	Confirmed	Implementation initiated		
6	Financial Management Capacity Assessment	Completed	Confirmed	Start- up actions initiated		
7	Procurement Plan for the first 18 months	Drafted	Confirmed			
8	Auditing arrangements including auditor TOR	Agreed	Confirmed			
9	Monitoring and evaluation arrangements	Indicators in DMF and monitoring mechanism agreed	Key results indicators with baseline data and monitoring mechanism confirmed			Survey started to validate baseline data
10	Required staff have been appointed to support project preparation and suitable project offices identified	Project organization chart, job description, staffing and responsibilities agreed	Project organization chart, staffing and responsibilities confirmed. Office space available	Key staff on board		
11	Recruitment of project implementation consultants	TOR drafted	Confirmed	Consulting services advertised/ request for proposals initiated	Proposals received	Recruitment of consultants completed and contract awarded

	Key Project Preparation Elements	Stage of Project Preparation				First Disbursement (within 3 months after effectiveness)
		Appraisal/ fact-finding 20-29 April 2015	Negotiations 22 October 2015	Signing	Effectiveness (within 3 months after signing)	
12	First year Bidding documents for goods and civil works (where design is available)	No advance action for goods and civil works. The detailed designs are not yet available. These will be done by the project management consultant.	Master bidding documents prepared and submitted to ADB			
13	Government counterpart funds and in-kind support	Agreed	Confirmed	Request for first year funds submitted to the Government	First year fund allocated	
14	Subsidiary agreements (where applicable)	Not applicable				
15	Legal opinion			Draft legal opinion submitted to ADB	Legal opinion* submitted to ADB	
16	Opening of imprest/designated account				Opening of imprest account initiated	Imprest account opened

* Effectiveness condition

B. Overall Project Implementation Plan

Activities	By When	2015		2016				2017				2018				2019				2020				2021
		3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q
A. Management Activities																								
1. ADB Board Approval																								
2. Loan Signing																								
3. Loan Effectiveness																								
4. Recruitment of project management consultant	Q2 2016																							
5. Recruitment of an independent financial auditor	Q3 2016																							
B. Outputs																								
1. Governance and practice for sustainable road asset management improved																								
1.1 Review overloading control and monitoring policy and process; and prepare draft revised axle-load control regulation for government approval	Q2 2017																							
1.2 Prepare draft long-term financing plan and revised RMF decree	Q2 2017																							
1.3 Prepare web-based registry system, and procurement/development of road asset management system and equipment	Q2 2018																							
1.4 Prepare updated (i) Performance-Based Maintenance contract documents, (ii) Technical Specifications for Road Construction and Maintenance, (iii) Road Design Manual, (iv) Road Maintenance Manual, and for acceptance and approval of MPWT	Q4 2017																							
2. Institutional capacity for sustainable road asset management strengthened																								
2.1 Provide capacity building/training for MPWT and DPWTs for Output 1	Q4 2020																							
2.2 Provide training for private contractors in preparation of tenders and implementation of performance-based maintenance contracts	Q2 2018																							
2.3 Provide capacity development assistance to small enterprises in maintenance of local roads	Q2 2019																							
3. Rehabilitation and maintenance of national and local roads completed																								
3.1 Undertake detailed design and prepare bidding documents	Q1 2017																							
3.2 Procurement of civil works contractors	Q4 2017																							
3.3 Implement civil works rehabilitation and maintenance contracts	Q1 2021																							

 Implementation
 Training

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations – Roles and Responsibilities

24. MPWT will be the executing agency and its DOR will be the implementing agency for the project. DPWT-Attapu, DPWT-Salavan, and DPWT-Xekong will act as project implementing units. DOR will have overall coordination responsibility and will work closely with the provincial DPWTs to implement the project. A project coordination unit (PCU) within MPWT and/or DOR will be established to implement the project. The PCU will comprise a project manager, 3 deputy project managers (one each from the target provinces), 1 social and environmental monitoring officer from the Public Works and Transport Institute (PTI), 1 axle-load and road-safety officer from the MPWT's Department of Transport (DOT) and supporting staff from DOR and provincial DPWTs.

25. A National Steering Committee (NSC) will be established to oversee project implementation and provide policy guidance at the national level. The steering committee will be chaired by an MPWT vice minister and will be comprised of vice governors from the provinces of Attapu, Salavan, and Xekong officials from the MPWT, Ministry of Finance (MOF), Ministry of Natural Resources and Environment (MONRE), and Ministry of Planning and Investment (MPI), and representatives from the Department of Finance (DOF), Department of Planning (DOP), DOR, DOT, DPWT-Attapu, DPWT-Salavan, and DPWT-Xekong..

26. A Regional Advisory Committee (RAC) will be set up for consultation of provincial issues. RAC will be comprised of vice governors from the provinces of Attapu, Salavan, and Xekong, and officials from provincial DPWTs.

Table 4: Project Implementation Organizations – Roles and Responsibilities

Project implementation organizations	Management Roles and Primary Responsibilities
Ministry of Finance	➤ Borrower
National Steering Committee	<ul style="list-style-type: none"> ➤ Oversight body ➤ Provide project direction and guidance at the national level ➤ Facilitate cooperation and coordination among concerned agencies ➤ Solve potential major problems that may arise during project implementation ➤ Ensure timely implementation of policy and institutional reform requirements ➤ Meet twice a year during the project period, or as necessary to respond to and provide guidance on inter-ministerial or strategic issues
Ministry of Public Works and Transport	<ul style="list-style-type: none"> ➤ Executing agency ➤ Implement project in accordance with the loan and grant agreements ➤ Provide policy guidance to PCU ➤ Review and approve detailed engineering designs and procurement documents
Department of Roads – Project Coordination Unit	<ul style="list-style-type: none"> ➤ Implementing agency ➤ Overall management and coordination of the Project ➤ Focal point for inter-agency coordination with ADB and

	<p>relevant agencies of the Borrower</p> <p>Project Management</p> <ul style="list-style-type: none"> ➤ Ensure necessary internal MPWT support from: <ul style="list-style-type: none"> ○ DOF for financial management of the Project ○ Division of Environmental Management under the Public Works Transport Institute (PTI) for Environmental/Social Monitoring and Evaluation of the Project ○ Division of Traffic and License Management under the Department of Transport (DOT) for axle load control and road safety monitoring and evaluation of the Project. ➤ Provide technical, management and administrative support to the DPWTs ➤ Implement capacity development initiatives and training activities ➤ Review progress reports prepared by the PMC and submit consolidated progress reports to ADB ➤ Develop project performance management and evaluation (PPME) indicators, prepare and submit PPME implementation plan to ADB ➤ Coordinate preparation of annual PPME reports by PMC and submit consolidated annual PPME reports to ADB ➤ Prepare project completion report and submit to ADB ➤ Perform the role of secretariat for the National Steering Committee (NSC) <p>Technical</p> <ul style="list-style-type: none"> ➤ Oversee preparation of detailed design studies (technical, economic, financial, institutional, social and gender, and safeguards aspects), and bid documents by PMC ➤ Prepare and update project procurement plan as necessary ➤ Review recruitment and procurement documents prepared by PMC and make recommendations for approvals by EA ➤ Carry out all recruitment and procurement activities ➤ Ensures quality control for works <p>Financial</p> <ul style="list-style-type: none"> ➤ Prepare budgeted work plans for disbursement and use of project funds ➤ Prepare budget reallocation requests and submit to EA and ADB for “no objection” ➤ Prepare withdrawal applications, submit to MOF for approval and maintain disbursement records ➤ Prepare terms of reference for independent financial auditor, recruit auditor, prepare information required for audit and follow up on the comments/recommendations of the auditor ➤ Submit annual audited project financial statements to ADB <p>Safeguards</p> <ul style="list-style-type: none"> ➤ Provide assistance and guidance to DPWTs in ensuring compliance with all safeguard policy provisions in accordance
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	<p>with agreed formats and frameworks</p> <ul style="list-style-type: none"> ➤ Submit to MONRE and/or DONRE the prepared IEEs for approval ➤ Ensure that the project environmental management plan (EMP) included in the IEEs are incorporated in the bid and contract documents for all civil works ➤ Oversee monthly environmental monitoring of the Project and submit semi-annual environmental monitoring reports to ADB for disclosure on ADB's website ➤ Oversee Project with relevant national and provincial government agencies on environmental matters as they arise ➤ Oversee the preparation of contractor's environmental management plans (CEMP) and ensure that these are consistent with the project EMP, standards are feasible, monitored and maintained ➤ Oversee the implementation of ethnic communities development plan (ECDP) by the relevant national and provincial government agencies under the Project and submit semi-annual social monitoring reports to ADB for disclosure on ADB's website
DPWTs of Attapu, Salavan, and Xekong	<ul style="list-style-type: none"> ➤ Implementing units ➤ Assign counterparts for DOR and the PMC ➤ With assistance of DOR and PMC, the DPWTs will be responsible for day-to-day coordination and supervision of project in the field ➤ Support project planning and detailed design <p>Project Management</p> <ul style="list-style-type: none"> ➤ Coordinate and supervise project activities in the province on a day-to-day basis ➤ Provide quarterly and annual progress updates on all project components and activities to DOR ➤ Assist in the establishment of baseline PPME data and framework, compile and submit data to DOR for the annual PPME reports ➤ Coordinate capacity development activities with provincial agencies, as well as contractors ➤ Act as secretariat for the Regional Advisory Committee (RAC) <p>Technical</p> <ul style="list-style-type: none"> ➤ Assist PMC with preparation of Project detailed design studies and reports ➤ Participate with DOR and PMC in reviewing Project designs and drawings ➤ Assist DOR in the review of bidding documents and contracts documents ➤ Assist DOR in the overall bidding processes and participate in bid evaluation for ICB and NCB contracts <p>Safeguards</p> <ul style="list-style-type: none"> ➤ Facilitate the DONRE approval of the IEEs

	<ul style="list-style-type: none"> ➤ Assist with the implementation and monitoring of the EMP ➤ Assist with the implementation of ECDPs ➤ Assist with monitoring and implementation of activities related to gender and ethnic groups ➤ Record and manage all grievances expressed on the project and/or related safeguards (e.g., monitor and address them) ➤ Participate in training and capacity development activities under the project ➤ Identify poor households in accordance with government policy
Regional Advisory Committee (RAC)	<ul style="list-style-type: none"> ➤ The Advisory Committee will meet twice a year during the project period, or as necessary to respond to and provide guidance on provincial issues
ADB	<ul style="list-style-type: none"> ➤ Provides financing ➤ Monitors project implementation ➤ Undertakes project review missions

B. Key Persons Involved in Implementation

Executing Agency

MPWT

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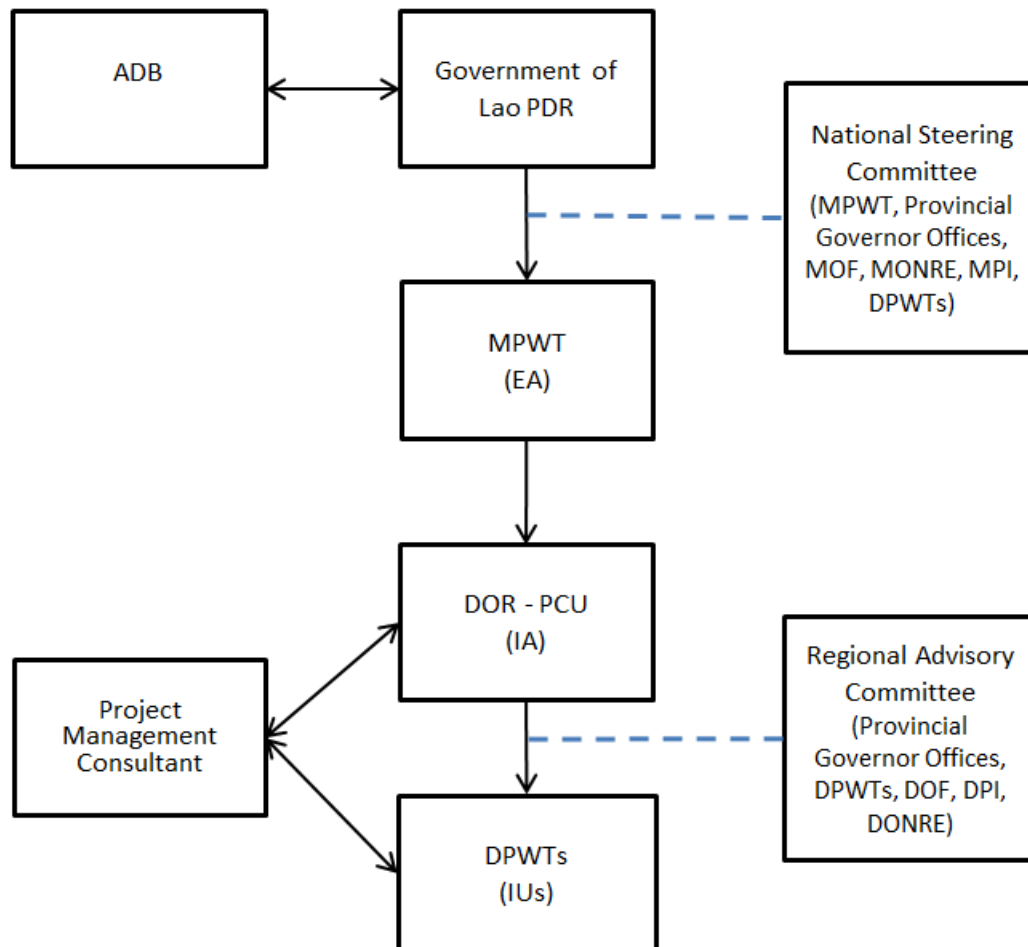
ADB
SETC

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C. Project Organization Structure



IV. COSTS AND FINANCING

27. The project is estimated to cost \$29.9 million (Table 4). The ADB loan covers the civil works, equipment, consulting services, contingencies and financial charges during implementation. The government will finance an estimated \$2.9 million in taxes and duties (\$2.5 million) and incremental administration costs (\$400,000 in kind).

Table 4: Project Investment Plan (\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Output 1: Governance and practice for road asset management improved	2.5
2. Output 2: Institutional capacity for road asset management strengthened	2.2
3. Output 3: Road asset rehabilitation and maintenance completed	18.9
Subtotal (A)	23.6
B. Contingencies^c	5.7
C. Financing Charges During Implementation^d	0.6
Total (A+B+C)	29.9

^a Includes taxes and duties of \$2.5 million to be financed from government resources in cash contribution.

^b In 2015 prices.

^c Physical contingencies computed at 10% for base costs. Price contingencies computed on the basis of foreign exchange costs' annual escalation rate ranging from 0.3% to 1.5%, and local currency costs' annual escalation rate ranging from 4.0% to 5.5%; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Interest during construction for ADB loan has been computed at 1.0% per annum.

Source: Asian Development Bank.

28. The government has requested a loan in various currencies equivalent to SDR 19,119,000 (\$27 million equivalent) from ADB's Special Funds resources to help finance the project.⁸ The loan will have a 32 -year term, including a grace period of 8 years, an interest rate of 1.0% per annum during the grace period and 1.5% per annum thereafter, and such other terms and conditions as are set forth in the draft loan agreement.

29. The financing plan is shown below.

Table 5: Financing Plan

	Amount (\$ million)	Share of Total (%)
Asian Development Bank (loan)	27.0	90.2
Government	2.9	9.8
Total	29.9	100.0

Sources: Asian Development Bank estimates.

⁸ The ADB loan may finance local transportation and insurance costs.

A. Detailed Cost Estimates by Expenditure Category

Table 6: Detailed Cost Estimates by Expenditure Category (\$ million)^a

Item	Foreign Currency	Local Currency	Total Cost ^b	% of Total Base Cost
(\$ million)				
A. Base Cost				
1. Civil Works	6.23	10.09	16.32	69.1%
2. Consultants	4.29	2.02	6.31	26.7%
3. Equipment	0.34	0.21	0.55	2.3%
4. Administration ^c	0.00	0.46	0.46	1.9%
Subtotal A	10.86	12.77	23.63	100.0%
B. Contingencies^d				
1. Physical Contingency	1.09	1.28	2.36	10.0%
2. Price Contingency	0.52	2.82	3.33	14.1%
Subtotal (B)	1.60	4.09	5.70	24.1%
C. Financial Charge During Implementation^e				
1. Interest During Construction	0.00	0.61	0.61	2.6%
Subtotal (C)	0.00	0.61	0.61	2.6%
Total Project Cost (A+B+C)	12.46	17.48	29.94	126.7%

a. In 2015 prices. Exchange Rate is Kip 8,116. Inclusive of taxes and duties shown for civil works which is shown in line 5.

b. Includes taxes and duties to be financed from government resources in cash contribution.

c. Administration cost will be financed by the government in-kind.

d. Physical contingencies compounded at 10% on base cost for civil works, equipment, consulting services and capacity building and training. Price contingencies computed on the basis of foreign exchange costs' annual escalation rate ranging from 0.3% to 1.5% and local currency costs' annual escalation rate ranging from 4.0% to 5.5%; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

e. Interest during construction for the ADB loan has been computed at 1% per annum.

Note: Numbers may not sum precisely because of rounding.

B. Allocation and Withdrawal of Loan Proceeds

Table 7: Allocation and Withdrawal of Loan Proceeds

Number	Item	Total Amount Allocated for ADB Financing (\$)	Percentage and Basis for Withdrawal from the Loan Account
1	Civil Works	14,570,000	89.3% of total expenditure claimed
2	Consulting Services	5,630,000	89.3% of total expenditure claimed
3	Equipment	490,000	89.3% of total expenditure claimed
4	Interest During Construction	610,000	100% of amount due
5	Unallocated	5,700,000	
Total		27,000,000	

C. Detailed Cost Estimates by Financier

Table 8: Detailed Cost Estimates by Financier (\$ million)^a

Item	ADB ^f		Government		Total Cost ^b
	Amount	% of Cost	Amount	% of Cost	Amount
(\$ million)					
A. Base Cost					
1. Civil Works	14.57	89.3%	1.75	10.7%	16.32
2. Consultants	5.63	89.3%	0.68	10.7%	6.31
3. Equipment	0.49	89.3%	0.06	10.7%	0.55
4. Administration ^c	0.00	0.0%	0.46	100.0%	0.46
Subtotal A	20.69	87.6%	2.94	12.4%	23.63
B. Contingencies^d					
1. Physical Contingency	2.36	100.0%	0.00	0.0%	2.36
2. Price Contingency	3.33	100.0%	0.00	0.0%	3.33
Subtotal (B)	5.70	100.0%	0.00	0.0%	5.70
C. Financial Charge During Implementation^e					
1. Interest During Construction	0.61	100.0%	0.00	0.0%	0.61
Subtotal (C)	0.61	100.0%	0.00	0.0%	0.61
Total Project Cost (A+B+C)	27.00	90.2%	2.94	9.8%	29.94

a. In 2015 prices. Exchange Rate is Kip 8,116. Inclusive of taxes and duties shown for civil works which is shown in line 5.

b. Includes taxes and duties to be financed from government resources in cash contribution.

c. Administration cost will be financed by the government in-kind.

d. Physical contingencies compounded at 10% on base cost for civil works, equipment, consulting services and capacity building and training. Price contingencies computed on the basis of foreign exchange costs' annual escalation rate ranging from 0.3% to 1.5% and local currency costs' annual escalation rate ranging from 4.0% to 5.5%; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

e. Interest during construction for the ADB loan has been computed at 1% per annum.

f. Annual audit financed by ADB.

Note: Numbers may not sum precisely because of rounding.

D. Detailed Cost Estimates by Outputs/Components

Table 9: Detailed Cost Estimates by Outputs (\$ million)^a

Item	Output 1		Output 2		Output 3		Total Cost ^b
	Amount	% of Cost	Amount	% of Cost	Amount	% of Cost	Amount
(\$ million)							
A. Base Cost							
1. Civil Works	0.00	0.0%	0.00	0.0%	16.32	100.0%	16.32
2. Consultants	1.97	31.3%	2.06	32.6%	2.28	36.1%	6.31
3. Equipment	0.45	81.8%	0.10	18.2%	0.00	0.0%	0.55
4. Administration ^c	0.04	8.7%	0.04	9.1%	0.37	82.2%	0.46
Subtotal A	2.46	10.4%	2.20	9.3%	18.97	80.3%	23.63
B. Contingencies^d							
1. Physical Contingency	0.25	10.4%	0.22	9.3%	1.90	80.3%	2.36
2. Price Contingency	0.13	3.9%	0.21	6.2%	3.00	89.8%	3.33
Subtotal (B)	0.38	6.6%	0.43	7.5%	4.89	85.9%	5.70
C. Financial Charge During Implementation^e							
1. Interest During Construction	0.05	8.3%	0.05	8.8%	0.51	82.9%	0.61
Subtotal (C)	0.05	8.3%	0.05	8.8%	0.51	82.9%	0.61
Total Project Cost (A+B+C)	2.89	9.7%	2.68	9.0%	24.37	81.4%	29.94

a. In 2015 prices. Exchange Rate is Kip 8,116. Inclusive of taxes and duties shown for civil works which is shown in line 5.

b. Includes taxes and duties to be financed from government resources in cash contribution.

c. Administration cost will be financed by the government in-kind.

d. Physical contingencies compounded at 10% on base cost for civil works, equipment, consulting services and capacity building and training. Price contingencies computed on the basis of foreign exchange costs' annual escalation rate ranging from 0.3% to 1.5% and local currency costs' annual escalation rate ranging from 4.0% to 5.5%; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

e. Interest during construction for the ADB loan has been computed at 1% per annum.

Note: Numbers may not sum precisely because of rounding

E. Detailed Cost Estimates by Year

Table 10: Detailed Cost Estimate by Year (\$ million)^a

Item	Total Cost ^b	Year 1	Year 2	Year 3	Year 4	Year 5
(\$ million)						
A. Base Cost						
1. Civil Works	16.32	0.00	1.44	6.01	6.60	2.27
2. Consultants	6.31	2.17	2.00	1.40	0.53	0.21
3. Equipment	0.55	0.00	0.28	0.28	0.00	0.00
4. Administration ^c	0.46	0.09	0.09	0.09	0.09	0.09
Subtotal A	23.63	2.26	3.81	7.77	7.22	2.57
B. Contingencies^d						
1. Physical Contingency	2.36	0.23	0.38	0.78	0.72	0.26
2. Price Contingency	3.33	0.12	0.32	1.05	1.28	0.56
Subtotal (B)	5.70	0.34	0.71	1.83	2.00	0.82
C. Financial Charge During Implementation^e						
1. Interest During Construction	0.61	0.01	0.04	0.11	0.19	0.25
Subtotal (C)	0.61	0.01	0.04	0.11	0.19	0.25
Total Project Cost (A+B+C)	29.94	2.61	4.56	9.71	9.41	3.65

a. In 2015 prices. Exchange Rate is Kip 8,116. Inclusive of taxes and duties shown for civil works which is shown in line 5.

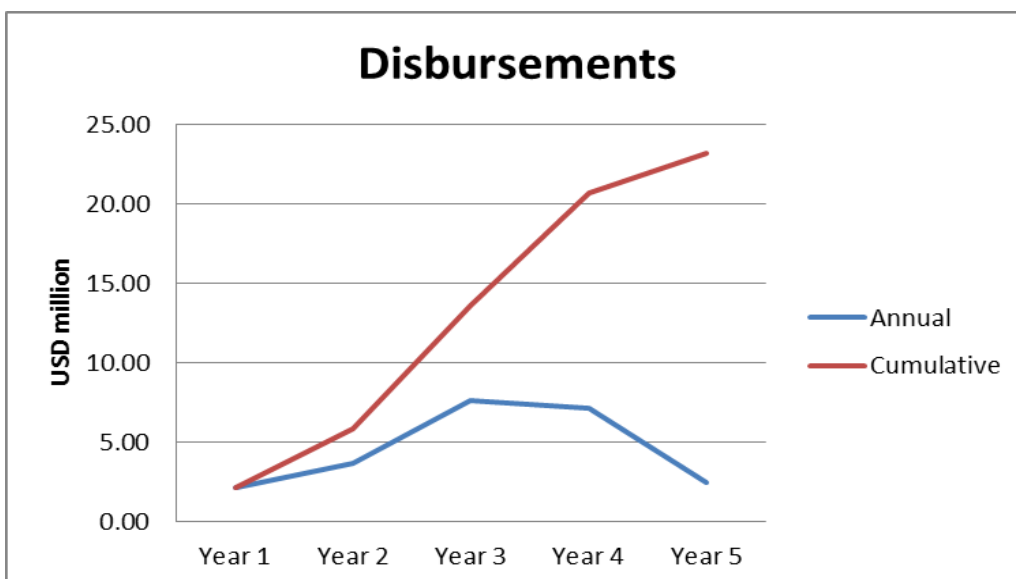
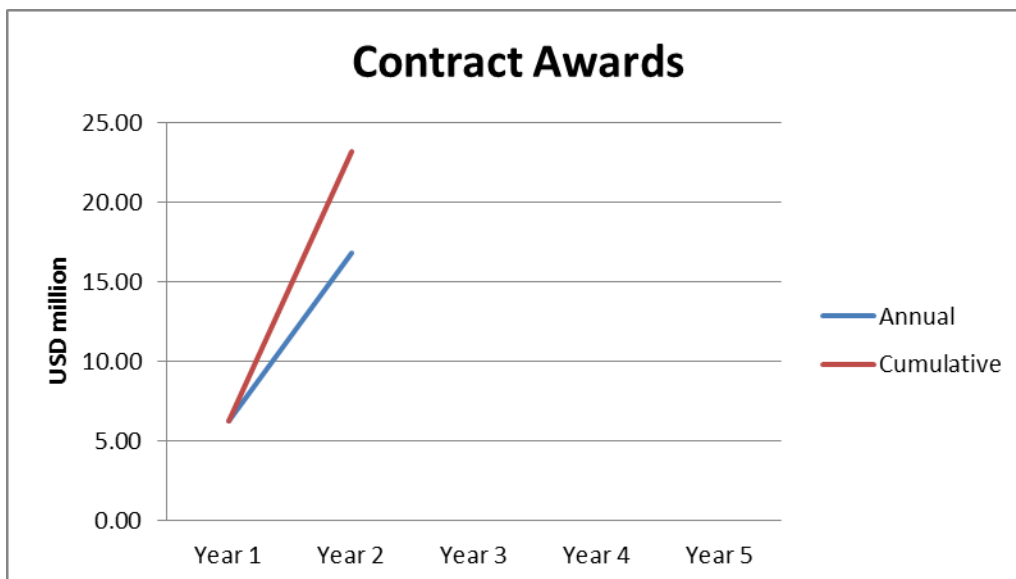
b. Includes taxes and duties to be financed from government resources in cash contribution.

c. Administration cost will be financed by the government in-kind.

d. Physical contingencies compounded at 10% on base cost for civil works, equipment, consulting services and capacity building and training. Price contingencies computed on the basis of foreign exchange costs' annual escalation rate ranging from 0.3% to 1.5% and local currency costs' escalation rate ranging from 4.0% to 5.5%; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

e. Interest during construction for the ADB loan has been computed at 1% per annum.

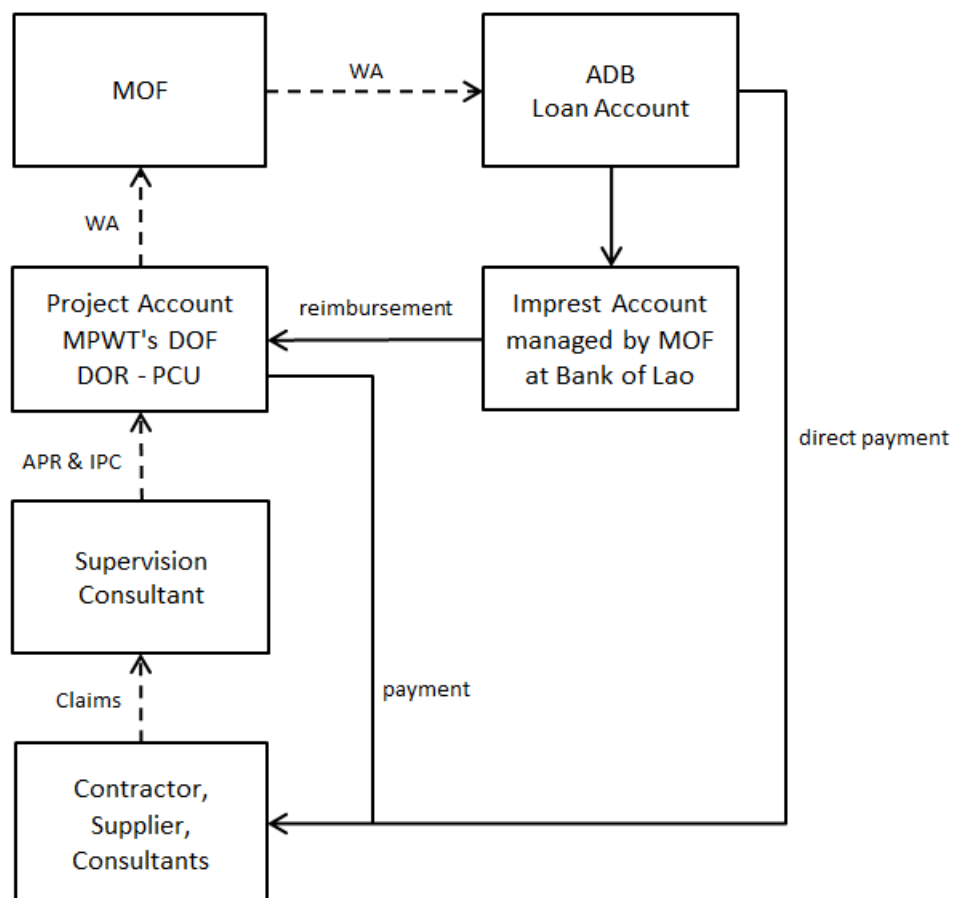
Note: Numbers may not sum precisely because of rounding.

F. Contract and Disbursement S-curve

G. Fund Flow Diagram

30. The following shows how the funds will flow from ADB and the Borrower to implement project activities.

a. Procedure for Direct Payment and Imprest Account



← - - - - Document flow
 ← Fund flow

APR: Advance payment request
 DOF: Department of Finance
 DOR - PCU: Department of Roads - Project Coordination Unit
 IPC: Interim payment certificate
 MOF: Ministry of Finance
 MPWT: Ministry of Public Works and Transport
 WA: Withdrawal application

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

31. Financial Management Assessment (FMA) was conducted to determine whether MPWT as the Executing Agency has acceptable financial management arrangements for project implementation. Project financial management, including financial accounting, recording, and reporting, will be performed by MPWT's Department of Finance (DOF). DOF will use a project financial management system, currently being used for ADB financed road sector projects⁹ for the implementation of the project.

32. MPWT has successfully implemented a number of externally financed road sector projects in recent years including the ADB financed projects under ADB Loan 2085 and Grant 0082 and World Bank financed Lao Road Sector Project (P120398) (LRSP).¹⁰ The existing DOF and DOR staff of MPWT are familiar with ADB procurement, disbursement, accounting and reporting requirements. The main strength lies in the project financial management experience and qualifications of the DOF staff who will be leading the financial management of the project.

33. MPWT has improved its financial management capacity over the years and has vast experience of managing ADB financed projects. MPWT has confirmed that it will utilize the existing financial management systems for the project. Incumbent staff are experienced and qualified to manage project imprest accounts, and maintain financial records in accordance with internationally accepted accounting practices. Project accounts and related records will be kept and maintained separately from other on-going projects. Overall, MPWT's financial management capacity to execute the project, including use of imprest fund/SOE procedures is considered adequate.

B. Disbursement

34. The Loan proceeds will be disbursed in accordance with ADB's Loan Disbursement Handbook (2015, as amended from time to time),¹¹ and detailed arrangements agreed upon between the Government and ADB. Online training for project staff on disbursement policies and procedures is available at <http://wpgr4.adb.org/disbursement> e-learning, Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

35. All disbursements for ADB loan will be carried out in accordance with ADB's Loan Disbursement Handbook. MPWT will be responsible for (i) preparing disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents, and (iv) preparing and sending withdrawal applications to ADB.

36. An imprest account will be established for the Project, administered by MOF and opened at the Bank of Lao PDR. The total outstanding advance of the imprest account will not at any time exceed the estimated ADB expenditures to be paid from the imprest account for the next 6 months. The currency of the imprest account is the U.S. dollar. The request for initial and additional advances to the imprest account are based on an Estimate of Expenditure Sheet¹²

⁹ The two projects are ADB's 2010 Project No. 41444-022 LAO: Second Northern GMS Transport Network Improvement Project and World Bank 2010 Lao Road Sector Project (P 120398).

¹⁰ ADB L2085-Lao (SF): Roads for Rural Development Project, and ADB G0082-Lao: Northern GMS Transport Network Improvement Project.

¹¹ Available at: http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf

¹² Available in Appendix 10B of the *Loan Disbursement Handbook*.

setting out the estimated expenditures for the forthcoming six (6) months of project implementation. For every liquidation and replenishment request of the imprest account, the borrower will furnish to ADB (a) Statement of Account (Bank Statement) where the imprest account is maintained, and (b) the Imprest Account Reconciliation Statement (IARS) reconciling the above mentioned bank statement against the EA's records.¹³ The imprest account is to be used exclusively for ADB's share of eligible expenditures. MOF who established the imprest account in its name is accountable and responsible for proper use of advances to the imprest account. The project account will be opened, maintained and managed by the EA at commercial bank to receive transfers from the Imprest Account for administrative costs and expenditures related to project activities. The request for initial advance to the project account is based on Estimate of Expenditure Sheet for the next three months.

37. The statement of expenditure (SOE) procedure¹⁴ may be used to reimburse/liquidate eligible expenditures. SOE records should be maintained and made readily available for review by ADB's disbursement and review mission or upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit. SOE records should be maintained and made readily available for review by ADB's disbursement and review mission or upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit.

38. Before the submission of the first withdrawal application, the borrower should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is US\$100,000 equivalent. Individual payments below this amount should be paid by the EA/IA and subsequently claimed from ADB (i) through reimbursement; or (ii) from the imprest account, unless otherwise accepted by ADB.

C. Accounting

39. MPWT will maintain separate project accounts and records by funding source for all expenditures incurred on the Project following cash accounting. MPWT will prepare consolidated project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices.

D. Auditing and Public Disclosure

40. MPWT will cause the detailed consolidated project financial statements to be audited in accordance with auditing standards by an independent auditor acceptable to ADB. The audited project financial statements together with the auditors' opinion will be submitted in the English language to ADB within six months of the end of the fiscal year by MPWT.

41. The annual audit report for the project accounts will include an audit management letter and audit opinions which cover (i) whether the project financial statements present a true and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting framework; (ii) whether loan and grant proceeds were used only for the purposes of the project or not; (iii) the level of compliance for each financial covenant contained in the legal agreements for the project; (iv) use of the imprest fund procedure; and (v) the use of

¹³ Follow the format provided in Appendix 10C of the *Loan Disbursement Handbook*.

¹⁴ SOE form is available in Appendix 9B of the *Loan Disbursement Handbook*.

the statement of expenditure procedure certifying to the eligibility of those expenditures claimed under SOE procedures, and proper use of the SOE and imprest procedures in accordance with ADB's Loan Disbursement Handbook and the project documents.

42. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

43. The Government, MPWT and DOR have been made aware of ADB's approach on delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.¹⁵ ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

44. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011).¹⁶ After review, ADB will disclose the project financial statements for the project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website. The Audit Management Letter will not be disclosed.

¹⁵ ADB's approach on delayed submission of audited project financial statements:

- When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (i) the audit documents are overdue; and (ii) if they are not received within the next six months, requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- When audited project financial statements have not been received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (i) inform the executing agency of ADB's actions; and (ii) advise that the loan may be suspended if the audit documents are not received within the next six months.
- When audited project financial statements have not been received within 12 months after the due date, ADB may suspend the loan.

¹⁶ Available from <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting

45. All advance contracting will be undertaken in conformity with ADB's Procurement Guidelines (2015, as amended from time to time)¹⁷ and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).¹⁸ The issuance of invitations to bid under advance contracting will be subject to ADB approval. The borrower, executing and implementing agencies have been advised that approval of advance contracting financing does not commit ADB to finance the Project. The Government has requested ADB's approval of advance contracting for the recruitment of Project Management Consultant (PMC). The issuance of the invitation to bid under advance contracting will be subject to ADB's approval. MPWT through DOR has already initiated preparation for the recruitment of consultants.

B. Procurement of Goods, Works and Consulting Services

46. All procurement of goods and works will be undertaken in accordance with *ADB's Procurement Guidelines (2015, as amended from time to time)*.

47. International competitive bidding (ICB) procedures will be used for 2 civil work contracts estimated to cost \$3 million or more. National competitive bidding (NCB) procedures will be used for 4 civil works contracts estimated to cost less than \$3 million, and 1 supply contract valued below \$1 million. Shopping will be used for 1 goods contract estimated to cost less than \$100,000. Possible use of performance-based contracting will be considered in consultation with ADB's OSFMD.

48. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is in Section C.

49. All consultants and nongovernment organizations (NGOs) if appropriate will be recruited according to *ADB's Guidelines on the Use of Consultants (2013, as amended from time to time)*.¹⁹ The terms of reference for all consulting services are detailed in Section D.

50. An estimated 345 person months (136 international and 209 national) of consulting services are required for the Project Management Consultant to facilitate project management and implementation, which will include capacity building and training, detailed engineering design, preparation of bidding documents and assistance with procurement and consulting services recruitment, and supervision of physical maintenance works. The Project Management Consultant will be a consulting firm and will be selected using the quality cost based selection (QCBS) method with a quality-cost ratio of 90:10 following the full technical proposal procedure. A national consulting firm will be recruited using least cost selection (LCS) method to undertake independent financial audit. An estimated 30 person-months of consulting services are required for the independent financial auditing firm.

51. A project procurement risk assessment has been completed and procurement risk is rated as moderate. MPWT/DOR has sufficient experience in procurement for ADB-financed

¹⁷ Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>

¹⁸ Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>

¹⁹ Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>

projects in the transport sector. With recent changes in ADB's procurement processes, start-up support has been requested. Procurement specialists (international and national) will be part of the PMC team who will assist PCU in complying with ADB procurement systems and procedures.

C. Procurement Plan

Basic Data

Project Name: Road Sector Governance and Maintenance Project	
Project Number: 47085-002	Approval Number: L xxxx
Country: LAO PEOPLE'S DEMOCRATIC REPUBLIC	Executing Agency: Ministry of Public Works and Transport
Project Procurement Classification: B	Implementing Agency: Department of Roads
Procurement Risk: Moderate	
Project Financing Amount: \$ 29.9 Million ADB Financing: \$ 27.0 million Non-ADB Financing: \$ 2.9 million	Project Closing Date: 30 September 2021
Date of First Procurement Plan : {loan approval date}	Date of this Procurement Plan: {dd / mm / year}

A. Methods, Thresholds, Review and 18-Month Procurement Plan

1. Procurement and Consulting Methods and Thresholds

Except as the Asian Development Bank (ADB) may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

Procurement of Goods and Works		
Method	Threshold	Comments
International Competitive Bidding (ICB) for Works	\$3,000,000	Prior review by ADB
National Competitive Bidding (NCB) for Works	Beneath that stated for ICB, Works	The first NCB is subject to prior review, thereafter post review.
International Competitive Bidding for Goods	\$1,000,000	
National Competitive Bidding for Goods	Beneath that stated for ICB, Goods	The first NCB is subject to prior review, thereafter post review.
Shopping for Goods	Below \$100,000	Post review by ADB

Consulting Services	
Method	Comments
Quality and Cost Based Selection (QCBS)	Prior review
Least-Cost Selection	Prior review

2. Goods and Works Contracts Estimated to Cost \$1 Million or More

The following table lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value (\$ Million)	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments
CW 1: Sal-NR 20	Rehabilitation and Maintenance Works of NR 20 (56km)	2.161	NCB*	Post (Prior review for the first NCB)	1S1E	2 nd Quarter 2017	Performance based contracting (PBC)
CW 2 Sal-LR 6901	Rehabilitation and Maintenance Works of LR 6901 (27.5km)	2.063	NCB	Post (Prior review for the first NCB)	1S1E	2 nd Quarter 2017	Performance based contracting (PBC)
CW 3 Xek-NR 16	Rehabilitation and Maintenance Works of NR 16 (54km)	1.002	NCB	Post (Prior review for the first NCB)	1S1E	2 nd Quarter 2017	Performance based contracting (PBC)
CW 4 Xek-LR 7615	Rehabilitation and Maintenance Works of LR 7615 (22.73km)	1.894	NCB	Post (Prior review for the first NCB)	1S1E	2 nd Quarter 2017	Performance based contracting (PBC)
CW 5 Att-NR 18B	Rehabilitation and Maintenance Works of NR 18B (111.9km)	3.225	ICB	Prior	1S2E	2 nd Quarter 2017	Performance based contracting (PBC)
CW 6 Att-LR 9001	Rehabilitation and Maintenance Works of LR 9001 (54km)	5.974	ICB	Prior	1S2E	2 nd Quarter 2017	Performance based contracting (PBC)

*First contract to be procured under national competitive bidding procedure shall be subject to prior review by ADB.

Subsequent contracts under national competitive bidding procedure shall be subject to post review by ADB.

3. Consulting Services Contracts Estimated to Cost \$100,000 or More

The following table lists consulting services contracts for which the recruitment activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value (\$ Million)	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
CS1	Project Management Consultant	6.156	QCBS	Prior	3 rd Quarter 2015 (advance action)	FTP	90:10 Quality cost ratio International/ National
CS2	Independent Financial Auditor	0.150	LCS	Prior	3 rd Quarter 2016	BTP	National consulting firm

4. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

The following table groups smaller-value goods, works and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

Goods and Works								
Package Number	General Description	Estimated Value (\$ Million)	Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure	Advertisement Date (quarter/ year)	Comments
G-1	Maintenance Tools	0.100	1	Shopping	Post (Sample)	Request for Quotation	1 st Quarter 2017	RFQ
G-2	Road Asset Management System	0.450	1	NCB	Prior	1S1E	4 th Quarter 2018	SBD for Goods

B. Indicative List of Packages Required Under the Project

The following table provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Goods and Works							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure	Comments

Consulting Services							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior / Post)	Type of Proposal ⁸	Comments ⁹

C. List of Awarded and On-going, and Completed Contracts

The following tables list the awarded and on-going contracts, and completed contracts.

1. Awarded and On-going Contracts

Goods and Works							
Package Number	General Description	Estimated Value	Awarded Contract Value	Procurement Method	Advertisement Date (quarter/ year)	Date of ADB Approval of Contract Award ¹⁰	Comments ¹¹

¹⁰ Date of ADB Approval of Contract Award is the date of No-Objection letter to the EA/IA.

¹¹ Indicate the Contractor's name and the contract signing date.

Consulting Services							
Package Number	General Description	Estimated Value	Awarded Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award ¹⁰	Comments ¹²

¹⁰ Date of ADB Approval of Contract Award is the date of No-Objection letter to the EA/IA.

¹² Indicate the Consulting Firm's name and the contract signing date.

2. Completed Contracts

Goods and Works								
Package Number	General Description	Estimated Value	Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award ¹⁰	Date of Completion ¹³	Comments

¹⁰ Date of ADB Approval of Contract Award is the date of No-Objection letter to the EA/IA.

¹³ The Date of Completion is the physical completion date of the contract.

Consulting Services								
Package Number	General Description	Estimated Value	Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award ¹⁰	Date of Completion ¹³	Comments

¹⁰ Date of ADB Approval of Contract Award is the date of No-Objection letter to the EA/IA.

¹³ The Date of Completion is the physical completion date of the contract.

D. Non-ADB Financing

The following table lists goods, works and consulting services contracts over the life of the project, financed by Non-ADB sources.

Goods and Works				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments

E. National Competitive Bidding

1. General

The procedures to be followed for National Competitive Bidding (NCB) shall be those set forth for “Public Bidding” in Prime Minister’s Decree No. 03/PM of the Lao People’s Democratic Republic, effective 09 January 2004, and Implementing Rules and Regulations effective 12 March 2004, with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the Procurement Guidelines.

2. Application

Contract packages subject to NCB procedures will be those identified as such in the project Procurement Plan. Any changes to the mode of procurement from those provided in the Procurement Plan shall be made through updating of the Procurement Plan, and only with prior approval of ADB.

3. Eligibility

Bidders shall not be declared ineligible or prohibited from bidding on the basis of barring procedures or sanction lists, except individuals and firms sanctioned by ADB, without prior approval of ADB.

4. Advertising

Bidding of NCB contracts estimated at \$500,000 or more for goods and related services or \$1,000,000 or more for civil works shall be advertised on ADB’s website via the posting of the Procurement Plan.

5. Procurement Documents

The standard procurement documents provided with Ministry of Finance, Procurement Monitoring Office shall be used to the extent possible. The first draft English language version of the procurement documents shall be submitted for ADB review and approval, regardless of the estimated contract amount, in accordance with agreed review procedures (post and prior review). The ADB-approved procurement documents will then be used as a model for all procurement financed by ADB for the project, and need not be subjected to further review unless specified in the procurement plan.

6. Preferences

- (i) No preference of any kind shall be given to domestic bidders or for domestically manufactured goods.
- (ii) Suppliers and contractors shall not be required to purchase local goods or supplies or materials.

7. Rejection of all Bids and Rebidding

Bids shall not be rejected and new bids solicited without ADB’s prior concurrence.

8. National Sanctions List

National sanctions lists may be applied only with prior approval of ADB.

9. Corruption Policy

A bidder declared ineligible by ADB, based on a determination by ADB that the bidder has engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing an ADB-financed contract shall be ineligible to be awarded ADB-financed contract during the period of time determined by ADB

10. Disclosure of Decisions on Contract Awards

At the same time that notification on award of contract is given to the successful bidder, the results of the bid evaluation shall be published in a local newspaper or well-known freely accessible website identifying the bid and lot numbers and providing information on (i) name of each Bidder who submitted a Bid, (ii) bid prices as read out at bid opening, (iii) name of bidders whose bids were rejected and the reasons for their rejection, (iv) name of the winning Bidder, and the price it offered, as well as the duration and summary scope of the contract awarded. The executing agency/implementing agency shall respond in writing to unsuccessful bidders who seek explanations on the grounds on which their bids are not selected.

11. Member Country Restrictions

Bidders must be nationals of member countries of ADB, and offered goods, works and services must be produced in and supplied from member countries of ADB.

D. Consultants' Terms of Reference

52. Project Management Consultant (PMC)

I. BACKGROUND

53. The Government of Lao PDR has requested the Asian Development Bank (ADB) for support in implementing the "Road Sector Governance and Maintenance Project". This project supports the Government's transport sector priorities of increasing the capability of local Departments of Public Works and Transport (DPWTs) to manage road assets that have been transferred to Provincial control, as well as providing capacity building within the central level of the Ministry of Public Works and Transport (MPWT).

54. The MPWT, as the Executing Agency (EA) for the proposed Project has proposed roads in Attapu, Salavan, and Xekong to be included in the project. The loan project will:

- Strengthen institutional capacity and governance in the MPWT and the provincial Departments of Public Works and Transport in undertaking road maintenance responsibilities; and
- Finance road rehabilitation, and routine and periodic maintenance on a selection of national and local roads in the three target provinces.

55. The Project's impact will be an improved delivery of public sector service in road asset management. The project outcome will be an implemented sustainable road asset management in the provinces of Attapu, Salavan, and Xekong.

56. The Implementing Agency (IA) for the Project will be the Department of Roads (DOR) of the MPWT which will be responsible for the direct supervision and implementation of the Project. A project management team formed under DOR will function for overall project coordination and monitoring. Project Implementation Units (PIU's) will be established in the three provincial DPWT's.

57. DOR intends to recruit a firm to act as the Project Management Consultant (PMC) for implementation and supervision of the Project including, but not limited to providing capacity building, preparing detailed engineering design and bidding documents, assisting with the procurement of civil works rehabilitation and maintenance contractors, and for supervising the implementation of road rehabilitation and maintenance works. The Consultant will be recruited using quality cost based selection (QCBS) method with a quality: cost: ratio of 90:10 under full technical proposal following *ADB's Guidelines on the Use of Consultants (2013, as amended from time to time)*.

II. OBJECTIVE(S) OF THE ASSIGNMENT

58. The objective of the PMC services is to provide advice and assistance to the MPWT, DOR and provincial DPWT's in delivering the following project Outputs and Sub-Outputs:

Output 1: Governance and practice for sustainable road asset management improved.

59. Sub-Output 1.1: Support revision of regulation on axle load control. This activity will support MPWT to strengthen the government's institutional framework, including procedures and regulations for overloading control, through planning and designing feasible measures for

monitoring axle loads (including addressing modification of vehicles), drafting and proposing revision of the current axle-load control regulation(s), and providing support for the institutional set-up for proper enforcement on overloading control.

60. Sub-Output 1.2: Support development of sustainable Road Maintenance Fund (RMF) revenue generation and financing mechanism in support of revision of the regulations on RMF. This activity will support MPWT and RMF Board (RMFB) to strengthen financing mechanism of the RMF for sustainable road asset management, drafting a long-term financing plan and proposing a revised RMF regulation.

61. Sub-Output 1.3: Increased transparency through consolidated road asset management system. This activity will incorporate a web-based registry system into the on-going World Bank-supported ICT project in the MPWT (ICT Department of the Cabinet Office) that will establish a web-based platform for the road asset management system. This activity also includes procurement/development of: (i) road condition survey tools (e.g., video recorder, image analysis system), (ii) road roughness survey tools (e.g., accelerometer, GPS devices, roughness analysis system) and (iii) computers/network/servers.

62. Sub-Output 1.4: Improvement and standardization of road asset management procedures and manual and revision of technical specifications. This activity will include updating of (i) Technical Specifications for Road Construction and Maintenance, (ii) the Road Design Manual, (iii) the Road Maintenance Manual, and (iv) improving performance-based maintenance contract documents, all for acceptance and approval of MPWT. This activity will standardize procedures for road maintenance planning, budgeting, procurement, and implementation.

Output 2: Institutional capacity for sustainable road asset management strengthened.

63. Sub-Output 2.1: Institutional capacity of MPWT for sustainable road asset management strengthened. This activity will provide capacity building/training for the management and staff of concerned departments of MPWT and DPWTs for Output 1, based on an assessment of needs and requirements of MPWT and DPWTs staff.

64. Sub-Output 2.2: Improvement of contractors' overall contract tendering and management capacity. This activity will improve contractors' capacity (i) for preparing responsive tenders by providing training for the contractors in all components of the tender documents and the tendering process, and (ii) for implementing performance-based maintenance contracts by providing on-site training in performance based maintenance works.

65. Sub-Output 2.3: Development of community based road asset management. This activity will assist DOR and DPWTs to facilitate full range of community development support services including (i) setting up and managing Village Maintenance Committee(s),²⁰ and (ii) improving routine road maintenance and management skills which will contribute to generating local employment and project ownership.

Output 3: Rehabilitation and maintenance of national and local roads completed.

²⁰ Community-based Maintenance (CBM) for road maintenance has been introduced and has been in practice for more than a decade in many provinces in Lao PDR, financed by both donors and the Lao PDR government. This has proved that the communities, engaged in the maintenance work, can contribute to quality routine maintenance.

66. This output will rehabilitate and maintain the selected national and local roads: 166 km of roads in Attapu Province. 84 km of roads in Salavan Province, and 77 km of roads in Xekong Province, as indicated below.

Sub-output	Province	Road Section (road no. from – to)	Length (km)
3.1	Attapu	National Road NR-18B [from Attapu City to Vietnam Border]	112
3.2	Attapu	Local Road LR-9001 [from NR-18B to Xanxai Village]	54
		Total 1 =	166
3.3	Salavan	National Road NR-20 from Salavan City to Champasak Border]	56
3.4	Salavan	Local Road LR-6901 from NR-13s to Mekong River Ferry Terminals	27.5
		Total 2 =	83.5
3.5	Xekong	National Road NR-16 [from Champasak Border to Xekong City]	54
3.6	Xekong	Local Road LR-7615 [from NR1H- to NR-16]	22.7
		Total 3 =	76.7
		Grand Total =	326.20

III. SCOPE OF SERVICES, TASKS (COMPONENTS) AND EXPECTED DELIVERABLES

67. The PMC shall comprise of international and national experts who will assist the EA, IA and PIUs in the different project implementation procedures. The services to be provided by the PMC include but are not limited the following:

- i. Overall management support of the loan disbursement, funding, monitoring and reporting processes to the DOR and the ADB
- ii. Preparation of all project components, including drafting of regulations for the revision of the current axle-load control regulation(s); and drafting a long-term financing plan for strengthening of the Road Maintenance Fund (RMF) and revised RMF regulation.
- iii. Procurement of contractors and suppliers of equipment, tools and related services.
- iv. Undertaking of the detailed engineering design of the rehabilitation and maintenance works on the selected roads.
- v. Supervision of rehabilitation and maintenance works carried out by contractors to ensure compliance with the drawings, specifications and contract documents.
- vi. Capacity building for DOR-MPWT and/or DPWT staff through the delivery of formal and on-the-job training and workshops.

IV. TEAM COMPOSITION & QUALIFICATION REQUIREMENTS FOR THE KEY EXPERTS

68. The PMC shall comprise of 136 person-months of international and 209 person-months of national experts who will assist the EA, IA and PIUs in the project management and implementation. The international and national experts to be provided by the PMC, the required

person-month inputs to carry out the services, the preferred experts' inputs- qualifications, and the experience and educational qualifications are indicated in the following tables.

International Experts	Person-months	Preferred Qualification in Relevant Field
1.Team Leader/Maintenance Specialist	55	Preferably 20 years' experience with preferably a Bachelor and/or post-graduate degrees in civil or construction engineering or related field. Team leadership experience preferably 15 years is preferred.
2.Capacity Building and Governance Specialist	8	Preferably 10 years' relevant experience and preferably a Bachelor's degree in civil engineering, project management or related field.
3. Road Safety Specialist	6	Preferably 15 years' experience with preferably a Bachelor's degree in civil or traffic engineering, or related field.
4. Road Asset Management and Procedures Specialist	12	Preferably 15 years' experience with preferably a Bachelor's degree in civil or construction engineering, project management or related field.
5. Maintenance Capacity Development Specialist	10	Preferably 10 years' experience with preferably a Bachelor's degree in project management, engineering or related field.
6. Financial and Road Maintenance Financing Specialist	6	Preferably 10 years' experience with preferably a Bachelor's degree in finance, project management or related field.
7. Procurement Specialist	6	Preferably 10 years' experience with preferably a Bachelor's degree in project management, engineering or related field.
8. Axle Load Control Specialist	5	Preferably 8 years' relevant experience and preferably a Bachelor's degree in mechanical or civil engineering or related field.
9. IT/ Registry System Specialist	3	Preferably 5 years' relevant experience and preferably a Bachelor's degree in computer engineering, information technology, or related field.
10. Social Development Specialist	3	Preferably 15 years' relevant experience and preferably a Bachelor's degree in a relevant social science or related field.
11. Detailed Design Specialist	8	Preferably 8 years' experience with preferably a Bachelor's degree in civil or transport engineering, or related field.
12.Structural Design Specialist	2	Preferably 8 years relevant experience and preferably a Bachelor's degree in civil or structural engineering or related field.

13. Pavement Design Specialist	2	Preferably 8 years relevant experience and preferably a Bachelor's degree in civil, transport or materials engineering or related field.
14. Rehabilitation/ Maintenance Specialist	6	Preferably 10 years' experience with preferably a Bachelor's degree in civil or construction engineering or related field.
15. Geotechnical Specialist	2	Preferably 8 years relevant experience and preferably a Bachelor's degree in civil or materials engineering or related field.
16 Hydrological/ Drainage Specialist	2	Preferably 8 years relevant experience and preferably a Bachelor's degree in civil or hydrological engineering or related field.
Total	136	

National Experts	Person-months	Preferred Qualification in Relevant Field
1. Deputy Team Leader/Maintenance Specialist	55	Preferably 15 years' experience on similar projects with preferably a Bachelor's degree in civil or construction engineering or related field.
2. Environmental Safeguards Specialist	24	Preferably 8 years relevant experience and preferably with a Bachelor's degree in environmental science or environmental engineering or related field.
3. Labor Based Maintenance Specialist	12	Preferably 8 years relevant experience and Preferably with a Bachelor's degree in project management, construction engineering or related field.
4. Financial and Road Maintenance Financing Specialist	2	Preferably 8 years relevant experience and preferably with a Bachelor's degree in finance, project management or related field.
5. Procurement Specialist	2	Preferably 8 years relevant experience and preferably with a Bachelor's degree
6. HIV/AIDS Human Trafficking Specialists (2 persons)	24	Preferably 8 years relevant experience and preferably with a Bachelor's degree in a relevant social science or related field.
7. Community Development Specialists (2persons)	24	Preferably 8 years relevant experience and with a Bachelor's degree in a relevant social science or related field.
8. Contractor Training Specialist	6	Preferably 8 years relevant experience and preferably with a Bachelor's degree in construction management, construction or engineering, or related field.

9. Resident Engineer	30	Preferably 10 years relevant experience and preferably with a Bachelor's degree in construction or civil engineering or related field.
10. Design Engineers (2 persons)	18	Preferably 8 years relevant experience and preferably with a Bachelor's degree in civil or transport engineering, or related field.
11. Geotechnical Engineer	4	Preferably 8 years relevant experience and preferably with a Bachelor's degree in civil or materials engineering, or related field.
12. Hydrological/Drainage Engineer	4	Preferably 8 years relevant experience and preferably with a Bachelor's degree in civil or hydrological engineering or related field.
13. Structural Engineer	4	Preferably 8 years relevant experience and preferably with a Bachelor's degree in civil or structural engineering or related field.
Total	209	

69. The key responsibilities and duties of proposed international and national experts are indicated below:

International Staff

70. Team Leader/Maintenance Specialist

- i. Responsible for the overall administrative, technical and financial management of the PMC, and act as the direct supervisor of all international and national staff of the PMC;
- ii. Act as the direct liaison between the PMC and the EA, IA and PIU's; and the direct liaison between the PMC and the ADB;
- iii. Act as the liaison between the PMC and other governmental and private entities, and the general public;
- iv. Responsible for coordinating all advice, assistance and project activities provided by the PMC in order to ensure the quality, continuity and clarity of the services and to avoid duplication of efforts;
- v. Assist and support all team specialists in the carrying of their duties, and in particular directly assist in (i) the development and implementation of a Capacity Building and Governance Plan; (ii) the development and implementation of a Project Performance Monitoring System (PPMS) (iii) procurements; (iv) the preparation of detailed designs and contract documents; and (v) the supervision of rehabilitation and maintenance works;
- vi. Act as the Engineer on all rehabilitation and maintenance projects in accordance with the contract provisions of all civil works contracts;
- vii. Act as the PMC lead specialist in assisting the EA and ADB in the regular 6-month interval project performance monitoring and in loan covenant compliance monitoring assessments;

- viii. Prepare quarterly, annual and mid-term reports to ADB/MPWT and related reports as required for the Project;
 - ix. Prepare the Project Completion Report; and
 - x. Assist with any other duties as may be reasonably assigned by the EA/ IA.
71. Capacity Building and Governance Specialist
- i. Develop, in coordination with the Public Works and Transport Training Center (PTTC), and prepare the Capacity Building and Governance Plan, incorporating PMC team inputs for training course contents, timeframes, logistical requirements and costs;
 - ii. Carry out the governance component of the training;
 - iii. Identify target EA, IA and PIU staff positions for formal and informal training;
 - iv. Carry out training evaluations.
72. Road Safety Specialist
- i. Review the road safety assessments and recommendations carried out earlier by the PPTA consultant. Review and incorporate the activities indicated in the Ethnic Communities Development Plan in the overall road safety program. Request for inputs from the Social Development Specialist specific to gender-sensitive and culturally appropriate design of various activities.
 - ii. Identify road safety treatments for inclusion into the detailed design;
 - iii. Provide training in road safety to the MPWT, DOR and DPWTs, and to communities and schools along the project roads;
 - iv. Coordinate work on identified road safety issues with staff from the Division of Traffic and License Management under the Department of Transport (DOT) of the MPWT in order to develop appropriate solutions;
 - v. Improve the capacity of the IA, PIU's and provincial Traffic Police in the provision of road safety services to promote safety on the project roads.
 - vi. Develop, in collaboration with the local traffic police and local communities, and social development specialist a road safety program (based on the concept of the Three E's: education, enforcement and engineering) to be implemented in rural communities and schools affected by the Project roads prior to start of maintenance works.
 - vii. Coordinate the implementation of the road safety program in conjunction with the civil works implementation schedule; and
 - viii. Carry out safety audits at the post rehabilitation and post-maintenance stages for the Project roads in line with the PPTA Study safety engineering recommendations as appropriate.
73. Road Asset Management and Procedures Specialist
- i. Develop training courses; and deliver formal and on-the-job training in road asset management;

- ii. Provide advice and assistance in optimizing the usage of existing road maintenance management systems;
- iii. Prepare draft final revised MPWT Road Maintenance Manual²¹, incorporating input from the Team Leader, and other PMC specialists;
- iv. Finalize revised MPWT Road Maintenance Manual in accordance with MPWT comments, for submission for the approval of the DOR, and formal MPWT approval of the Minister;
- v. Prepare, together with the Construction/Maintenance Management Specialist, the draft final revised MPWT Technical Specifications for Road Construction and Maintenance;
- vi. Finalize revised MPWT Technical Specifications for Road Construction and Maintenance in accordance with MPWT comments, for submission for the approval of the DOR, and formal MPWT approval of the Minister;
- vii. Prepare, together with the Maintenance Capacity Development Specialist and Procurement Specialist, the draft final revised performance-based maintenance contract documents;
- viii. Finalize revised performance-based maintenance contract documents in accordance with MPWT comments; and
- ix. Assist in the procurement and training in the use of road condition survey tools, and road roughness survey equipment.

74. Maintenance Capacity Development Specialist

- i. Provide, together with the national Contractor Training Specialist, training to maintenance works contractors, and DPWT supervision staff;
- ii. Review and finalize the existing Draft Performance Based Contract Administration Guideline (2014);²²
- iii. Prepare evaluation reports on the performance based contracts implemented under the Project for DOR use on future PBC contracting;
- iv. Together with the Capacity Building and Governance Specialist, prepare a training program for labor-based maintenance for community groups. Review and incorporate activities indicated in the Ethnic Communities Development Plan in the overall community-based routine maintenance activities. Request for inputs from the Social Development Specialist specific to gender-sensitive and culturally appropriate design of various activities.
- v. Provide capacity strengthening in labor based maintenance for community groups;

²¹ In the preparation of all manuals, specifications and standard contract documents, the PMC should be guided by the following: (i) the need to improve road technology for Lao PDR in accordance with local conditions; (ii) the need to improve quality control through strict site supervision; (iii) evaluation of alternative technologies in terms of whole life cycle assessments; (iv) inclusion of bio-engineering for road stability, especially in hilly and mountainous terrain; (v) consideration of independent technical auditors for as-built audits for adherence to specification of completed roads; and (vii) road design should not be controlled by standard cost norms which may result in significantly lower quality standards and higher maintenance costs.

²² Prepared under the Capacity Building for Road Maintenance in Lao PDR Project; Oriental IDCJ, Tokyo, Japan.

- vi. Recommend the type and specification of suitable tools to be provided for the undertaking of labor-based maintenance; and assess local availability in the subject Provinces;
 - vii. Assist in the procurement of labor based maintenance tools; and
 - viii. Prepare a framework business plan (including training, tools/equipment, management, financing, etc.) for community small business enterprises to undertake contracts for labor-based routine road maintenance.
 - ix. Encourage participation of women and ethnic groups in the setting up of village management committees and trainings and ensure that targets in the DMF, ECDP, and SPRSS are met.
75. Financial and Road Maintenance Financing Specialist
- i. Prepare draft long-term Road Maintenance Fund (RMF) financing plan and revised draft RMF degree;
 - ii. In coordination with the Lao Road Sector Project (World Bank supported), provide financial training to MPWT, Department of Finance (DOF) and Department of Inspection (DOI) staff;
 - iii. Assist the DOF in preparing all required financial reports to ADB and MPWT; and
 - iv. Monitor and assist DOF in complying with Project auditor's recommendations.
76. Procurement Specialist
- i. Monitor and advise DOR on procurement activities and contractual issues;
 - ii. Prepare a working paper for consultation and consideration of the EA/IA (including seeking comments from ADB) on the most effective use of E-procurement for the project;
 - iii. Provide training in procurement and contract administration procedures to DOR, DOF and DPWTs; and
 - iv. Provide support and capacity development for the Procurement Unit at the MPWT, (under Department of Finance, Asset Management Unit).
77. Axle Load Control Specialist
- i. Review existing practices and guidelines for control of overloading including locations, types and operating procedures at existing weighbridge sites, the institutional set-up of enforcing overloading control and the practicality and effectiveness of enforcing such control; and identify any weaknesses in the existing approach and recommend improvements;
 - ii. Prepare a draft proposal for a revision of the axle load regulation, including design for institutional arrangement for enforcement, and measures for monitoring axle loads;
 - iii. Prepare manual(s) to implement overloading control operations, to include, but not limited to code of conduct of operational staff, auditing, reporting, monitoring, and data collection/analyses;
 - iv. Recommend a draft overloading control program, action plan and public information campaign;

- v. Develop overloading control monitoring plan²³ for project roads, to be implemented by civil works contractors during performance maintenance period(s) and controlled/monitored by DPWTs with assistance of the PMC;
- vi. Identify country-wide overloading control training needs and prepare training materials; and
- vii. Provide overloading training to relevant officials.

78. IT/Registry System Specialist

- i. Incorporate a web-based registry system into the on-going World Bank-supported ICT project in the MPWT (ICT Department of the Cabinet Office);
- ii. Assist with the procurement, and the supervision of the installation of equipment for the web-based registry system, i.e. computers, network, server and software; and related items.
- iii. Develop a pilot program to undertake initial implementation of the web-based registry system and monitoring equipment for target Provinces, and undertake its implementation.

79. Social Development Specialist

- i. Prepare a detailed consultation and participation plan for the HIV/AIDS and Human Trafficking Awareness and Prevention Campaign to ensure meaningful consultation and participation of communities and other stakeholders;
- ii. Assist with the encouragement of employment of communities, specifically women and ethnic groups during construction and ensure that core labor standards are followed and monitored during implementation;
- iii. Monitor the involvement of ethnic groups, the poor and women in Project activities especially project generated employment and income generation
- iv. Work closely with road safety specialist and maintenance capacity development specialist in the design and implementation of the road safety program and community-based routine maintenance training to ensure that gender-sensitive and culturally appropriate measures are incorporated in the various activities.
- v. Work closely with road safety specialist and maintenance capacity development specialist in the preparation of gender and ethnic-disaggregated monitoring indicators to monitor and evaluate the Project benefits in relation to (i) road safety awareness, and (iii) capacity development - including training in routine maintenance works and related road asset management skills;
- vi. Prepare gender and ethnic-disaggregated monitoring indicators to monitor and evaluate the Project benefits in relation to (i) community awareness of social benefits; (ii) social risks – HIV/AIDS and Human Trafficking; and (iii) project generated employment and income generation.
- vii. Coordinate and work closely in all of the above issues with Social Monitoring staff from the Environment and Social Division under the Public Works and Transport Institute (PTI) of MPWT, local authorities, and concerned government agencies.

²³ The overloading control monitoring plan will also consider the practicality of monitoring of truck tire pressure on certain road sections.

- viii. Initiate the preparation of a social monitoring report and templates which will be used as reference by the national consultants when submitting the semi-annual monitoring reports to DOR and ADB.

80. Detailed Design Specialist

- i. Review existing MPWT Road Design Manual and discuss with staff of DOR, concerning scope and content of required revisions/upgrading of the MPWT Road Design Manual;
- ii. Prepare draft of revised MPWT Road Design Manual, together with input from the Team Leader, other PMC specialists, and assigned counterpart staff of the DOR, Design Division;
- iii. Finalize revised MPWT Road Design Manual in accordance with MPWT comments, for submission for the approval of the DOR, formal MPWT approval of the Minister;
- iv. Review conceptual and preliminary designs and contract documents for rehabilitation and maintenance works as prepared by the PPTA consultant, and conduct (plan-in-hand) detailed reconnaissance site visits to all Project roads;
- v. Prepare, together with the assistance of the Team Leader, the Procurement Specialists and other engineering specialists, a Detailed Design Program for all Project roads, including required field surveys, packaging and implementation scheduling;
- vi. Manage all required field surveys, topographic and geotechnical, etc.; and any other required studies needed to prepare detailed designs;
- vii. Prepare draft final Detailed Designs of all contract packages, including draft contract documents, standard specifications and special provision, and the draft engineer's estimate all for review by the DOR;
- viii. Finalize detailed designs and contract documents for all contract packages in accordance with DOR review comments; and
- ix. Prepare detailed designs for any "Black Spot" sections along project roads that were not included in Project rehabilitation works due to lack of funding for construction under the Project.

81. Structural Design Specialist

The international Structural Design Specialist and the National Structural Engineer shall work as a two-person team in carrying out all structural engineering tasks, under the direction of the Detailed Design Specialist:

- i. Review structural (bridge and box culvert) related sections of the existing MPWT Road Design Manual and discuss in detail with responsible staff of DOR, the required revisions and content of these structural sections;
- ii. Prepare draft of revised structural sections of the MPWT Road Design Manual;
- iii. Finalize structural sections of the revised MPWT Road Design Manual;
- iv. Review conceptual and preliminary structural designs prepared by the PPTA consultant, and conduct (plan-in-hand) detailed reconnaissance site visits to all bridge and box culvert locations along Project roads;

- v. Prepare draft final Detailed Designs for all structural components on all contract packages; and
- vi. Finalize detailed designs of structural components for all contract packages in accordance with DOR review comments.

82. Pavement Design Specialist

The international Pavement Design Specialist shall work closely with the international and national Geotechnical Specialists in carrying out all pavement design tasks under the direction of the Detailed Design Specialist:

- i. Review pavement design and related sections of the existing MPWT Road Design Manual and discuss in detail with responsible staff of DOR, the required revisions and content of these pavement design sections;
- ii. Prepare draft of revised pavement design sections of the MPWT Road Design Manual under the direction of the Detailed Design Specialist;
- iii. Finalize structural sections of the revised MPWT Road Design Manual under the direction of the Detailed Design Specialist;
- iv. Review conceptual and preliminary pavement designs prepared by the PPTA consultant, and conduct (plan-in-hand) detailed reconnaissance site visits to all bridge and box culvert locations along Project roads;
- v. Prepare draft final Detailed Designs for all pavement design components on all contract packages; and
- vi. Finalize detailed designs of pavement design components for all contract packages.

83. Rehabilitation/Maintenance Management Specialist

- i. Review all conceptual and preliminary designs prepared by the PPTA consultant, and conduct detailed reconnaissance site visits of all construction components along all Project roads;
- ii. Establish a construction supervision program for all rehabilitation and performance maintenance construction packages; and
- iii. Provide on the job training for DPWT supervision staff.

84. Geotechnical Specialist

The international Geotechnical Specialist and the national Geotechnical Specialist shall work as a two-person team in carrying out all geotechnical engineering tasks, under the direction of the Detailed Design Specialist:

- i. Review geotechnical investigations and design sections of the existing MPWT Road Design Manual and discuss in detail with responsible staff of DOR, the required revisions and content of these geotechnical sections;
- ii. Prepare draft of revised geotechnical investigations and design sections of the MPWT Road Design Manual under the direction of the Detailed Design Specialist;
- iii. Finalize geotechnical sections of the revised MPWT Road Design Manual under the direction of the Detailed Design Specialist;

- iv. Review conceptual and preliminary geotechnical sections prepared by the PPTA consultant, and conduct detailed reconnaissance site visits along Project roads as necessary;
- v. Prepare draft final geotechnical components of Detailed Designs on all contract packages; and
- vi. Finalize final geotechnical components of detailed designs for all contract packages.

85. Hydrological/Drainage Specialist

The international Hydrological/Drainage Specialist shall work closely with the national Hydrological/Drainage Specialist in carrying out all hydrological design tasks under the direction of the Detailed Design Specialist:

- i. Review hydrological/drainage designs and related sections of the existing MPWT Road Design Manual and discuss in detail with responsible staff of DOR, the required revisions and content of these hydrological/drainage design sections;
- ii. Prepare draft of revised hydrological/drainage design sections of the MPWT Road Design Manual;
- iii. Finalize hydrological/drainage sections of the revised MPWT Road Design Manual;
- iv. Review conceptual and preliminary hydrological/drainage designs prepared by the PPTA consultant, and conduct detailed drainage reconnaissance site visits along all Project roads;
- v. Prepare draft final Detailed Designs for all hydrological/drainage design components on all contract packages; and
- vi. Finalize detailed designs of hydrological/drainage design components for all contract packages.

National Experts

86. Deputy Team Leader/Maintenance Specialist

Assist the international Team Leader/Maintenance Specialist in below tasks, and in providing Lao/English translations to assist the international Team Leader/Maintenance Specialist in performing his/her tasks:

- i. Act as Team Leader in the absence of the Team Leader;
- ii. Carry out designated responsibilities for certain areas of administrative, technical and financial management of the PMC consultancy, and act as the supervisor of all and national staff of the PMC;
- iii. Act as the direct liaison between the PMC and the EA, IA and PIU's; and the direct liaison between the PMC and the ADB;
- iv. Act as the liaison between the PMC and other governmental and private entities, and the general public;
- v. Responsible for coordinating all advice, assistance and project activities provided by the PMC to the EA, IA and the PIU's, in order to ensure the quality, continuity and clarity of the services and to avoid duplication of efforts;
- vi. Assist and support all team specialists in the carrying of their duties, and in particular directly assisting all national specialists;

- vii. Prepare quarterly, annual and mid-term reports to ADB/MPWT and related reports as required for the Project; and
- viii. Prepare the Project Completion Report at the end of assignment.

87. Environmental Safeguards Specialist

- i. Ensure that mitigation measures for detailed design phase are incorporated in the project design and;
- ii. Ensure that the project EMP included in the IEEs is incorporated in bid and contract documents for all civil works.
- iii. Prior to review by ADB, review the contractors' environmental management plans (CEMPs) in order to be compliant with the: (i) environmental requirements of the construction contracts as reflected in the EMP, (ii) environmental laws of the Government, and (iii) ADB's Safeguard Policy Statement (2009);
- iv. Within six months from commencement of civil works, design and conduct a training program for MPWT/DPWT staff on how the environmental aspects of the project will be monitored, giving emphasis on CEMP evaluation; environmental monitoring of construction activities and preparation of corresponding reports; supervision responsibilities and interaction with contractors; and documentation, resolution and reporting of non-compliance issues and complaints;
- v. Conduct orientation sessions with the contractors on the environmental mitigation measures to be implemented, environmental monitoring system to be used, notification of non-compliance, and the process of requiring contractors to do corrective measures when necessary;
- ix. Before excavation works and removal of the existing pavement commences, undertake an inspection of and approval the contractors' disposal sites to ensure that the EMP criteria for such sites are met.
- x. Coordinate and work closely in all of the above issues with the staff from the Division of Environmental Management under the Public Works Transport Institute (PTI) of the MPWT.
- xi. Require and provide guidance to the contractors in update their respective CEMPs should there be adverse impacts not addressed in the current CEMP;
- xii. Undertake the following compliance review tasks:
 - Develop a standardized environmental monitoring/audit form to document results of environmental performance and environmental quality monitoring;
 - Undertake monthly monitoring and inspection of construction sites and all construction-related facilities (workers' camps, asphalt batching plants, concrete batching plants, borrow pits, disposal sites for spoil and unsuitable materials, equipment maintenance areas, fuel and materials storage sites, project-specific quarries and crushers, etc.) to assess the contractors' compliance with the CEMP and Project EMP, and provide guidance to contractors on the implementation of corrective measures, as necessary. The above tasks will be undertaken in coordination with PTI and DPWTs.
 - Consolidate the results/findings of each monthly monitoring activity into a semi-annual environmental monitoring report to be submitted to ADB one month from end of each semi-annual period.

- Undertake environmental quality monitoring (ambient monitoring) as required in the project EMP.
- Advise on potential climate change adaptation measures, as necessary.
- Review monthly and semi-annual environmental supervision/performance monitoring reports and environmental quality monitoring reports to identify progress with implementation of EMP;
- Identify key issues and actions taken and compliance performance;
- Identify any non-compliance issues and focal areas for site audits,
- As part of the environmental monitoring reports, document environmental issues and complaints and maintain a photographic record of key issues identified and actions and timescales agreed upon for their resolution;
- Document in the semi-annual environmental monitoring reports training/capacity building activities conducted for MPWT and DPWT, as well as orientation activities conducted for contractors;
- Review compliance with EMP, highlight areas of good practice and make recommendations on areas where performance could be improved;

88. Labor Based Maintenance Specialist

Assist the international Maintenance Capacity Development Specialist in below tasks, and in providing Lao and/or English translations to assist the international Maintenance Capacity Development Specialist in performing his/her tasks:

- i. Prepare a training program for labor-based maintenance for community groups;
- ii. Provide capacity strengthening in labor based maintenance for community groups; and
- iii. Recommend the type and specification of suitable tools to be provided for the undertaking of labor-based maintenance; and assess local availability in the subject Provinces. Assist DOR and/or DPWT in the procurement of labor-based maintenance tools.

89. Financial and Road Maintenance Financing Specialist

Assist the international Finance and Road Maintenance Financing Specialist in below tasks, and in providing Lao/English translations to assist the international Finance and Road Maintenance Financing Specialist Maintenance Capacity Development Specialist in performing in his/her tasks:

- i. Prepare a draft long-term Road Maintenance Fund (RMF) financing plan and revised RMF regulation;
- ii. Coordinate with the Lao Road Sector Project (World Bank supported), provide financial training to MPWT, Department of Finance (DOF) and Department of Inspection (DOI) staff;
- iii. Assist the DOF in preparing all required financial reports to ADB and MPWT; and
- iv. Assist DOF in complying with project auditor's recommendations.

90. Procurement Specialist

Assist the international Procurement Specialist in below tasks, and in providing Lao/English translations to assist the international Procurement Specialist in performing in his/her tasks:

- i. Monitor and advise DOR on procurement activities and contractual issues;
 - ii. Provide training in procurement and contract administration procedures to DOR, DOF and DPWTs; and
 - iii. Provide support and capacity development for the Procurement Unit at the MPWT, (under Department of Finance, Asset Management Unit).

- 91. HIV/AIDS and Human Trafficking Specialist
 - i. Design and implement HIV/AIDS and human trafficking awareness and prevention program
 - ii. Work closely with Social Development Specialist on the preparation of gender and ethnic-disaggregated monitoring indicators to monitor and evaluate HIV/AIDS and Human Trafficking program Coordinate and work closely in all of the above issues with Social Monitoring staff from the Environment and Social Division under the Public Works and Transport Institute (PTI) of MPWT, local authorities, and concerned government agencies. Monitor activities based on gender and ethnic disaggregated data (as applicable)

- 92. Community Development Specialist
 - i. In line with the Ethnic Communities Development Plan (ECDP), prepare a detailed consultation and participation plan to ensure meaningful consultation and participation of communities and other stakeholders;
 - ii. Assist with the encouragement of employment of communities specifically women, ethnic groups, poor households during construction and ensure that core labor standards are followed and monitored during implementation;
 - iii. Monitor the involvement of ethnic groups, the poor and women in Project activities related to (i) road safety awareness, (ii) project generated employment and income generation, and (iii) capacity development - including training in routine maintenance works and related road asset management skills
 - iv. Coordinate and work closely in all of the above issues with Social Monitoring staff from the Environment and Social Division under the Public Works and Transport Institute (PTI) of MPWT, local authorities, and concerned government agencies.

- 93. Contractor Training Specialist
 - i. Working closely with the Team Leader, Deputy Team Leader and Capacity Building and Governance Specialist while designing training courses to contractors;
 - ii. Review and identify relevant existing capacity gaps among the contractors, through interviews with contractors, and with DOR and DPWT staff;
 - iii. Provide training to Contractors in the preparation tenders, including preparing implementation schedules, preparing cash flow diagrams, developing unit rates sufficient for profit generation etc.
 - iv. Provide training to Contractors in contract management for implementing works contracts, with a focus on PBC contracts.

94. Resident Engineer

The Resident Engineer shall work closely with the international Team Leader, who will act as the Engineer on all civil works contracts; and with the international Construction/Maintenance Specialist in carrying out all project tasks:

- i. Act as the Engineer's Representative on all rehabilitation and maintenance projects in accordance with the contract provisions of all civil works contracts;
- ii. Manage all construction supervision and inspection activities in accordance with the contract provisions of all civil works contracts;
- iii. Act as the direct liaison between the Project and the public and communities along the routes of Project roads;

95. Design Engineer (1) and Design Engineer (2)

- i. Carryout geometric detailed designs;
- ii. Carryout all detailed designs for roadway furniture and miscellaneous works;
- iii. Coordinate the designs of other design specialists (geotechnical, pavement design, drainage design and structural design);
- iv. Supervise the preparation of contract drawings;
- v. Prepare unit cost analyses for all bill of quantity items
- vi. Prepare construction cost estimates for each civil works contract/package;

96. Geotechnical Specialist

Assist the international Geotechnical Specialist in below tasks, and in providing Lao/English translations to assist the international Geotechnical Specialist in performing in his/her tasks:

- i. Review geotechnical investigations and design sections of the existing MPWT Road Design Manual and discuss in detail with responsible staff of DOR, the required revisions and content of these geotechnical sections;
- ii. Prepare draft of revised geotechnical investigations and design sections of the MPWT Road Design Manual under the direction of the Detailed Design Specialist;
- iii. Finalize geotechnical sections of the revised MPWT Road Design Manual under the direction of the Detailed Design Specialist;
- iv. Review conceptual and preliminary geotechnical sections prepared by the PPTA consultant, and conduct detailed reconnaissance site visits along Project roads as necessary;
- v. Prepare draft final geotechnical components of Detailed Designs on all contract packages; and
- vi. Finalize final geotechnical components of detailed designs for all contract packages.

97. Hydrological/Drainage Engineer

Assist the international Hydrological/Drainage Specialist in below tasks, and in providing Lao/English translations to assist the international Hydrological/Drainage Specialist in performing in his/her tasks:

- i. Review hydrological/drainage designs and related sections of the existing MPWT Road Design Manual and discuss in detail with responsible staff of DOR, the required revisions and content of these hydrological/drainage design sections;
- ii. Prepare draft of revised hydrological/drainage design sections of the MPWT Road Design Manual;
- iii. Finalize hydrological/drainage sections of the revised MPWT Road Design Manual;
- iv. Review conceptual and preliminary hydrological/drainage designs prepared by the PPTA consultant, and conduct detailed drainage reconnaissance site visits along all Project roads;
- v. Prepare draft final Detailed Designs for all hydrological/drainage design components on all contract packages; and
- vi. Finalize detailed designs of hydrological/drainage design components for all contract packages.

98. Structural Engineer

Assist the international Structural Design Specialist in below tasks, and in providing Lao/English translations to assist the international Structural Design Specialist in performing in his/her tasks:

- i. Review structural (bridge and box culvert) related sections of the existing MPWT Road Design Manual and discuss in detail with responsible staff of DOR, the required revisions and content of these structural sections;
- ii. Prepare draft of revised structural sections of the MPWT Road Design Manual;
- iii. Finalize structural sections of the revised MPWT Road Design Manual;
- iv. Review conceptual and preliminary structural designs prepared by the PPTA consultant, and conduct (plan-in-hand) detailed reconnaissance site visits to all bridge and box culvert locations along Project roads;
- v. Prepare draft final Detailed Designs for all structural components on all contract packages; and
- vi. Finalize detailed designs of structural components for all contract packages.

V. REPORTING REQUIREMENTS AND TIME SCHEDULES FOR DELIVERABLES

99. The key deliverables under this PMC assignment are listed below. All shall be submitted in the English language to DOR Director General and to ADB. They shall be submitted in 5 hard copies to DOR Director General together with electronic files on a CD, and in 3 hard copies to ADB together with corresponding electronic files on a CD.

- i. Draft final and final revised Road Design Manual
- ii. Draft final and final revised Road Maintenance Manual
- iii. Draft final and final revised Technical Specifications for Road Construction and Maintenance
- iv. Draft final and final improved performance-based maintenance contract documents

100. When both draft final and final submissions are required, both the DOR and the ADB will provide final comments within 30 days of receipt of the draft final submission; and the PMC shall incorporate comments into the final submission within 15 days receipt of all comments. Should there be any clarification required concerning any comments the DOR shall promptly clarify the issue and inform the PMC.

a. Inception Report

101. The inception report will be submitted within six weeks after the start of the assignment, and shall contain a detailed work program, a brief description of the updated working methods proposed for carrying out the services in accordance with the Terms of Reference and identify any major issues and problems likely to be encountered. The report should also review the needs of recruiting other services as required.

b. Monthly Report

102. A Monthly Report will be submitted at the end of each month, summarizing the progress of the project, the work accomplished, any problems encountered during the month, and a work plan for the next month, with recommendations to achieve the objectives.

c. Quarterly Reports

103. The Quarterly Report will be submitted at the end of each quarter, summarizing work accomplished, any problems encountered and how they were resolved, recommendations to improve project implementation and outcomes, all contract events and other pertinent information as needed for effective management of the project and the achievement of objectives.

d. Semi-Annual Reports

104. The semi-annual report will be submitted at the end of six months, summarizing detailed work plan vis-a-vis work accomplished, any problems encountered and how they were resolved, recommendations to improve activities specific to ethnic communities development plan and the HIV/AIDS and Human Trafficking Awareness and Prevention Program.

e. Annual Reports

105. This Report should be submitted at the end of each year and include (i) progress achieved by output as measured through the indicator's performance targets, (ii) key implementation issues and solutions, (iii) safeguards and social monitoring report (iv) updated procurement plan, and (v) updated implementation plan for next 12 months.

f. Mid-term Review Report

106. The consultant will report on full review of project progress, achievements and problems at the time of the mid-term review as well as any revisions made or estimated to be made to the project design.

g. Draft Project Completion Report

107. This Report should be submitted within the last five (05) months prior to project completion. This report shall summarize information on Project completion including works accomplished, all contract events and other pertinent information for the duration of the consultancy contract. The Report also details (i) use of Loan proceeds on Project components, and (ii) the extent to which the Project outcome has been accomplished.

h. Final Project Completion Report

108. This Report should be submitted within three (03) months of final completion of the

Contract. The Final Project Completion Report will be finalized by incorporating comments received on the Draft Project Completion Report.

i. Specialized Project Reports

109. In addition to the above regular reporting requirements, it is expected that specialized reports will need to be prepared in support of project implementation - at different stages a summary of the expected specialized reports to be prepared under the project is provided below. The list should not be considered exhaustive.

- i. Report on review and update the financial management and institutional capacity assessments, and training plan. This report should be submitted upon completion of the review, assessment and preparation of training plans.
- ii. Detailed Design Report. This report should be submitted at the completion of the detailed design process.
- iii. Semi-annual Environmental Monitoring Reports. This report will be submitted one month at the end of each semi-annual period detailing the results of monthly environmental performance monitoring (progress of construction works, status of implementation of mitigation measures, issues identified and corrective actions necessary, complaints received and actions taken, progress of environmental training/orientation, status of implementation of previous required corrective actions, results of required environmental quality monitoring, etc.).

VI. CLIENT'S INPUT AND COUNTERPART PERSONNEL

110. The Consultant is expected to provide their own insurance, subsistence, office- and computer equipment and consumables, and make provision for the cost of office operation, including electricity and telephone, domestic travel and other costs to fulfill the consultancy services. After completion of project the items purchased under project shall be handed over to the government.

111. The DOR and three DPWTs in the provinces will provide office space to the Consultant and as well will make qualified counterpart staff available to work with the Consultant. The counterpart staff is to be trained by the Consultant to gain hands-on experience in all aspects of project management. The counterpart staff will not work as members of the Consultant team for delivering the services and they will be paid salaries by the Government. Therefore the cost of counterpart staff will not be included in the Consultant's proposal and subsequent contract agreement.

112. DOR and/or DPWTs will provide all relevant existing reports and available documents to the Consultant during the implementation of the consultancy. DOR and/or DPWTs will facilitate access of the Consultant to other government agencies for communications, collecting of relevant information, data, documents, etc. and other activities related to the consultant's assignment.

113. Independent Financial Auditor

114. An independent Financial Auditor will be recruited to annually audit all accounts and financial statements related to the Project. The General and Detailed Project Accounts of the Project from the Project Management Unit will be audited by the external auditor in accordance with auditing standards acceptable to ADB. The external auditor should be knowledgeable on

ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited accounts.

115. The independent Financial Auditor is expected to carry out tests to confirm that:

- i. ADB financing have been used in accordance with the conditions of the relevant financing agreement, with due attention to economy and efficiency, and only for the purposes for which the financing was provided;
- ii. Counterpart funds have been provided and used in accordance with the conditions of the relevant financing agreement, with due attention to economy and efficiency, and only for the purposes for which they were provided;
- iii. Goods, works and services financed have been procured in accordance with relevant financing agreements, including specific provisions of the ADB procurement guideline;
- iv. All necessary supporting documents, records, and accounts have been maintained in respect of all project activities, including expenditures reported using Statements of Expenditure (SOE). The auditor is expected to verify that respective reports issued during the period were in agreement with the underlying books of account.

116. The audit will include but not limited to the following:

- i. Imprest account;
- ii. Statement of Expenditures
- iii. Use of Funds for the Purpose Intended
- iv. Compliance with covenants contained in the Loan Agreement
- v. Any material weakness in internal control which were identified during the audit
- vi. Compliance with Financial Management Manual and Procurement Manual
- vii. Fixed assets procured. Review the allocation of project's equipment and whether these are being utilized in accordance with the Loan Agreement
- viii. Any other matters which the auditor considers should be brought to the attention of the borrowers.

117. The independent financial audit will be undertaken by a national consulting firm for 30 person-months over a 5-year project implementation period. The financial audit is expected to start from October 2016 to December 2021. Audit for any fiscal year ending in September will be carried out from October to November of the same year; the reports will be delivered to ADB latest at the end of March of the succeeding year. If the project completion is delayed, the independent financial audit is extended until the following year of the project completion. The audit team will be composed of one audit manager (10 person-months) and two auditors (10 person-months each). The consulting firm will be recruited using the least cost selection (LCS) method.

VII. SAFEGUARDS

118. The primary objective of safeguards is to avoid adverse impacts of projects on the environment and affected people. If impacts become unavoidable to realize the intended positive project impacts, adverse impacts shall be minimized, mitigated or affected people compensated. Approved and acceptable planning instruments shall be used and will be recorded as project covenants. Such instruments are approved by Approving Agencies in Lao PDR and also by ADB. They will be disclosed in accordance with the agreed policies and procedures by ADB and the borrower.

A. Environment

119. MPWT and/or DOR will be assisted by the PMC in supervising and monitoring over-all compliance with the EMP specified in the IEE by undertaking the following activities related to environmental safeguards for all project components regardless of financing source: (i) ensuring that the EMP is included in the tender documents and civil works contracts; (ii) supervising the implementation of environmental mitigating measures required for the construction activities; (iii) reviewing, monitoring, and evaluating the effectiveness of the contractor's implementation of the EMP, and recommending corrective actions, if required; (iv) undertaking monthly environmental performance monitoring and required environmental quality monitoring, and preparing semi-annual environmental monitoring reports for ADB's review and public disclosure; and (vi) addressing, recording, and reporting on any grievances through the project's Grievance Redress Mechanism.

B. Resettlement

120. The involuntary resettlement categorization of the project is Category C. The project scope is to maintain existing roads within the existing alignments. The project will neither entail any land acquisition nor restrict access to land resulting to physical or economic displacement of people.

C. Indigenous Peoples

121. The indigenous peoples categorization of the project is Category B. National Road 16 and Provincial Road 7615 (Salavan Province) and Provincial Road 9001 (Attapu Province) are dominated by a number of ethnic groups such as Triang, Harak, Katu, Levy, and Shuay while Lao Loum are dominant in the remaining 4 project roads. Although ethnic groups have their own local language, Lao language is spoken among the communities. An indigenous peoples plan, the Ethnic Communities Development Plan (ECDP), has been prepared to ensure that social benefits are maximized and adverse impacts are mitigated, if not avoided. The community-based road asset management component will target poor, women, and ethnic groups in setting up village management committees and providing routine maintenance and management skills training in order to provide income and improve status of women and ethnic groups in the communities. Work opportunities during construction are also expected, therefore, core labor standards (CLS) requirements is included in the civil works bidding documents and contracts and adherence to CLS will be monitored and reflected in the project's progress reports. The HIV/AIDS and Human Trafficking and Road Safety components of the Project will be designed and implemented in a gender-sensitive and culturally appropriate manner. Semi-annual progress reports will be prepared and submitted to ADB.

VIII. GENDER AND SOCIAL DIMENSIONS

122. The summary poverty reduction and social strategy (SPRSS) presents project benefits and mitigation measures, to address social impacts and enhance distribution of project benefits. The project will have positive social and economic impacts, which will improve livelihood opportunities due to better access to markets, schools, and health centers for women and men, including ethnic groups. On the community-based road asset management component of the project, women, ethnic groups, and poor households will be given preference during the selection of members of the village management committees (VMCs). Women, ethnic groups and poor households will be encouraged to join and participate in the setting-up of VMCs and to undergo training on routine maintenance. Their participation in the VMC and trainings will build their capacity for future income generation.

123. The HIV/AIDS and Human Trafficking Awareness and Prevention Program, and Road Safety Campaign include measures such as scheduling of meetings based on availability of women due to their numerous responsibilities, information materials will be gender-sensitive and culturally appropriate and will be conducted during market days, location of safety facilities will be in consultation with women, ethnic groups and that Lao Women's Union will actively participate in the design and implementation of the said activities.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

A. Project Design and Monitoring Framework

Impact of the Project is aligned with the National Socio-Economic Development Plan 2015^a:
For delivery of public services in road asset management improved

Project Results Chain	Performance Indicators with Targets and Baselines	Data Sources or Reporting Mechanism	Risks
Outcome Sustainable road maintenance implemented in the provinces of Attapu, Salavan, and Xekong	By 2022 a. Percentage of national roads in good condition in target provinces increased to 60% (2014 baseline: 40%) b. Percentage of local roads in good condition in target provinces increased to 20% (2014 baseline: 6%) c. Average daily traffic on all project roads increased to 30,000 PCUs (2014 baseline: 21,600 PCUs)	a-c. Annual road asset management report of MPWT	Diminishing government support for road asset management because priorities change.
Outputs 1. Governance and practice for road asset management improved	1a. Revised axle-load control regulation developed by 2017 (baseline: NA) 1b. Revised RMF regulation developed by 2017 (baseline: NA) 1c. A web-based road asset management registry established and made available for public disclosure by 2018 (baseline: NA) 1d. Updated performance-based maintenance contract documents, technical specifications for road construction and maintenance, road design manual, and road maintenance manual prepared, approved, and issued by 2017 (baseline: NA)	1a-d. Quarterly progress reports from project management consultant	Cost overrun because of unforeseen circumstances
2. Institutional capacity for road asset management strengthened	2a. 200 staff of MPWT and DPWTs with improved knowledge and skills in sustainable road asset management by 2020 (baseline: NA) 2b. Contractors with improved skills	2a & b. Training workshop evaluation reports	

	in performance-based maintenance contract tendering and implementation by 2018 (baseline: NA) 2c. Six training courses in routine road maintenance and management provided to communities along project roads with women comprising 50% of trainees, by 2019 (baseline: NA)	2c. Quarterly progress reports from project management consultant	
3. Road asset rehabilitation and maintenance completed ^b	3a. 166 km of roads in Attapu Province, 84 km of roads in Salavan Province, and 77 km of roads in Xekong Province are rehabilitated and maintained by 2021 (2015 baseline:0)	3a. Quarterly progress reports from project management consultant	

Key Activities with Milestones

Output 1. Governance and practice for road asset management improved

1.0 Recruit Project Management Consultant (Q3 2015-Q2 2016)

1.1 Review existing policy for overloading control and monitoring; and prepare draft revised axle-load control regulation for government approval (Q3 2016 - Q2 2017) [GCD]

1.2 Prepare draft long-term financing plan and revised RMF regulation (Q3 2016- Q2 2017) [GCD]

1.3 Prepare web-based registry system, and procurement and/or development of road asset management system, and procure equipment (Q1 2017- Q2 2018) [G/CD]

1.4 Prepare, approve and issue updated (i) performance-based maintenance contract documents, (ii) technical specifications for road construction and maintenance, (iii) road design manual, and (iv) road maintenance manual, for acceptance by and approval of MPWT (Q3 2016 - Q4 2017) [GCD]

Output 2. Institutional capacity for road asset management strengthened

2.1 Provide capacity building and/or training for MPWT and DPWTs for Output 1 (Q3 2017 – Q4 2020) [GCD]

2.2 Provide training for contractors in preparation of tenders and implementation of performance-based maintenance contracts (Q1 2017 – Q2 2018) [GCD]

2.3 Provide capacity building for supporting community-based routine maintenance (Q1 2017 – Q2 2018)

Output 3. Road asset rehabilitation completed

3.1 Undertake detailed design and prepare bidding documents (Q2 2016 – Q4 2016)

3.2 Procure civil works (Q1 2017 – Q4 2017)

3.3 Implement and complete civil works (Q4 2017 – Q1 2021)

Inputs

Asian Development Bank:	\$27,000,000.00
Government:	\$2,940,000.00

Assumptions for Partner Financing

Not applicable.

DPWT = Department of Public Works and Transport, GCD = governance and capacity development, km = kilometer, MPWT = Ministry of Public Works and Transport, NA = not applicable, PCU = passenger car units, Q = quarter, RMF = Road Maintenance Fund.

^a Government of the Lao People's Democratic Republic, Ministry of Planning and Investment. 2011. *The Seventh Five-Year National Socio-Economic Development Plan (2011–2015)*. Vientiane.

^b The maintenance work in the project refers to specific maintenance, which generally includes road drainage improvements, slope protection, minor upgrade of structural sections, pavement resurfacing, and provision of road furniture. Such maintenance is not ongoing task by nature and can be completed within a specific time frame.

Source: Asian Development Bank.

B. Monitoring

124. **Project performance monitoring.** The Borrower through MPWT shall establish within six (6) months of the Effective Date, a project performance monitoring and evaluation system that shall operate throughout the life of the project. The project implementation consultant services will include qualified consultants to help establish the monitoring and evaluation system. The system shall be integrated with the existing management information system. At the initial stage, the Borrower shall develop and conduct sample surveys to establish baseline data for subsequent performance monitoring and establish pre-project social and economic living conditions for the direct beneficiaries of the Project. The Borrower shall ensure that sufficient data is gathered to monitor the indicators set out in the design and monitoring framework for the Project. The baseline and impact surveys shall include areas impacted by the Project and assess all interventions under the Project, including safeguards interventions. These baseline surveys shall be carried out within twelve (12) months of the Effective Date. A second survey shall be carried out upon Project completion and a third survey shall be carried out not earlier than five (5) years after Project completion.

125. **Compliance monitoring.** ADB, with Government representatives, will undertake regular reviews of the Project at about 6-month intervals to assess compliance with the loan covenants. The project management consultant will assist ADB and MPWT in the preparation, updating and monitoring of interim milestones for each of the outputs as part of the 6-month regular loan covenant compliance assessment.

126. As an integral part of this regular loan covenant compliance assessment, the ADB and the MPWT shall establish a series of agreed interim milestones for each of the outputs, and sub-outputs of the Project, in particular the required policy actions to be delivered by the Government as contained in Output 1: Governance and practice for road asset management improved. Refer to the following table for key milestones pertaining to Output 1. This regular assessment shall include meetings with relevant Government agencies and offices that have direct effect on the financial, institutional and legal aspects of the implementation of required policy actions. The first assessment shall take place within six (6) months of the Effective Date, and shall continue at 6-month intervals throughout the life of the Project.

Output 1 - Detailed Scope and Interim Milestones

Sub-Outputs (Output 1)	Sub-Output Description	Milestones ²⁴
1.1	<u>Revised axle load monitoring regulation(s)</u> Applicable Loan Agreement Policy Actions: Schedule 5, Paragraph 7, (i), (ii) and (iii)	
	Existing practices and guidelines for control of overloading reviewed (including locations, types and operating procedures at existing weighbridge sites, the institutional set-up of enforcing overloading control and the practicality and effectiveness of enforcing such control; and identify any weaknesses in the existing approach and recommend improvements)	end Q3 2016
	Manual(s) to implement overloading control operations, to include, but not limited to code of conduct of operational staff, auditing, reporting, monitoring, and data collection/analyses prepared	end Q1 2017
	Draft overloading control program, action plan and public information	end Q2 2017

²⁴ Milestone dates indicated for completion of each sub-output activity is indicative until actual loan Effective Date is determined.

Sub-Outputs (Output 1)	Sub-Output Description	Milestones ²⁴
	campaign recommended	
	Draft proposal for a revision of the axle load regulation, including design for institutional arrangement for enforcement, and measures for monitoring axle loads prepared	end Q2 2017
	Revised axle load monitoring regulations put forward for governmental approvals	end Q2 2018
1.2	<u>Revised Road Maintenance Fund (RMF) regulation(s)</u> Applicable Loan Agreement Policy Actions: Schedule 5, Paragraph 7, (iv), (v), (vi) and (vii)	
	Long-term Road Maintenance Fund (RMF) financing plan (including revenue generation plan and financing mechanism) prepared	end Q1 2017
	Measures to improve financial management of RMF designed	end Q1 2017
	Revised draft RMF degree prepared	end Q2 2017
	Long-term RMF financing plan put forward for governmental approvals	end Q2 2018
	Revised RMF degree put forward for governmental approvals	end Q2 2018
1.3	<u>Web-based road asset management registry</u> Applicable Loan Agreement Policy Action: Schedule 5, Paragraph 7, (viii)	
	Equipment (computers, network, server, software, etc.) for MPWT web-based registry system procured, delivered and installed	end Q4 2017
	Web-based registry system at MPWT in operation	end Q1 2018
	Pilot program for initial implementation of web-based registry system or target provinces implemented	end Q2 2018
1.4	<u>Upgraded road asset management manuals, specifications and performance-based contract documents</u> Required Loan Agreement Policy Action: Schedule 5, Paragraph 7, (ix)	
	Draft final revised Performance Based Contract Administration Guideline (2014) prepared	End Q3 2016
	Draft final revised MPWT Road Maintenance Manual prepared	End Q4 2016
	Draft final MPWT Technical Specifications for Road Construction and Maintenance prepared	End Q4 2016
	Draft final revised performance-based maintenance contract documents prepared	End Q4 2016
	Draft final revised MPWT Road Design Manual prepared	End Q4 2016
	Final Performance Based Contract Administration Guidelines (revised 2017) approved and issued	End Q4 2017
	Final MPWT Road Maintenance Manual, Technical Specifications for Road Construction and Maintenance and Road Design Manual approved and issued	End Q4 2017
	Final performance-based maintenance contract documents approved and issued	End Q4 2017

127. The project management consultant will (i) monitor the inclusion of mitigation actions required during the design phase and as defined in the approved IEE; (ii) in coordination with the Public Works and Transport Institute (PTI); undertake monthly monitoring of contractors' environmental performance in terms of implementation of mitigation measures indicated in the EMP; (iii) monitor and report on the environment impacts during construction, and recommend measures to improve the situation as required; (iv) undertake environmental quality/effects monitoring as may be required in the EMP; and (v) prepare semi-annual monitoring reports for submission to the DOR and ADB.

128. The Project Management Consultant will assist DOR to monitor project's compliance with the Ethnic Communities Development Plan and other social activities related to HIV/AIDS and Human Trafficking Awareness and Prevention Program, and Road Safety; and prepare corrective actions as required. Semi-annual monitoring reports will be prepared and submitted to DOR and ADB. All social monitoring reports will be uploaded on the ADB website.

C. Evaluation

129. ADB, with Government representatives will undertake regular reviews of the Project at about 6-month intervals to assess the potential risk for achieving the project outcome. In addition to these regular reviews, a comprehensive midterm review of Project implementation will be carried out at the end of the second year of the project implementation. This midterm review will allow for any necessary midcourse corrections. Within 6 months of physical completion of the Project, MPWT will submit a project completion report to ADB.²⁵ About 1 year after project completion, ADB will conduct a project completion review to document the achievements of the Project.

D. Reporting

130. The MPWT will provide ADB with (i) inception report within six weeks after the start of the assignment of the project management consultant, (ii) quarterly progress reports in a format consistent with ADB's project performance reporting system; (iii) semi-annual reports related to environment and Ethnic Communities Development Plan and HIV/AIDS and Human Trafficking Awareness and Prevention Program (iv) consolidated annual reports including (a) PPME report with progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the next 12 months; (v) audited project financial statements, and (vi) a project completion report within 3 months of physical completion of the Project.

E. Stakeholder Communication Strategy

131. The Stakeholder Communication Strategy is based on the principles of transparency, timeliness, meaningful participation and inclusiveness. The strategy ensures that vulnerable groups, such as the poor, women and ethnic groups, who risk marginalization, are provided opportunities for communication and feedback during project design and implementation. It is expected that both rural and urban residents, will benefit from project interventions through improved access, job creation, increased local involvement in decision-making, and improved self-reliance. Awareness programs (road safety, HIV/AIDS, and anti-trafficking) will reduce social and health risks related to the infrastructure investment for the entire population living in the project areas.

132. The Stakeholder Communication Strategy is designed to ensure: (i) a regular flow of reliable project information; (ii) promote ownership over the road project and maintain the interest to achieve the project benefits; (iii) inclusion of vulnerable groups in benefit distribution and project implementation; and (iv) promotion of responsible development.

²⁵ Project completion report format is available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>

133. The Stakeholder Communication Strategy shall include the use of the Road Sector Governance and Maintenance Project's website. The following information, including other relevant information, shall be uploaded and made available to the stakeholders and the public in general: (i) project document (RRP) and the PAM; (ii) procurement information (bidding procedures, bidders, and contract awards); (iii) annual work plans; (iv) quarterly and annual progress reports and the project completion report; (v) environmental and social safeguards documents; (vi) grievance redress mechanisms; and (vii) technical reports and knowledge products produced by the project.

134. The project team will also ensure that relevant information about major changes to the project and likely impacts is also shared with affected people and other interested stakeholders.

X. ANTICORRUPTION POLICY

135. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project.²⁶ All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all Project contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the Project.²⁷

136. To support these efforts, relevant provisions are included in the loan agreement/regulations and the bidding documents for the Project. Moreover, the Government will ensure that all of the MPWT and DPWT project staff are fully aware of and comply with the Government's and ADB's procedures, including procedures for (i) implementation, (ii) procurement, (iii) use of consultants, (iv) disbursement, (v) reporting, (vi) monitoring, and (vii) prevention of fraud and corruption.

137. The Borrower shall: (i) undertake necessary measures to create and sustain a corruption-free environment for activities under the Project; (ii) comply with ADB's Anticorruption Policy (1998, as amended to date); and (iii) where appropriate, ensure that relevant provisions of ADB's Anticorruption Policy are included in all bidding documents for the Project. The Borrower: (i) acknowledges ADB's right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive and coercive practices relating to the Project; and (ii) agrees to cooperate fully with any such investigation and to extend all necessary assistance, including providing access to all relevant books and records, as may be necessary for the satisfactory completion of any such investigation. All external costs related to such investigations shall be met by the Project resources or by the Borrower.

138. Without limiting the generality of the preceding paragraph, the Borrower shall: (i) conduct periodic inspections on the suppliers', contractors', consultants' and other service providers' activities related to the Loan proceeds, fund withdrawals and settlements; and (ii) ensure that all contracts financed by ADB in connection with the Project include provisions specifying the right of ADB to audit and examine the records and accounts of the Borrower, and all suppliers, contractors, consultants and other service providers as they relate to the Project.

139. In addition to the above requirements, the Borrower shall set up a Project website that shall disclose how the Loan proceeds are being used and the contracts awarded, including: (i) the list of participating bidders; (ii) the name of the winning bidder; (iii) basic details on bidding procedures adopted; (iv) the amount of the contract awarded; (v) the list of goods and/or services purchased; and (vi) the resettlement monitoring reports. The website shall be updated within two weeks after: (i) each award of contract; and (ii) each submission of the semi-annual monitoring reports on resettlement.

²⁶ Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

²⁷ ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>

XI. ACCOUNTABILITY MECHANISM

140. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make a good faith effort to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, that should they approach the Accountability Mechanism.²⁸

141. The Project will establish a Grievance Redress Mechanism to ensure greater accountability. Within 9 months from loan effectivity, MPWT will prepare a Grievance Redress Mechanism acceptable to ADB, and establish a special committee to receive and resolve complaints/grievances or act upon reports from stakeholders on misuse of funds and other irregularities, including grievances due to resettlement. The special committee will (i) make public of the existence of this Grievance Redress Mechanism, (ii) review and address grievances of stakeholders of the Project, in relation to either the Project, any of the service providers, or any person responsible for carrying out any aspect of the Project; and (iii) proactively and constructively responding to them.

²⁸ For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.

XII. RECORD OF PAM CHANGES

142. This PAM describes the essential administrative and management requirements to implement the financing for the project. ADB, the government, and MPWT-DOR prepared this PAM during the fact-finding from 20 to 29 April 2015. This PAM was discussed during the loan negotiations on 22 October 2015. All revisions/updates during course of implementation should be retained in this Section to provide a chronological history of changes to implemented arrangements recorded in the PAM.