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IDA/R2013-0289/1

November 21, 2013

**Closing Date: Thursday, December 12, 2013
at 6 p.m.**

FROM: Vice President and Corporate Secretary

Vietnam - Vietnam Road Asset Management Project

Project Appraisal Document

Attached is the Project Appraisal Document regarding a proposed credit to the Socialist Republic of Vietnam for a Vietnam Road Asset Management Project (IDA/R2013-0289), which is being processed on an absence-of-objection basis, with a closing date of **Thursday, December 12, 2013.**

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Report No: PAD699

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR162.6 MILLION
(US\$250 MILLION EQUIVALENT)

TO THE

SOCIALIST REPUBLIC OF VIETNAM

FOR THE

VIETNAM ROAD ASSET MANAGEMENT PROJECT

November 8, 2013

Vietnam Sustainable Development Unit
Sustainable Development Department
East Asia and Pacific Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective November 8, 2013)

Currency Unit = Vietnamese Dong (VND)

VND 1.00 = US\$ 0.0000474

US\$ 1.00 = VND 21,100

FISCAL YEAR

January 1 – December 31

ADB	Asian Development Bank
AU(D)	Australian (Dollar)
AusAID	Australian Government Overseas Aid Program
CPS	Country Partnership Strategy
DRVN	Directorate for Roads of Vietnam
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ERR	Economic Rate of Return
GOV	Government of Vietnam
HDM-4	Highway Development and Management Model (version 4)
ICB	International Competitive Bidding
IDA	International Development Association
IFRs	Interim Financial Reports
IRI	International Roughness Index
JICA	Japan International Cooperation Agency
MOT	Ministry of Transport
NRN	National Road Network
PBCs	Performance-Based Contracts
PMU	Project Management Unit
PPCs	Provincial People's Committee
RAP	Resettlement Action Plan
RETF	Recipient Executed Trust Fund
RMF	Road Maintenance Fund
RNIP	Road Network Improvement Project
RP	Resettlement Plan
RRMUs	Regional Road Management Units
SOE	State-Owned Enterprise
TOR	terms of reference
VPRoMMS	Vietnam Provincial Road Maintenance Management System
VRAMP	Vietnam Road Asset Management Project

Regional Vice President	:	Axel Van Trotsenburg
Country Director	:	Victoria Kwakwa
Sector Director	:	John A. Roome
Sector Manager	:	Jennifer J. Sara
Task Team Leaders	:	Mitsuyoshi Asada / Phuong Thi Minh Tran

**SOCIALIST REPUBLIC OF VIETNAM
VIETNAM ROAD ASSET MANAGEMENT PROGRAM (VRAMP)**

TABLE OF CONTENTS

	Page
I. STRATEGIC CONTEXT	1
A. Country Context.....	1
B. Sectoral and Institutional Context.....	1
C. Higher Level Objectives to which the Project Contributes	4
II. PROJECT DEVELOPMENT OBJECTIVES	4
A. PDO.....	4
B. Project Beneficiaries	4
C. PDO Level Results Indicators.....	5
III. PROJECT DESCRIPTION	5
A. Project Components	5
B. Project Financing	6
C. Lessons Learned and Reflected in the Project Design.....	7
IV. IMPLEMENTATION	8
A. Institutional and Implementation Arrangements	8
B. Results Monitoring and Evaluation	9
C. Sustainability.....	9
V. KEY RISKS AND MITIGATION MEASURES	10
A. Risk Rating Summary Table.....	10
B. Overall Risk Rating Explanation	10
VI. APPRAISAL SUMMARY	11
A. Economic and Financial Analyses	11
B. Technical.....	12
C. Financial Management.....	13
D. Procurement	13
E. Social (including Safeguards).....	13
F. Environment (including Safeguards).....	15

Annex 1: Results Framework and Monitoring	16
Annex 2: Detailed Project Description.....	18
Annex 3: Implementation Arrangements	22
Annex 4: Operational Risk Assessment Framework (ORAF).....	35
Annex 5: Implementation Support Plan.....	39
Annex 6: Project-Level Governance, Transparency and Anti-Corruption Plan.....	41

PAD DATA SHEET*Vietnam**Vietnam Road Asset Management Project (P123961)***PROJECT APPRAISAL DOCUMENT***EAST ASIA AND PACIFIC**EASVS*

Report No.: PAD699

Basic Information			
Project ID P123961	Lending Instrument Investment Project Financing	EA Category B - Partial Assessment	Team Leaders Mitsuyoshi Asada Phuong Thi Minh Tran
Project Implementation Start Date 01-Apr-2014		Project Implementation End Date 30-June-2020	
Expected Effectiveness Date 30-Apr-2014		Expected Closing Date 31-Dec-2020	
Joint IFC No			
Sector Manager Jennifer J. Sara	Sector Director John A. Roome	Country Director Victoria Kwakwa	Regional Vice President Axel van Trotsenburg
Borrower: Socialist Republic of Vietnam			
Responsible Agency: Project Management Unit No. 3 (PMU3)			
Contact: Telephone No.:	Nguyen Xuan Truong (84-4) 3783 6052	Title: Email:	General Director, PMU3 pmu3@drvn.gov.vn
Project Financing Data(in USD Million)			
<input type="checkbox"/> Loan	<input checked="" type="checkbox"/> Grant	<input type="checkbox"/> Other	
<input checked="" type="checkbox"/> Credit	<input type="checkbox"/> Guarantee		
Total Project Cost:	301.70	Total Bank Financing:	250.00
Total Cofinancing:	AUD1.7 equivalent	Financing Gap:	0.00
Financing Source		Amount	
BORROWER/RECIPIENT		50.00	
International Development Association (IDA)		250.00	
Cofinancing		AUD1.70 equivalent	
Total		US\$300.0 and AUD1.7	

Expected Disbursements (in USD Million)							
Fiscal Year	2015	2016	2017	2018	2019	2020	2021
Annual	12.00	20.00	30.00	50.00	50.00	50.00	38.00
Cumulative	12.00	32.00	62.00	112.00	162.00	212.00	250.00
Proposed Development Objective(s)							
The proposed Project Development Objective (PDO) is to improve the efficiency and sustainability of the road asset management and maintenance practices performed by the Ministry of Transport on national roads in Vietnam.							
Components							
Component Name						Cost (USD Millions)	
Component A: Road Asset Management System (RAMS) Development						US\$8.30 and AUD1.70 equivalent	
Component B: Road Asset Preservation						156.60	
Component C: Road Asset Improvement						133.40	
Component D: Institutional Strengthening						1.70	
Institutional Data							
Sector Board							
Transport							
Sectors / Climate Change							
Sector (Maximum 5 and total % must equal 100)							
Major Sector	Sector			%	Adaptation Co-benefits %	Mitigation Co-benefits %	
Transportation	Rural and Inter-Urban Roads and Highways			90			
Public Administration, Law, and Justice	Central government administration			5			
Transportation	General transportation sector			5			
Total				100			
<input checked="" type="checkbox"/> I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.							
Themes							
Theme (Maximum 5 and total % must equal 100)							
Major theme	Theme					%	
Public sector governance	Administrative and civil service reform					10	
Financial and private sector development	Infrastructure services for private sector development					90	
Total						100	

Compliance			
Policy			
Does the project depart from the CAS in content or in other significant respects?		Yes []	No [X]
Does the project require any waivers of Bank policies?		Yes []	No [X]
Have these been approved by Bank management?		Yes []	No []
Is approval for any policy waiver sought from the Board?		Yes []	No [X]
Does the project meet the Regional criteria for readiness for implementation?		Yes [X]	No []
Safeguard Policies Triggered by the Project		Yes	No
Environmental Assessment OP/BP 4.01		X	
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36			X
Pest Management OP 4.09			X
Physical Cultural Resources OP/BP 4.11			X
Indigenous Peoples OP/BP 4.10			X
Involuntary Resettlement OP/BP 4.12		X	
Safety of Dams OP/BP 4.37			X
Projects on International Waterways OP/BP 7.50			X
Projects in Disputed Areas OP/BP 7.60			X
Legal Covenants			
Name	Recurrent	Due Date	Frequency
Section 1 of Schedule 2	Yes	NA	NA
Description of Covenant: The Recipient shall maintain the implementation arrangements as described in Section 1 of Schedule 2 to the Financing Agreement.			
Conditions			
Name		Type	
Description of Condition			
Team Composition			
Bank Staff			
Name	Title	Specialization	Unit
Mitsuyoshi Asada	Sr. Transport Specialist	Transport Engineering	EASIN
Phuong Thi Minh Tran	Sr. Transport Specialist	Transport Engineering	EASVS

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Non-Bank Staff

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Locations

Country	First Administrative Division	Location	Planned	Actual	Comments
Vietnam	Ha Giang Tuyên Quang	NH2 (Km 163 – Km 287)			
	Bắc Ninh Hải Dương	NH18 Km 3 + 300 – Km 46			
	Nghệ An	NH 48 (Km 0 - Km 20 and Km 38 – Km 64)			
	Hoa Binh Sơn La	NH6 (Km 78 + 300 – Km 193)			
	Hung Yên Hải Dương	4 Bridges in NH38B: Trang Thua (Km16 + 300 - Km 18 + 600); Trang (Km29+857); Neo (km24+945); Cap (km36+020)			
	Thái Bình	NH39 Trieu Duong - Hung Ha (Km 42+714.26 – Km 64 & 3 bridges			
	Hung Yên Hải Dương	NH38 Quan Goi - Yen Lenh&2 bridges			
	Thai Binh	NH39 Vo Hoi - Diem Dien Km 91 – Km 107 + 519			

I. STRATEGIC CONTEXT

A. Country Context

1. Vietnam has achieved high rates of sustained economic growth over the past 20 years. Between 1990 and 2010, real Gross Domestic Product (GDP) grew at an average annual rate of 7.4 percent—among the world’s top five growth performance records over the same period. Meanwhile, the percentage of the population living below the poverty line decreased from 58 percent in 1993 to 15 percent in 2008. Vietnam joined the World Trade Organization (WTO) in 2007, and trade and foreign direct investment (FDI) have grown significantly in the last 10 years. In 2011, GDP per capita reached an estimated US\$1,362 at market rates, confirming Vietnam’s recently rated status as a lower middle-income country.

2. Infrastructure investment has been a key component of Vietnam’s growth trajectory. Annual expenditures in infrastructure have been sustained at between 9 and 10 percent of GDP over recent years, about half of which devoted to transport. As urbanization continues to expand (it is expected that as early as 2020 some 50 percent of the Vietnamese population will be living in urban areas), further expansion of the road, rail, and inland waterway transport networks will be required to alleviate bottlenecks, drive productivity improvements, and meet key growth and poverty reduction targets.

3. To address these growth challenges, the Government of Vietnam (GOV) implemented a plan to expand revenue streams for road maintenance through the formation of a Road Maintenance Fund (RMF) and requested the support of the World Bank for the financing of an enhanced Road Asset Management System (RAMS), as well as periodic maintenance and improvement of strategically selected segments of the existing road transport network. Previously, the Bank supported efforts to enhance transport efficiency by selective improvement works, preserve existing assets through strategic maintenance and management techniques, and to address the institutional and financial sustainability of the Directorate for Roads of Vietnam (DRVN) through the Road Network Improvement Project (RNIP). As a result of lessons learned through RNIP and to address remaining road asset management challenges, particularly the strategic prioritization of selective periodic maintenance works, enhanced maintenance practices, and fiscal sustainability, the World Bank and GOV agreed to initiate the Vietnam Road Asset Management Project (VRAMP).

B. Sectoral and Institutional Context

4. The road sector has significantly contributed to Vietnam’s recent rapid socioeconomic development by providing basic access for communities to markets, education, and health facilities, connecting provinces to national centers and reducing the cost of moving people and goods across the country. Demand for investments in infrastructure will continue to grow for many years to come, and export performance will not improve if infrastructure bottlenecks are not removed. To do so will require a continued program of improvement and maintenance of the existing road network to maintain Vietnam’s strong economic performance, local business development, and improved social capital.

5. The Vietnam road network is classified by functional status as National, Provincial, District, Rural and Urban roads. The total road network length is around 210,000 km of which National Roads account for around 17,199 km and Provincial roads for 17,450 km. Rural roads

represent the majority (63 percent) of the total network length (131,951 km). The road network density is 677 km per 1,000 square land area and 2.41 km per 1,000 inhabitants. Table 1 shows the road network length distribution by network type.

Table 1: Annual National Road Maintenance Needs for the next 5 years

Vietnam Road Network Length (km)		
Network	Total	Percent
National	17,199	8.2%
Provincial	17,450	8.3%
District	36,400	17.3%
Rural	131,951	62.8%
Urban	7,000	3.3%
Total	210,000	100.0%

Source: DRVN

6. Despite achievements in expanding the network, 30 percent of the national roads in Vietnam are still in “poor” or “very poor” condition. The overall network is only about 50 percent paved and a significant share of district and commune roads remain unpaved. Table 2 shows an analysis in 2012 for the annual road preservation needs (i.e. routine/periodic maintenance and rehabilitation) to keep the current road condition.

Table 2: Annual National Road Maintenance Needs for the next 5 years

Keep Current Condition Scenario				
Years 1 to 5 Annual Road Works Costs (US\$ million/year)				
Network	Routine Maintenance	Periodic Maintenance	Rehabilitation	Total
National	89	56	215	360

Source: DRVN

In the meantime, Table 3 shows the recent (2008-2011) road preservation and improvement expenditures.

Table 3: Recent National Road Network (NRN) Expenditure

NRN Preservation and Improvement Expenditures				
	2008	2009	2010	2011
GDP (US\$ million)	98,300	101,600	112,800	134,600
Exchange Rate (VND to US\$)	16,445	17,799	19,125	20,657
NRN Routine Maintenance (US\$ million)	32	34	34	37
NRN Periodic Maintenance (US\$ million)	85	116	102	83
NRN Rehabilitation/Improvements (US\$ million)	341	285	275	258
Total (US\$ million)	458	435	411	378
Total (VND billion)	7,462	7,424	7,655	7,730
Preservation Expenditures per GDP	0.5%	0.4%	0.4%	0.3%

Source: DRVN

This comparison shows that the recent annual average national roads preservation spending is about US\$378 – 458 million, while the road preservation needs to keep the current condition is about US\$360 million.

7. The rationale for Bank involvement in the proposed VRAMP stems from the under-developed nature of Vietnam’s institutional and financial approach to managing road assets. The proposed project will seek to improve road network data collection, management, and the use of this data to determine strategic priorities for improvement and maintenance of selected sections of the road network. The project will include a second series of Performance-Based Contracts (PBC) to build on the experience of use of PBCs under the recently completed Road Network Improvement Project (RNIP)¹ and strengthen use of an output-based approach for road asset maintenance. Vietnam’s current approach to road asset management is limited as it is based on the application of maintenance norms rather than determining the needs of each road based on observed traffic condition data. The current approach is sub-optimal in that there is a risk that funding is not being applied in a way that optimizes the condition of the whole network and the generation of benefits is not optimal for the funds applied. The involvement of the Bank will not only provide financing but also bring better global practices in project preparation, asset management practices, monitoring and evaluation, as well as fiduciary and safeguards arrangements, and it will contribute to increasing the implementing agency’s capacity to help increase the long-term sustainability for maintaining the national road network.

8. The Road Maintenance Fund (RMF) was established by the Decree signed by the Prime Minister on 13 March 2012². The establishment decree has been followed by a number of circulars which together begin to define the structure and detailed operation of the Road Fund³. The purpose of the RMF is to secure funds for (i) maintenance and management of national roads through the Department of Roads Viet Nam (DRVN) and for (ii) maintenance and management of sub-national roads under provincial responsibility through the People’s Councils. The Road Fund Office (RFO) develops and approves a financial expenditure plan and ensures that the funding provided is spent as planned. The RFO accounts for the expenditure under the fund and manages that expenditure. Collection of fees under the RMF began on 1st January 2013. The budget for road maintenance in 2012 was approximately Dong 2.5 to 3.0 trillion (about US\$118 – 141 million; including bridge and tolls on national highways) paid from the central state budget. In 2013, the equivalent budget will be approximately Dong 4 trillion from the RMF and an additional Dong 1.5 trillion from the central government budget for a total of Dong 5.5 trillion (about US\$260 million). The expansion of RMF funding offers the opportunity for the DRVN and the Provincial People’s Committees (PPCs) to make a significant impact on the current road condition in Vietnam, but only if they have an enhanced planning and management capability.

¹Road Network Improvement Project, Credit No. IDA-38430; Closed in March 31, 2012

² No. 18/2012/ND-CP: Decree on Road Maintenance Funds, Hanoi , March 13, 2012

³ No.: 197/2012/TT-BTC: Circular Guiding Regulation on Collection, Payment, Management and Use of Road User Charges by Unit of Vehicle; Hanoi, November 15, 2012;

No.230/2012/TTLT-BTC-BGTVT: Joint Circular, Guiding Regime of Management, Use, Payment and Settlement of Road Maintenance Fund; Hanoi, December 27, 2012

9. The comparison of the current road preservation demand of \$360 million (Table 2) and the current total available RMF funding in 2013 of \$260 million (para 8) shows that the RMF can cover approximately 70% of the total national road preservation needs. This needs to be enhanced to cover the required demand.

C. Higher Level Objectives to which the Project Contributes

10. The proposed VRAMP is consistent with the FY12 – FY16 Country Partnership Strategy (CPS) (Report No. 65200-VN), which seeks to enhance Vietnam’s competitiveness in the regional and global economy, increase development sustainability, and broaden access to economic and social opportunity. Specifically, the project contributes to: (i) enhancing competitiveness, by promoting a sustainable approach to road asset management, the advancement of a performance-based maintenance approach that incorporates private sector contractors, improving road safety through sustained road maintenance, as well as by reducing travel times, variability of travel times, and vehicle operating costs through road asset improvements and preservation; (ii) increasing fiscal sustainability by strengthening the strategic planning of the road maintenance fund; and (iii) expanding opportunity, by improving infrastructure quality in under-served areas and by building institutional capacity to promote and manage private participation in road asset management.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

11. The proposed Project Development Objective (PDO) is to improve the efficiency and sustainability of the road asset management and maintenance practices performed by the Ministry of Transport on national roads in Vietnam.

B. Project Beneficiaries

12. The proposed VRAMP will target key sectoral needs by focusing on (i) the development of a Road Asset Management System (RAMS) to develop prioritized annual work planning based on an analysis of condition data for the road network; (ii) the advancement of the reform agenda with increased usage of PBC; and (iii) facilitation of fiscally sustainable road asset management financing through provision of capacity development technical assistance to the newly formed RMF. It is anticipated that successful implementation of the VRAMP will lead to a more effective road preservation strategy, a more optimal road asset management, and the efficient programming of road network operations.

13. Direct project beneficiaries include the road users of about 400 km of the road network that will be improved and maintained under the project. Improvement and preventive maintenance of these sections will result in reduced vehicle operating costs, a reduction of travel time, and a reduction in road accidents due to improved road safety features. Indirect project beneficiaries include consumers and producers of freight hauled on the project’s road sections due to more reliable delivery times and reduced operation costs.

14. The project will strengthen the environment for the use of PBC. This project will provide a critical opportunity to enhance PBC implementation by building on lessons learned from the initial pilots under RNIP. The long-term implications of a successful maintenance strategy and a

focus on preventive road maintenance will include (i) improved cost savings and cost effectiveness; (ii) enhanced asset performance; (iii) strengthened decision making capability to adequately meet improvement or expansion demands; (iv) enhanced safety features; and (v) improved road user satisfaction.

15. Additional institutional strengthening initiatives will result in improved road design, and enhanced coordination amongst relevant agencies and stakeholders to facilitate a more comprehensive approach to an efficient operation of the road transport network in Vietnam.

16. *Project impact on the extreme poverty and shared prosperity.* The project will improve critical links in the national highway network and increase efficiency of public expenditure on road asset management through targeting of funding to sections of the highway network that are most in need. An improved transport network provides the means to reduce constraints on the flow of goods and people. It improves the connection of communities to markets and thereby reduces transaction costs. There is broad international experience that improvements to the transport network will support economic growth. In Vietnam, over more than two decades, growth has consistently driven both rising incomes for the bottom 40% and a decline in extreme poverty. Improvement to the road network will support spatial economic and social integration, spur and spread economic diversification in inland provinces, and address long-distance passenger mobility needs. In Vietnam extreme poverty is overwhelmingly in the Northern Mountains and, to a lesser extent, the Central Highlands. Although the project includes links on the national road network that lead to the Northern Mountains the impact of the project on extreme poverty will be indirect, through improvements of linkages from the Northern Mountains to the main areas of economic activity. However, by supporting economic growth the project will reduce poverty for the bottom 40%.

C. PDO Level Results Indicators

17. The achievement of the PDO will be measured by the following outcome indicators:
- (a) Annual and mid-term (3 years) plans for priority and implementation of national road network maintenance and long-term (10 years) maintenance strategy generated by RAMS;
 - (b) Improved financing of road maintenance measured by the increased share of maintenance financing covered by the Road Maintenance Fund(%); and
 - (c) Expansion of PBC programs in national road maintenance (km);

III. PROJECT DESCRIPTION

A. Project Components

18. **Component A: Road Asset Management System (RAMS) Development** (US\$10 million, with US\$8.3 million equivalent IDA financing and AU\$1.7 million equivalent co-financing grant). This component will finance the development and implementation of a comprehensive Road Asset Management System (RAMS). This activity will build on previous initiatives and complement ongoing activities in the sector funded by the Asian Development Bank (ADB), and the Japan International Cooperation Agency (JICA). This component will consist of the following two activities: (1) Establishment of the road database framework, design

and implementation of the Road Asset Management System, and development of Road Asset Management Plans; (2) Data collection to update and complement the road data for the whole network of national highways.

19. **Component B: Road Asset Preservation** (US\$156.6 million, with US\$156.6 million equivalent IDA financing). In addition to funding traditional road asset maintenance works this component will also support PBCs to demonstrate more efficient maintenance of selected highways. It will finance technical assistance on establishing (1) PBC legal framework, develop standard bidding documents taking into account previous experience of PBC contracts, and the development of a supervision manual (for both engineering and environmental supervision) and training; (2) PBC scale up for preservation of high priority sections of the national road network (170 km); (3) periodic maintenance through traditional input-based method (161 km); (4) a comparison study of effectiveness of maintenance methods; and (5) supervision of the maintenance and improvement works contracts for Component B&C and undertaking of environmental and social monitoring for Component B. In addition, it will also finance the purchase of vehicles, goods (office and data collection equipment) for project implementation and management.

20. **Component C: Road Asset Improvement** (US\$133.4 million, with US\$83.4 million equivalent IDA financing and US\$50.0 million GOV financing). This component will finance (1) improvement of road assets for high priority road sections (55.5 km) of the national road network (including widening of nine bridges over 25 m, which are currently causing bottlenecks on the network) and other related activities, and the costs for land acquisition, resettlement are financed by GOV; (2) supervision of improvement works and undertaking of environmental and social monitoring; and (3) undertaking technical, internal and financial audits.

21. **Component D: Institutional Strengthening** (US\$1.7 million, with US\$1.7 million equivalent IDA financing). This component will support targeted activities to develop the capacity of Vietnam's road agencies to undertake better planning, budgeting, constructing, and monitoring of road assets. Specific activities will include: (i) improvements in human resource management within the Directorate for Roads of Vietnam's (DRVN) with respect to the planning, budgeting, management, and operation of the new information management system; (ii) improvements in management, transparency, and monitoring of the recently established RMF; and (iii) development of standard drawings for infrastructure facilities to increase consistency and quality control of pre-fabricated parts, and to expedite design and construction processes.

B. Project Financing

22. **Lending Instrument.** The project will be financed by an Investment Project Financing (IPF) in the form of an IDA Credit on blend terms for US\$250 million equivalent. The proposed terms of the Credit are: 25 years maturity including a grace period of 5 years.

23. **Project Cost and Financing.** Table 4 indicates the proposed project cost with financing sources. The AUD1.7 million Grant from AusAID has been confirmed to be a Recipient Executed Trust Fund (RETF) which will be managed by MOT/PMU3. This RETF will be closed on June 30, 2016, so the activities subject to be financed from the Grant will have to be done by

June 30, 2016, and all the disbursement will have to be completed by December 31, 2016, although the IDA financing can remain until its closing date (December 31, 2020)

Table 4: Project Cost and Financing

No	Project Components		Total Cost (US \$ mil)*	IDA		Counterpart funds		Co-financing	
				%	US \$ mil	%	US \$ mil	%	*AU\$ mil
1	A	Road Asset Management System Development	8.3 and AUD1.7	83.0	8.3	0.0	0.0	17.0	1.7
2	B	Road Asset Preservation	156.6	100.0	156.6	0.0	0.0	0.0	0.0
3	C	Road Asset Improvement	133.4	62.5	83.4	37.5	50.0	0.0	0.0
4	D	Institutional Strengthening Program	1.7	100.0	1.7	0.0	0.0	0.0	0.0
		Total	300.0 and AUD1.7 mil		250.0		50.0		1.7

*AusAID Co-financing grant is in Australian Dollar amount, which is equivalent to USD 1,584,904.25 as of October 31, 2013.

C. Lessons Learned and Reflected in the Project Design

24. **Close monitoring in resettlement activities.** The experience from RNIP indicates that the delayed resolution of resettlement issues could result in a significant negative impact on project implementation. The preparation and implementation of Resettlement Action Plans (RAP) must be strictly monitored. In order to mitigate these risks, MOT will (i) provide the technical design, social assessment (SA), compensation, allowance and resettlement policies proposed to the project, Resettlement Action Plans (RAPs) at the early stage; (ii) strictly monitor the implementation of safeguard instruments with appropriate institutional arrangements; (iii) ensure the sufficient allocation of counterpart fund required for resettlement related activities; and (iv) hire project advisors and independent monitoring consultation supporting and overseeing key project resettlement activities to ensure timely implementation. Monthly review meetings within MOT/PMU3 on the implementation issues will be maintained during project implementation to monitor and resolve any delays.

25. **Capacity enhancement for Performance-Based Contracts (PBCs).** PBC for road improvement and maintenance is still a new contracting instrument in Vietnam. Its implementation is dependent on overall public sector management capacity, including that of executing agencies that will need to acquire the necessary skills and knowledge for transition from the traditional input-based monitoring to the output-based monitoring. In particular, capacity will be reinforced in: (i) forecasting the likelihood of payment requirements flows under works contracts, (ii) increasing timeliness and enhancing quality of final engineering designs, and (iii) decreasing occurrences of change orders.

26. **Improved bidding documents for PBC.** Experience from other countries shows that initial contracts often suffer from a series of flaws in design of the contract and related processes. These flaws will be avoided in this project by thoroughly structuring the technical specifications and principles of PBC during the preparation of bidding documents. Contracts need to be sufficiently flexible to allow for changes found necessary during implementation.

27. **Enhanced screening of contractor's capacity.** There may be instances of a very few contractors submitting bids. The private sector, while emerging in Vietnam, is not yet fully capable of handling multiple contracts. Also the risk of less incentives caused by relatively small PBC maintenance contracts amount in the separated input-based rehabilitation and performance-based maintenance needs to be recognized. This could lead to a lack of competition and potential for delay in implementation when a limited number of contractors win multiple contracts in the same period. To mitigate these risks the project includes measure to (i) screen contractors' capacity to ensure adequate past performance and financial capability, (ii) realistic contract packaging that reflects the market reality, and (iii) provide wider training for PBC technical aspects for construction industry.

28. **Proactive Implementation Arrangements.** For timely implementation, detailed engineering design will be prepared on time. The detailed design works for the first year civil works will be completed by the time of project effectiveness. Resettlement and land acquisition could be one of the biggest hurdles during project implementation. Thus, careful preparation of the RAPs, flexibility in arranging counterpart fund resources and implementation arrangements to support land acquisition and resettlement are critical. The implementation responsibility for the RAPs should be given to the provincial/local governments for efficiency.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

29. The Ministry of Transport (MOT) will have the overall responsibility of overseeing the implementation of the project, reporting to the GOV, coordinating the activities of central and provincial government agencies and fulfilling IDA requirements. MOT will also approve the overall feasibility/construction investment report and the overall procurement plan; provide policy/strategic guidance and instruction to the Directorate for Roads of Vietnam (DRVN) and PMU3. The DRVN is MOT's authorized executing agency and owner of the project, and will have the overall responsibility for approving survey methodologies and plans, detailed engineering designs and cost estimates, bidding documents and requests for proposals, bid and proposal evaluation reports, bidding results and signing contracts in accordance with procurement requirements, as well as monitoring the quality of works and reviewing periodic reports such as the audits. DRVN fully owns and is responsible for implementation of Component A and D in close collaboration with RMF Office.

30. DRVN has assigned Project Management Unit No. 3 (PMU3) to be responsible for the project implementation. PMU3 will act as the fiduciary agent on behalf of DRVN/RMFO in procurement and FM for these components. PMU3 will be in charge of the procurement of goods, works and services related to all project components and supervision including contracting and payments. PMU3 will also be responsible for coordination, quality assurance, training, monitoring and evaluation, day-to-day supervision of project activities. Many staff in PMU3 is familiar with the Bank requirements as they have been transferred from PMU2 which managed RNIP.

31. Provincial People's Committee (PPCs) will be responsible for overall implementation of the resettlement and compensation of their related project road sections within their administrative jurisdiction.

B. Results Monitoring and Evaluation

32. The main outcome indicators for the project, as well as the intermediate indicators for each component, are provided in Annex 1. DRVN, through the support of PMU3, will provide regular reports on the technical, social and economic indicators defined in the results framework and assess project progress and effectiveness. PMU3 will be responsible for regular collection of data required for monitoring and evaluation of outcomes and results.

33. The baseline data and target values have been agreed and will be included as part of the project's monitoring reports. DRVN through the support of PMU3 will be responsible for regular collection of data required to monitor and evaluate outcomes and results. Regular progress reports will include physical and financial progress, as well as information for compliance of safeguards and developments of the institutional strengthening component. The monitoring and evaluation system will be tested, augmented, and revised as necessary. Annual independent audits of the special accounts will be conducted and an Implementation Completion and Results Report (ICR) will be prepared within six months of the closing date of the IDA Credit.

C. Sustainability

34. The Borrower has a strong commitment to the development of RAMS and has established a new department level Road Asset Management Unit in DRVN with eight dedicated staff, and is proactively preparing the system design. The new unit will ensure effective management of the RAMS including the development and use of the road asset management software, development of analysis options and requirements to serve the needs of the user departments including, planning and investment department, maintenance and infrastructure department, road safety department and finance department.

35. Vietnam has established a Road Maintenance Fund (RMF) by Decree No. 18/2012 in March 2012, and enacted on June 1, 2012. Going forward, funds from the RMF, together with funds from the state budget, are expected to mobilize sufficient financial resources to meet the needs of the road network in terms of routine and periodic maintenance, emergency and other repairs to ensure safe operation of the road network. The establishment of the RMF also provides Vietnam with the opportunity to implement a market mechanism by which the service users pays for a better service. The preparation of rational road maintenance plans with RAMS, which will contribute to the effective use of the RMF, will establish a more sustainable road maintenance practice for both national and provincial road networks.

36. With a number of lessons learned from the RNIP pilot PBC road maintenance contracts, the scale up of PBC maintenance contracts in the project will enhance the sustainable PBC utilization in road maintenance practices. DRVN has expanded the PBCs (some of which are managed by PMU3) in all 4 Regional Road Management Unites (RRMUs) and aiming to have 30% of FY 2014's budget to be PBCs. DRVN is planning to further expand the PBC maintenance contracts to other national road network toward 2015, and the legal framework and standard bidding documentation and supervision manual and training in the early part of the project will provide a timely contribution to the sustainable roll out of updated PBC maintenance practices in the country.

V. KEY RISKS AND MITIGATION MEASURES

A. Risk Rating Summary Table

37. The primary project risks and mitigation measures are presented in the Operational Risk Assessment Framework (ORAF) in Annex 4. The overall risk is rated as “substantial”. Table 5 summarizes the risks described in Annex 4.

Table 5: Risk Rating Summary

Risk Category	Rating
Stakeholder Risk	Low
Implementing Agency Risk	
- Capacity	Substantial
- Governance	Substantial
Project Risk	
- Design	Substantial
- Social and Environment	Moderate
- Program and Donor	Low
- Delivery Monitoring and Sustainability	Substantial
Overall Implementation Risk	Substantial

B. Overall Risk Rating Explanation

38. Three primary risks pose a significant challenge to the long-term success of this project: (i) sustainable operation of the RAMS; (ii) overloading control, particularly for PBC sections; and (iii) growth and long-term sustainability of RMF.

39. **Sustainable Operation of the Road Asset Management System.** Significant effort to establish the RAMS will be required in DRVN. While the agency is committed to introducing RAMS, and the adoption of a scientific approach to prioritization of road maintenance work planning, the long-term sustainability of the system remains in risk. Traditionally, politically motivated decision making plays a major role in allocation of financing to road improvement works. The efficient operation of the system driven by quantitative and qualitative analysis and planning to support a long-term paradigm shift will be of paramount importance in the overall success of the project.

40. **Overloading Control.** There is a significant risk associated with the controlling vehicle overloading during preservation works or after the completion of improvement works. Regulatory mechanisms, such as review of vehicle load allowances, signage clearly indicating load limits, as well as enforcement of weight restrictions through a system with minimal potential for corruption must be implemented to ensure safety and a reasonable life-cycle costs of the road assets. This is particularly important for the PBC contracts, where the contractual payment is directly linked to the road conditions regardless of the input works.

41. **Growth and Long-term Sustainability of the Road Maintenance Fund.** Failure to sustain the RMF would result in a severe funding deficit and a decline in the level of service. This risk will be mitigated throughout institutional strengthening initiatives in the project. The importance of expanding the current plan for revenue collection and transparent reporting of funding flow will be highlighted to demonstrate the need for greater fiscal resources and the ability of the public to accept a larger buy-in for an improved road network. Public marketing of the RMF will be designed to show the qualitative and quantitative advantages of increased financing for preservation activities.

42. The Governance, Transparency and Anti-Corruption Plans (GTAP) for World Bank supported transport projects in Vietnam have evolved significantly over the past years with lessons learned from the past experiences. In particular, the previous focus on procurement process related activities and strengthening of process design and control has been shifted to address the risks associated with financial management and project implementation more directly. The GTAP for this project has been prepared following the discussions with the MOT, DRVN, PMU3 and other donors, and presented in Annex 6.

VI. APPRAISAL SUMMARY

A. Economic and Financial Analyses

43. The economic analysis covers the civil works of the PBC scale up, periodic maintenance, and road asset improvement programs. Costs for this work are estimated as US\$247 million, which represent 74 percent of the project costs. The economic evaluation was undertaken using the Highway Development and Management Model (HDM-4) with project benefits evaluated in terms of reduction of road user costs and maintenance costs to be derived from the project. The evaluation adopted a discount rate of 12 percent, a 20 year evaluation period, and an annual traffic growth rate of 7.0 percent per year from 2014-2023 and 5.0 percent per year thereafter for four wheeled vehicles.

44. The economic analysis yields a project Economic Rate of Return (ERR) of 20 percent and a Net Present Value (NPV) of US\$127 million. All road sections have an ERR higher than the 12 percent threshold. The sensitivity analysis shows that: (i) construction cost increase of 15 percent reduces the project ERR to 18 percent; (ii) benefits decrease of 15 percent reduces the project ERR to 18 percent; and (iii) construction cost increase of 15 percent plus benefits decrease of 15 percent reduces the project ERR to 16 percent, which shows that the economic justification of the project is robust. Table 6 below summarizes the economic evaluation results.

Table 6: Economic Evaluation Summary

Program	Road Section	Base NPV (US\$ million)	Base ERR (%)
PBC scale up	NH2 Ham Yen - Ha Giang	15	17%
	NH18 Noi Bai - Sao Do	25	24%
	Sub-Total	40	22%
Periodic Maintenance	NH 48 Nghe An	7	20%
	NH 6 Hoa Binh – Moc Chau	51	21%
	Sub-Total	58	20%
Road Asset Improvement	NH39-1 Trieu Duong - Hung Ha	9	17%
	NH38 Quan Goi - Yen Lenh v	14	21%
	NH39 Vo Hoi - Diem Dien	6	17%
	Sub-Total	29	19%
Total		127	20%

B. Technical

45. Component A: RAMS implementation will allow DRVN to prepare plans for improvements, periodic maintenance and routine maintenance of the whole national highway network. This capacity does not currently exist, and priority roads for maintenance are qualitatively selected without a scientific approach. Development of RAMS will be built on the basis of work now being financed by other donors or other projects. These activities include the ongoing Bridge Management System and Pavement Management Systems development, supported by JICA, and the Vietnam Provincial Road Maintenance Management System (VPRoMMs), supported by the Bank. The development of RAMS will be undertaken in close partnership with other donors working in the road sector.⁴ The system development will consist of (i) setting up of the road database framework, (ii) data collection, (iii) implementation of RAMS, and (iv) the development of a rolling Road Asset Management Plan to generate annual and strategic road maintenance plans.

46. Component B: Road Asset Preservation includes a scale up of PBC maintenance. From the lessons learned from RNIP pilot PBCs, DRVN has established key principles for utilizing PBC contracts under the current contractual environment in Vietnam. The model PBC in Vietnam can typically include both periodic maintenance and routine maintenance, i.e. combined PBC model. However, the periodic maintenance will still be paid in accordance with the measured work against a priced standard bill of quantities, while the routine maintenance will be paid according to performance criteria. Given the value of the periodic maintenance work, the government considers that paying periodic maintenance against measured quantities of work is more accurate and that efforts spent in monitoring quantities are worthwhile due to the amount of money involved in these relatively large contracts. The PBC contracts under the project will have contract duration of 5 years to ensure the benefit of PBC maintenance in longer-term contract. The proposed closing date of the Credit (December 31, 2020) reflects this contract duration after allowing for a reasonable time to procure these contracts.

47. The presence of overloaded vehicles will be detrimental to sustainable road maintenance. This will be particularly significant in PBC contracts, as the contractors will maintain the road to performance indicators, such as the surface condition, and must meet the performance target

⁴Principally the Asian Development Bank, the Australian Government (through AusAID), and the Japan International Cooperation Agency.

regardless of the amount of traffic. Thus controlling overloaded vehicles will be a critical factor if the PBC roll out is to be successful. To do so, DRVN will need to establish prioritized overloading control on PBC roads by utilizing mobile weigh stations and ensuring that specific enforcement measures are in place.

C. Financial Management

48. Bank assessment has concluded that the Project meets the minimum Bank financial management requirements, as stipulated in OP/BP 10.00 and that the IAs would maintain adequate financial management arrangements acceptable to the Bank and, as part of the overall implementation arrangements, provide reasonable assurance that the proceeds of the IDA credit and co-financing grant will be used for the purposes for which these will be provided. The following main action was required and completed prior to *Negotiation*: The establishment of the internal audit functions in accordance with the Terms of Reference (TOR) that was already being accepted by the Bank. Further details are available in Annex 3.

D. Procurement

49. PMU3 under the oversight of DRVN/MOT is designated as the implementing agency for this project, for which the procurement capacity assessment was carried out by the Bank in September 2012 and June 2013. The capacity assessment identified several risks that could arise during project implementation. Although PMU3 with its core team had experience in implementing Bank-funded projects in the past, such as Rural Transport, Second Rural Transport and RNIP, the procurement capacity needs to be further strengthened. The main risks relate to PMU3's limited knowledge and experience in applying the newest version of the Bank's Procurement/Consultant Guidelines - January 2011, and insufficient competence to effectively handling both procurement and management of large PBC and other ICB slice-and-packages in a high-risk procurement environment. The risks can be mitigated by undertaking a comprehensive set of measures that would include but not limited to incorporating procurement support and contract management into relevant technical assistances for project management consultancy, as well as through targeted procurement training, on regular and ad-hoc basis, for enhancing the required knowledge of PMU3 staff and those of relevant approving authorities.

50. A summary of the procurement capacity assessment and the general arrangements for project procurement, the proposed mitigation measures and Bank review procedures are provided in Annex 3, sub-section on Procurement. The complete procurement capacity assessment is available in the project files. The tentative Procurement Plan for the project, including activities that are subject to early procurement has been discussed with the Bank and will be subject to regular updates as needed by PMU3 to adequately reflect the project implementation needs and institutional capacity.

E. Social (including Safeguards)

51. **Social Assessment.** A social assessment has been conducted to identify the potential social impacts and the socio-economic characteristics of people in the project area. The Project is expected to have positive social impacts by improving transport environment through upgrading and rehabilitating existing road networks; promoting economic access and social opportunity. The local population will directly benefit from project's activities with travel time reduction and

road safety promotion. In general, the assessment report indicated a positive supports of stakeholders regarding the project's activities.

52. Among social safeguard policies of the World Bank, only OP 4.12 on Involuntary Resettlement is triggered as Component C (Road Asset Improvement) requires land acquisition. Subsequently, PMU3 under MOT is preparing Resettlement Plans (RP) of four sub-projects, including: (i) 4 bridges along NH38B; (ii) NH39-1 Trieu Duong - Hung Ha, from km42.714 to km64; (iii) NH38 Quan Goi - Yen Lenh Bridge, from km 33+130 to km52 + 827; and (iv) NH39 Vo Hoi - Diem Dien, from km91 to km107 + 522. The RPs for the three roads have already been prepared under the previous Road Network Improvement Project (RNIP). These three RPs have been updated based on detailed impact survey, updated compensation policies, lessons learned from recent experiences including RNIP, and recommendations of the Bank review missions. Based on current RPs, 1947 HHs are affected by the project, among which 827 HHs will lose residential land, 524 HHs lose more than 10 percent productive land, and 29 HHs completely lose housing. During the resettlement planning and implementation, extensive consultation with participants from the affected villagers and others will be continuously conducted. All the resettlement cost will be financed from the counterpart funds. The implementation of the prepared instruments will be externally monitored by an independent agency.

53. PMU3 prepared compensation, assistance and resettlement policies proposed for the project. This document, spelling out principles of OP 4.12, updated national laws/regulations and proposed policies and entitlement applied to this project. Its key contents are consistently presented in four above described RPs. The document will be approved by the Prime Minister of Government of Vietnam, ensuring a proper application of OP 4.12 on Involuntary Resettlement of the World Bank.

54. The RPs were disclosed locally in Vietnamese at the project sites (on July 3, 2013) and at the Vietnam Development Information Center on July 17, 2013, and in English at Infoshop (on July 19, 2013) in Washington, DC. Once these instruments are approved by the Prime Minister and MOT, they shall be endorsed and followed by local authorities.

55. The project is expected to have no impact on Indigenous People, thus the World Bank's OP 4.10 is not triggered.

56. **Gender Mainstreaming.** A wide range of gender-responsive analysis and consultation has been conducted during project preparation. In the Social Impact Assessment, a gender disaggregated analysis was used to inform intervention for households in the project areas, particularly single female-headed households. The consultation on economic restoration for affected women has been consulted with community (including women) and women's union. Gender issues in resettlement process also constituted a key agenda in the consultative meeting with affected community. In this project, gender responsive actions (e.g. training, economic restoration, land acquisition, relocation) will be implemented in combination with resettlement activities with a priority given to poor female-headed households, and it will be monitored by a performance indicator. During the implementation, affected women will be encouraged to participate in consultation workshop organized with local communities. The percentage of affected households having woman participated in consultation activities is expected to reach 50% (in the first year of implementation) and 80% (by completion of resettlement activities) of total affected households. Signatures of both husband and wife are required in receipt of compensation/assistance payments. PMU3 will develop an appropriate gender related M&E

system to ensure a proper implementation, tracking, and reporting of the set forth activities in the Resettlement Plans. Gender mainstreaming will be one of the monitoring indicators covered by the Independent Monitoring Consultant.

F. Environment (including Safeguards)

57. The project triggers the environmental safeguard policies on Environmental Assessment and (OP/BP 4.01) and Natural Habitats (OP/BP 4.04), and has been assessed as a Category B project. PMU3 has prepared three sub-project Environmental Impact Assessment (EIAs), nine Environmental Protection Commitments (EPCs), and 12 Environmental Management Plans (EMPs) in accordance with the government environmental management regulations and the Bank safeguards policies. These safeguards instruments have been reviewed by the Bank and found to be satisfactory.

58. The project roads will be mostly located alongside the existing alignments, and the expansion of the right-of-way. The EIAs and EPCs concluded that the project will have mostly positive but some adverse environmental impacts. On the positive side, the project will bring major benefit in reduction of travel time, improvement of road safety, reduced vehicle operating costs, and more reliable delivery times. The adverse environmental impacts are expected to result from the construction activities and may potentially include: noise, dust, vibration, fumes from asphaltting and transportation of materials; disruption to traffic, access to roadside activities; damage to local roads and localized flooding; interruption of local household businesses and utility services; potential contamination of soil and water from disposal of waste materials and fueling equipment; worker safety; and illegal hunting and cutting trees, forest fire risk, and encroachment on the natural reserve. Direct impacts from operation potentially mainly include: increased noise and vibration disturbance, air pollution from vehicle exhaust, and increased accidents. However, these environment impacts are likely to be short term, site-specific, non-sensitive or irreversible, and in every case, mitigation measures can be designed to reduce the negative impacts. No physical cultural resources are impacted by the project.

59. Appropriate mitigation measures and environmental monitoring programs have been developed and are presented in the EMPs. EMPs will be implemented through PBC and traditional road maintenance contracts for Component B and construction contracts for Component C, supervised by PMU3 and the construction supervision consultants, and supported by capacity building for PMU3, supervision consultants, and contactors.

60. During the preparation of environmental safeguards documents, meaningful consultations with related stakeholders on the specific EIAs, EPCs, and EMPs have been conducted. Feedbacks from the consultations have been documented and taken into account in the final documents and the subproject design.

61. Prior to appraisal the EIAs, EPCs, and EMPs were disclosed locally in Vietnamese at the project sites (on July 3, 2013) and at the Vietnam Development Information Center (on July 17, 2013), and in English at Infoshop in Washington, DC (on July 19, 2013).

Annex 1: Results Framework and Monitoring

Vietnam Road Asset Management Project

Project Development Objective (PDO): The proposed Project Development Objective (PDO) is to improve the efficiency and sustainability of the national road asset management and maintenance practices performed by the road agency on national roads in Vietnam.													
PDO Level Outcome Indicators	Core	Unit of Measure	Baseline	Cumulative Target Values						Frequency and Reports	Data Source/ Methodology	Responsibility for Data Collection	
				2014	2015	2016	2017	2018	2019				End Target
Indicator One: Annual and mid-term (3 years) plans for priority and implementation of national road network maintenance and long-term (10 years) maintenance strategy generated by RAMS		Yes/No	Systems - PMS under establishment and to be completed by February 2014 - BMS under establishment and to be completed by October 2013 Data collection: completed for - Road surface conditions for about 2300km road under RRMU No.2 /17,748km highway - Inventory of about 4700 bridges on the whole national road network	---	---	RAMS commissioned	---	Prioritized Annual National Road Maintenance Plan (ANRMP), med- term and long-term strategic maintenance plan generated.	2 rd ANRMP generated.	3 rd ANRMP generated.	Y3&Y5	Progress Report	DRVN/ PMU3
Indicator Two: Improved financing of road maintenance measured by the increased maintenance financing covered by the RMF.		%	70%* Base year demand: US\$360mil. Base year RMF amount: US\$260 mil. (PAD Section B)	70%*	75%*	80%*	85%*	90%* (this target revisited when RAMS data is available)	95%*	100%*	Annual	Annual Report	DRVN/ PMU3
Indicator Three: Expansion of PBC Program in national road maintenance		Km	0	100	200	400	700	1,000	1,400	1,700	Annual	Annual Report	DRVN/ PMU3

*Based on the baseline-year demand

INTERMEDIATE RESULTS													
Results Indicators for Each Component	Core	Unit of Measure	Baseline	Cumulative Target Values						Frequency and Reports	Data Source/ Methodology	Responsibility for Data Collection	
				2014	2015	2016	2017	2018	2019				End Target
Intermediate Result (Component One): Asset Management System Development													
<i>Indicator One:</i> Annual condition measurement for national road network		km	0	0	8,000	17,748	17,748	17,748	17,748	17,748	Annual	Road Condition Survey	DRVN/ PMU3
Intermediate Result (Component Two): Road Asset Preservation													
<i>Indicator One:</i> PBC maintenance implemented under the project		km	0	0	50	170	170	170	170	170	Annual	EOP Survey	DRVN/ PMU3
<i>Indicator Two:</i> km of roads maintained under the project with traditional input method		km	0	0	0	80	120	161	161	161	Annual	EOP Survey	DRVN/ PMU3
Intermediate Result (Component Three): Road Asset Improvement													
<i>Indicator One:</i>		km	0	0	0	0	30	40	56	56	Annual	EOP Survey	DRVN/

INTERMEDIATE RESULTS													
Results Indicators for Each Component	Core	Unit of Measure	Baseline	Cumulative Target Values							Frequency and Reports	Data Source/ Methodology	Responsibility for Data Collection
				2014	2015	2016	2017	2018	2019	End Target			
km of roads improved under the project													PMU3
Intermediate Result (Component Four): Institutional Strengthening Program													
<i>Indicator One:</i> Annual Audit of Road Maintenance Fund published and available for civil society		Yes/No	No	---	Audit Report Published	Audit Report Published	Audit Report Published	Audit Report Published	Audit Report Published	Audit Report Published	Annual	Annual Report	DRVN/PMU3/RMF
Intermediate Result: IDA Core Indicator, Gender Mainstreaming, Poverty Reduction and Shared Prosperity													
Roads in good and fair condition increase as a share of total road network due to the project (National Road: percentage)	<input type="checkbox"/>	%	70	70	70	71	72	72	72	72	Annual	EOP Survey	DRVN / PMU3/ Consultant
Percentage of affected households having woman attended consultation activities on compensation/resettlement.**		%	N/A	50	60	70	80	0	0	0	Annual	RAP Monitoring Report/Annual Report	DRVN/ PMU3/ Consultant
Intermediate Result: Monitoring and Evaluation													
Semi-annual Project Monitoring and Evaluation Report will be submitted to the Bank.		No.	0	2	4	6	8	10	12	14	Semi-annual	Semi-annual Monitoring	DRVN / PMU3/ Consultant

Annex 2: Detailed Project Description

1. **Component A. Road Asset Management System Development** (US\$10 million, with US\$8.3 million equivalent IDA financing and AU\$1.7 million equivalent co-financing grant). This component will finance the development and implementation of comprehensive Road Asset Management System (RAMS). The road database has not been updated since 2007 and DRVN has no comprehensive planning tool for periodic road maintenance or improvement for its 17,000 km long national road network. Proposals for periodic maintenance, improvement or new construction are not based on proper technical justifications. This activity will complement and augment previous and ongoing support activities in the sector from the multiple development partners including AusAID, the Asian Development Bank, and the Japan International Cooperation Agency. Specifically, this component will consist of four activities: (i) establishment of the road database framework; (ii) initial data collection for the entire national highway network followed by a rolling update of one-third of the network in each subsequent year of the project; (iii) development and implementation of a Road Asset Management System compatible with the already established sub-systems; and (iv) inception of short-, medium-, and long-term road asset management planning for national road network maintenance and improvements. Specifically:

- Activity A1: Establishment of the road database framework, design and implementation of the Road Asset Management System, and development of Road Asset Management Plans (US\$1.1 million): The task will (i) establish a user-friendly database framework with a reduced number of required inputs that can effectively maintain the reliability of the road asset management system, (ii) design the system to be compatible with ongoing PMS, BMS and provincial road asset management system. The software will be user-friendly taking the shape of toolkits with a user manual, and (iii) develop the Management Plans to cover maintenance and network improvements for short, medium and long term.
- Activity A2: Data collection (US\$8.7 million): The task will include (i) the update and complement of road data for the whole network of national highways during the initial years; the data to be collected include traffic data, pavement conditions data, geometrical characteristics data, right of way data, etc. and (ii) yearly rolling update of the road data during the remaining years of the project; the update will cover one third of the road network every year).

In addition, this Component will finance the Incremental Operating Cost of US\$0.2 million, including the costs of consumables, operation, maintenance, and/or rental of equipment and vehicles; communication costs; information and communication campaigns; transportation costs; and per diem for Project staff.

2. **Component B. Road Asset Preservation** (US\$156.6 million, with US\$156.6 million equivalent IDA financing). This component includes a comprehensive means to create an enabling environment for mainstreaming effective maintenance methods through PBCs. It will finance Technical Assistance on establishing the PBC legal framework based on the past project experience, formulating standard bidding documents and a supervision manual (both engineering and environmental supervision); maintenance and improvement activities of road sections of high priority in the DRVN road network through both traditional input-based method and PBCs; a study to compare alternative maintenance strategies and lead to practical policy advice on the

most effective, long-term preservation strategy for Vietnam. Specifically, this component includes the following activities:

- Activity B1: PBC legal framework, standard bidding documentation, supervision manual, and training (US\$1.4 million): This activity will finance: (i) update of the legal framework and review of moving maintenance responsibility from the PMUs and RRMUs; (ii) development of standard PBC bidding documentation (including sample contracts) with clear performance indicators linked with amounts of bonuses and penalties; (iii) training of contractors on how to prepare bidding proposals for PBCs, quality assurance methods, and work programming, which will occur before contract awarding; and (iv) provision of a manual for PBC supervision (engineering and environment).
- Activity B2: PBC scale-up(US\$82.6 million):This activity will finance maintenance of two roads totaling 170 km with PBC. These will be five-year performance based maintenance contracts involving routine maintenance and some necessary periodic maintenance. These roads are: (i) NH2 Ham Yen - Ha Giang, from km163 to km287, a length of 124 km, with a cost of US\$61.7million, and (ii) NH18 Bac Ninh - Sao Do, a length of 42.7 km, with a cost of US\$20.9 million. In addition, this activity will finance at least one control section that will be rehabilitated first to ensure an initial baseline condition similar to that of the PBC sections. This control section will then be maintained using the traditional input-based maintenance method currently used by DRVN for comparative purposes.
- Activity B3: Periodic maintenance (US\$59.4 million):This activity will finance periodic maintenance of two roads totaling 161 km with the traditional input-based contracts. These two roads are (i) NH48 Nghe An, from km0 to km20 and from km38 to km64, a total length of 46 km with a cost of US\$17.4 million, and (ii) NH6 Hoa Binh – Moc Chau, from km78+300 to km193, a length of 115 km with a cost of US\$42.0 million.
- Activity B4: Study and comparing the effectiveness of maintenance methods(US\$0.4 million): This activity is a study on alternative and more efficient techniques for maintenance. It will take benefit of the fact that some roads renovated under the project will be maintained with input-based contracts while some others will be maintained with PBCs. The study will compare methods, techniques and achievements of both ways of maintenance, and identify the most effective, long-term preservation strategy for Vietnam. It will also provide examples from other countries with maintenance techniques aimed at reducing maintenance costs and improve service quality.
- Activity B5: Supervision of civil work contracts under component B and C (US\$12.3 million) and Environmental and Social Monitoring for Component B (US\$0.2 million): The activity will finance all construction supervision activities for the project’s civil works. The supervision of PBCs will be performed under the supervision manual developed under activity B1.

In addition, this Component will also finance the purchase of vehicles, goods (office and data collection equipment) for project implementation and management.

3. Component C: Road Asset Improvement (US\$133.4 million, with US\$83.4 million equivalent IDA financing and US\$50.0 million GOV financing). This component will finance improvement work activities for road sections of high priority within DRVN road network. It

includes civil works, land acquisition, resettlement and supervision activities. This component includes the following activities:

- Activity C1: civil works (US\$82.2 million from IDA and US\$50.0 million from counterpart funds): The activity includes the widening of (i) 4 bridges along NH38B over 25m (these bridges have been left in their original status while the rest of NH38B has been widened under RNIP) with a cost of US\$16.0 million, (ii) NH39 (Trieu Duong - Hung Ha Section), from km44 to km64, a length of 20.6 km with a cost of US\$22.6 million, (iii) NH38 Quan Goi - Yen Lenh Bridge, from Km33+130 -Km52+827, a length of 20.6km with a cost of US\$29.4 million, and (iv) NH39 Vo Hoi - Diem Dien, from km91 to km107+519, a length of 13.21 km with a cost of US\$14.2 million. Land acquisition, resettlement and other related activities which costs US\$50.0 million is financed by counterpart funds, including land acquisition, resettlement and other fees for the following items:
 - Project Management Cost
 - Design appraisal, general cost estimate approval, completion of investment procedures, construction procedures and other required administration procedures,
 - Mine clearance costs,
 - Audit and financial accounting,
 - Quality control, inspection, taking over and liquidation of the project,
 - Contingency and other costs, etc.
- Activity C2 (US\$0.2 million): undertaking of environmental and social safeguards monitoring. The costs for Supervision of civil works contracts are combined under Activity B5.
- Activity C3: Audits (US\$ 1.0 million): This activity includes technical, internal and financial audits of the project implementation.

4. **Component D: Institutional Strengthening** (US\$1.7 million, with US\$1.7 million equivalent IDA financing). This component aims to improve Vietnam's road asset planning, budgeting and managing in a holistic approach including supporting institutional reform and capacity building of human capital; ensuring sustainable fiscal recourses by institutionalizing and strengthening the management of the Road Maintenance Fund; developing practical road asset management tools to facilitate planning and budgeting; and improving standard drawings of road facilities to establish streamlined upgrading, operations, and maintenance of the national road network. Specifically, this component includes:

- Activity D1: Renovation of Human Resource Management for DRVN (US\$0.4 million): This task will provide DRVN with technical assistance to: (i) support DRVN's institutional reform so that each newly established entity will have clearly defined responsibilities and accountabilities; as well as sensible performance indicators for more efficient functioning of all positions; (ii) implement an Information Management System (IMS) with user-friendly interface for internal data sharing between entities of DRVN, as well as a communication platform between DRVN, MOT and other ministries, E-Government for public services; and (iii) train and build capacity of DRVN staff of all entities including RRMUs on road asset planning, budgeting, management, and IMS operation.
- Activity D2: Implementation of Road Fund (US\$1.1 million): Road Maintenance Fund Decree was enacted starting from June 1st 2012. This task will include: (i) Development of

tools aimed at improving management skills of RMF management staff in the medium- and long-term, with fund allocation and performance evaluation; (ii) Building skills in report preparation and public consultation aimed at showing effectiveness of RMF performance; and (iii) Establishment of performance indicators for road sections maintained with money provided by the RMF.

- Activity D3: Development of standard drawings on infrastructure facilities (US\$0.2 million): Typical drawings of various road facilities such as culverts, slopes, ditches, etc. are outdated and no longer appropriate. There is no specific design for some other road facilities and designers invent new designs for projects on a regular basis, which results in facilities of low quality, higher costs at both design and implementation stages, and inconsistencies in maintenance and replacement procedures. The objectives of this activity are to: (i) increase consistence in road amenity and furniture design and construction; (ii) enable streamlining of construction with use of prefabricated road components that are easy to be replaced at maintenance stage and better quality control; (iii) facilitate faster and more efficient design and construction; (iv) contribute to better overall aesthetics; and (v) enhance cost savings at design and construction stages. The task will include: (i) review of the design of road facilities; (ii) improvement of standard drawings; (iii) development of standard models and calculations for design; (iv) promotion of soil engineering techniques and best construction management practices, (v) trial implementation of experimental prefabricated products if necessary; and (vi) appraisal and approval.

Annex 3: Implementation Arrangements

Project Institutional and Implementation Arrangements

1. The Ministry of Transport (MOT) will have the overall responsibility of overseeing the implementation of the project, reporting to the GOV, coordinating the activities of central and provincial government agencies and fulfilling IDA requirements. MOT will also approve the overall feasibility/construction investment reports and the overall procurement plan; provide policy/strategic guidance and instruction to DRVN and PMU3.
2. The Directorate for Roads of Viet Nam (DRVN) is MOT's authorized executing agency and owner of the project, and will have the overall responsibility for all the implementation matters. DRVN will directly lead the project through an assisting team including key staff namely: Planning and Investment Departments, Financial and Accounting Department, Road Maintenance Management Department, Traffic Safety and Infrastructure Department, International Relation, Environmental and Technology Department and Road Management Bureau. Each department shall assign experienced staff and leaders of each department attending in the supervision, comments, report and propose relevant issues to the Chairman of the DRVN. The Road Management Bureau will assign a Deputy Leader of the bureau and a vice director of a department under the bureau to be responsible for management of aspects relating progress and quality of the civil works implementation.
3. Component A provides technical assistance to the DRVN in increasing management and budgeting capacity for Vietnam road system in a scientific and effective manner. As assigned by DRVN, the Road Information Technology Center will chair for the development and management of the database system and acts as a counterpart of VRAMP. Therefore, Road Information Technology Center will establish a task team specializing on development and management of the database system.
4. DRVN has assigned Project Management Unit No. 3 (PMU3) to be responsible for the project implementation management. PMU3 will act as the fiduciary agent on behalf of DRVN/RMFO for procurement and FM aspects. PMU3 will be in charge of the procurement of goods, works and services related to all project components and supervision including contracting and payments. PMU3 will also be responsible for coordination, quality assurance, training, monitoring and evaluation, day-to-day supervision of project activities. PMU3 is familiar with the Bank requirements as the implementation agency for RNIP.
5. Provincial People's Committee (PPCs) will be responsible for overall implementation of the resettlement and compensation of their related project road sections within their administrative jurisdiction.
6. The organization chart for the project implementation, its monitoring and evaluation responsibilities are shown in Figure A3.1 at the end of this annex.

Financial Management, Disbursements and Procurement

Financial Management

7. **Financial Management Assessment.** An assessment of the financial management arrangements carried out during preparation concluded that the financial management arrangements for the project are satisfactory. A "*Substantial*" FM risk rating was assigned to

the project. The Financial Management Assessment identified the following key risks of the Program: (i) shortage of counterpart funds compared to the committed amounts for the Project and (ii) weakness in internal controls at the designated Implementing Agency. This will be mitigated by (i) written commitment from MOT to provide counterpart funds on a timely basis, (ii) FMPM was updated for the Project and (iii) the internal audit function being established and operational at PMU3/DRVN for VRAMP. Additionally, the required FM risk mitigation action, agreed as summarized in Table A3.1, has been completed.

Table A3.1: Agreed FM Risk Mitigation Actions

Required action	Timing
Appointing internal audit function for the Project, in accordance with the TOR that was accepted by the Bank	<i>Negotiation MOT, DRVN and PMU3</i>

8. **Implementation arrangement:** The project will be implemented by DRVN and PMU3. DRVN has assigned PMU3 for all procurement and civil works related to all project components, including supervision, as well as procurement and financial management responsibilities. PMU3 will be responsible for all financial management arrangements of the whole Project.

9. **Parallel co-financing mechanism for Component A:** Part 1 of the Project is to be parallel co-financed by a grant support from the AusAid’s Recipient Executed Trust Fund through a separate Grant Agreement. With respect to Part 1 of the Project, disbursement can be made from the Trust Fund or the Credit, whichever is available and where disbursement from the Trust Fund will be given priority as the Closing Date of the Trust Fund is on June 30, 2016. Eligible expenditure from Part I will be disbursed on an invoice-by-invoice basis, to avoid double claiming of the same expenditure from both financing sources.

10. **Budgeting and planning:** The annual disbursement plan prepared by PMU3 will be reviewed and verified by DRVN before being approved by MOT. Budgeting variances will be calculated and analyzed in the periodical management reports (and progress reports) prepared by the PMU3 and reviewed by the management of DRVN and MOT.

11. **Accounting system and Financial reporting:** The current accounting system used in PMU3 is the Accounting System for Investment project which is based on the Circular 195 dated 15 November 2012 of MOF. The chart of accounts has been modified and ANA accounting software updated as necessary to meet the Bank FM requirements. Semi-annual Interim Financial Reports following the AMT templates will be submitted to the Bank within 45 days after the semester end by PMU3.

12. **Internal Control and Internal Audit:**

Internal controls: Current internal controls procedures at PMU3 are adequate for project financial management. The management of DRVN and PMU3 will be responsible for ensuring that an adequate internal control framework and internal controls are in place and operating.

Internal audit: Internal Audit function will be in place at the project. During the first 2-3 years of the project life, the project internal audit work will be outsourced based on a TOR acceptable to

the Bank. The internal audit consultant will help build the internal audit capacity for PMU3 and DRVN. It is expected that after the outsourcing complete, the project internal audit work will be independently performed by the PMU3's and/or DRVN Internal Audit's function. The internal audit consultants will take a leading role in the first half of the assignment and PMU3's internal audit team will learn from their work. During the second half of the assignment, PMU3's internal audit team will become the "performer" and the consultant will be the "reviewer", so that the newly established internal audit unit in PMU3 can operate independently after the consultant has completed the assignment.

13. **External Audit:** The project financial statements will be audited on an annual basis in accordance with international auditing standards, with statements and audit reports to be submitted to IDA within six months of the close of the fiscal year. All audited financial statements are to be published according to the Bank's information disclosure policy.

Disbursements

14. The project (both IDA and TF) can use the following disbursement methods:

- *Reimbursement* - The Bank may reimburse the borrower for expenditures eligible for financing pursuant to the Credit Agreement ("eligible expenditures") that the borrower has pre-financed from its own resources.
- *Advance* - The Bank may advance loan proceeds into a designated account of the borrower to finance eligible expenditures as they are incurred and for which supporting documents will be provided at a later date.
- *Direct Payment* - The Bank may make payments, at the borrower's request, directly to a third party (e.g., supplier, contractor, and consultant) for eligible expenditures.
- *Special Commitment:* The Bank may pay amounts to a third party for eligible expenditures under special commitments entered into, in writing, at the borrower's request and on terms and conditions agreed between the Bank and the borrower.

15. **Funds Flow.** The primary disbursement method will be Advances. Designated Accounts (DAs) will be opened to manage the funds from IDA and the co-financing TF separately. Both DAs will be denominated / opened in US dollars at a commercial bank under terms and conditions acceptable to the Bank. The IDA DA will have a Fixed Ceiling of US\$ 25,000,000 and the TF DA will have a Fixed Ceiling of US\$ 250,000.

16. **Supporting documentation required for documenting eligible expenditures** paid from the DAs and for Reimbursements will be Statements of Expenditure (SOE) and a list of payments against the contracts that are subject to the Bank's prior review, together with Records. The frequency for documenting expenditures paid from the DA's will be quarterly. Direct Payments will be documented by Records. The Minimum Application Size for Reimbursement, Special Commitment and Direct Payments will be US\$ 1,000,000 equivalent for IDA and US\$ 20,000 equivalent for the TF.

17. The Project will have a Disbursement Deadline Date (final date on which the Bank will accept applications for withdrawal from the borrower or documentation on the use of credit/grant proceeds already advanced by the Bank) four months after the Closing Date. This "Grace

Period" is granted in order to permit the orderly project completion and closure of the credit/grant accounts via the submission of applications and supporting documentation for expenditures incurred on or before the Closing Date. Expenditures incurred between the Closing Date and the Disbursement Deadline Date are not eligible for disbursement, except as otherwise agreed with the Bank.

18. The Project will finance "Eligible Expenditures", defined as the payment for the financing of the reasonable cost of Works, Services, Goods (including vehicles, office equipment, and data collection equipment), Incremental Operating Costs, and Training and Workshops, and to be financed out of the proceeds of the Financing and procured, all in accordance with the provisions of the Financing Agreement.

19. "Incremental Operating Costs" means the reasonable cost of incremental eligible expenditures incurred by the Recipient and implementing agencies as well as concerned participating agencies and local beneficiaries in the implementation of the Project, based on annual budgets approved by the Association, which expenditures would not have been incurred absent the Project, including the costs of consumables, operation, maintenance, and/or rental of equipment and vehicles; communication costs; information and communication campaigns; transportation costs; and per diem for Project staff including contracted staff and other participants for purposes of Project implementation, management, and supervision; and wages of contracted staff; but in all cases excluding salaries, salary allowances, and salary supplements of the Recipient's civil servants ("côngchức", "viênchức").

20. "Training and Workshops" means the reasonable costs of expenditure incurred by the Recipient, based on annual work plans and/or terms of reference acceptable to the Association, in facilitating, conducting, and/or undertaking domestic and overseas training and workshop activities under the Project, including: costs of training or workshop materials; equipment and venue rental; and per diem, accommodation, and transportation for those attending the training or workshop, honoraria for government trainers; but excluding salary and salary supplements of the Recipient's civil servants ("côngchức", "viênchức").

Procurement

21. **General:** Procurement under the project will be carried out in accordance with the Bank's "*Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, January 2011*" (hereafter called Procurement Guidelines) and "*Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, January 2011*" (hereafter called Consultant Guidelines), as well as the specific provisions stipulated in the Financing Agreement (FA). The procedure to be followed for National Competitive Bidding (NCB) shall be in accordance with provisions stipulated in Annex to Schedule 2 of the Financing Agreement (called NCB Annex). In the case of any conflict between the Financing Agreement (FA) and national laws/regulations, the FA takes precedence. For each contract to be financed by IDA, the method of procurement or selection, cost estimate, prior review requirements, and timeframe for implementation shall be agreed between the Borrower and IDA and duly in the project procurement plan.

22. **Risk assessment and rating:** The PMU3 under DRVN and MOT is a designated agency for implementing all procurement activities under this project. PMU3, whose majority of key staff have been assigned from PMU3, is a quite experienced project management unit that implemented and has been implementing the number of road construction projects financed by not only the GOV funding, but also by international donors, such as IDA, ADB, JICA, etc. In the past, all of the current key staff under PMU3 were also in charge of procurement for IDA-funded projects such as Rural Transport Project 1 and 2 (RTP-1 and 2) and RNIP. The procurement unit currently established under PMU3 with the core team that had previous procurement experience under RTP-1,2 and RNIP. The procurement capacity assessment of PMU3 identified several risks at the following areas:

- Unfamiliarity with the newest version of the Procurement/Consultant Guidelines as of January 2011 that may lead to Borrower staff' misunderstanding and incorrect application of the Bank's Guidelines;
- Reluctance by implementing agency (PMU3) and relevant approving authorities (DRVN/MOT) to follow the Bank's Guidelines and their insistence on following the Government Law on Procurement even when it conflicts with the Bank's Guidelines, because of cumbersome and unclear structure of the system and manuals for making/appraising/approving procurement decisions;
- Weak capacity & incompetence of Borrower staff in procurement planning, preparing procurement related documents, and inadequate contract supervision and management, especially for large PBC and slice-and-package contracts for periodic maintenance of roads;
- Limited oversight by civil societies and independent organizations, audits; and
- Potential collusion among bidders.

Given that (i) the high risk being identified for the country's public procurement system, (ii) the risk of transport sector's past performance for similar projects was rated as high, (iii) the level of complexity of procurement under the project, and (iv) the above findings of the PMU3's procurement capacity, the procurement risk for this project has been assessed as "High".

23. **Mitigation measures:** Measures to mitigate the identified risks have been discussed and agreed with the Borrower as described below. It is expected to downgrade the residual rate to "Substantial", after the mitigation measures are implemented.

- Measures completed during preparation: The procurement unit of PMU3 has been established and should be adequately staffed. The first procurement training on the Bank's Procurement & Consultant Guidelines – January 2011 took place on July 31, 2013, to which all procurement staff of PMU3 and related staff in DRVN & MOT participated. The Project Operations Manual (POM) will be developed by PMU3 and approved with DRVN/MOT by October 2013. The POM will also be cleared with the Bank by the negotiations. Selections of all 5 consultants (firms), hired for preparation of VRAMP using PPTAF funding, are to be completed by the project negotiations.
- Measures to be completed by the Credit Effectiveness: The subsequent procurement training will be conducted at the project's launch workshop. By this time, the consulting contract for Detailed Designs & preparation of Works bidding documents (financed from

PPTAF) should have been signed with consultant team mobilized. Procurement activities that are included in the Plan for early procurement, agreed with the Bank, are about to proceed as soon as reasonably possible.

- Measures to be carried out during the project implementation: An appropriate procurement record keeping and monitoring system (including adequate storage) is established, operated and managed by designated PMU3 staff. Further and advanced procurement training will be conducted on both regular and ad-hoc basis as needed by the Bank's Procurement Specialist upon request of PMU3. Additional training may be considered during project implementation, when needs arise, as part of the training and capacity building to be provided under Component D for Institutional Strengthening Program.

24. **Procurement Plans:** The Borrower has developed the Procurement Plan that included a planning for some activities to be implemented on the basis of early procurement acceptable to the Bank. The project Procurement Plan has been discussed and agreed between the Borrower and the Bank during the project negotiations. The agreed procurement Plan will be disclosed by the Bank to the public after the IDA Credit has been approved. The Procurement Plan will be updated on an annual basis or as needed throughout the project duration to reflect the actual project implementation needs and improvements in institutional capacity. The updated Procurement Plan, as agreed between the Bank and the Borrower, will specify procurement methods and their applicable thresholds, as well as the most updated applicable thresholds for the Bank's prior review, for all packages.

25. Most of contracts for works under Component B- Road Asset Preservation (with estimated at USD 156.6 million) and Component C-Road Asset Improvement (with estimated at USD 133.4 million including counterpart fund for resettlement activities) are of large value and would be procured under the International Competitive Bidding procedures (ICB) as the default procurement method. For all ICB contracts for Works, there shall be no domestic preference. For the large rehabilitation contracts that will follow a performance-based payment approach (PBC contracts), and where rehabilitation and maintenance of relatively long sections of roads (40-50km) will take place over the 4-year period, further international publication of this bidding opportunity in addition to the GPN (for all ICB contracts) should be arranged by PMU3 (by any suitable means such as UNDB online, international professional gazette on road maintenance, etc.) in order to garner as much as possible (and maintain) interest from international contractors. Before bids are invited through publication of the SPN, a kind of survey on existing contractor capacity in the local market related to road maintenance services should also be considered and arranged in order to examine the supply side of the local market of this business related to maintenance activities. As the result of the analyses of contractors' interest and assessment of their capacity, the size and scope as well as the packaging for PBC contracts may be adjusted to be consistent with market conditions to enable maximum participation and competition by and among potentially capable contractors both national and international. There would be no pre-qualification for ICB packages under this project.

26. Under Components A& D, there are mainly large consulting services for development of Road Asset Management Plans and System and strengthening institutional capacity for DRVN (total value of these services is roughly estimated at USD12.7 million). There are also other two large consulting services (totally estimated at USD12.3 million) for supervision of works for two Components B and C. As regards the consulting services (most of which are of large value), each

contract estimated to cost more than USD300,000 would be procured through Quality- and Cost-Based Selection (QCBS) as the default selection method. Summary of large contracts for Works, Goods and Consulting Services is provided in the tables below:

Table A3.2: ICB Contracts for Works and Goods:

No	Contract ID	Description	Procurement Method ^(*)	Cost Estimate (USD thousand)	Review by Bank	Expected Bid Opening
1	RAI/W/CP1	4 bridges: Trang Thua (Km18+180) L=2300m; Trang (Km29+857) L=442m; Neo (km24+945) L=2700m; Cap (km36+020) L=338m	ICB	16,000	Prior	Apr-14
2	RAP/PBC/CP2	NH2, Km163-Km205, Length: 42 km (Tuyen Quang)	ICB	22,000	Prior	Sep-14
3		Slice and packages (02 contracts)	ICB Slice and packages	39,700	Prior	Sep-14
	RAP/PBC/CP3	NH2, Km205-Km246, Length: 41 km (Ha Giang)				
	RAP/PBC/CP4	NH2, Km246-Km287, Length: 41 km (Ha Giang)				
4	RAP/PBC/CP5	NH18, Km3+300-Km46, Length: 45,7 km (BacNinh - Sao Do)	ICB	20,900	Prior	Jul-14
5	RAI/CP6	NH38, Km33+130-Km52+827(Length: 18.6Km) and Sat Bridge (Km0+529, L=4500m) and Bun Bridge (Km46+633, L=400m) Quan Goi - Yen Lenh	ICB	29,400	Prior	Oct-14
6	RAP/W/CP8	NH48, Km0-Km20 and Km38-Km64, Length: 46km (Nghe An)	ICB	17,400	Prior	Nov-14
7	RAI/CP7	NH39, Km42+714-Km64+000 (Length: 20Km) and Nai Bridge (km52+662, L=600m) and Dong tu (Km55+366, L=512m) and Go (Km88+164, L=386) Trieu Duong - Hung Ha	ICB	22,600	Prior	Feb-15
8	RAI/W/CP9	NH39, Km91+00-Km107+522 Length: 16.5Km Vo Hoi - Diem Diem	ICB	14,200	Prior	Feb-15
9		Slice and packages (02 contracts)	ICB	16,000	Prior	Apr-15
	RAP/CP10	NH6, Km78-Km98, Length: 20 km (Hoa Binh)	Slice and packages			
	RAP/CP11	NH6, Km98-Km118, Length: 20 km (Hoa Binh)				
10		Slice and packages (02 contracts)	ICB	13,000	Prior	Apr-15
	RAP/CP12	NH6, Km118-Km138, Length: 20 km	Slice and packages			
	RAP/CP13	NH6, Km138-Km158, Length: 20 km				
11		Slice and packages (02 contracts)	ICB	13,000	Prior	Jul-15
	RAP/CP14	NH6, Km158-Km178, Length: 20 km	Slice and packages			
	RAP/CP15	NH6, Km178-Km193, Length: 19,5 km				
12	RAP/G1,2	Equipment for PMU3	NS	100	Post	Jun-14
13	RAP/G3	Vehicles for PMU3	NCB	200	Prior	Feb-15

(*)There would be no pre-qualification for ICB packages under this project.

Table A3.3: Contracts for Consulting Services:

Contract No.	Description	Estimated Cost (USD thousand)	Procurement Method	Review by Bank	Expected Proposal Submission
RAPI/CS1	Supervision of civil work contracts of component B and C and PBC Strengthening	14,100	QCBS	Prior	Mar-14
RAM/CS3	Development of the Road Asset Management System and Road Asset Management Plans (including setting-up of the road database framework and data collection)	10,000	QCBS	Prior	Apr-14
ISP/CS4	Finance Audit	200	CQS	Prior	Jan-14
RAI/CS5	Social & Environmental Monitoring for Component B	200	CQS	Post	Mar-14
RAP/CS6	Social & Environmental Monitoring for Component C	200	CQS	Post	Mar-14
ISP/CS7	Technical Audit	700	QCBS	Prior	Jul-14
ISP/CS8	Implementation of Road Fund Support	1,100	QCBS	Prior	Aug-14
ISP/CS9	Development of standard drawings on infrastructure facilities	200	CQS	Post	Sep-14
ISP/CS10	Internal Audit	100	CQS	Post	Mar-14

Table A3.4: Procurement Plan for Early Procurement:

Contract No.	Description	Estimated Cost (USD thousand)	Procurement Method	Review by Bank	Expected Bid Opening
RAPI/CS1	Supervision of civil work contracts of component B and C	14,100	QCBS	Prior	Mar-14
ISP/CS4	Finance Audit	200	CQS	Prior	Jan-14
RAI/W/CP1	Trang Thua (Km18+180) L=2300m; Trang (Km29+857), L=442m Neo (km24+945) L=2700m; Cap (km36+020) L=338m	16,000	ICB	Prior	Mar-14

27. Prior Review by the Bank: Thresholds for the Bank's prior review together with the Bank's thresholds for procurement/selection methods, currently applicable for this particular project, are shown in the table below:

Table A3.5: Currently Applicable Procurement Method and Prior Review Thresholds

Category	Procurement Method Thresholds		Prior Review Thresholds	
	Applicable thresholds (in USD million)	Remarks	Applicable thresholds (in USD million)	Remarks
Works / Supply & Installation				
ICB	>= \$10 m		All ICB contracts	
NCB	< \$10 m		First 1 NCB contract	
Shopping	< \$0.2 m		None	
Goods				
ICB	>=\$1 m		All contracts	
NCB	< \$1 m	Where goods are not normally available from within Vietnam, the method of procurement will be ICB even if the contract value is less than \$1 m.	First 1 NCB contract	
Shopping	< \$0.1 m		None	
Consultant Services				

CQS	< \$ 0.3 m	Para 3.7 of Consultant Guidelines (January 2011). Other methods (QCBS, QBS, FBS, LCS) may also be applied for contracts below \$0.3 m.	<ul style="list-style-type: none"> • Firms: >=\$0.3 m (for competitive selection) plus the first contract for each method LCS, CQS) regardless of value. • SSS: For SSS, \$50k (Para 3.9 of Consultant Guidelines, January 2011) and all other SSS contracts. • All Audit contracts • Individuals: for essential assignments (procurement consultant, accountant,...). 	-All QCBS contracts >= \$0.3 m shall be subject to Prior review.
Shortlist of all national firms	< \$ 0.3 m	Para 2.7 of Consultant Guidelines (January 2011)		-Essential individual assignments will be defined in the Procurement Plan agreed with the Bank.

28. Each Method shall be specified in the updated Procurement Plan, which will be reviewed and cleared with the Bank. All contracts that are included in the planning for early procurement shall be subject to the Bank’s Prior review regardless of value. Contracts with cost estimates below the thresholds of Prior review shall be subject the Bank’s Post review. Such Procurement Ex-post Reviews by the Bank will cover 20% of the total post-reviewed contracts and will be on a frequency of every twelve (12) months. The Bank will also carry out regular procurement supervision missions on a bi-annual basis.

Environmental and Social (including safeguards)

Environment

29. Environment Assessment (OP/BP 4.01). The project roads will be mostly located alongside the existing alignments, and the expansion of the right-of-way. The project’s civil works includes upgrading and improvement of existing discrete road sections spread over the northern half of the country. It also includes strengthening, rebuilding and preserving the pavements within the existing right-of-way. The project will have mostly positive but some adverse environmental impacts. On the positive side, the project will bring major benefit in reduction of travel time, improvement of road safety, reduced vehicle operating costs, and more reliable delivery times. The adverse environmental impacts are expected to result from the construction activities and may potentially include: noise, dust, vibration, fumes from asphaltting and transportation of materials; disruption to traffic, access to roadside activities, and to waterways; damage to local roads and localized flooding; interruption of local household businesses and utility services; potential contamination of soil and water from disposal of waste materials and fueling equipment; destruction of crops, trees; worker safety. No physical cultural resources are impacted by the project. Direct impacts from operation potentially include: increased noise and vibration disturbance, air pollution from vehicle exhaust, fuel and lubricants spills, and increased accidents. However, these environment impacts are likely to be short term, site-specific, non-sensitive or irreversible, and in every case, mitigation measures can be designed to reduce the negative impacts, and thus the project has been assessed as a Category B project.

30. Natural Habitats (OP/BP4.04).The periodic maintenance of the NH6 would involve 10km of the existing NH6 that runs through the Hang Kia Pa Co Natural Reserve. 7km pass of this section pass through the buffer zone and 3km pass through the core zone of the natural reserve. The main potential impacts anticipated to occur during periodic maintenance of this road section would include illegal hunting and cutting of trees, waste and noise generated during civil

work, forest fire risk, and encroachment on the natural reserve. However, the limited nature of the maintenance works on NH6 will have small effects on the protected area and its biodiversity. Specific mitigation measures have been included in the subproject Environmental Management Plan (EMP).

31. Measures to address safeguards issues. PMU3 has prepared 3 subproject EIAs, 9 EPCs, and 12 EMPs in accordance with the government environmental management regulations and the Bank safeguards policies. The EMPs consists of the set of appropriate mitigation, monitoring, and institutional measures to be taken during implementation and operation to eliminate adverse environmental and social impacts, offset them, or reduce them to the acceptable levels. The EMPs will be included in the bidding and contractual documents. The EMPs will be implemented through PBC and traditional road maintenance contracts for Component B and construction contracts for Component C. Implementation of the EMPs will be monitored and supervised by PMU3, the construction supervision consultant, and will be supported by capacity building for PMU3, supervision consultants, and contactors.

32. PMU3 will be responsible for monitoring the overall project implementation, including environmental compliance of the project. It will have the final responsibility for environmental performance of the project. PMU3 will be responsible for reviewing and approving the EIAs, EPCs, and EMPs. The construction supervision consultant will take the lead in ensure contractor compliance with the EMPs. Furthermore, PMU3 will also be responsible for overall supervising the implementation of EMPs, reviewing project monitoring reports, and implement regular/ad hoc monitoring, and request further mitigation measures based on their own environmental management jurisdiction.

33. PMU3 will contract experienced independent environmental monitoring services for external monitoring of compliance with the EMPs. The independent environmental monitoring consultant will carry out the environmental monitoring program as designed in the EMPs and advise on additional monitoring of mitigation measures to be implemented by the contractors. The consultant will submit bi-annually monitoring reports to PMU3 and to the Bank.

34. Public consultation and disclosure: During the preparation of environmental safeguards documents, meaningful consultations with related stakeholders on the specific EIAs, EPCs, and EMPs were conducted during February – March 2013. Feedbacks from the consultations have been documented and taken into account in the final documents and the subproject design. Prior to appraisal, the final draft EIAs, EPCs, and EMPs were disclosed locally in Vietnamese at the project sites and at the Vietnam Development Information Center (VDIC), and in English at the Infoshop in Washington, DC.

Social

35. Prominent social impact (e.g. land acquisition) is identified in Component C of the Project. It includes rehabilitation of four long bridges and sections of related roads along NH 38B and upgrading of both NH38 and NH39-1. To perform these tasks, a certain amount of land acquisition and resettlement will be required due to widening of the existing alignment and construction of new bypasses at certain locations. For these impacts, PMU3 prepared four Resettlement Plans, and compensation, assistance and resettlement policies proposed to VRAMP. The latter, which will be approved by Prime Minister of Government of Vietnam,

spells out principles of OP 4.12, updated national laws/regulations and proposed policies and entitlement applied to this project. The four RPs include specific compensation, mitigation measures and implementation arrangements associated to each sub-project.

36. PMU3 is responsible for overall management, including resettlement plan update, fund disbursement, consultant engagement, instrument implementation and its monitoring and reporting. Before resettlement implementation, the resettlement plan will be updated, based on DMS, RCS and compensation plan to be prepared in early resettlement implementation stage and to be approved by provincial or district people committees. The PMU3 will on time disburse resettlement fund to Compensation, Support and Resettlement Council (CSRC) at district level which specifically implements the RPs. PMU3 will assign a qualified staff to oversee all activities under umbrella of social safeguard policies. Training programs are designed in the RPs to strengthen the capacity of implementing agencies.

37. PMU3 will contract experienced independent consultant to monitor the implementation of Resettlement Plans. The consultant will carry out the monitoring exercise as designed in the RPs and advise on additional mitigation measures to be implemented by PMU3. The consultant will submit monitoring reports to PMU3 and to the Bank.

38. To ensure principle of compensation at replacement cost, PMU3 will appoint a professional appraiser at the initial stages of the resettlement implementation to conduct Replacement Cost Surveys (RCS) as a point of comparison with established compensation rates.

39. *Public Consultation and Disclosure.* During the RAP preparation, from January to March 2013, consultation with various stakeholders (e.g. local authorities, affected communities, affected households etc.) was carried out. Feedback from the consultations has been documented and taken into account in the final social safeguard documents. Consultation will be continuously conducted during project implementation to ensure implementation of the project's social safeguard documents (RPs), especially in planning and designing assistance strategies for severely affected households. Prior to appraisal, the final draft of RPs, compensation, assistance and resettlement policy were disclosed locally in Vietnamese at the project sites and at the Vietnam Development Information Center (VDIC), and in English at the Infoshop in Washington, DC.

40. *Grievance Redress Mechanism.* The RPs describes the procedures and responsibility of related agencies in receiving, redressing and recording all grievances and complaints from the DPs. Project-affected people will be provided information on the authority of project officials in solving project complaints on land, assets acquisition, physical relocation and income restoration.

Monitoring & Evaluation

41. Semiannually Interim Financial Reports (IFRs) will be prepared by PMU3 for monitoring of financial performance of the project in a format to be agreed between the representatives of the GOV and the IDA.

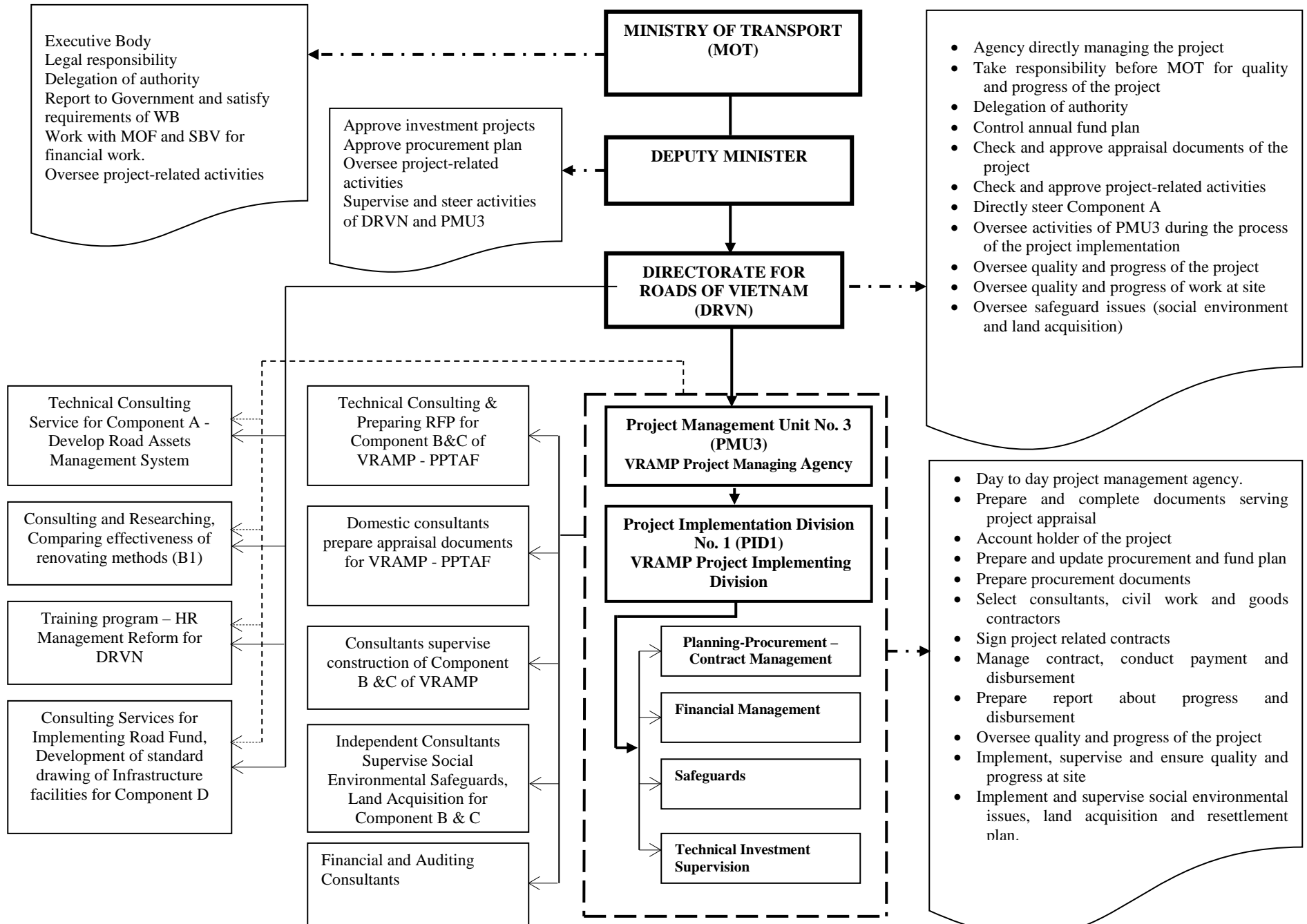
42. Annual Project Financial Statements. PMU3 will prepare annual financial statements covering the portion of the project components and activities for which they are responsible. The

financial statements must be prepared on a modified cash basis in accordance with international and national accounting standards. The Project Financial Statements will consist of:

- (i) A Statement of Sources and Uses of Funds / Cash Receipts and Payments which recognizes all cash receipts, cash payments and cash balances controlled by the entity; and separately identify payments by third parties on behalf of the entity.
- (ii) The Accounting Policies Adopted and Explanatory Notes. The explanatory notes should be presented in a systematic manner with items on the Statement of Cash Receipts and Payments being cross referenced to any related information in the notes. Examples of this information include a summary of fixed assets by category of assets, and a schedule of credit withdrawals, listing individual withdrawal applications; and
- (iii) A Management Assertion that IDA funds have been expended in accordance with the intended purposes as specified in the relevant IDA legal agreement.
- (iv) The annual financial statements are required to be audited and submitted to IDA within six months of the end of each financial year.

43. Independent External Audits. The annual financial statements will be audited in accordance with international auditing standards by independent auditors and TORs acceptable to IDA. PMU3 will be responsible for engagement and management of the audit contract. It will appoint the auditor at the early stage, within six months after the signing of the FA, following IDA procurement procedures. The audited financial statements and audit reports will be submitted to IDA within six months of the end of each financial year, and the date of closing of the project. The annual financial statements and audit reports will be made publicly available.

Figure A3.1: Organizational Structure for VRAMP Implementation and Monitoring & Evaluation



Annex 4
Operational Risk Assessment Framework (ORAF)
Vietnam: Road Asset Management Project (P123961)
Stage: Appraisal

Risks

Project Stakeholder Risks

Stakeholder Risk	Rating					
		Low				
<p>Risk Description: No opposition to the road network improvement has been expressed by either a local or an international group. Some potential opposition to project on grounds of environmental concerns including impacts due to elevated embankment, and sustainability of the constructed asset.</p>	<p>Risk Management: Promote the project's expected and actual environmental impact via electronic and other media. Specifically, the improvement of the national highways is expected to reduce the projected congestion levels, fuel consumption on major corridors. Further, when completed the improved roads will be more resilient to flooding risk than it is in its current state. Consultations with local communities will be conducted during preparation.</p>					
	Resp: Both	Status: In Progress	Stage: Preparation	Recurrent:	Due Date:	Frequency:

Implementing Agency (IA) Risks (including Fiduciary Risks)

Capacity	Rating					
		Substantial				
<p>Risk Description: The newly assigned PMU3 may not be familiar with Bank's fiduciary and safeguard requirements. Procurement risks exist in unfamiliarity with the newest version of the Procurement/Consultant Guidelines and weak capacity & incompetence of Borrower staff may delay in procurement planning and preparing procurement related documents. Risks in inadequate contract supervision and management in preservation and improvement</p>	<p>Risk Management: Procurement and FM capacity assessment was conducted soon after PMU3 was designated for fiduciary and safeguard management. Bank team assessed and provided training and guidance for operations. The procurement unit of PMU3 has been established and will be adequately staffed. The procurement training on the Bank's Procurement & Consultant Guidelines – January 2011 takes place in June 2013, and the Project Operations Manual (POM) will be developed by PMU3 and approved with DRVN/MOT by October 2013, so that the procurement procedures can be fully recognized. International consultant will be hired for supervision engineer's role to ensure the international standard of construction management. Supervision consultant's TOR will include an establishment of independent</p>					

contracts may deteriorate the progress and quality of the intended works. Lack of independent testing laboratory for supervision engineer caused quality problems in the past.	material testing facility from the contractor to ensure the quality assurance.					
Governance	Resp: Both	Status: In Progress	Stage: Both	Recurrent:	Due Date:	Frequency:
Risk Description:	Rating Substantial					
DRVN may not have full ownership of RAMS and focusing on physical works only. Lack of leadership for RAMS may face a crisis for achievement of PDO. Change in the PMU (from PMU2 to PMU3) may lead to lack of confidence of implementation.	Risk Management: DRVN assigned a dedicated Road Management Unit (RMU) for RAMS component. The TOR preparation and strategy plan has been formulated well. Bank team assessed that PMU3 staff has relevant experience in past Bank projects and capable of smooth preparation and implementation. The Bank team will closely monitor the implementation capacity and ownership in RMU and PMU3. PMU3 will establish an internal audit function in accordance with a TOR acceptable to the Bank. The Bank team will closely monitor the implementation progress and quality of the Internal Audit function.					
	Resp: Client	Status: In Progress	Stage: Preparation	Recurrent:	Due Date:	Frequency:
	Risk Management: Strict monitoring of procurement process will be maintained to avoid collusion opportunities and fraud activities. The project will increase awareness and capacity of the anti-corruption measures, increase transparency and disclosure through regularly updated and complete project information made publicly available, and strengthen stakeholder integrity commitments by requiring ethical business standards, project integrity controls, fair implementation and publicity of sanctions.					
	Resp: Client	Status: In Progress	Stage: Implementation	Recurrent:	Due Date:	Frequency:
Project Risks						
Design	Rating Substantial					
Risk Description: The project has a mix of road asset management system development, traditional road asset preservation and improvement, and the development of PBC in preservation. Although there have been a number of lessons learned from the previous project (RNIP) in pilot PBC, the modality of PBC still needs to be confirmed before procurement, which may cause the delay of PBC contract. and it could	Risk Management: The PBC modality, its application and limitations in Vietnam environment has been learned through RNIP. The legal framework at the start of the project will confirm the performance-based payment mechanism for maintenance contracts and responsibility of prime contractor for both improvement and maintenance, so that the procurement for PBC works can start in an appropriate time. To ensure the long-term maintenance contract for PBC, the closing date is proposed to be 2020, so that 5-year maintenance period can be secured even if the preparation and procurement process takes two years from the start of the project. Review of the feasibility study during pre-appraisal has confirmed the readiness of technical design, but the detailed design and bid documents preparation process for the first year program will be carefully monitored to confirm the readiness of the project at negotiation, approval, signing and effectiveness. The RNIP experience shows that					

<p>lead to less-than-optimal duration of maintenance contract. The “hybrid” approach of PBC in dual contracts in rehabilitation/periodic maintenance has a risk of lack of performance during maintenance period due to the lack of incentives in small maintenance contracts. From the past record of slow implementation of transport project in Vietnam, the readiness for implementation is at risk.</p>	<p>contractor’s interest in PBC maintenance contract was reasonably well. However, the risk of “hybrid” PBC will be mitigated through the focused training with potential contractors for the advantage of this modality and their experience of PBC maintenance leads to their future opportunities of larger contracts of “full” combined PBC in future.</p>					
<p>Social and Environmental</p>	<p>Resp: Both</p>	<p>Status: In Progress</p>	<p>Stage: Implementation</p>	<p>Recurrent:</p>	<p>Due Date:</p>	<p>Frequency:</p>
<p>Risk Description:</p> <p>Social: From past experience, delays and inadequacy of counterpart funds (all counterpart funds are for land acquisition and resettlement cost) constitute a major project risk as this will prevent timely handover of project sites and delayed project implementation.</p> <p>Environmental: The adverse environmental impacts are expected to result from the construction activities and may include material supply/transport, noise, dust, vibration, fumes from asphaltting, disruption to traffic, access to roadside activities, potential contamination of soil and water from disposal of waste materials and fueling equipment, and worker's safety.</p>	<p>Risk Management:</p> <p>Social: The establishment of resettlement committees at the provincial and district levels is ongoing. MOT will provide compensation, assistance and resettlement policies, RAP and by appraisal to facilitate land acquisition and resettlement in a timely fashion. The Bank Team will closely monitor land acquisition and resettlement activities to ensure that they are carried out in a timely manner to ensure site handover to the contractors.</p> <p>Environmental: Appropriate environmental monitoring programs have been developed and presented in the EMPs. EMPs will be implemented through PBC and traditional road maintenance contracts for Component B and construction contracts for Component C, supervised by PMU3, and the construction supervision consultants. During the preparation of environmental safeguard documents, meaningful consultations with related stakeholders on the specific EIAs, EPCs and EMPs have been conducted, and feedback from the consultations has been documented and taken into account for implementation.</p>					
<p>Program and Donor</p>	<p>Rating</p>	<p>Low</p>				
<p>Risk Description:</p> <p>There is co-financing and cooperation with other donors (AusAID) in Component A (RAMS). The risks associated with this are considered minimal.</p>	<p>Risk Management:</p> <p>Information sharing and consultation for project design and progress will be continued with the possible co-financing partner.</p>					
<p>Delivery Monitoring and Sustainability</p>	<p>Resp: Both</p>	<p>Status: In Progress</p>	<p>Stage: Preparation</p>	<p>Recurrent:</p>	<p>Due Date:</p>	<p>Frequency:</p>
<p>Rating</p>	<p>Substantial</p>					

<p>Risk Description:</p> <p>Project Delivery/Contract Monitoring: Preparation for PBC contracts may delay due to the confusion in streamlining the contract details.</p> <p>Monitoring and Evaluation: The risk of properly measuring project outcome indicators and intermediate indicators exist for the lack of interest at the GOV.</p> <p>Sustainability: The sustainability of RAMS after establishment is still at risk with lack of recognition for its effectiveness for rolling road maintenance planning.</p>	<p>Risk Management:</p> <p>Project Delivery/Contract Monitoring: The legal framework and standard bidding documentation, supervision manual and training planned at the start of Component B will enhance the delivery and contract capacity.</p> <p>Monitoring and Evaluation: The baseline data and target values will be agreed and included as part of the project's monitoring reports. Regular progress reports will include annual reporting for indicator values. The monitoring and evaluation system will be tested and revised as necessary.</p> <p>Sustainability: DRVN shows a strong commitment in the development of the RAMS by establishing a new department level Road Asset Management Unit with dedicated staff, and proactively preparing the system design. The new Department will Ensure effective management of RAMS including the development and use of the road asset management software.</p>					
	Resp: Client	Status: In Progress	Stage: Implementation	Recurrent:	Due Date:	Frequency:
Overall Risk						
Overall Preparation Risk: Substantial			Overall Implementation Risk: Substantial			
<p>Risk Description:</p> <p>Social and Environmental safeguard aspects are mostly managed and remaining risks are low. The residual risks in the fiduciary capacity of PMU3 in project management, RMU for RAMS preparation, and design processes are being monitored through the continuous dialog and enhanced training programs by the Bank team.</p>	<p>Risk Description:</p> <p>The substantial risks in Capacity, Governance, Design and Delivery Monitoring & Sustainability will be addressed by the described measures, and will be managed and monitored through the continuous implementation review and support by the Bank team.</p>					

Annex 5: Implementation Support Plan
VIETNAM: Road Asset Management Project

1. Bank's implementation support for the project will consist of scheduled supervision and monitoring missions, site visits to project affected areas, fiduciary compliance reviews, a mid-term review, as well as provision of guidance and recommendations based on the findings of the independent monitoring consultants (for land appraisal, resettlement, and environmental impacts) engaged under the project. Further, supervision consultants and independent technical auditors will provide guidance on additional implementation support needed and means to advance the fulfillment of project development objectives. Specifically, the strategic approach for implementation support includes the following:

2. **Technical issues:** The Bank Team will include an international expert on road asset management systems who is familiar with the previous attempts to establish a system in Vietnam to provide guidance on the development of a framework for data collection and management as well as to oversee the establishment of a scientific-based prioritization model. An international highway design expert will be retained to review and provide recommendations on the detailed engineering designs for periodic maintenance works included in the Road Asset Preservation Component (Component B) and road improvement works included in the Road Asset Improvement Component (Component C).

3. **Procurement:** The Bank procurement staff will conduct annual procurement reviews, including checking for compliance with agreed procedures, identifying potential capacity issues, and evaluating adequacy of documentation and record keeping arrangements. Support will include training for PMU3's Procurement Unit, PMU staff responsible for handling procurement, and project consultants. The Bank team will also provide guidance to procurement staff on World Bank procurement guidelines, and will review procurement documents based on identified in the updated Procurement Plan, and monitor progress towards meeting the agreed Annual Procurement Plan. To help ensure timeliness of guidance and reviews, the procurement specialist will be based in the country office.

4. **Financial management:** The Bank will perform financial management (FM) supervision at least twice a year. The supervision will include review of the project's financial management system, including, but not limited to reviews of accounting books and audit reports, operation of Designated Accounts, Statement of Expenditures, adequacy of internal controls, identifying potential capacity issues, as well as reporting and follow up on audit findings and mission findings. Support will include training to PMU staff members responsible for financial management prior to commencement of project implementation. The FM specialist will be based in the country office.

5. **Environmental and social safeguards:** The Bank will supervise the implementation of the related Resettlement Action Plans, as well as the Environmental Management Plan included in all civil works contracts. As the project includes independent resettlement monitoring and independent environmental monitoring, the Bank will review and provide its no-objection to the terms of references for these assignments. The social and environmental specialists will be based in the country office, though international expertise will be used on an as needed basis.

Table A5.1: Focus areas and required skills:

Time	Focus	Skills Needed	Resource Estimate	Partner Role
First twelve months	Road Asset Management System (RAMS) development and data collection	RAMS Expert	4 SW	
	Technical review of detailed design reports, bid documents, and capacity building	Highway Engineer	4 SW	
	Review of operationalization of road maintenance fund (RMF)	Road Fund Specialist	4 SW	
	Procurement review and training	Procurement Specialist	8 SW	
	FM capacity review and supervision	FM Specialist	4 SW	
	Review of environmental management plan	Environmental Specialist	4 SW	
	Review of land acquisition and resettlement action plans	Social/Resettlement Specialist	4 SW	
12-60 months	Technical review of functionality of RAMS	RAMS Expert	4 SW	
	Technical review of detailed design reports, bid documents, capacity building, physical works progress	Highway Engineer	4 SW	
	Review of operationalization of road maintenance fund (RMF)	Road Fund Specialist	4 SW	
	Procurement review and training	Procurement Specialist	8 SW	
	FM capacity review and supervision	FM Specialist	4 SW	
	Review of environmental management plan	Environmental Specialist	4 SW	
	Review of land acquisition and resettlement action plans	Social/Resettlement Specialist	4 SW	

Table A5.2: Staffing Requirements:

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Task Team Leader (TTL)	8-10 SW annually	2	
Co-TTL	8-10 SW annually	Field visits as needed	Country Office based
RAMS Expert	4 SW annually (average)	2	
Highway Engineer	4 SW annually (average)	2	
FM Specialist	4 SW annually (average)	Field visits as needed	Country Office based
Procurement Specialist	8 SW annually (average)	Field visits as needed	Country Office based
International Social Specialist	1 SW annually (average)	1	
Social Specialist	4 SW annually (average)	Field visits as needed	Country Office based
International Environmental Specialist	1 SW annually (average)	1	
Environmental Specialist	4 SW annually	Field Visits as needed	Country Office based
Operational Support	4 SW annually		Country Office based

Annex 6: Project-Level Governance, Transparency and Anti-Corruption Plan

Table A11.1: Module I - Increasing Awareness, Transparency and Disclosure, and Strengthening Stakeholder Integrity Commitments

Theme/Topic	Intervention/Measure	Responsibility ¹ Prepare/Appraise/Approve	Target Date
A. <u>Awareness and Capacity</u> Satisfactory governance transparency and anti-corruption plan in place; all stakeholders aware of its provisions; and adequate capacity for its implementation.	Training on compiled MOT GTAP of applicable MOT and World Bank anti-corruption policies & regulations to relevant project stakeholders, update GATP regularly.	PMU3/-/DRVN	Within 6 months after signing of Financing Agreement (FA) and two courses per year thereafter. Annually update GTAP within the project duration.
B. <u>Transparency and Disclosure</u> Relevant project information disclosed to stakeholders, project managed transparently and fairly, fair access to information, integrity information on officials & contractual partners disclosed.	1. Establish Project information media and outlets including linked to DRVN.	PMU3/-/DRVN	Within 6 month of Project Effectiveness.
	2. Upload and regularly update: (a) basic Project information (scope, costs & organization, PAD, FA, POM, Project staffing, etc.); (b) disclosable documents & records (RP, Procurement Plan, etc.); (c) Project annual budget and source of funds; (d) Project policies (World Bank Procurement, Financial, Disbursement, Safeguards and Anti-Corruption Guidelines, and applicable MOT policies); and (e) complaint & reporting mechanism.	PMU3/-/DRVN	Within 6 months of Project Effectiveness; and update quarterly, by the last day of each quarter.
	3. Regularly update: (a) Project progress, including procurement and disbursement status; (b) monitoring & evaluation results; (c) RP implementation; and (d) quarterly interim financial reports and the annual audited financial statements.	PMU3/-/DRVN	Monthly, by the 10 th of each month.
	4. Obtain and publish: (a) Participant Integrity Disclosures (information on State disclosure by Project officials); and (b) reference and contact information of each contractual participant in the Project.	PMU3/-/DRVN	Within 6 months of Project Effectiveness
C. <u>Stakeholder Integrity Commitments and Responsibilities</u> Project Owner and contractual partners adopt & commit to ethical business standards, Project integrity controls, fair implementation and publication of sanctions.	Relevant key project officials fully commit to ethics and transparencies as per the Bank's policies and Government's regulations.	PMU3/DRVN/MOT Inspectorate	6 months after Project Effectiveness

¹ The GTAP identifies the agencies responsible for preparation, appraisal and approval of each intervention or measure. In addition the MOT's Inspectorate will coordinate activities to implement the GTAP and will undertake periodic audits to confirm that actions have been completed.

Table A11.2:Module II - Strengthening Process Controls

Topic	Risk	Mitigation Action	Responsibility¹ Prepare/Appraise/Approve	Target Date
A. Mitigating Collusion/Corruption/Fraudulence in Procurement Practice				
1. Procurement planning (PP)	Subdividing the bid package in order to adopt a less competitive bidding method or avoid compulsory reviews	Using larger packages to enhance more competitive methods, always give priority to the most appropriate competitive method and ensure efficiency use of budget. Annual procurement plans shall be sent to the Bank for review and approval before inviting any bids in that plan.	PMU3/-/DRVN Institutionalized in the POM and reviewed by Bank in procurement plan.	Throughout Project life
2. Invitation to bid	Reduced competitiveness in procurement process	All steps of procurement (advertising, issuing bid documents, bid opening, membership of Bid Evaluation Committee and recommendation for Bid award, advertising of contract award) shall strictly follow the Bank's applicable project guidelines and Government's regulations.	PMU3/-/DRVN Institutionalized in the POM	Throughout Project life
3. Bid documents	Invitation for bids establishes technical criteria and specifications that are beneficial to some bidders. The cost estimate is known to a few bidders only.	Post-qualification criteria should be clearly specified in bidding documents. Bidding document should include a provision allowing bidders to protest/submit a complaint regarding bidding procedures and bid evaluation.	Project implementation consultants/PMU3/DRVN. Institutionalized in the POM	Throughout Project life
4. Bid submission and opening	Closing dates are manipulated to advantage/disadvantage particular bidders.	Bid submission, opening of bids shall be strictly in accordance with the instruction to bidder/consultant as indicated in the Bidding Document/RFP	PMU3/-/DRVN.	Throughout Project life
5. Bid evaluation	Establishing selection criteria favoring specific bidders and consultants. The members of the bid evaluating team have familial or financial relations with bidders. Process is delayed resulting in the lapse of the bid validity.	Bid evaluation reports should include a section on allegation or indicators of collusion, corruption or fraud. The recommendation of contract award submitted for review and approval should include a statement by bid evaluation committee members that, to the best of their ability, they did not find any indications of collusion, corruption or fraud in bids.	Project implementation consultants/PMU3/DRVN. Institutionalized in the POM	Throughout Project life
6. Contract negotiation and award	Risk of financial or other inducements being offered by or sought from contractors during contract negotiations.	Contract award information should be published within two weeks of notification of award in accordance with the Bank's Guidelines and Government's regulations.	PMU3/-/DRVN. Institutionalized in the POM	Throughout Project life

Topic	Risk	Mitigation Action	Responsibility¹ Prepare/Appraise/Approve	Target Date
7. Contract implementation and management	1. Penalties of delays in contract implementation applicable for both parties. 2. Extension of time for contract duration was done after expiration of contract. 3. Big gap between actual completed works and actual payment. 4. Changes in condition of contract for prior review contract are not given NOL by the Bank.	1. The penalties for delays in contract implementation should be strictly applied to both parties as specified in the condition of contract. 2. Extension of contract duration and procedures for approval of extension from relevant agencies (WB and MOT) should be done before expiration of contract. 3. The payment should be adherent and exact to the actual completed works/quantities of contract. 4. For contract subject to prior review by the Bank, all modification of contracts as specified in the Guidelines should be submitted to the Bank for review and no-objection.	PMU3/-/DRVN/MOT	Throughout Project life
8. Receipt and handling of bidders' complaints (see also Module III)	Mechanism is not functioning properly. Delays in handling and processing complaints resulting in delays in procurement progress.	Bid documents will describe the mechanism for submitting, receipt and handling of bidders' complaints that does not disrupt the procurement process.	Detail Design Consultant /PMU3/DRVN.	As required
B. Mitigating Collusion, Corruption and Fraud in Implementation of Works and Consulting Assignments				
1. Financial management	False claims. Misappropriation of funds. Misuse of assets.	<u>Satisfactory internal controls</u> : PMU3 maintains high internal control standards and qualified staff.	PMU3/-/DRVN	Throughout Project life
		<u>Satisfactory internal auditing process</u> : Project owner (MOT) has functioning internal audit process that secures regular report for oversight of results and follow-up.	PMU3/-/DRVN	Throughout Project life
		<u>Reporting process</u> : Interim Financial Reports (IFR) complying with World Bank requirement and MPI Aligned Monitoring Tool (AMT). The annual audited financial statements will be audited in accordance with a TOR acceptable to the Bank and by an auditor acceptable to the Bank. The annual Financial Statements will be publicly disclosed in accordance with Bank guidelines.	PMU3/-/DRVN	Throughout Project life
		<u>Integrated Performance Audit</u> : Technical audit with focus on accountability of the uses of funds, covering the physical progress, procurements and safeguards.	PMU3/-/DRVN	Throughout Project life

Topic	Risk	Mitigation Action	Responsibility¹ Prepare/Appraise/Approve	Target Date
2. Implementation quality	Poor quality of works and/or services.	Clear definition of, and adherence to, quality standards set out in contracts. DRVN/PMU3 engages supervision staff with appropriate expertise and enforcement powers. Independent technical audit is sought where necessary, from the Project implementation consultants in the first instance and from an external agent if necessary.	PMU3/-/DRVN	Throughout Project life
3. Contract variations	Payment is made for non-warranted contract variations.	DRVN/PMU3 engages supervision staff with appropriate expertise to assess requests for variations. Independent review audit is sought, where necessary, from the Project implementation consultants in the first instance and from an external agent if necessary.	Project implementation consultants/PMU3/DRVN	Throughout Project life
4. Transparency in resettlement compensation				
4.1 Arrangement of sufficient budget for land acquisition compensation	Lack of budget for land acquisition compensation causing delay in compensation payment and land handover.	<ul style="list-style-type: none"> - Land acquisition planning must be updated regularly to have an appropriate budget planning. - Close coordination between Project's authorities and local authorities. 	DRVN, PMU, DRCs	Budget planning updated quarterly
4.2 Disclosure of information on planning and compensation policies of the project and transparency of land acquisition compensation.	<ul style="list-style-type: none"> • Lack of information, non-transparency in detail measurement survey data, compensation planning causing complaints from affected households during land acquisition compensation. • Lack of disclosure and transparency in responding quarries, complaints causing prolonged complaints by affected households. 	<ul style="list-style-type: none"> • Disclosure of sufficient information on planning, affected areas and benefits of the Project, compensation policies of the Project to effected households, agencies and unions of the commune, hamlets. • Regular organization of consulting, information publication with proper contents for each stage such as design, inventory/detail, measurement survey, compensation payment, and post-payment. 	PMU, DRCs, CRCs	Information publication and public consultation must be conducted after completion of one stage and before commencement of next stage.

Topic	Risk	Mitigation Action	Responsibility ¹ Prepare/Appraise/Approve	Target Date
4.3 Performance capacity of Resettlement Committees (RCs) at all level	<ul style="list-style-type: none"> • Limited capacity in land acquisition compensation, inadequate understanding of project resettlement policies, late and non-proper response to the resident's queries on land acquisition policies of the Donor and the Government causing complaints from the affected households during land acquisition process • Regular replacement of personnel in the Resettlement Committee (RC) affecting general capacity of the RC 	<ul style="list-style-type: none"> • RCs should be established with personnel having sufficient experience on land acquisition compensation, especially in WB funded projects, and tried to maintain the same staffs for the whole project duration. • Organize training courses on updated policies and regulations related to land acquisition/resettlement of the Government and of the provinces within the Project's areas and the Project's compensation policies for implementation staffs of the district, commune and hamlet authorities. Training courses will be conducted repeatedly during land acquisition and resettlement process (and repeated if necessary) 	PMU, DRCs, CRCs	RCs need to be established before execution of activities related to resettlement and land acquisition. Training works will be conducted early and repeatedly during land acquisition and resettlement process
4.4 Complaint Redressing Mechanism maintained during the whole process of project implementation	Lack of an effective Complaint Redressing Mechanism causing prolonged complaints/grievances which affects land acquisition progress and handover of cleared land to the Project	<ul style="list-style-type: none"> • Applied complaint redressing mechanism should be mentioned clearly in the Project's compensation plan. • Complaint Redressing Committee at local community level must be established following Decree No. 70 on Law on Complaint and Complaint Settlement of the Government by prior to commencement of the Project, before execution of any activities. • Land acquisition policies of the Project must be aware by all members of Complaint Settlement Board at all levels. • A data base of complaint shall be established as a part of resettlement data base in which redressing status and outstanding issued will be updated. 	PMU, PPCs, DPCs, CPCs	Issuance of establishment decision of Complaint Settlement Board at all levels and in place before project land acquisition activities taken place

Topic	Risk	Mitigation Action	Responsibility¹ Prepare/Appraise/Approve	Target Date
A mechanism for resettlement monitoring and supervision must be maintained during the whole process of project implementation	<ul style="list-style-type: none"> No report system for monitoring and supervising all steps of resettlement implementation at all levels causing the fact that shortcomings are not detected or not fixed timely which leads to complaints or grievances by affected people. No database of resettlement causing difficulties in monitoring and settlement of issues related to land acquisition and resettlement. 	<ul style="list-style-type: none"> An effective and binding reporting system at all levels for resettlement and land acquisition must be established. A data base on resettlement and land acquisition at district level and project level including effecting level, cost, complaint and complaint settlement must be established. 	PMU, DRCs	A data base must be established and unified with Resettlement Committees of the districts in the project area at least three months before detail measurement survey
5. Environmental mitigation	Environmental management plan (EMP) not followed during implementation	Awareness of contractors and supervision consultants. Publicize EMP to beneficiaries and affected communities. Increase of EMP provisions. Putting EMP as contract conditions with supervision consultants and contractor; apply penalty in case of non-compliance. Project owners to use qualified staff to ensure adherence to plan.	Project implementation consultants/PMU3/DRVN	Throughout Project life
6. Gender in public consultation	Non-participation women in some public consultation activities.	Ensure participation of relevant women stakeholders in public consultations.	Project implementation consultants/PMU3	Throughout Project life

¹ The GTAP identifies the agencies responsible for preparation, appraisal and approval of each intervention or measure. In addition the MOT's Inspectorate will coordinate activities to implement the GTAP and will undertake periodic audits to confirm that actions have been completed.

Table A11.3:Module III - Strengthening Monitoring, Oversight and Enforcement

Theme/Topic	Intervention/Measure	Responsibility ¹ Prepare/Appraise/Approve	Target Date
Monitoring by Beneficiary Communities			
Direct involvement by beneficiaries	Project beneficiary representatives encouraged to participate in supervision activities and attend bid openings. Project to provide support to local communities and civil society in overseeing project works following Decree 120/2006/ND-CP and Ordinance No. 34/2007/PL-UBTVQH11.	PMU3/-/DRVN	Throughout Project life.
Reporting and Handling Complaints Mechanism			
Complaints handling mechanisms	Establish mechanisms and protocols for confidential reporting of corrupt practice tips and complaints, management of records, fair processing, monitoring, and confidentiality.	PMU3/DRVN/MOT Inspectorate	By Loan Effectiveness.
	Training courses for offered to all stakeholders to raise awareness and to provide instructions and contacts making and addressing complaints.	PMU3/DRVN/MOT Inspectorate	Throughout Project life.
	Ensure that complaints handling mechanism is operational.	PMU3/DRVN/MOT Inspectorate	Throughout Project life.
Supervision and Support by the Bank			
1. Consultation with the World Bank	Project staff are encouraged to consult with World Bank staff at any time. For contracts subject to the Bank's prior-review, documentation relating to Project's handling of collusion, corruption, and fraud should also be made available to the Bank as part of the prior-review submission. For contracts subject to post-review by the Bank, such documentation should be maintained in Project's files. In some cases the responses from the Bank should be within the specified time on procurement to ensure the project progress.	Project implementation consultants/PMU3/ DRVN and World Bank	Throughout Project life.
2. Review by the World Bank	Bank's prior and post review to include particular attention to collusion/ corruption/ fraudulence. In some cases the responses from the Bank should be within the specified time on procurement to ensure the project progress.	World Bank	Throughout Project life.
3. Follow up by the World Bank	Systematic follow-up by the Bank of cases of noncompliance and integrity issues with appropriate remedial measures.	World Bank	Throughout Project life.
Support by MOT Leadership and Project Provinces			
1. Support by the project provinces/ministry's leadership is critical to the success of the plan	Prompt decision by leadership in determination of collusion, corruption and fraud. Systematic follow-up by the Borrower of cases of non-compliance and integrity issues with appropriate remedial measures.	MOT and Provincial Peoples' Committees	Throughout Project life.

Theme/Topic	Intervention/Measure	Responsibility¹ Prepare/Appraise/Approve	Target Date
2. Review by MOT and DRVN	In some cases the responses from MOT/DRVN should be within the specified time on procurement and other issues on project implementation to ensure the project progress.	DRVN/MOT	Throughout Project life.
3. Sanctions and Remedial Actions	The POM to include Project-wide procedures for identifying, reporting and tackling collusion, corruption and fraud. Responsibilities at each unit/level are to be clearly defined and are to reflect the required oversight necessary for mitigating the risk of collusion, corruption and fraud.	PMU3/-/DRVN	By Effectiveness
	The POM to include a clause regarding penalties to be applied to PMU3 staff and contractors involved in collusion, corruption or fraud.	PMU3/DRVN/MOT Inspectorate	Throughout Project life.
	Publication in MPI and MOT websites/procurement bulletin and provincial newspapers of all sanctions made against colluding bidders within two weeks of determination.	PMU3/DRVN/MPI and MOT	Throughout Project life.

¹ The GTAP identifies the agencies responsible for preparation, appraisal and approval of each intervention or measure. In addition the MOT's Inspectorate will coordinate activities to implement the GTAP and will undertake periodic audits to confirm that actions have been completed.