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Report No:

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR {AMT} MILLION (US\$ 190 MILLION EQUIVALENT)

TO THE

SOCIALIST REPUBLIC OF VIETNAM

FOR A

MEKONG TRANSPORT INFRASTRUCTURE DEVELOPMENT PROJECT

{PROJECT DATE}

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CURRENCY EQUIVALENTS

(Exchange Rate Effective {Date})

Currency Unit = = US\$1 US\$ = SDR 1

> FISCAL YEAR January 1 – December 31

ABBREVIATIONS AND ACRONYMS

Acting Vice President:	Jeffrey Gutman
Country Manager/Director:	Klaus Rohland
Sector Manager:	Jitendra N. Bajpai
Task Team Leader:	Simon David Ellis

VIETNAM Mekong Transport Infrastructure Development Project

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The project will be implemented over a six –year period commencing in mid 2007 and closing in 2013. Construction will be arranged in two phases over a total of about 4 years. The six-year project period includes the lead-in times for initial procurements and the final contracts defects liability periods, as well as time for final disbursement of Credit funds. The implementation schedule is summarised in Figure 6. 2 and details are included in the Project Implementation Plan
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Environment safeguards
The EIA concluded that the proposed project will not have significant adverse impact, provided the mitigation measures be properly implemented. The transport routes under MTIDP are not close to sensitive ecosystems (national park, natural reserves) or historical and cultural sites. The Environmental Management Plan has specified the environmental management and supervision organizations and responsibilities, mitigation measures, monitoring and reporting programs, budget estimates and capacity building requirements. During EIA preparation public consultation with project affected people, local relevant stakeholders was under-taken, and their feedback taken into consideration when designing appropriate mitigation measures
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VIETNAM

VN-MEKONG TRANSPORT INFRASTRUCTURE DEVELOPMENT PROJECT

PROJECT APPRAISAL DOCUMENT

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Date: July 31, 2006	Team Leade	r: Simon David F	Illis		
Country Director: Klaus Rohland	Sectors: Ro	Sectors: Roads and highways (40%):Ports			
Sector Manager/Director: Jitendra N Bainai	waterways a	waterways and shipping (40%):General			
Sector Manager, Director, Phonara IV. Dajpar	transportatio	n sector (20%)), General		
	Themes Tr	ade facilitation an	d market access		
	(P)·Rural set	vices and infrastr			
	(P)·Infrastru	cture services for	private sector		
	developmen	(\mathbf{P}) ·Small and me	edium enterprise		
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Project ID: P083588	Environmen	al screening cates	gory: A		
Lending Instrument: Specific Investment Los	an				
Project I	Financing Data				
[] Loan [X] Credit [] Grant [] Gua	rantee [] Oth	er:			
For Loans/Credits/Others:					
Total Bank financing (US\$m.): 190.00					
Proposed terms: Standard, with 40-year maturity and 10 years grace period					
Financin	ng Plan (US\$m)				
Source	Local	Foreign	Total		
BORROWER/RECIPIENT	55.70	5.45	61.15		
INTERNATIONAL DEVELOPMENT	51.23	139.04	190.27		
ASSOCIATION					
AUSTRALIAN AGENCY FOR	13.18	11.82	25.00		
INTERNATIONAL DEVELOPMENT					
Total:	120.11	156.31	276.42		
Borrower:					
Socialist Republic of Vietnam					
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Component	B: Nation	nal Water	way Corr	idors (USS	63.29 mi	llion) aim	s to impro	ove the sta	ndard
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Component	C: Conne	ecting the	Poor to the	ne Supply	Corridors	(US\$68.9	97 million) by impro	oving
the feeder w	vaterways	, roads, p	orts and la	anding stag	ges at the	district ar	nd provinc	ial levels	to link
poorer and	more dista	ant produc	cer comm	unities to	the main s	supply con	rridors.		
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Which safe	guard poli	icies are tr	riggered,	if any? Re	ef. PAD L).6, Techr	ical Ann	ex 10	

Environmental Assessment (OP/BP 4.01) Involuntary Resettlement (OP/BP 4.12) Indigenous Peoples (OP/BP 4.10)

Significant, non-standard conditions, **if any**, for: *Ref. PAD C.7* Board presentation:

Loan/credit effectiveness:

Covenants applicable to project implementation:

A. STRATEGIC CONTEXT AND RATIONALE

1. Country and sector issues

Background

Vietnam's transport and logistics system has supported impressive economic progress in recent years:

- the Gross Domestic Product (GDP) has grown at 6 percent per year since 2000 and grew by 8.4 percent in 2005, the highest level in nine years;
- there has been a continuation in rapid poverty reduction with poverty rates falling from 37 percent in 1998 to 20 percent in 2004; and
- there has been strong export growth of 13 percent per year from 2000 to date and an increase of 22.4 percent in 2005. The top six exports being: oil, garments, agriculture (including rice), footwear, seafood and wood products.

However, with Vietnam's expected accession to the World Trade Organization (WTO) in October 2006, it is likely that the transport and logistics system will come under increasing strain. When manufacturing firms were consulted during the Investment Climate Assessment (ICA) survey what infrastructure improvements would most benefit their business, more than 40 percent highlighted national and provincial roads. The figure for the Mekong Delta was 50 percent.

Millions of small farmers, thousands of private businesses, over 700 state-owned enterprises and several cooperatives contribute to the vibrant economy of the Mekong Delta. The region produces about 45 percent of Vietnam's agricultural products while utilizing just 31 percent of the country's agricultural land. More than half of the entire area of the region (2.1 million ha) is under rice cultivation. Known as the country's rice basket, the Mekong Delta produces about half of the rice consumed in Vietnam's rice and 80 percent of rice exports. It also produces about 40 percent of the country's seafood and 50 - 60 percent of its seafood exports.

Poverty remains a critical problem for the region. Despite a considerable decline in poverty since 1998, there are still nearly four million people living in poverty in the Mekong Delta. This is the highest concentration of poor people of any of Vietnam's seven regions. Additionally, the Mekong Delta has the highest percentage of people vulnerable to relapsing into poverty through adverse economic shocks. The Mekong Delta is also prone to natural disasters, which contributes to a precarious existence for the poor.

Government Strategy for the Mekong Delta

The government aims to stimulate growth in the region, to fight poverty and to reduce the urbanization pressure on Ho Chi Minh City (HCMC). This has been successful to the extent that the economy of the Mekong Delta is growing rapidly and the products as well as the markets of the region are diversifying. To support the economic growth and poverty reduction strategy, the following policies regarding the development of the transport system have been encouraged:

• economic diversification: national and provincial governments are promoting economic diversification in order to increase the value of production in an area traditionally dominated by rice;

- agricultural diversification: aquaculture industries, fruit and vegetable farming, etc;
- downstream diversification: local processing, canning and packing of produce, etc;
- quality enhancement: new central rice collection points, well-equipped fishing ports and International Standards Organization certified seafood packing plants, to reduce product loss and increase value;
- manufacturing and service industries: industrial parks are expanding and the delta is emerging as a destination for eco-tourism; and
- market diversification: increased international trade and new export markets.

A key part of the Government's strategy for the region is to promote and help develop the City of Can Tho (population 1.2 millions) as an economic hub for the Mekong Delta and a port for the region that will relieve pressure on HCMC roads and ports.

Transport sector issues in the Mekong Delta

The region's strategic freight transport needs are met by the inland waterways system and the road system. There are no railways in the region. The waterways system consists of 4,800 kms of navigable waterways, 1,600 kms for the main corridors, and carries around 70 percent of tonne-kms. The road system comprises 28,000 km, including 1,700 km of national roads, and carries around 30 percent of tonne-km. Broadly, in terms of logistics, the waterways carry the region's important but lower market value bulk goods, such as rice, cement, building materials and fertilizer, while roads carry goods with higher market value (and more time-sensitive), including seafood, other perishables and manufactured goods.

The 18 million inhabitants of the Mekong Delta rely on just two major routes into HCMC. The road network is dominated by National Highway 1; and the waterway network is dominated by the central waterway through the Cho Gao canal. Both routes are becoming bottlenecks and there is an immediate requirement to provide alternative routes by improving the standard of the rest of the national highways and to provide a Northern and Coastal corridor on the waterways.

The provincial network is also underdeveloped; only 35 percent of the provincial road network is paved, and only 10 percent of rural roads are paved. There are large areas of the delta that are not served by roads and the communities are reliant on the waterways and motorcycle tracks. The high costs of road building in an area where embankments must be high and bridges frequent indicate that accessibility is a real constraint. As a result the level of rural accessibility in the Mekong Delta is the lowest in the country with only 57 percent of the population having access to an all weather road compared to 76 percent for the country as a whole (VLSS 2002 data). Social assessments have highlighted the priority that communities in the Mekong Delta put on road access.

Infrastructure bottlenecks in the logistics system include:

- slow and sometimes expensive rural transport links from farms to freight aggregation points;
- poor access to provincial feeder routes from aggregation points to the trunk roads and waterways in some peripheral areas;
- growing congestion on National Highway 1, the dominant trunk road, and quality deficiencies on other main roads, often caused by bridge loading constraints;

- lack of major northern and southern canals providing high capacity barge routes, which would reduce transport cost and relieve pinch-points on the central canal routes;
- insufficient and poorly managed landing stages which act as interchange points between road transport and waterway transport at commune, district and provincial levels; and
- lack of infrastructure that would allow penetration of 40 foot containers beyond Can Tho.

Institutional Capacity. The national road network in the Delta is managed by Regional Road Management Unit 7 (RRMU-7) which is one of four RRMUs under the Vietnam Roads Administration. The capacities of planning and prioritization are currently poor but the International Development Association (IDA) funded Road Network Improvement Project (RNIP) is providing support to Vietnam Road Authority (VRA), and their RRMUs, to enhance their network planning, management and maintenance roles. Provincial level roads are managed by the 13 provincial departments of transport which report to the Provincial Peoples Committees. Maintenance finance is a particular problem but the Ministry of Transport is instituting a comprehensive capacity building program for all provinces supported by development partners. This capacity building program will support improved planning, implementation and maintenance management of the provincial road network.

The national waterways are managed by the Vietnam Inland Waterways Administration (VIWA). The waterways located in the Mekong Delta are the responsibility of VIWA- South (VIWA-S). VIWA currently has a cumbersome organizational structure which does not respond to the modern requirements for efficient waterways and ports management. VIWA wants to reorganize to give greater accountability to VIWA-S and its waterway management stations; it wants to make the ports authorities more independent and commercial; and it wants to improve cost recovery capability in the sector to cover operations and maintenance expenditures.

Multi-modal Coordination during Planning. The last comprehensive Mekong Delta transport plan was produced in 2000. Multi-modal coordination challenges include the building of road bridges with insufficient clearance for waterways vessels, poor bank protection on the waterways causing the road embankments to collapse and insufficient road access to ports and landing stages. Although the waterways sector has a clear set of investment priorities, the road sector suffers from poor prioritization and political interference in investment decision making. Improved coordination between agencies and improved prioritization within agencies is needed.

Ports Development and Management. Most port development has been undertaken independently by provincial governments with the advantage of at least some competition, but with the disadvantage of some duplication of facilities. Users of the waterways see the priority to be expanding and enhancing the existing facilities rather than building new ports. For example, they see a need for new berths, additional storage space, container handling equipment, and improved road access. Users also desire the management of the facilities to be more responsive to their needs. At the moment the majority of facilities are operated by provincial enterprises that lack the necessary knowledge or incentives to provide the most efficient and cost effective services.

Regulation. Changes in transport and logistics regulatory systems have improved markedly over the last five years and will in the longer term provide a more effective enabling market

environment for the development of the logistics industry. As part of the push towards WTO accession, the government has legislated an increasingly open environment for the development of multi-modal transport services. The two main modes operating in the Mekong Delta are open for private truck and barge operators. Private participation in ports infrastructure and operations is at an early stage but there have been improvements and certainly for river ports it is now fairly easy for the private sector to operate facilities. The remaining issues to be solved relate to completion and enforcement of the implementing regulations.

Transport safety. According to accident data from RRMU-7, in 2005 approximately 1,000 people died on National Highways in the Mekong delta region alone but this is likely to be an underestimate. Many vehicle classes compete for the space (trucks, cars, motorcycles, bicycles, pedestrians and animal drawn vehicles). Surveys indicate that motorcycles typically constitute 80 to 85 percent of vehicles (excluding bicycles). Paved shoulders or footpaths are either nonexistent or too narrow. Lack of enforcement of land use restrictions in the right of ways makes this situation even worse as people carry on their daily lives at the road side. Consequently, how to reduce traffic accidents and improve traffic management have become major issues.

2. Rationale for Bank involvement

The Government of Vietnam, in its increasing awareness of the benefits of efficient multimodal transport and logistics services, has requested Bank support in the financing and planning of multi-modal transport systems in both the Mekong and the Red River Deltas. Despite previous transport investments in the Deltas, Vietnam's rapid economic growth over the past decade is resulting in serious transport bottlenecks and investment demands that are beyond the reach of government's own resources. The availability of two major transport modes in waterways and roads and the numerous interfaces between them make the Deltas ideal regions for enhancing multimodal transport efficiency.

This is the first operation of the type in Vietnam and the complex issues involved in the policy and planning for multi-modal transport and logistics services are new to the government. The Bank brings expertise in the various aspects of designing efficient multimodal projects including regulatory frameworks, regional planning techniques, private sector participation and institutional arrangements. This project will serve both as a demonstration of how multimodal transport projects can be developed and designed, and also play a major role in raising awareness of multimodal transport. The Bank has also contributed to a project design that addresses economic growth but also links peripheral areas to the main supply corridors providing opportunities for more socially inclusive growth.

While this project introduces a new approach to transport planning in Vietnam, it further contributes to the development of the Mekong Delta by building on previously financed investments in national roads, provincial roads, waterways and port facilities. These investments have already contributed significantly to improvements to the quality of the transport network reducing travel times and costs and increasing rural accessibility.

3. Higher level objectives to which the project contributes

The project would support three of the four main pillars of the proposed next Vietnam CAS (FY07-FY11), i.e. business development, social inclusion and governance. The project would contribute directly to the proposed CAS sub-themes focusing on (i) Efficient and reliable infrastructure services; (ii) Better access to and use of key rural infrastructure services and (iii) Improved effectiveness of public resources management.

The program also directly supports:

- the Government's Socio-Economic Development Plan (SEDP) for 2006-2010 in which the transport sector is required to provide better coordination and planning between modes;
- the Government's Transport sector strategy
- the requirements of World Trade Organization (WTO) accession through an improved environment for trade facilitation and private sector investments; and
- is linked with the IDA-funded customs modernization project and supports the objectives of the Greater Mekong Sub-region (GMS) for improved regional economic integration.

B. PROJECT DESCRIPTION

1. Lending instrument

The project will be financed with a specific investment loan.

2. Project development objective and key indicators

The development objective of the project is to:

- (i) reduce transport costs and facilitate trade by improving the main inland waterways and road corridors in the Mekong Delta region;
- (ii) improve rural mobility of goods and people by providing year round basic access to communes and the main supply corridors;
- (iii) strengthen the effectiveness of transport institutions to plan and manage multi-modal transport infrastructure and logistics.

The key performance indicators for the above development objectives are:

- a) Reduced number of respondents to the Investment Climate Survey citing transport as a constraint in the Mekong Delta;
- b) Percentage reduction in rice supply chain costs along the Northern Trans Mekong Waterways corridor ;
- c) Percentage reduction in freight costs on improved project highway and waterway corridors;
- d) Increased level of rural accessibility in the Mekong Delta as defined by the percentage of people living within 2 km of an all weather road and reduced number of communes lacking year round basic access;
- e) Increase in the number of km of waterways under active management and maintenance in the Mekong Delta; and
- f) The creation of a National Logistics Forum (NLF) to coordinate discussions between the government, logistics industry and their customers.

3. Project components

The Project will have four main components. Annex 4 provides a detailed project description with the associated investment costs:

Component A: National Road Corridors (US\$50.03 million)

The component will improve the standard of national trunk roads connecting the main economic hub of the Mekong Delta. There are two sub-components:

- (i) National Road Corridor Improvements, amounting to approximately US\$46.86 million, will rehabilitate existing alignment by widening and upgrading the roads to a Class II, Class III or Class IV standard of approximately 98 km of national highways (including 13.52 km under NH 53, 40.85 km under NH 54, and 43.89 km under NH 91). Works will also include construction of 12 bridges, provision of culverts and raising the road levels where required in flood prone areas; and
- (ii) Financing for *Detailed Engineering Designs and Construction Supervision* for the national road component, estimated to cost approximately US\$3.17 million.

Component B: National Waterway Corridors (US\$63.44m)

The component will improve the standard of trunk waterways connecting the Northern and coastal delta areas to Can Tho and HCMC. There are two sub-components:

- (i) Improvements to National Waterway Corridors, amounting to approximately US\$59.11 million, will support investments on the main supply corridors to improve the standard and connectivity of the canal network, concentrating on links in both the Northern Trans Mekong corridor (253km) and the southern coastal corridor (153km). These corridors will be improved to Class III standard and include dredging to the required widths and depths, bank protection in selected areas, a ship lock, bridge improvements (raising and rehabilitation) and provision of 24-hour aids to navigation. The improvements will help improve region-wide accessibility, relieve congestion on the main corridors, reduce transportation costs and support economic development in the provinces; and
- (ii) Financing for *Detailed Engineering Designs and Construction Supervision* for the national waterway component, estimated to cost approximately US\$4.33 million.

Component C: Connecting the Poor to the Supply Corridors (US\$68.97 million)

The component will improve the feeder waterways, roads, ports and landing stages at the district and provincial levels to link poorer and more distant producer communities to the main supply corridors. The following four sub-components will be directed to this objective:

(*i*) *Investments in Provincial Roads, amounting to* US\$58.25 million, will focus on connecting the secondary road network to areas of high economic activity centers and areas with high poverty concentration in the Mekong region to the main transport corridors. A total of approximately 315 km of secondary roads, including 120 bridges,

will be upgraded to an all-weather standard in the thirteen. Improvements will be carried out along the existing alignments by upgrading the roads through providing structural overlays, or through complete reconstruction where the existing road structure has collapsed or where there are earth roads.

- (ii) Investments in Provincial Feeder Canals will finance the improvement of two feeder canals in An Giang and Ca Mau provinces with a total length of 58 km. The improvements, estimated to cost US\$1.04 million, will include widening and deepening of the canal sections to a class IV standard, bank protection in selected areas, raising of bridges where required and provision of aids to navigation.
- (iii) Investments in Provincial and District Ports and Landing Stages, amounting to US\$4.0 million, will finance enhancements to existing provincial ports infrastructure, and may include new wharfs, storage areas, road access or equipment to improve existing throughput and efficiency. It will also finance new infrastructure in the form of 5 rural landing stages to facilitate access to rural producers to the main transport networks, and 2 provincial river ports. In addition, technical assistance will be provided to Port Authorities to manage port development, concessions and maximize the efficiencies of river ports and landing stages in the Mekong Delta. This endeavor includes an assessment of port and landing stage functions, services, finance and institutional framework, capacity building for Port Authorities, feasibility and concrete solutions for private sector involvement.
- (iv) Design, Supervision and Advisory Services will support the 13 project provinces in their design and supervision of works, project management, reporting and capacity building requirements. The design and supervision services will be procured by each of the 13 provinces, amounting to approximately US\$4.49 million. The other services will finance technical assistance and advisory services for the development of a regional support centre to be based at the Southern Transport College in Can Tho in the amount of US\$1.2 million. This support centre will provide provinces with assistance on general project management but also with their training needs, including budgeting and planning, procurement, financial management and safeguards issues.

Component D: Institutional Support to Ministry of Transport (US\$6.45 million)

Four sub-components will provide institutional support to the Ministry of Transport (MOT):

- (*i*) Support to MOT on Developing Multi-modal Transport To enhance the efficiency of multi-modal transport, the project will support the relevant departments in MOT in the development of appropriate policies and planning frameworks. The consulting services are estimated to cost US\$1.5 million.
- (*ii*) Institutional support to Vietnam Inland Waterway Administration (VIWA). To more effectively carry out its roles and responsibilities as managers of the inland waterways network in Vietnam the project will finance support to VIWA. The consulting services are estimated to cost US\$1.5 million, including studies to improve asset management and

cost recovery, and advice on the reorganization of VIWA including the ports authorities and waterway management stations.

- (*iii*) *Training*. A training budget of US\$0.95 million will be coordinated by the Department of Personnel and Labor for use at approved MoT training institutes. The training will include project management, business processes, asset management techniques and multi-modal transport planning.
- (iv) Project Audit Services, costing approximately US\$1.0 million, will facilitate two types of independent audits: (a) Integrated Project Implementation Audit Services, in which independent consultants will be procured to conduct semi-annual reviews that provide heightened fiduciary, safeguards and general project monitoring; and (b) a Project Financial Audit, in which independent external auditors will conduct annual project financial audits.
- (v) Preparation for Future Projects The sub-component will finance the detailed design services for the Northern Delta Transport Development Project, in the amount of US\$1.5 million.

4. Lessons learned and reflected in the project design

Multi-modal Planning. There is little previous experience in planning and managing multi-modal infrastructure investments in Vietnam, therefore MOT decided to plan and prepare the project as a single operation for this project. In this way MOT hopes to maximize the synergies between the modes of waterway and roads.

Provincial Level Decentralization Initiatives. Experience from previous projects suggests that provincial ownership of investments is reduced, as are the benefits from capacity building initiatives, where a central implementing agency carries out the works. The provincial components of this project will be fully decentralized. Technical assistance is included in the project to support all implementing agencies at the provincial level based on the results of various capacity assessments of the provinces. An increased level of technical assistance support will be provided where Provincial Project Management Units (PPMUs) and Provincial Departments of Transport are assessed as lack of capacity.

Institutionalizing Training Activities. Previous projects have tended to conduct training activities through project consultants which has limited the longer term sustainability of these initiatives. This project will conduct trainings using MOT/ Government of Vietnam (GOV) approved curriculum and through MOT training institutes.

Corruption and Collusion. This project addresses the risk of corruption and collusion through a plan to improve transparency and fairness in procurement which builds on the one MOT has approved for RT3. The main elements of the action plan include an integrated project implementation audit with consistent enforcement, wider advertising of bid opportunities, a register of de-barred bidders, provision for complaints, dissemination and training, disclosure of contract award information, and greater community participation in planning and procurement.

Project consultants will also support with the preparation of bid documents, provide reports on contractor qualifications and produce independent bid evaluation reports.

Quality of Construction – Quality has been an issue in past projects due to a combination of poor design, supervision and construction quality. This project will achieve quality construction through: (a) additional emphasis on construction supervision through training and by oversight by an independent advisory consultant; (b) carrying out independent integrated audits which include technical quality as well as financial management; (c) encouraging local communities to become more involved in monitoring procurement and construction activities; and (d) implementing the plan to improve fairness and transparency in procurement.

5. Alternatives considered and reasons for rejection

For the individual project components numerous alternative upgrading schemes were considered and the ultimate package of investments selected is a result of detailed economic, financial, environmental and social trade-offs summarized in Section D and Annexes.

The main institutional alternatives consideration was given to project implementation arrangements involving both national and provincial roads and waterways infrastructure. Consideration was given to the use of one implementing agency to capture the synergies between modes; however, this was later rejected in favor of the greater efficiency of implementation using specialized project management units.

For the provincial infrastructure, various options were considered, namely: (i) full centralization - with PMU-1 and PMU-W implementing the provincial roads and the feeder canals subcomponents respectively; (ii) partial decentralization - with those provinces assessed as sufficiently strong implementing their sub-components, but with the centralized agencies implementing the sub-components within those provinces assessed as requiring additional strengthening, and; (iii) full decentralization - with all 13 provinces being given responsibility for implementing their sub-components and additional support directed to provinces with less capacity. Given the Government's move towards greater decentralization, the desire for greater provincial ownership and a push towards simplifying implementation arrangements, the fully decentralized option was chosen.

C. IMPLEMENTATION

1. Partnership arrangements (if applicable)

The project will be co-financed with AusAID who will fund US\$ 25 million. These funds will be used to fund defined components of the project and there will be separate accounting and reporting of the IDA and AusAID funds. The Mekong Delta is a focus area for IDA and AusAID and the proposed project components supplement other investments by the Government and donors in the Mekong Delta region. The project will also facilitate integration of the Greater Mekong Sub-region for which coordination will be required with ADB and the Mekong River Commission.

An active Government-donor partnership group regularly brings together the key actors to discuss strategic issues for the transport sector and coordinate support. Capacity building activities under the project will be carried out in line with an agreed framework developed by the transport donor partnership group in Vietnam. This partnership sets out sectoral areas in which each development partner will concentrate, as well as the regional focus for training support.

Partnership will also be important for the various government agencies if multi-modal transport and trade facilitation are to be maximized. The project steering committee under the project will address the inter-modal and inter-ministerial coordination activities of the project.

2. Institutional and implementation arrangements

The Ministry of Transport would act as the "line agency" for the national infrastructure components. The line agency will approve the national investment programs and procurement plans. The VRA will be the "project owner" for the national highways component and VIWA the "project owner" for the national waterways component. These modal administrations will be fully delegated by the "line agency" for the day to day management of their respective components with PMU1 and PMUW being the "implementing units" reporting directly to the "project owners". The "implementing units" will advertise, receive, evaluate, produce evaluation reports, award and sign contracts and subsequently manage implementation of their components but will require necessary approvals from the "project owners" at the various stages.

For the provincial infrastructure component the respective PPCs will be the "line agencies" and be responsible for approving respective investment programs and procurement plans. The respective "PDoTs" will be the "project owners" of the respective provincial infrastructure programs. The respective PPMUs will be the "implementing units" for the provincial infrastructure components and will advertise, receive, evaluate, produce evaluation reports, award and sign contracts and subsequently manage implementation of their components but will require approvals from the respective project owners (i.e. PDoTs) at the various stages.

The Ministry of Transport (MOT) will have overall responsibility for overseeing the implementation of the project, reporting to the Government of Vietnam (GOV) and fulfilling the requirements of the World Bank.

The MOT will establish a Project Steering Committee (PSC), which will be chaired by a MOT Vice-Minister and consist of representatives of Ministry of Planning and Investment (MPI), Ministry of Finance (MOF), State Bank of Vietnam (SBV), DPI, VRA, VIWA and representatives from some of the 13 Provinces (provinces to select such representatives). The PSC's mandate is to address cross-ministerial issues, multi-modal issues and to oversee project management and monitor the implementation progress of the overall project. DPI will act as the secretariat for the PSC and be responsible for overall coordination and oversight of implementation of the Project, including:

(i) Coordination and liaison between the Project Owners, their Implementing Units and other ministries on behalf of the PSC;

- (ii) Coordination of the review of the technical and financial audit reports, social and environmental monitoring reports, the Project evaluation and monitoring reports, other Project related studies and reports;
- (iii) Ensuring that the Project related policy and institutional reforms are achieved; and
- (iv) Monitoring the Project's physical and financial progress.

A summary of the responsibilities of each "implementing unit" is set out below.:

- (i) Project Management Unit No. 1. PMU-1 and its consultants will have responsibility for all aspects of the national roads corridor component, including planning, programming, budgeting, design, procurement, implementation, supervision, monitoring, evaluation, and coordination/liaison with IDA. It will be responsible for the award of and signature to, contracts for national highways. PMU-1 will engage consulting services to assist it in the design and supervision of the national highways program. At all stages it will report to, and require the approval of, VRA.
- (ii) Project Management Unit -Waterways. PMU-W and its consultants will have responsibility for all aspects of the national waterway corridors component (including bridges). The responsibilities are as with PMU-1 above. PMU-W will also be responsible for managing the Institutional Strengthening component, which will include the engagement, contracting and supervision of the various technical assistance/consulting services and training packages. At all stages it will report to, and require the approval of, VIWA.
- (iii) Provincial Project Management Units (PPMUs) The PPMUs in each of the 13 project provinces will have responsibility for all aspects of their respective provincial roads, bridges, feeder canal and landing stages works programs. The responsibilities are as with PMU-1 above. The PPMUs will engage consulting services to assist them in the design and supervision of their provincial roads and feeder canal programs. Overall support to each of the 13 provinces will be provided under Advisory Consultants engaged by PMU-W, and will be responsible for oversight, advice and assistance to the local consultants to be engaged by the PPMUs. At all stages, the PPMUs will report to, and require the approval of, the respective PDoTs.

The Technical Control & Quality Management Bureau (TCQM) within MOT will provide assistance for review and approval of technical designs and cost estimates, as well as for monitoring the quality of the works, for the national components.

Consulting services will be engaged to further support project implementation, namely:

- (i) Regional support consultants (to support capacity building at the PPMU/PDoT level and overall support to PPMUs and local supervision consultants (see above)(Component C4ii));
- (ii) Support to MOT for developing multi-modal transport (Component D1);
- (iii) Institutional support to VIWA (Component D2);
- (iv) Training (Component D3);

(v) Independent audit (to carry out Integrated project implementation audit and external financial audit for all project implementing agencies (Component D4i and D4ii)

To simplify procurement and management arrangements, PMU-W will contract and manage all of the above consulting services packages. Component D3 will also be managed by PMU-W but, through Ministerial Decree, the training department in DPL will be responsible for the overall coordination of the training program.

The project will be implemented in two phases. The first phase of investments will be ready for implementation at project effectiveness including all the necessary engineering, procurement and safeguards documentation. Preparation of the second phase will commence once the project has started.

3. Monitoring and evaluation of outcomes/results

MOT has requested close monitoring of two project multi-modal corridors to evaluate the impacts of improved policy, regulation and infrastructure. The first corridor will be the Northern Trans Mekong Waterway Corridor from HCMC to Rach Gia (250 km) which carries mainly agricultural product, building materials and clinker. The second corridor will be the NH-91 from Can Tho to the Cambodian border (120 km) which will be improved to accommodate 40 foot containers. This corridor is located next to various industrial parks, Can Tho Port and the Bassac River. A comprehensive Monitoring and Evaluation Framework has been developed for these corridors, and the major indicators are included in Annex 3.

This M&E framework will address a range of multi-modal indicators including freight movements, freight rates, efficiency of port operations, supply chain analysis (time/quality/cost), and impacts on industrial and agricultural producers to improve access to supply corridors. The monitoring will be undertaken by the consultants advising MOT on multi-modal transport (component D1) and the findings will be transmitted to the PSC.

Information pertaining to the monitoring and assessment of the progress of the MTIDP will be reviewed by DPI, with assistance of other key MOT departments. The key performance indicators will measure project effectiveness, efficiency, appropriateness, procurement procedures, quality of works supervision, the performance of the Consultancy Services, the sufficiency and appropriateness of inputs and outputs, and the frequency and quality of participation by stakeholders.

4. Sustainability

The sustainability of the Project will depend on construction quality, the subsequent management and maintenance of the network and the ability for MOT and provincial agencies to plan and operate multi-modal transport networks. The quality of construction will be addressed as set out in section B4. The Project will address management and maintenance issues on the waterways through a technical assistance program and the implementation of a River Management Information System. The technical assistance program will also seek means to increase the cost recovery capability in the waterways sector. For provincial infrastructure, a regional support center in Can Tho, established under this Project, will provide the facilities, equipment and training to improve maintenance management. As national roads maintenance is being addressed through the IDA funded RNIP, that Project will focus on investments in the rehabilitation of national road network in the Mekong Delta region.

There are also technical assistance programs to assist relevant agencies with the planning of multi-modal transport and in providing an enabling regulatory environment for service provision. These services will also support provinces develop sound management plans for port facilities, evaluating the options for private concessions, before investments are approved by MOT and IDA.

5. Critical risks and possible controversial aspects

The project risks are substantial (OR HIGH?). This is the first multi-modal project in Vietnam and there is a risk that the coordinating activities of the PSC may be inadequate to meet the development objectives. Furthermore, Vietnam is considered high risk with regard to procurement environment. Both of these major risks can be mitigated through enhanced internal controls, as outlined in the Action Plan to improve transparency and fairness (see annex 8), as well as adequate technical assistance to support the project design.

Risk	Risk Level	Risk mitigation measures					
To project development objectives							
Coordination of multi-modal infrastructure is inadequate	Н						
Fiduciary risks increase with increasingly decentralized implementation	Н	The project will adopt integrated project implementation audits, will adopt an action plan to improve fairness and transparency in procurement and provide advisory consultants to increase provincial capacity.					
Funds for maintenance will be insufficient for the long term protection of assets	S	The project will provide technical assistance to improve cost recovery in the waterways sector and roll-out maintenance management systems to the provinces.					
Multi-modal transport facilities are poorly managed and hence limit the effectiveness of infrastructure investments	S	The project will provide technical assistance to improve management at ports and landing stages. It will also work on the regulatory framework to provide a better environment for private sector involvement.					
To component results							
Implementation delays caused by slow procurement and land acquisition	S	The project has been designed to allocate implementation responsibilities the most appropriate institutions/levels					
Decentralized implementing agencies have insufficient capacity to implement the project	М	Each implementing agency has relatively few contracts to administer which are similar in size to domestically funded projects. Advisory services will support project implementation.					

Design and construction quality are poor	S	Technical assistance will be provided to heighten attention to design and quality construction through on- the-job training and additional oversight. Integrated implementation audits will monitor technical issues.
OVERALL RISK LEVEL	Н	

Risk rating – H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or low risk)

6. Loan/credit conditions and covenants

Credit Effectiveness

- 1. The AusAID trust fund grant agreement has been executed and delivered and all conditions precedent to its effectiveness or to the right of the borrower to make withdrawals thereunder have been fulfilled, except the effectiveness of the Development Credit Agreement;
- 2. PMU1 and PMU-W confirm the appointments and qualifications of finance staff responsible for project financial management who are acceptable to IDA. PDOTs appoint sufficient accounting/ finance staff with relevant qualifications and experiences or basic knowledge for capacity building acceptable to IDA.
- 3. Development of project specific accounting software should be made in implementing units in PMU1, PMU-W and PDOTs together with proper trainings.
- 4. FM manual for MTIDP project will be prepared in PMU1, PMU-W and PDOTs setting out in detail the structure, procedures, reporting and coordination between different levels of MTIDP project in financial management aspect. Training on IDA regulation, requirement on financial management and disbursement should also be provided.

D. APPRAISAL SUMMARY

1. Economic and financial analyses

The economic analysis was carried out in two phases. The first phase involved modeling the road and waterway network in the Mekong Delta using the TRANSCAD model to identify the major routes, main modal transfer points and to predict future transport growth. This highlighted a number of road and waterway corridors that would cause future constraints unless improved. In the second phase, these individual investments were subject to a standard economic analysis. For the national roads, costs and benefits were determined using the Highways Design and Management model 4 (HDM-4). For the waterways, the Inland Waterways Transport Cost model (IWTC) was used.

The modeling of the Mekong Delta transport network using TRANSCAD only captured the national network. The initial selection of routes for the provincial network was based on connectivity to the main supply corridors, poverty and accessibility criteria, and the policy requirement to involve all provinces in the Mekong Delta. The Roads Economic Decision model (RED) was then used to calculate the expected benefits from these improvements. At the provincial level there are four road links in the program where it was not possible to calculate the likely benefits. All of these road links provide new all-weather access and hence there is no existing traffic.

2. Technical

Improvements to national roads will be carried out on the existing alignment by widening and upgrading the roads to a Class II, Class III or Class IV standard following the highway design standards of Vietnam (TCVN 4054-1998), as supplemented by AASHTO standards. Present traffic on the selected roads ranges between 300 and 2000 vehicles per day (four-wheel vehicles) with an estimated average growth rate of about 7 percent over the next 10 years. Given the high level of non-motorized and two-wheeler traffic, all improved roads (except for those in very low traffic remote areas) will include paved shoulders for improved road safety. Where possible there will be segregation of non-motorized traffic either through the provision of sidewalks or physical measures on the roads. Works will also include rehabilitating and/or constructing bridges and culverts and raising the road levels where required in flood prone areas.

The waterway corridors will be improved to Class III standard with a bottom width of 26-30 meters. An exception will be the Cho Gao canal which, while still being a Class III canal, will have a bottom width of 55 meters to further reduce congestion in this busy area. The proposed improvements will generally include dredging to the required widths and depths, bank protection in selected areas, bridge improvements (raising and rehabilitation) and provision of 24-hour aids to navigation. Feeder canals will be dredged to a Class IV standard. Specific ports and landing stages will be identified during implementation but investments will likely focus on expanding the capacity and functionality of existing facilities rather than new builds.

Considering the low motorized traffic volumes on most of the provincial roads, as well as the need to optimize benefits from the proposed investments, it was considered that improving all-weather connectivity and accessibility and improving the riding quality of selected roads within the delta would take priority over road widening. Road upgrading will take place along existing alignments and will also include rehabilitating or constructing bridges and culverts and raising road levels where required in flood prone areas. The improved roads will be constructed with either single-lane (3.5 m) or two-lane (6.0 m) bituminous surface treated (BST) paved carriageways with a 1.0 m paved shoulders on each side.

3. Fiduciary

Procurement – The overall procurement risk of the project is considered *high*. This *high* risk level is partly because of the overall procurement environment in Vietnam and partly because of the decision to fully decentralize the provincial component of the project to the PPMUs under the control of the PPCs. Although a number of these provinces have experience with donor-funded projects, some do not. The highest risks identified so far are: i) misunderstanding of the applicable procurement procedures by the implementing agencies that are not familiar with Bank procurement procedures; and ii) manipulation of the procurement process and collusion among bidders.

The implementation units responsible for the national components of the project, PMU-1 and PMU-W, have extensive experience with IDA procurement and are judged to have the necessary capacity to undertake the procurement activities.

To mitigate the above risks, an action plan to improve fairness and transparency in procurement has been developed jointly by the Bank and Borrower; and the Project includes significant technical assistance to help each of the implementing agencies in implementation of their respective components. The action plan has already been adopted in the third rural transport project also being managed by MOT. All of the TA packages include procurement support and procurement training. TA will also be provided for the preparation of bidding documents and subsequent evaluation of proposals.

Financial Management – The inherent risk to the project from the financial environment is assessed as substantial before mitigation and moderate after mitigation primarily due to limited financial management capacity, lack of effective auditing, lack of counterpart funding due to budget constrains and potential corruptions which may arise from procurement. The Project will address the overall fiscal environment by working with provinces to develop medium term expenditure frameworks, improved budgeting and monitoring, establishment of internal audit function, and conducting a range of independent financial and performance audits. An anticorruption plan will be implemented to address the risk of corruption.

The Project control risk is assessed as moderate. PMU-1 and PMU-W already have financial functions that are adequately staffed. Both PMU1 and PMU-W financial staffs have experience managing IDA financed projects and national projects (PMU1: Highway Rehabilitation, Mekong Transport and Flood Protection; PMU-W: Inland Waterway). The accountants in PMU1, PMU-W and Chief accountants of the PPMUs have accounting educational background (bachelor degree) and experiences. They are assessed as having the capacity to undertake the MTIDP as their current workload is reducing with other projects coming to completion during 2006 (PMU-W) and 2007 (PMU1).

At the PPMU level, the accounting staff will be assigned either from the Project Management Board for Investment Projects (PMB) (within PDOT) or assigned from PDOT. PPMU staffs must be capable of formulating and implementing budget, maintaining project accounts and preparing financial reports. Each PPMU would have at least one financial officer and one assistant to handle accounting and reporting. These two persons will have adequate qualifications and relevant experiences to fulfill fiduciary requirements consistent with IDA requirements.

The following weaknesses were addressed from the financial management assessment of PDOTs: (a) Lack of experiences in managing donors funded projects, (b) inconsistent accounting system, some PDOTs (particularly Can Tho) do not have any accounting system, (c) weak budgeting and reporting, (d) no internal audit function, external audit requirements are not consistent, and (e) accounting software is in used in a number of PDOTs, however integrity and security of software are variable and questionable.

The Financial Management Action Plan to be implemented (see Annex 7) would serve to address these weaknesses and ensure that capacity is adequate to address current financial management deficiencies.

4. Social

Efforts have been made to avoid and mitigate resettlement impacts. However, the project will pose substantial resettlement impacts due to required land acquisition for rehabilitation, improvement and widening of national highways, provincial roads and waterways, bridges and ship locks. A Resettlement Policy Framework (RPF) has been developed in compliance with the requirements of the Bank's OP 4.12 on Involuntary Resettlement and will be approved by the client. The RPF will be applied for all subprojects for the entire project life. According to the results of inventory, almost 2,840 Displaced Persons (DPs) will be affected under the road subprojects and 7,245 DPs affected by the waterway subprojects in the first year.

The results of the social surveys showed that the Project would impact a number of ethnic minority communities/households in the project areas, including Khmer, Cham, Hoa, Ngai and Tay. An Ethnic Minority Policy Framework (EMPF) has been developed and will be approved by the client that complies with Bank's OD 4.20 Indigenous Peoples. The EMPF will be applied to develop Ethnic Minority Development Plans (EMDPs) for all subprojects involving ethnic minority peoples. An EMDP is prepared for the first phase implementation, for both waterways and national highways and provincial roads.

5. Environment

In compliance with Bank OP4.01 the Borrower commissioned an independent environmental consultant to prepare an environmental impact assessment. Given that the Project is dealing with multiple modes of transport and will be implemented in a phased approach, the EIA includes an overall impact assessment of the Project, a specific impact assessment for the subprojects identified for the first phase, and an environmental framework governing the impact assessment process for the subsequent phase of the project. Based on the results of the EIA, an Environmental Management Plan (EMP) has been developed with the specifications of the environmental management and supervision arrangements, mitigation measures, monitoring and reporting programs, budget estimates and capacity building requirements.

The major environmental impacts of waterway upgrading are the disturbance of water quality and aquatic species as a result of canal dredging, spoil disposal, and piling works for structures built in the water. For the road rehabilitation dust emission, noise, air pollution from earth filling and excavation works, hot mixing plants, material stockpiling and disposal of unused spoil are major impacts. These impacts are evaluated as short term and confined within the construction period.

The EIA concluded that the Project will not have significant adverse environmental impact, provided the mitigation measures recommended in the EMP are properly implemented. The transport routes under MTIDP are not in proximity of sensitive ecosystems (national park, natural reserves) or historical and cultural sites. During EIA preparation public consultation with project affected people and local relevant stakeholders was under-taken, and their feedback taken into consideration when designing appropriate mitigation measures.

6. Safeguard policies

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	[X]	[]
Natural Habitats (<u>OP/BP</u> 4.04)	[]	[]
Pest Management (<u>OP 4.09</u>)	[]	[]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[]	[]
Involuntary Resettlement (<u>OP/BP</u> 4.12)	[X]	[]
Indigenous Peoples (<u>OP/BP</u> 4.10)	[X]	[]
Forests (<u>OP/BP</u> 4.36)	[]	[]
Safety of Dams (<u>OP/BP</u> 4.37)	[]	[]
Projects in Disputed Areas (<u>OP/BP</u> 7.60) [*]	[]	[]
Projects on International Waterways (<u>OP/BP</u> 7.50)	[]	[]

7. Policy Exceptions and Readiness

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

Annex 1: Country and Sector or Program Background

VIETNAM: Mekong Transport Infrastructure Development Project

Key Socio-economic Characteristics of the Mekong Delta

Vietnam's transport and logistics system has supported impressive economic progress in recent years:

- the Gross Domestic Product (GDP) has grown at 6 percent per year since 2000 and grew by 8.4% in 2005, the highest level in nine years;
- there has been a continuation in rapid poverty reduction with poverty rates falling from 37 percent in 1998 to 20 percent in 2004;
- strong export growth of 13 percent per year since 2000 and an increase of 22.4 percent in 2005 although down on the 31 percent achieved in 2004; and
- the top six exports are: oil, garments, agriculture (including rice), footwear, seafood and wood products.

However, with Vietnam's accession to the World Trade Organization (WTO) in October 2006 (*planned*) it is likely that the transport and logistics system will come under increasing strain. When manufacturing firms were asked as part of the Investment Climate Assessment (ICA) what infrastructure improvements would most benefit their business, more than 40 percent highlighted national and provincial roads. For the Mekong Delta this increased to 50 percent.

The Mekong Delta region contains 13 of Vietnam's 64 provinces and has an area of 40,000 km², about 12 percent of Vietnam's area. Its population and labor force of around 17 million and 9 million respectively account for about 22 percent of Vietnam's totals. The region is inhabited by four ethnic groups: the Viet (or Kinh) (about 90 percent); the Khmer (5 percent-6 percent), the Chinese (3 percent-4 percent) and a small Cham minority of less than 1 percent. The region contributed 19 percent to Vietnam's GDP in 2000 (*update figure*) up from 17 percent in 1995. Poverty rates in the Mekong vary from a low of 15 percent-17 percent in the provinces neighboring HCMC (Ben Tre, Long An and Tien Giang) to a high of the 32 percent-38 percent in the 3 southern provinces (Soc Trang, Tra Vinh and Ca Mau). The average for the Delta as a whole is 24 percent compared to a national average of 29 percent.

Millions of small farmers, thousands of private businesses, over 700 state-owned enterprises and some cooperatives contribute to the vibrant economy of the region. The region produces about 45 percent of Vietnam's agricultural products on only 31 percent of the country's agricultural land. More than half of the entire area of the region (2.1 million ha) is under rice cultivation. Known as the country's rice basket, it produces about half of Vietnam's rice and 80 percent of rice exports. It also produces about 40 percent of the country's seafood yield and 50 percent-60 percent of its seafood exports.

Government Strategy for the Mekong Delta

The government aims to stimulate growth in the region and reduce the urbanization pressure on Ho Chi Minh City (HCMC). This has been successful to an extent and the economy of the Mekong Delta is both growing rapidly and diversifying its products and its markets. To support its growth strategies, the following policies have been encouraged:

- economic diversification: national and provincial governments are promoting economic diversification in order to increase the value of production in an area traditionally dominated by rice;
- agricultural diversification: aquaculture industries, fruit and vegetables, etc;
- downstream diversification: local processing, canning and packing of produce, etc;
- quality enhancement: new central rice collection points, well-equipped fishing ports and International Standards Organization certified seafood packing plants, to reduce product loss and increase value;
- manufacturing and service industries:: industrial parks are expanding and the delta is emerging as a destination for eco-tourism;
- market diversification: increased international trade and new export markets.

A key part of the Government's strategy for the region is to promote and help develop the City of Can Tho (population 1.2 millions) as an economic hub for the Mekong Delta and a port for the region that will relieve pressure on HCMC roads and ports.

To support the growing transport demand in the Delta two major projects are being planned by the government. The proposed Bassac river improvement project will, if it is implemented, increase the cargo carrying capacity of the River by opening its entrance for larger maritime vessels to access the region hub port of Can Tho. The government hopes that this will stimulate economic activity in the Mekong Delta and reduce the pressure on HCMC ports and traffic congestion. Secondly, the planned Ho Chi Minh Expressway through the central part of the delta, from Ho Chi Minh to Rach Gia and Cau Mau is scheduled to be open in 2010 and will relieve congestion on NH1. These projects will go hand in hand with an overall upgrade of the road and waterways in the Delta

The government also has a policy to provide all weather road access to all communes in the country. Currently the Mekong Delta has the lowest levels of rural accessibility in the country because of the high road building costs associated with a delta area requiring high embankments and many bridges.

Transport sector issues in the Mekong Delta

The region's strategic freight transport needs are met by the inland waterways system and the road system. There are no railways in the region. The waterways system consists of 4,800 kms of navigable waterways, 1,600 kms for the main corridors, and carries around 70 percent of tonne-kms. The road system consists of 28,000 kms, including 1,700 kms of national roads, and carries around 30 percent of tonne-km. Broadly, in terms of logistics, the waterways carry the region's important but lower value bulk goods, such as rice, cement, building materials and fertilizer, while roads carry higher value (and more time-sensitive) goods, including seafoods, other perishables and manufactured goods.

The 18 million inhabitants of the Mekong Delta rely on just two major routes into HCMC. The road network is dominated by National Highway 1; and the waterway network is dominated by the central waterway through the Cho Gao canal. Both routes are becoming bottlenecks and there is an immediate requirement to provide alternative routes by improving the standard of the rest of the national highways and to provide a Northern and Coastal corridor on the waterways.

The provincial network is also under developed; only 35 percent of the provincial road network is paved, which drops to 10 percent for rural roads. There are large areas of the delta that are not served by roads and the communities are reliant on the waterways and motorcycle tracks. The high costs of road building in an area where embankments must be high and bridges frequent mean that accessibility is a real constraint. As a result the level of rural accessibility in the Mekong Delta is the lowest for the country with only 57 percent of the population having access to an all weather road compared to 76 percent for the country as a whole (VLSS 2002 data). The social assessments have highlighted the priority that communities put on road access and as a result will be a major focus of this project.

Bottlenecks in the logistics system include:

- slow and sometimes expensive rural transport links from farms to freight aggregation points;
- poor access to provincial feeder routes from aggregation points to the trunk roads and waterways in some peripheral areas;
- growing congestion on National Highway 1, the dominant trunk road, and quality deficiencies on other main roads, often caused by bridge loading constraints;
- lack of major northern and southern canals providing high capacity barge routes, which would reduce transport cost and relieve pinch-points on the central canal routes;
- insufficient and poorly managed landing stages at commune, district and provincial levels, which act as interchange points between road transport and waterway transport to the benefit of the logistics system as a whole; and
- lack of infrastructure that would allow of penetration of 40 foot containers beyond Can Tho.

Changes in transport and logistics regulatory systems have improved markedly over the last five years and will in the longer term provide a more effective enabling market environment for the development of the logistics industry. However, this will tend to reveal even more strongly the infrastructure constraints that exist in the region.

Institutional Capacity. The national road network in the Delta is managed by Regional Road Management Unit 7 (RRMU-7) which is one of four RRMU under the Vietnam Roads Administration. Planning and prioritization is currently poor but the current IDA-funded Road Network Improvement Project (RNIP) is providing support to VRA, and their RRMUs, to improve their network planning, management and maintenance roles. Provincial level roads are managed by the 13 provincial departments of transport which report to the Provincial Peoples Committees. Maintenance finance is a particular problem but the Ministry of Transport is instituting a comprehensive capacity building program for all provinces supported by development partners. This will support improved planning, implementation and maintenance management of the provincial road network.

Systematic port administration and management have not been fully carried out in Vietnam. Jurisdiction over Vietnamese ports falls not only to various government branches such as the Ministry of Transportation (MOT)/VINAMARINE, Ministry of Trade, Ministry of Agriculture and Rural Development, Ministry of Industry, Ministry of Defense and Ministry of Construction but also VINALINES which is one of State Owned Enterprises (SOEs), Vietnam International Container Terminal (VICT) which was established as a Joint Venture including foreign investment and other agencies. In addition, ports are constructed based on individual construction plans, and various SOEs operate each port (except VICT).

The national waterways are managed by the Vietnam Inland Waterways Administration (VIWA). The waterways located in the Mekong Delta are the responsibility of VIWA- South (VIWA-S). VIWA currently has a cumbersome organizational structure which does not respond to the modern requirements for efficient waterways and ports management. VIWA wants to reorganize to give greater accountability to VIWA-S and its waterway management stations; it wants to make the ports authorities more independent and commercial; and it want to improve cost recovery in the sector to cover operations and maintenance expenditures.

In the Mekong Delta there are publicly as well as privately managed ports. Public sector ports are managed either by MOT, provinces, cities and state- or province-owned corporations. Since the beginning of 1997, most of the MOT-owned ports are no longer operated by VIWA, but by private operators. VIWA itself, however, remains responsible for the port infrastructure. Some ports are managed by MOT/VINAMARINE. A large part of the privately owned ports, are merely landing stages instead of port, the main part of the inter-provincial (long-haul) cargo is handled at the public sector ports.

Multi-modal Coordination during Planning. The last comprehensive Mekong Delta transport plan was produced in 2000. Multi-modal coordination challenges include the building of road bridges with insufficient clearance for waterways vessels, poor bank protection on the waterways causing the road embankments to collapse and the poor provision of road access to ports and landing stages. Although the waterways sector has a clear set of investment priorities, the road sector suffers from poor prioritization and political interference in investment decision making. Improved coordination between agencies and improved prioritization within agencies is needed.

Ports development and management. Most port development has been undertaken independently by provincial governments with the advantage of at least some competition, but the disadvantage of some duplication of facilities. Users of the waterways see the priority to be expanding and enhancing the existing facilities rather than building new ports. For example, they see a need for new berths, additional storage space, container handling equipment, and improved road access. Users also want management of the facilities to be more responsive to their needs. At the moment the majority of facilities are operated by provincial enterprises that lack the necessary knowledge or incentives to provide the most efficient and cost effective services.

Regulation. As part of the push towards WTO accession, the government has legislated an increasingly open environment for the development of multi-modal transport services. The two main modes operating in the Mekong Delta are open for private truck and barge operators. Private participation in ports infrastructure and operations is at an early stage but there have been improvements and certainly for river ports it is now fairly easy for the private sector to operate facilities. The remaining issues to be solved relate to completion and enforcement of the implementing regulations. There are still some inconsistencies between the different laws and decrees.

The remaining issues to be solved relate to completion and enforcement of the implementing regulations. There is still some inconsistencies between different laws and decrees which allows for too much interpretation by officials and increases the possibility for rent seeking. Informal payments are a major cost to the transport industry in Vietnam.

The various laws and decrees in the road transport sector require a significant overhaul. Currently their focus in on traffic regulations and there is a need to add a focus on competitive provision of transport services. Road act also needs to be revised to match the evolving requirements of the Vietnam Road Administration. The waterways sector needs better regulations to govern planning and also a better framework to govern pricing and cost recovery. At the moment revenues collected by the sector are miniscule.

	Basic Policies					Policy Implementation			
	Market entry/licensing	Competition/SOE role	Safety/environment	Planning/investment	Pricing/cost recovery	Legislation	Implementing regulations	Implementing mechanisms	Outcome/ overall performance
International Shipping	✓	 Image: A second s	 Image: A start of the start of	n.a.	\checkmark	\checkmark			\checkmark
Coastal Shipping			\checkmark	n.a.	\checkmark	\checkmark			\checkmark
Ports and Related Infrastructure			\checkmark	×		\checkmark		×	
Road Transport Services	<	✓	x	n.a.	\checkmark	×		×	×
Road Infrastructure	n.a.	n.a.	x			×		×	×
Inland Water Transport Services	<	✓		n.a.	\checkmark	<			
Inland Waterway Infrastructure	n.a.	n.a.		x	x	\checkmark		×	
Multimodal Transport	✓	√	n.a.	n.a.	n.a.				
	✓	Good		\checkmark	In progr	ess			
		Fair			In progr	ess			
	3 C	Poor		n.a.	Not app	licable/sig	gnificant		

Transport safety. The most obvious observation about the road traffic is the movements of conflicting streams where different road user groups (cars, motorcycles, bicycles and pedestrians) are competing for the same road space because paved shoulders or footpaths are generally not available or too narrow. Lack of enforcement of land use restrictions in the right of ways makes this situation even worse as people carry on their daily lives at the road side. As a consequence traffic accidents are a major issue. Accident data indicates that about 1000 people die on National Highways in Mekong delta region alone (Source RRMU7). For NH-91, one of the project roads, there are 57 fatalities a year which is 1.3 fatalities per kilometer per year. These figures are almost certainly underestimated. As a comparison; statistics from VIWA show about 150 – 200 fatal accidents a year on the Mekong delta region waterways.

Accident data for Provincial, District and Rural Roads are not generally available, however, the social assessment highlights that 19 percent of respondents reported that they or their household members had suffered some traffic accidents. Motorcycles being the most dominant motorized

transport in the country, the motorcycle accidents constitute the largest number of such accidents, followed by vehicle and boat accidents.

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies VIETNAM: Mekong Transport Infrastructure Development Project

	Bank-financed Projects				
		Supe	rvision F	Ratings	
Ongoing	Sector Issue	IP*		DO [†]	
Mekong Transport and Flood Protection (Cr.3448-VN)	Reform basic institutional aspects of road management and improve access in Mekong Delta	ľ	MS		
Road Network Improvement Project (Cr.3843-VN)	Improve road management and maintenance funding for national roads	ľ	MS		
Vietnam Road Safety Project (Cr.4073-VN)	Strengthen NTSC to manage and coordinate road safety activities in Vietnam	S		S	
Rural Transport III	Improve access to rural areas				
Northern Mountains Poverty Reduction (Cr.3572-VN)	Strengthen capacity for CDD infrastructure projects in North of Vietnam		S	S	
Community Based Rural Infrastructure (Cr.3532-VN)	Strengthen capacity for community involvement in infrastructure projects in Central Vietnam		S	S	
		OED Evaluation			
Completed	Sector Issue	Out- come	Sustain -ability	ID Impact	
Rural Transport Project (Cr.2929- VN)	Improve access to remote rural areas, sustain adequate maintenance	MS	L	М	
Highway Rehabilitation Project (Cr.2549-VN)	Reduce rehabilitation backlog; build institutional capacity; strengthen road maintenance operations	S	L	М	
Second Highway Rehabilitation Project (Cr.N013-VN)	Reduce rehabilitation backlog; increase the volume of periodic maintenance; build institutional capacity.	MS	L	М	
Urban Transport Improvement Project (Cr.3125-VN)	Strengthen decentralized authority, expand capacity, and improve operating conditions of urban transport				
Inland Waterways and Port Rehabilitation (Cr.3000-VN)	Improve main inland waterway route in Mekong Delta and strengthen operations and management				
Second Rural Transport Project (Cr.3306-VN)	Improve access to remote rural areas, sustain adequate maintenance				
Pipeline	Sector Issue				
Hanoi Urban Transport Project	Promote Bus Rapid Transit in Hanoi and strengthen the institutional framework for public transport.				
Northern Triangle Infrastructure Development Project	Develop multi-modal transport in the Red River Delta area				
Poor Communes Infrastructure and Livelihoods	Improve livelihoods in the country's poorest and most marginalized communes				

S = Satisfactory; MS- Moderately Satisfactory; L=Likely; SB = Substantial; M = Modest; NR = Not Rated

*—Implementation progress; [†] — Development objective

Other Development Agencies					
Agency	Project	Status	Duration		
	Second Road Improvement	Completed	1997-2003		
	Third Road Improvement	Ongoing	1998–2005		
	GMS: Ho Chi Minh City-Phnom Penh Highway	Ongoing	1998–2005		
	GMS: East-West Corridor	Ongoing	2000-2005		
ADB	Provincial Roads Improvement	Ongoing	2001-2006		
	Central Region Transport Network	Preparation Stage	2005-2010		
	GMS: Kunming-Haiphong Corridor	Preparation Stage	2005-2010		
	GMS: Southern Coastal Corridor	Concept Stage	2006–2011		
	Implementation of Sector Development Policy (Road Information and Management System)	Consultants presently being recruited	2004–2005		
	National Highway No. 5 Improvement Project	Ongoing	1996–2004		
	National Highway No. 1 Bridge Rehabilitation Project	Ongoing	1996–2005		
	Hai Van Tunnel Construction Project	Ongoing	1997–2007		
	National Highway No. 10 Improvement Project	Ongoing	1998–2007		
	National Highway No. 18 Improvement Project	Ongoing	1998–2008		
	Second National Highway No. 1 Bridge Rehabilitation Project	Ongoing	1999–2004		
	Transport Infrastructure Development Project in Hanoi	Ongoing	1999–2006		
IBIC	Saigon East-West Highway Construction Project	Ongoing	2000-2007		
JDIC	Binh Bridge Construction Project	Ongoing	2000-2007		
	Red River (Thanh Tri) Bridge Construction Project	Ongoing	2000-2008		
	Bai Chay Bridge Construction Project	Ongoing	2001-2008		
	National Highway No. 1 Bypass Road Construction Project	Ongoing	2001-2009		
	Can Tho Bridge Construction Project	Ongoing	2001-2009		
	Third National Highway No. 1 Bridge Rehabilitation Project	Ongoing	2003–2009		
_	National Highway No.3 Improvement Project	Proposed	2005-		
JICA	Traffic Safety Program	Ongoing	2004-2005		
JBIC/DFII	D Transport sector coordination	Ongoing	2003-		
NZ/DFID	Transport Safety Design Work	Design	2004-2005		

Annex 3: Results Framework and Monitoring VIETNAM: Mekong Transport Infrastructure Development Project

Results Framework

PDO	Project Outcome Indicators	Use of Project Outcome			
		Information			
 Reduce transport costs and facilitate trade; Improve rural mobility of goods and people; Strengthen the effectiveness of transport institutions to plan and manage multi-modal transport infrastructure and logistics. 	Reduced number of respondents to the investment climate survey citing transport as a constraint Reduced rice supply chain costs between Rach Gia and Saigon port Reduced time from commune to the nearest wholesale market in the Mekong Delta Formation of a National Logistics Forum	To inform policy makers about the efficiency of supply chains in the Mekong Delta facilitating improved policy in trade facilitation.			
Intermediate Outcomes	Intermediate Outcome	Use of Intermediate			
	Indicators	Outcome Monitoring			
Component A Improved transport services along the main road supply corridors of the Mekong Delta	Reduced road freight and passenger costs along NH-91 Reduced traffic fatalities on NH-91	To better target investments and transport regulation to remove transport constraints from the main corridors.			
Component B Improved freight services along the main waterway supply corridors of the Mekong Delta	Reduced barge freight costs and increased volumes of container traffic on the Northern Trans Mekong Corridor Increased throughput through hub port facilities (Can Tho Port)	To better target investments and transport regulation to remove transport constraints from the main corridors.			
Component C Improved connectivity of rural producers and communities to the main supply corridors	Increase in the percentage of people living within 2kms of an all weather road in the Mekong Delta	To better target investments and transport regulation to remove transport constraints from the main corridors.			
Component D Effective institutions at the national and provincial level able to plan and regulate efficient multi-modal transport	A set of modal transport regulations that support multi-modal transport and a common multi-modal decree An effective planning authority preparing plans that facilitate efficient multi-modal transport	To better target investments and transport regulation to remove transport constraints from the main corridors.			

				Гarget V	alues		Data	Reporting		
Project Outcome Indicators	Base- line	YR1	YR2	YR3	YR4	YR5	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection	
Reduced rice supply chain costs - Rach Gia producers to Saigon Port	?						Annual	Consultant surveys	Multi-modal consultants (D1)	
Reduced number of respondents to ICS citing transport as a constraint	50			45		40	Annual	Investment Climate Survey	World Bank	
Reduced time from commune to the nearest wholesale market in the Mekong Delta (mins)	28.65			27		25	Every two years	VLSS	GSO	
Intermediate Outcome Indicators										
Component A Investments on national roads										
Reduced road freight costs on NH-91 (\$/t/km)	?						Annual	Consultant surveys	Multi-modal consultants (D1)	
Reduced accident fatalities on NH- 91	57			45		30	Annual	Police reports	RRMU-7	
Number of container movements on NH-91	?						Quarterly	Consultant surveys	Multi-modal consultants (D1)	
Length of national road rehabilitated (km)	0			50		98	Quarterly	PMU-1 report	PMU-1	
Number of bridges replaced	0			6		12	Quarterly	PMU-1 report	PMU-1	
Procurement Progress	0	30	60	80	100	100	Quarterly	PMU-1 report	PMU-1	
Progress rate of works	0	5	20	50	80	100	Quarterly	PMU-1 report	PMU-1	
Component B Investments on national water	ways					·		· · ·		
Reduced barge freight costs from Rach Gia to HCMC (\$/t/km)	?						Annual	Consultant surveys	Multi-modal consultants (D1)	
Length of waterway improved	0	20	80	200	320	406	Quarterly	PMU-W report	PMU-W	
Number of bridges raised and improved	0			9		18	Quarterly	PMU-W report	PMU-W	
Procurement Progress	0	30	60	80	100	100	Quarterly	PMU-W report	PMU-W	
Progress rate of works	0	5	20	50	80	100	Quarterly	PMU-W report	PMU-W	
Component C Investments to connect the poo	Component C									
Rural accessibility (%) – Population in the Mekong Delta within 2km of an all	57			60		65	Every two years	VLSS	GSO	

Arrangements for results monitoring

weather road									
Length of road improved to	0					205	Quarterly	Consultant	Advisory
all weather standard (km)								reports	consultant (C4i)
Length of feeder waterways	0					58	Quarterly	Consultant	Advisory
improved	-							reports	consultant (C4i)
Number of rural landing	0					5	Quarterly	Consultant	Advisory
stages constructed								reports	consultant (C41)
Number of provincial ports						5	Quarterly	Consultant	Advisory
enhanced						5	Quarterry	reports	consultant (C4i)
									,
Procurement Progress	0	30	60	80	100	100	Quarterly	Consultant	Advisory
								reports	consultant (C4i)
Progress rate of works	0	5	20	50	80	100	Quarterly	Consultant	Advisory
								reports	consultant (C4i)
Component D									
Institutional support to the Mi	nistrv of T	Franspor	rt and prov	inces					
Multi-modal transport	0		1				Annual	Consultant	Multi-modal
decree drafted and								surveys	consultants (D1)
implemented									
MOT issues plan that				1			Annual	Consultant	Multi-modal
highlights the main multi-								surveys	consultants (D1)
modal linkages and main									
routes									
Percentage of operation and	<1			5		10	Annual	Consultant	VIWA
maintenance costs covered				5		10		surveys	consultants (D2)
through fees in the								2	
waterways sector									
Number of kms of waterway	2900			3200		3500	Annual	Consultant	VIWA
increased								surveys	consultants (D2)
mereased									
Number of IDA financed	1			3		5	Annual	Consultant	VIWA
ports and landing stages				-		-		surveys	consultants (D2)
with private management								, , , , , , , , , , , , , , , , , , ,	. ,
contracts									
MOT approved curriculum				1			Annual	Course	Department of
TOT IVIULI-modal transport								material	Labour
Annex 4: Detailed Project Description

VIETNAM: Mekong Transport Infrastructure Development Project

The Project will have four main components:

Component A: National Road Corridors (US\$50.03 million)

To improve the standard of trunk roads connecting to the main economic hub of the Mekong Delta. This component will be implemented by the Project Management Unit No. 1 (PMU-1). There will be two sub-components:

Component A1: National Road Corridor Improvements (US\$46.86 million). Improvement works will be undertaken to rehabilitate and upgrade approximately 98 km of national highways, including 13.52 km under NH 53, 40.85 km under NH 54, and 43.89 km under NH 91. Improvements will be carried out on the existing alignment by widening and upgrading the roads to a Class II, Class III or Class IV standard following the highway design standards of Vietnam (TCVN 4054-1998), as supplemented by AASHTO standards.

NH Name	Section Name	Length (km)	Bridge (no & length)	Description of Improvements	Base Cost* (\$ mil)
Phase I –	Year 1-4				
NH 53	NH 53 – 3 Km 56.000 – 60.610	4.610	2 for 205 m	Widening on both sides and upgrade to AC 4-lane Class II standard. (Formation width: 17.0 m; carriageway width 14.0 m; divider width 1.0 m, shoulder width 0.5 m paved plus 0.5 m verge)	4.459
NH 53	NH 53 – 10 Km 130.440 – 139.350	8.910	1 for 13 m	Widen and upgrade to AC 2-lane Class IV standard over earth road with the addition of one lane. 1 new landing stage for ferry included (Formation width: 9.0 m; carriageway width 6.0 m; shoulder width 1.0 m payed plus 0.5 m yerge)	
NH 54	NH 54 – 5, 6, 7, 8 Km 85.000 – 125.854	40.854	4 for 296 m	Widen and upgrade from 1-lane to AC 2-lane Class IV standard, (Formation width: 9.0 m; carriageway width 6.0 m; shoulder width 1.0 m paved plus 0.5 m verge)	12.114
Phase I Program 54.		54.374	7 bridges for	514 m	19.217
Phase II	– Year 2-6				
NH 91	NH 91 – 1, 2 Km 7.000 – 25.800	18.800	2 for 181 m	Widen and upgrade AC 2-lane highway to Class III standard, (Formation width: 12.0 m; carriageway width 7.0 m; shoulder width 2.0 m paved plus 0.5 m verge)	10.514
NH 91	NH 91 – 1, 2 Km 25.800 – 50.889	25.089	3 for 313 m	Widen and upgrade AC 2-lane highway to Class III standard, (Formation width: 12.0 m; carriageway width 7.0 m; shoulder width 2.0 m paved plus 0.5 m verge)	11.129
Phase	II Program	43.890	5 bridges for	494 m	21.643
Total, National Highways		98.264	12 bridges for	• 1,008 m	40.860

* Estimated cost is base cost, excluding contingencies and construction supervision and contract management.

Present traffic on the selected roads ranges between 300 vpd and 2000 vpd (four-wheel vehicles) with an estimated average growth rate of about 7 percent over the next 10 years. Given the high level of non-motorized and two-wheeler traffic, all improved roads (except in very low traffic remote areas) will include paved shoulders for improved road safety. Works will also include rehabilitating and/or constructing bridges and culverts and raising the road levels where required in flood prone areas. NH-91 is an important strategic route North of Can Tho. It serves Can Tho

port, a number of industrial parks and is the route to the Cambodian border. Bridges will be upgraded along this corridor to accept 40 foot containers. Near industrial parks the large volumes of pedestrians and cyclists entering and leaving these sites will be segregated from the through traffic, street lighting will also be provided.

Component A2: Design and Supervision (US\$3.17 million). To finance the detailed engineering designs for Phase II and the construction supervision for Phases I and II for the national road component.

Component B: National Waterway Corridors (US\$63.29m)

To improve the standard of trunk waterways connecting the Northern and coastal delta areas to Can Tho and HCMC. This component will be implemented by the Project Management Unit Waterways (PMU-W). There will be two sub-components:

Component B1: Improvements to National Waterway Corridors (US\$59.11 million). Investments on the main supply corridors are foreseen to improve the standard and connectivity of the canal network (including the major landing stages), concentrating on links in both the Northern Trans Mekong corridors and the southern coastal corridor. None of the corridors provide good transport continuity at present, and improvements will help improve region-wide accessibility, relieve congestion on the main corridors, reduce transportation costs and support economic development in the provinces. The following principal corridors will be improved:

- Northern Trans Mekong Corridor: Through Ho Chi Minh City Tan An Cai Dau C. Rach Gia (253 km)
- Parts of Southern Coastal Corridor: Gia Rai Bac Lieu Dai Ngai (103 km) and Cho Gao Canal (50 km)

These corridors will be improved to Class III standard with a bottom width of 26-30 meters. The Cho Gao Channel will also be improved to Class III but will have a 55 meter bottom width to further reduce congestion in this busy area. The proposed improvements will generally include dredging to the required widths and depths, bank protection in selected areas, bridge improvements (raising and rehabilitation) and provision of 24-hour aids to navigation. Improvements to the Northern Trans Mekong corridor will also include the installation of a ship lock at Rach Chanh to remove a major bottleneck caused by an anti-salinity sluice gate at this location.

Once improved these corridors will be able to accept convoys of fully loaded 300 DWT barges over their entire length. The replacement of bridges will also improve the movement of people and goods crossing the canals.

Section Name	Quantity (km/no.)	Bottom Width (m)	Minimum Depth (m)	Description of Improvements	Base Cost* (\$ mil)	
Phase I – Year 1-4						
Corridor 2: Class 3, Length 173 km						
Km 80 – 253	173	26-30	3	Widening, deepening and bank protection works	20.398	
Bridge13Remove old bridge, construct 9 steel 1-lane bridges and lift 4 bridges to 5m / adapt aids to navigation3.50		3.502				
Phase I Program 23.900						
Phase II – Year 2	2-6					

Section Name	Quantity (km/no.)	Bottom Width (m)	Minimum Depth (m)	Description of Improvements	Base Cost* (\$ mil)		
Corridor 2: Class 3, Length 80 km							
Km 0 – 80	80	30	3	Widening, deepening and bank protection works	12.001		
Bridge	5			Remove old bridge, construct 3 steel 1-lane bridges, lift 1 bridge to 5m / adapt aids to navigation and construct of Nhi Thien Duong concrete bridge	2.641		
Ship lock Construction	1			Construction of ship lock at Rach Chanh	7.617		
Corridor 3: Class	3, Length 193	3 km					
Km 0 – 35	35	30	3	Widening, deepening and bank protection works			
Km 35 – 80	45	55	3	Widening, deepening and bank protection works	11.020		
Km 207 – 310	103	26	3	Widening, deepening and bank protection works			
Equipment Suppl	ly & Installatio	on					
Navigation Aids	1,783			Navigation aids: Corridors 2, 3 & feeder canals	1.929		
Phase II Program					35.208		
Total, Inland Wa	aterway Corri	dors			59.108		

* Estimated cost is base cost, excluding contingencies and construction supervision and contract management.

Component B2: Design and Supervision (US\$4.18 million). To finance the detailed engineering designs for Phase II and the construction supervision for Phases I and II for the national waterway component.

Component C: Connecting the Poor to the Supply Corridors (US\$68.97 million)

To improve the feeder waterways, roads, ports and landing stages at the district and provincial levels to link poorer and more distant producer communities to the main supply corridors.

Component C1: Investments in Provincial Roads (US\$58.25 million). One of the main objectives of the project is to connect, through the secondary road network, the centers of economic activities and areas with high poverty concentration in the Mekong region to the main transport corridors. The short list of roads was screened based on their connectivity to main transport corridors, service to areas with higher potential agriculture productivity, service to areas with high poverty density, and equitable distribution within the delta provinces. A first phase program of 205 km of secondary roads, including 78 bridges, will be upgraded to an all-weather standard in the thirteen provinces. There will also be a second phase program that will be identified during implementation that is estimated to add a further 110 km of road and 40 bridges. The provinces will be supported to prepare transport plans and annual work plans that give sufficient weight to maintenance. The provinces will be permitted to use project resources for periodic maintenance activities.

Considering the low traffic volumes on most of the provincial roads, as well as the need to optimize benefits from the proposed investments, it was considered that improving all-weather connectivity and accessibility and improving the riding quality of selected roads within the delta would take priority over road widening. Accordingly, improvements will be carried out along the existing alignments by upgrading the roads through providing structural overlays, or through complete reconstruction where the existing road structure has collapsed or where they are earth roads. Work will also include rehabilitating or constructing bridges and culverts and raising road levels where required in flood prone areas. All proposed bridges would be a standard 9-m width. The improved roads will be constructed with either single-lane (3.5 m) or two-lane (6.0 m) bituminous surface treated (BST) paved carriageways, depending on existing conditions and traffic demands. All roads will have 1.0 m paved shoulders on each side.

Component C2: Investments in Provincial Feeder Canals (US\$1.04 million). This component will finance the improvement of two feeder canals in An Giang and Ca Mau provinces with a total length of 58 kms. The improvements will include widening and deepening of the canal sections to a class IV standard, bank protection in selected areas, raising of bridges where required and provision of aids to navigation (to be procured under Component B1).

Component C3: Investments in Provincial and District Ports and Landing Stages (US\$4.0 million). This component will finance the enhancements to existing provincial ports infrastructure to improve existing throughput and efficiency, and the improvement in port administration and management systems in the Mekong Delta. Investments may include new wharfs, storage areas, road access or equipment. This component will also finance new infrastructure in the form of 5 rural landing stages to facilitate access to rural producers to the main transport networks. These facilities may be located at market sites, processing plants or other rural centers. These investments have not been identified in advance. Two provincial river ports will also be upgraded at Tan Chau and Bac Lieu. Finance for this component will be dependent on the operating entities (proposed or existing) providing sound business plans and management arrangements.

PR Name	Section Name	Length (km)	Bridge (no & length)	Description of Improvements	Base Cost* (\$ mil)
Phase I – Year	1-4				
Ben Tre	DT 884	13.72	5 for 292 m	Two-lane (6.0 m) carriageway w/ shoulders	2.570
Soc Trang	DT 04	15.30	8 for 181 m	Single lane (3.5 m) carriageway w/ shoulders	2.892
Ca Mau	CN-CDV	8.50	8 for 299 m	Single lane (3.5 m) carriageway w/ shoulders	3.074
Phase I Program	m	37.52	21 bridges for	772 m	8.536
Phase II – Year	2-6				
Vinh Long	DT 909	21.40	2 for 81 m	Single lane (3.5 m) carriageway w/ shoulders	2.397
	DT 941	02.60	13 for 405 m	Approaching roads of bridges only	2.583
An Giang				Upgrading of Mac Can Dung Canal	0.515
				Upgrading of Tan Chau River Port	1.072
Long An	DT 835B	11.97	-	Two-lane (6.0 m) carriageway w/ shoulders	1.777
Tien Giang	DT 865	13.05	6 for 243 m	Two-lane (6.0 m) carriageway w/ shoulders	3.245
Dong Thap	DT 841	01.40	7 for 398 m	Approaching roads of bridges only	2.183
Can Tho	TT – TL	11.90	10 for 342 m	Single lane (3.5 m) carriageway w/ shoulders	3.609
Hau Giang	DT 928	24.40	1 for 82 m	Single lane (3.5 m) carriageway w/ shoulders	2.307
Kien Giang	BN – TH	16.85	12 for 270 m	Single lane (3.5 m) carriageway w/ shoulders	2.840
Co Mou	Thoibinh-Uminh	09.50	1 for 25 m	Single lane (3.5 m) carriageway w/ shoulders	1.508
				Upgrading of Ong Dinh Canal	0.524
Bac Lion	CS – HCMR	26.36	1 for 280 m	Single lane (3.5 m) carriageway w/ shoulders	2.797
Dat Litu				Upgrading of Bac Lieu River Port	1.045
Tra Vinh	TN	08.30	1 for 38 m	Single lane (3.5 m) carriageway w/ shoulders	1.098
	DT 915	20.00	3 for 150 m	Single lane (3.5 m) carriageway w/ shoulders	2.965
Phase II Progra	am	167.73	57 bridges for	2,313 m	32.465
Total, Provincia	al Roads	205.25	78 bridges for	3,086 m	41.001

* Estimated cost is base cost, excluding contingencies and construction supervision and contract management.

In addition, this component is intended to assist the port authorities at the provincial level in improving their capacities of port administration and management through transferring international experience, and enhance the efficiency of port operation by promoting the private sector's participation.

This component, therefore, will finance the following activities:

- Assess functions, services, finance, and institutional framework of river ports and landing stages at the Mekong Delta
- Assess the current status of the regulatory framework of port operation, and formulate a strategy to improve the framework
- formulate a strategy to achieve a sustainable efficiency in the financing and operation of landing stages and river ports in Mekong Delta
- redefine the roles on port management and operation among governmental agencies, other public sectors and private sector to promote the non-state sectors' participation in the operation of the landing stages and river ports in Mekong Delta
- design a program for institutional strengthening in the public sector

Component D2 of this project will support in the preparation of these arrangements.

Component C4: Design, Supervision and Advisory Services (US\$4.05 million). To finance two main areas of work for each of the 13 participating provinces:

i) Project supervision, second phase detailed design and advisory services (US\$2.85 million) – Construction supervision for Phases I (where applicable) and II and detailed design for Phase II.

ii) Regional Support Centre development (US\$1.2 million) - To finance technical assistance and advisory services for development of a regional support centre to be based at the Southern Transport College in Can Tho. This support centre will provide provinces with a variety of their training needs including budgeting and planning, procurement, financial management and safeguards issues. The curriculum for these training schools will have been developed through the Third Rural Transport Project (RTP3). Additional emphasis will be placed on multi-modal transport planning issues. The technical assistance and advisory services package (C4ii) will also provide design, construction supervision, contract management oversight and general support to PPMUs/PDoTs and national consultants to be engaged by each of the 13 respective provinces (C4i) for the provincial roads and feeder canals component.

Component D: Institutional Support to Ministry of Transport (US\$6.45 million)

To provide institutional support to the Ministry of Transport (MOT) in two areas.

Component D1: Support to MOT on Developing Multi-modal Transport (US\$1.5 million). To finance support to various departments in MOT to enhance the efficiency of multi-modal transport. This consultancy will have a number of components including:

- Review the model regulations and make recommendations on changes required for future amendment of the decrees
- Review the existing Decree 125 on international multi-modal transport and recommend revisions or drafting of a new multi-modal transport decree
- Training of policymakers and operators involved with multi-modal transport operations
- Support for development of appropriate policies and planning of transport networks to take full account of multi-modal requirements.
- Monitor key logistics indicators on two pilot corridors in the Mekong Delta.

Component D2: Institutional support to Vietnam Inland Waterway Administration (VIWA) (*US\$1.5 million*). To finance support to VIWA to more effectively carry out its tasks as managers of the inland waterways network on Vietnam. The main areas of support include:

- Institutional studies and advice to inform the reorganization of VIWA including the ports authorities and waterway management stations.
- Asset management and maintenance including the institutionalization of the River Management Information System (RMIS) in Vietnam Inland Waterway Administration South (VIWA-S) and studies to recommend improved cost recovery in the sector
- Ports management models for VIWA and support to provincial port facilities in the Mekong
- Institutionalization of waterway standards
- Improving safety on the waterways and better integrating the needs of rural waterways users
- Support to inland waterways school in the South to further develop their curriculum in the areas identified above

Component D3: Training (US\$0.95 million). To finance training in the areas mentioned above. This subcomponent will be co-ordinated by Department of Personnel and Labor (DPL) of MOT. The training programs will be provided by:

- University of Transportation in HCMC Multi-modal transport issues
- Inland Waterway Training School No. 2 Management and operation of waterways and related facilities
- Southern Transportation College in Can Tho 1) Management of roads; and 2) Provision
 of general support to provinces in project implementation as "Regional Support Center"
 (Component C4ii)
- Institute for Transport Administration and Management Cadres in Hanoi project management and core business processes (procurement, FM, safeguards etc)

Component D4: Project Audit Services (US\$1.0 million). To finance the following two types of independent audits:

i) Integrated Project Implementation Audit Services (US\$0.64 million) – Independent consultants will be hired to conduct semi annual reviews of the status of all project elements and bring together progress under one report to be presented prior to each supervision missions. These services are designed to provide heightened fiduciary, safeguards and general project monitoring through:

- Social and environmental monitoring, financial management and procurement, and technical quality
- A semi-annual summary of the status of all project components
- A review on progress towards meeting the projects overall objectives and key performance indicators
- Internal audit assistance

ii) Project Financial Audit (US\$0.36 million) – Independent external financial auditors acceptable to the IDA will prepare and submit to the Bank audited financial statements and audit reports within six months of each financial year. The internal audit function within the implementing agencies is the responsibility of the respective implementing agencies but support will provided under Component D4i for reviewing internal control systems, making recommendations for improvements, and monitoring remedial actions taken. The internal audit reports will be available on semi-annual basis to IDA and the project external auditors.

Component D5: Preparation of a follow-up project (US\$1.5 million). This component will finance the detailed design services for the Northern Delta Transport Development Project.

Annex 5: Project Costs

VIETNAM: Mekong Transport Infrastructure Development Project

Table 5.1 Summary Project Costs and Financing (US\$ million)					
Project Cost Py Component	Local	Foreign	Total		
Project Cost By Component	US \$million	US \$million	US \$million		
A. National Road Corridors			56.98		
B. National Waterway Corridors			84.54		
C. Connecting the Poor to the Supply			77.24		
Corridors					
D. Institutional Support to Ministry of			6.45		
Transport					
IOC			3.0		
Total Baseline Cost			228.22		
Physical Contingencies			16.93		
Price Contingencies			9.44		
Total Project Costs ¹			254.59		
VAT		0	21.83		
Total Financing Required			276.41		
			100%		

¹Identifiable taxes and duties are US\$ 21.83 million and the total project cost, net of taxes, is US\$254.59 million. Therefore, the IDA share of project cost net of taxes is approximately 75 percent.

Table 5.2: Project Costs and Funding by Component (US\$ million)			
Component	Financing		
	IDA	GOV	Total
	50.02	< 0 7	=< 00
Component A- National Highway Corridors	50.05	0.95	50.98
Component A1- National Highway Corridor Improvements	40.80	0.95	55.81
Component A2- National Highway Design and Supervision	3.17	-	3.17
Component R - National Waterway Corridors	63.44	21 10	84 54
Component B1- National Waterway Corridor Improvements	59.11	21.10	80.21
Component D1- National Waterway Corridor Improvements	59.11	21.10	00.21
Component B2- National Waterway Design and Supervision	4.33	-	4.33
Component C- Connecting the Poor to the Supply Corridors	68.97	8.27	77.24
Component C1- Investment in Provincial Roads	58.25	8.17	66.42
Component C2 - Investments in Provincial Feeder Canals	1.04	0.10	1 14
Component C2 - Investments in Provincial Ports and Landing Stages	4.0	-	4.0
Component C4i- Provincial Program Design and Supervision	4 49	-	4 49
Component C4ii- Support for development of Regional Support	1.20	-	1.20
Center			
Component D- Institutional Support to Ministry of Transport	6.45	-	6.45
Component D1- Support for developing Multi-modal Transport	1.50	-	1.50
Component D2- Institutional Support to VIWA	1.50	-	1.50
Component D3- Training	0.95	-	0.95
Component D4i- Integrated Project Implementation Audit	0.64	-	0.64
Component D4ii- Financial Audit Service	0.36	-	0.36
Preparation of NTIDP	1.50	-	1.50
Incremental Administration	-	3.00	3.00
Sub-total	188.89	39.32	228.22
Contingencies	26.37	-	26.37
Physical	16.93	-	16.93
Price	9.44	-	9.44
Sub-total	215.26	39.32	254.59
Taxes	-	21.83	21.83
Total	215.26	61.15	276.41

Annex 6: Implementation Arrangements

VIETNAM: Mekong Transport Infrastructure Development Project

Organizations Responsible for Project Implementation

The Ministry of Transport would act as the "line agency" for the national infrastructure components. The line agency will approve the national investment programs and procurement plans. The VRA will be the "project owner" for the national highways component and VIWA the "project owner" for the national waterways component. These modal administrations will be fully delegated by the "line agency" for the day to day management of their respective components with PMU1 and PMUW being the "implementing units" reporting directly to the "project owners". The "implementing units" will advertise, receive, evaluate, produce evaluation reports, award and sign contracts and subsequently manage implementation of their components but will require necessary approvals from the "project owners" at the various stages.

For the provincial infrastructure component the respective PPCs will be the "line agencies" and be responsible for approving respective investment programs and procurement plans. The respective "PDoTs" will be the "project owners" of the respective provincial infrastructure programs. The respective PPMUs will be the "implementing units" for the provincial infrastructure components and will advertise, receive, evaluate, produce evaluation reports, award and sign contracts and subsequently manage implementation of their components but will require approvals from the respective project owners (i.e. PDoTs) at the various stages.

The Ministry of Transport (MOT) will have overall responsibility for overseeing the implementation of the project, reporting to the Government of Vietnam (GOV) and fulfilling the requirements of the World Bank.

The MOT will establish a Project Steering Committee (PSC), which will be chaired by a MOT Vice-Minister and consist of representatives of Ministry of Planning and Investment (MPI), Ministry of Finance (MOF), State Bank of Vietnam (SBV), DPI, VRA, VIWA and representatives from some of the 13 Provinces (provinces to select such representatives). The PSC's mandate is to address cross-ministerial issues, multi-modal issues and to oversee project management and monitor the implementation progress of the overall project. DPI will act as the secretariat for the PSC and be responsible for overall coordination and oversight of implementation of the Project, including:

- (v) Coordination and liaison between the Project Owners, their Implementing Units and other ministries on behalf of the PSC;
- (vi) Coordination of the review of the technical and financial audit reports, social and environmental monitoring reports, the Project evaluation and monitoring reports, other Project related studies and reports;
- (vii) Ensuring that the Project related policy and institutional reforms are achieved; and
- (viii) Monitoring the Project's physical and financial progress.

A summary of the responsibilities of each "implementing unit" is set out below.:

(iv) Project Management Unit - No. 1. PMU-1 and its consultants will have responsibility for all aspects of the national roads corridor component, including planning, programming, budgeting, design, procurement, implementation, supervision, monitoring, evaluation, and coordination/liaison with IDA. It will be responsible for the award of and signature to, contracts for national highways. PMU-1 will engage consulting services to assist it in the design and supervision of the national highways program. At all stages it will report to, and require the approval of, VRA.

- (v) Project Management Unit -Waterways. PMU-W and its consultants will have responsibility for all aspects of the national waterway corridors component (including bridges). The responsibilities are as with PMU-1 above. PMU-W will also be responsible for managing the Institutional Strengthening component, which will include the engagement, contracting and supervision of the various technical assistance/consulting services and training packages. At all stages it will report to, and require the approval of, VIWA.
- (vi) Provincial Project Management Units (PPMUs) The PPMUs in each of the 13 project provinces will have responsibility for all aspects of their respective provincial roads, bridges, feeder canal and landing stages works programs. The responsibilities are as with PMU-1 above. The PPMUs will engage consulting services to assist them in the design and supervision of their provincial roads and feeder canal programs. Overall support to each of the 13 provinces will be provided under Advisory Consultants engaged by PMU-W, and will be responsible for oversight, advice and assistance to the local consultants to be engaged by the PPMUs. At all stages, the PPMUs will report to, and require the approval of, the respective PDoTs.

The Technical Control & Quality Management Bureau (TCQM) within MOT will provide assistance for review and approval of technical designs and cost estimates, as well as for monitoring the quality of the works, for the national components.

Consulting services will be engaged to further support project implementation, namely:

- (vi) Regional support consultants (to support capacity building at the PPMU/PDoT level and overall support to PPMUs and local supervision consultants (see above)(Component C4ii));
- (vii) Support to MOT for developing multi-modal transport (Component D1);
- (viii) Institutional support to VIWA (Component D2);
- (ix) Training (Component D3);
- (x) Independent audit (to carry out Integrated project implementation audit and external financial audit for all project implementing agencies (Component D4i and D4ii)

To simplify procurement and management arrangements, PMU-W will contract and manage all of the above consulting services packages. Component D3 will also be managed by PMU-W but, through Ministerial Decree, the training department in DPL will be responsible for the overall coordination of the training program.

The project will be implemented in two phases. The first phase of investments will be ready for implementation at project effectiveness including all the necessary engineering, procurement and safeguards documentation. Preparation of the second phase will commence once the project has started.

Figure 1: Overall Project Organizational Arrangements.



Responsibilities of the Implementing Agencies and Other Stakeholders

Though MOT will serve as the executing or line agency for the MTIDP, implementation of the various components will be delegated to respective implementing agencies who will report to and at key steps require the approval of the "project owners", namely VRA, VIWA and the 13 PDoTs. The specific responsibilities to be ascribed to each of these organizations are summarized in Table 2-1:

Constituent Agency	Reporting Relationship	Implementation Functions
Ministry of Transport (MOT)	Office of the Prime Minister	 Executing Agency Legal responsibility for project Transport Policy Delegation of responsibility Formation of Project Steering Committee Approval of key project reports such as PFS, FSs/CIRs and overall project procurement plan
Project Steering Committee	Vice Minister, Ministry of Transport	 Oversee management and implementation of overall project Address cross-ministerial issues Address multi-modal issues
Department of Planning and Investment of MOT	Vice Minister, Ministry of Transport	 Oversight of policy compliance Secretariat of PSC Review and approve Quarterly Reports Review and approve work plans Review all key reports including Feasibility Studies (FSs) Appraisal of procurement plan, bidding document, bid evaluation standard & bid results for Components A,B and D Ensure interests of all stakeholders are reflected in project outcomes
Department of Personnel and Labour	Vice Minister, Ministry of Transport	 Approval of training plans and training packages Coordination with training institutions for all project training initiatives
Technical Control & Quality Management Bureau (TCQM)	Vice Minister, Ministry of Transport	 Appraisal detail designs Appraisal of cost estimates for works packages Monitoring of quality of all works under Components A and B
Vietnam Roads Authority (VRA)	Vice Minister, Ministry of Transport	Project Owner of national highways component
Vietnam Waterways Authority (VIWA)	Vice Minister, Ministry of Transport	Project Owner of national waterways component
Provincial Departments of Transport (PDoTs)	Provincial People's Committees	Project Owners of provincial transport infrastructure components

Table 2.1: Summary of Organizational Responsibilities

Constituent Agency	Reporting Relationship	Implementation Functions
	.	National Highways (Component A)
		Implementation of above Component
		Coordination of activities with PMU-W and PPMUs
		Liaison with and reporting to the World Bank
		• Preparing and submitting to MOT all studies, designs, bid plans,
Project		bid documents, contract documents, etc., for approval
Management	VRA	 Selection of design and supervision consultants
Unit 1 (PMU-1)		• Prequalification of contractors (if required)
		 Evaluation of bids and award of contracts
		 Implementation of land acquisition and resettlement plans
		together with PPC
		 Monitoring of construction progress and quality
		 Submission of Quarterly Reports to MOT and WB as required
		Main Waterway Corridors (Component B) and TA/Consulting Services
		(Component C4ii and Component D)
		 Implementation of above Component/sub-components
	VIWA	 Coordination of activities with PMU-1 and PPMUs
Project		 Liaison with and reporting to the World Bank
Management		• Preparing and submitting to MOT all studies, designs, bid plans,
Unit -		bid documents, contract documents, etc., for approval
Waterways		• Selection of design and supervision consultants
(PMU-W)		Prequalification of contractors
		• Evaluation of bids and award of contracts
		• Implementation of land acquisition and resettlement plans
		together with PPC
		• Monitoring of construction progress and quality
		• Submission of Quarterly Reports to MUT and WB as required
		Provincial Roads and Feeder Canals (Component C)
		• Coordination of activities with PMU-1 and PMU-w
		• Liaison with PMU- w on engagement of consultants (Component C4i by PPMUs and C4ii by PMU W)
		• Implementation of Component
		 Implementation of Component Ligicon with and reporting to the World Paple
Provincial		 Liaison with and reporting to the world bank Dranging and submitting to DDoTe for review all studies
Project		• repaining and submitting to FD01s for review, an studies, designs hid plans hidding documents contract documents atc
Management	Provincial Depts of	 Selection of design and supervision consultants
Units (PPMUs)	Transport	 Evaluation of bids and award of contracts
(13)		 Implementation of land acquisition and resettlement plans
		together with PPC
		 Coordination of resettlement and compensation activities for
		component and Components A1 and B1
		 Monitoring of construction progress and quality
		 Submission of Quarterly Reports to MOT and WB as required

Features of Administrative Arrangements for Project Implementation

Improvement of Fairness and Transparency

A plan to improve fairness and transparency has been developed which recognizes the inherent risks of implementing a project in 13 provinces, and in two waterway corridors, where availability of skills and experience may be low has been drafted. Risk management in this context includes measures related to procurement, financial management and the supervision of implementation.

The draft Action Plan to Improve Fairness and Transparency is set out in Annex 8. The Action Plan that has been prepared is based on an examination of the overall project cycle, to identify where problems are most likely to occur, and what mitigation measures are likely to be most effective. The plan requires further development with regard to approval of sanctions in the event of problems being identified.

The plan to be adopted for MTIDP is based on the plans adopted for other projects in MOT (e.g RTP3)

Emphasis on Achieving Improved Quality

The project will give substantial emphasis to improving construction quality control, through the introduction of a multi-faceted program that involves the following components:

- a. The introduction of the Plan to Improve Fairness and Transparency that will target corrupt practices that directly result in reduced construction quality, and provide for penalties for those found to be involved in such practices, including Contractors, Consultants, and the staff of government agencies. It is expected that this will result in significant improvements to quality of construction.
- b. One of the actions set out in the Plan is to introduce a new mechanism for bidding of civil works whereby independent consultants hired under the project will be required to review **all** procurement activities under Components A1, B1, C1, C2 and C3.
- c. Strengthening the powers and authority of the Construction Supervision Consultants (CSC) that will allow them to reject defective works and/or refuse payments for defective works and also build their longer term capacity. This will be achieved by not only strengthening Terms of Reference of CSC but by providing other support to PPMUs and local CSC through the Regional Support Center to be developed with the assistance of international consultants to be engaged to assist in this development. A Procurement Advisor will also be part of this international consultants team. The advisor will be required to review and advise on all procurement processes carried out by the 13 respective provinces. In addition the integrated project audit consultants (see below) will carry out periodic reviews of progress and procedures adopted.
- d. Provide for an independent program of Integrated Project Implementation Audits, to be conducted by consultants to be contracted by PMU-W.
- e. Promote public awareness of the project, and encourage local communities and stakeholders to become actively involved in observing and commenting on what they may regard as issues of quality and corruption. A complaints mechanism will be developed, that will follow up and report on all complaints, and whose effectiveness and performance will in turn be monitored and publicly reported on. These activities will be supported by the Regional Support Center and the experienced consultants to be engaged for the development of it and for support to the PPMUs.

These important new initiatives are being further developed in this project, and their performance will be closely monitored to identify ways of strengthening and refining the measures for use in subsequent projects.

Project Design and Supervision

The design and bidding documents for Phase I will be carried out by consultants contracted by PMU-1 and funded under an on-going project (RNIP).

For the design of Phase II and the construction supervision of Phase I and 2, Design and Supervision Consultants (DSCs) will be engaged. Final engineering designs will be checked and approved by MOT, and reviewed by the Bank. Project economic and environmental feasibility will be reviewed after design completion to ensure project acceptability for inclusion in the work program.

Three DSC assignments are envisaged under the Project; (i) for National Highways – to be engaged by PMU-1; (ii) for Main Waterway Corridors- to be engaged by PMU-W; (iii) for Provincial Roads and Feeder Canals – to be engaged by each of the 13 Mekong Delta provinces.

Environmental Safeguards

An Environmental Management Plan (EMP) defines the safeguard procedures to be used during project implementation. EMP outlines the main guidelines and procedures for a range of environmental and social impact activities and aspects including stakeholder consultation, land and building acquisition, resettlement, and isolated vulnerable peoples (ethnic minorities). The guidelines are based on a combination of Government of Vietnam (GoV) procedures and regulations and World Bank operational directives. The EMP also includes screening procedures, monitoring procedures and an institutional action plan for enhancing the involvement of MTIDP Project.

The environment management will be implemented by construction contractors and will be overseen by PMU-1/PMU-W/PPMUs- working for the respective project owners (i.e VRA, VIWA and 13 PDoTs).

Social Safeguards

A Resettlement Policy Framework and an Ethnic Minorities Framework detail how the land acquisition and compensation procedures are to be carried out and how ethnic minority households affected by the project are to be dealt with. These frameworks can be found in project files.

Phase I Works Program

For all projects to be implemented in Phase I, preparation of feasibility studies, preliminary engineering, economic evaluation, environmental and social aspects have already been completed. Preparation of final engineering design and bidding documents is to commence shortly by consultants engaged by PMU-1 with funding from RNIP. The economic, environmental and social feasibility of each sub-project/contract package will be checked by the responsible PMU following completion of final designs and cost estimation for each project.

Phase II Work Programs

During initial project preparation, draft works programs were identified for Phase I and Phase II. The detailed design and bidding documents for Phase II will be carried out as initial activities of the project and funded with project funds. The consulting assignments will not only include the detailed design of Phase II sub-projects/contract packages but also the construction supervision of Phase I sub-projects/contract packages as well as, subsequently, Phase II sub-projects/contract packages.

Arrangements for Reporting

Implementation will be monitored through the Quarterly Financial Management Reports (QFMRs), and bi-annual supervision reports prepared by each implementing agency and brought together in a consolidated progress report by PMU-W acting for DPI. Periodic Progress Reports will be prepared by all of the Technical Assistance Consultants carrying out their respective assignments. These reports, once reviewed and approved by the client, will then be submitted to the World Bank. The World Bank will conduct Supervision Missions every six months, and will conduct a mid-term review after about 24 months of implementation. The Bank will work closely with PMU-1/PMU-W and PDoTs to review the performance of technical assistance consultants.

Arrangements for Monitoring and Evaluation

The DPI within the MOT, in consultation with constituent implementation agencies—including PMU-1, PMU-W and PPMUs/PDoTs will prepare, prior to Credit Effectiveness, a comprehensive Monitoring and Evaluation Framework. The implementing agencies will use, collaboratively, the specific technical, social and economic indicators defined in the Development Credit Agreement to assess project progress and effectiveness. The monitoring of such indicators will be integrated into the day-to-day work routines of the project implementing agencies.

Information pertaining to the monitoring and assessment of the progress of the MTIDP will anchor the agenda of all Project Steering Committee meetings. The key performance indicators which will serve as the basis for the monitoring system elicit information on the performance of all key facets of the project.

Implementation Schedule

The project will be implemented over a six –year period commencing in mid 2007 and closing in 2013. Construction will be arranged in two phases over a total of about 4 years. The six-year project period includes the lead-in times for initial procurements and the final contracts defects liability periods, as well as time for final disbursement of Credit funds. The implementation schedule is summarised in Figure 6. 2 and details are included in the Project Implementation Plan

Annex 7: Financial Management and Disbursement Arrangements VIETNAM: Mekong Transport Infrastructure Development Project

Country Issues

The 2001 CFAA for Vietnam concluded that the public financial management system represented some level of fiduciary risk. The 2005 PER-IFA recognized improvements in transparency and accountability arising from (i) a new audit law (May 2005) which will enhance oversight by the National Assembly and Provincial People's Councils over public finances and increase public access to information on government finances; (ii) the new decree on independent audit (March 2004) which regulates the status of auditors and audit firms and define the value of audit results; (iii) the accounting law (2003) which establishes the legal framework for Vietnamese Accounting Standards for public and private sectors on the basis of international standards.

However, the PER-IFA identifies a large agenda for improvement in public financial management. The key challenges include: (i) implementation of the legislative frameworks which are largely in place; (ii) strengthening the effectiveness of the State Audit of Vietnam; (iii) streamlining the internal control framework; (iv) building financial management capacity, particularly at the subnational level; and (v) adopting international public sector accounting standards.

Recently, corruption and collusion has been highlighted as a significant risk in transport projects in Vietnam. The risks particularly relate to procurement, however the weaknesses in internal control and financial monitoring and oversight combined with capacity weaknesses increase the inherent risk in relation to mis-use of funds for approved purposes which are accounted for through government systems and processes to substantial.

Risk Assessment and Mitigation

The inherent risk to the project from the financial environment is assessed as substantial before mitigation and **moderate** after mitigation. The project specific control risk taking into account the risk mitigation measures that are to be implemented for the project is assessed as **moderate**.

Risk	Risk Rating	Risk Mitigation Measures Incorporated into Project Design	Risk After Mitigation Condition of Negotiation, Board or Effectiveness
Inherent Risk			
Country level: Overall Fiscal Environment	Moderate	Capacity building in MTEF and road planning and budgeting, implementation and monitoring, commitment control and debt management; Performance expenditure reviews at least annually	Moderate
GOV may be unable to meet its funding obligations due to budgetary constraints	Moderate	(i) proper budget preparation and submission from the PMUs and PPMUs, (ii) IDA will fund 100% of eligible expenditure (which are all civil works, goods and technical assistance). The risk for the counterpart fund for land acquisition and resettlement however remains unmitigated	Substantial
Entity and Project level: Funds may not	Substantial	(i) Annual financial audit by external auditor,(ii) performance audit by external auditor, (iii)	Moderate

Risk	Risk Rating	Risk Mitigation Measures Incorporated into Project Design	Risk After Mitigation Condition of Negotiation, Board or Effectiveness
be used efficiently and economically and for purposes intended		function of internal audit function within the MOT, (iv) enhanced accounting and reporting system.	
Entity and Project level: Potential corruption mainly arising from procurement	Substantial	(i) ICB applied for all contracts at and above USD 2 m (work), USD 0.1 m (goods), (ii) prior review for contracts with value of USD 0.2 m or more (work), USD 0.1 m ore more (service), (iii) implementation of anti-corruption plan- See annex	Moderate
Overall Inherent Risk	Substantial		Moderate
Control Risk			
1. Budgeting	Substantial	(i) Budgets are prepared on a quarterly basis by all PMUs and PPMUs, (ii) Financial budgets to be linked with physical operating plan, (iii) variances to be analysed and reported by all PMUs and PPMUs	Moderate
2. Funds Flow	Moderate	Funds will flows directly from the IDA to the designated accounts maintained at a commercial bank acceptable to IDA whose signatories are management of PMU1, PMU-W and PPMUs.	Negligible
3. Staffing	Moderate	Finance staff required to have appropriate experience and qualifications.	Moderate
4. The PPMUs do not have experiences managing the similar projects. The capability of the PPMUs staff may not be adequate	Moderate	PPMUs will be supported by advisory consultant and regional support center. Operational manual will be in place and training on project management will be organized.	Moderate
5. Accounting Policy & Procedures	Moderate	A consistent set of accounting policies and procedures to be set up and applied in all implementing agencies (which will be detailed in a Financial Management Guidance). Training of the accounting policies and procedures to be organized for the staff.	Moderate
6. Internal Audit	Moderate	Internal audit function will be set up within the MOT as part of MOT Inspectorate whose mandate to cover the internal audits of all components of MTIDP	Moderate
7. External Audit	Negligible	Annual Financial Audit of the project's financial statements by independent auditors; Performance (technical and financial) audits annually	Negligible
8. Reporting & Monitoring	Substantial	The current system to be updated so that (a) consistent report requirements for all implementing agencies, (b) there is a link with the project physical progress and (c) all reports can be automatically prepared by the System	Moderate
9. Information Systems	Moderate	FM software to be set up and used in all implementing agencies	Moderate
Overall Control Risk	Moderate		Moderate

Implementation arrangements

The Ministry of Transport (MOT), through its Department of Planning and Investment (DPI), will be the executing agency for the Mekong Transport Infrastructure Development Project (MTIDP). The MOT through a Project Steering Committee (PSC) will have overall responsibility for overseeing the implementation of the project, reporting to the Government of Vietnam (GOV) and fulfilling the requirements of the World Bank.

There will be 15 implementing agencies within the MOT: PMU1, PMU-W and a PPMU in each project province. Each PMU will be separately responsible for the financial management relevant to the project components that they are implementing. The provincial components will be fully decentralized. Technical assistance is included in the project to support all implementing agencies at the provincial level. The PSC and its secretariat, the Department of Planning and Investment will oversee the financial management through (a) reviewing the budget and work plan from the components, (b) review the financial statements from components, (c) supervise and direct the internal audit function.

Staffing of PMUs and PPMUs

PMU-1 and PMU-W already have financial functions that are adequately staffed. Both PMU1 and PMU-W financial staffs have experience managing IDA financed projects and national projects (PMU1: Highway Rehabilitation, Mekong Transport and Flood Protection; PMU-W: Inland Waterway). The accountants in PMU1, PMU-W and Chief accountants of the PPMUs have accounting educational background (bachelor degree) and experiences. They are assessed as having the capacity to undertake the MTIDP as their current workload is reducing with other projects coming to completion during 2006 (PMU-W) and 2007 (PMU1).

At the PPMU level, the accounting staff will be assigned either from the Project Management Board for Investment Projects (PMB) (within PDOT) or assigned from PDOT. PPMU staffs must be capable of formulating and implementing budget, maintaining project accounts and preparing financial reports. Each PPMU would have at least one financial officer and one assistant to handle accounting and reporting. These two persons will have adequate qualifications and relevant experiences to fulfill fiduciary requirements consistent with IDA requirements.

Some PMB have had experience with Rural Transport 2 as <u>centralized provinces (management of contracts and contract claims, but not in all aspects of financial management accounting, control and reporting).</u>

A modified self assessment questionnaire (refer Annex 2) was prepared and issued to the PPMUs to complete. The questionnaire is intended to form the basis for assessment of the FM arrangements and capacity of each of the participating provinces. Only 6 provinces completed and returned the questionnaire. Visits to two of the provinces (Vinh Long and Can Tho) has also been undertaken to review the FM arrangements based on the questionnaire responses. An analysis of the Provincial FM arrangements and capacity is at Annex 3. The major findings of the analysis to date are:

- Lack of experiences in managing donor funded projects
- Inconsistent accounting system. Some PDoTs (Can Tho in particular) do not have any accounting system)
- Weak budgeting and reporting
- No internal audit function, external audit requirements are not consistent

- Accounting software is used in a number of PDoTs. However the integrity and security of the software are variable and questionable

PPMU staffs require additional support as their capacity is weak in budgeting, bank account management, financial reporting and monitoring of financial performance and follow up on financial performance and disbursements and annual financial statements preparation. To address these capacity constraints in both financial management and procurement at the PPMU level, training programs for Financial Management and Procurement should be established and implemented as part of the project. The training will cover

- Budget planning and monitoring;
- IDA procedures in FM and disbursement applicable for the project;
- Government procedures in FM and disbursement for the project;
- Accounting and reporting for the project;
- Strengthening internal control.
- Asset accounting, management and control

Training should be provided at least annually to the PPMUs.

Budgeting

Currently budgeting systems in MOT are weak. In PMU1 and PMU-W, the annual procurement plan serves as basis for financial plan. In PMBs, there is no link between the two. The budgets in PMU-W and PMU1 are broken down by contract. (Budgets of PMBs have not yet been reviewed and assessed).

Annual work plan will be prepared by PMU1, PMU-W, and 13 PPMUs. These work plans will be submitted to the Department of Planning and Investment of MoT for consolidation. The consolidated plan will be approved by the MoT, and then submitted to the MoF for allocation of funds. Project budgeting will follow GoV policies and procedures.

Accounting

The current accounting system use in PMU1 and PMU-W is the Accounting System for Investment project which is based on the Decision 214 of the MOF. While most of the PMBs (of those reviewed) also use the same accounting system, Ben Tre use a different system which is based on the Circular 121 (applied for Administrative Agencies) issued by MOF and Can Tho just uses a single entry accounting system and does not prepare any reports.

The current chart of accounts of the project management units will need to be revised, even with the one regulated by the Decision 214, in order to meet the Project financial management requirements of the report by project components, activities and disbursement categories.

Accounting system and procedures including retention of documents and system records and access to these yet to be established.

The records of fixed assets are in place but not sufficient.

Internal Controls

The PSC will be responsible for ensuring that an adequate internal control framework and internal controls are in place and operating. Within each project management unit, the Project Director is responsible for the project internal controls.

The project's internal control system will include the key controls of (i) clearly defined FM responsibilities and reporting structures (ii) segregation of duties; (iii) defined and documented financial processes and procedures (iv) regular timely reconciliations (v) security and safeguarding of cash and assets (vi) timely reporting, review and monitoring; and (vii) timely remedy actions and follow up on financial issues, variances and audit findings, and (vi) proper documentation and retention of project financial records and documents.

The project's internal controls will be documented in the Financial Management Manual (FMM) which will be updated regularly to take into account any changes in procedures. The FMM must be reviewed annually to ensure it is up-to-date and relevant.

Currently, there are no FMM at PMU1, PMU-W and 13 PPMUs. PMU1, under the Mekong Transport and Flood Protection has signed a contract with a contractor to develop a FMM in accordance with a Terms of Reference accepted by IDA. The FMM for PMU-W, 13 PPMUs and even PMU1 must be prepared prior to effectiveness of the project (*condition of effectiveness*)

Funds Flow and Disbursement Arrangements

The table below details the allocation of IDA Credit

PMU1

Expenditure Category	Amount of Credit Allocated (million US\$)	% of Expenditures to be Financed
Works	40.86	100%
Goods	-	
Consultant services	4.19	100%
Training and workshops	-	
Unallocated		
TOTAL	45.05	

PMU-W

Expenditure Category	Amount of Credit Allocated (million US\$)	% of Expenditures to be Financed
Works	57.18	100%
Goods	1.93	100%
Consultant services	9.02	100%
Training and workshops	0.95	100%
TOTAL	69.08	

13 PPMUs

Expenditure Category	Amount of Credit Allocated (million US\$)	% of Expenditures to be Financed
Works	39.89	100%
Goods	1.00	100%
Consultant services	3.22	100%

Training and workshops	-	
TOTAL	44.11	

Total

Expenditure Category	Amount of Credit Allocated (million US\$)	% of Expenditures to be Financed
Works	137.93	100%
Goods	2.93	
Consultant services	16.43	100%
Training and workshops	0.95	100%
Unallocated	22.01	100%
TOTAL	180.25	

Disbursement Methods

The project will use the following disbursement methods:

- *Reimbursement* The Bank may reimburse the borrower for expenditures eligible for financing pursuant to the Loan Agreement ("eligible expenditures") that the borrower has prefinanced 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.

The Disbursement Deadline Date will be four months after the Closing Date of the project.

Reporting on Eligible Expenditures Paid from the Designated Accounts Withdrawal applications reporting eligible expenditures paid from the designated account will be submitted to monthly, with the following documentation:

- Use of Statement of Expenditures (SOEs). For: (a) goods costing less than \$100,000 equivalent per contract; (b) works costing less than \$200,000 equivalent per contract; (c) for services of individual consultants costing less than \$50,000 equivalent per contract; (d) for services of consulting firms under contracts costing less than \$100,000 equivalent per contract; and (e) workshops, training and incremental operating costs, withdrawals under the Credit Agreement will be made on the basis of Statements of Expenditure. The related payment documents will be made available for the required audits, as well as to the Bank supervision missions upon request.
- Other Expenditures: All other expenditure above the SOE thresholds will be submitted on the basis of full documentation which will include copies of receipts, supplier invoices, bills of lading, etc.

Applications for direct payment Contract and purchase records evidencing the eligible expenditures, e.g., copies of contracts, purchase orders, supplier invoices, receipts will be submitted together with the withdrawal application setting out clear payment instructions. The minimum application value for direct payment requests will be set in the project disbursement letter.

Applications for reimbursement: Withdrawal applications reporting eligible expenditures for reimbursement of eligible expenditures will be submitted to with the same documentation as required for reporting of eligible expenditures paid from the designated accounts.

Special Commitments: The commercial bank provides its confirmation directly to the Bank that conditions for release of payments committed for withdrawal have been met.

Designated Accounts

It is proposed that 3 designated accounts be maintained for the project with details as follows:

- 2. Designated Account A: Account holder is PMU 1. This Designated account is used to receive funds from IDA for the activities managed by PMU1.
- Designated Account B: Account holder is PMU-W. This Designated account is used to 3. receive funds from IDA for the activities managed by PMU-W.
- 4. Designated Account C: Account holder is PMU-W. This Designated account is an intermediate account to receive funds from IDA and transfer to the sub-Designated accounts held by the PPMU

Each PPMU will open a sub-designated account to receive funds from Designated Account C for the activities carried out by the PPMUs.

Each implementing agency will manage the funds for the components that they will implement. PMU 1 and PMU-W manage their the bank accounts, preparation and submission of withdrawal applications to the Bank, controlling payments for eligible expenditures to suppliers and beneficiaries in accordance with the Credit Agreement from their designated accounts (Account A and Account B respectively). PMU-W will prepare the consolidated withdrawal application for the 13 PPMUs, transfer the requested funds to the PPMUs' sub-Designated accounts and manage the Designated Account C. 13 PPMUs will individually manage their accounts, preparation and submission of withdrawing application to PMU-W, controlling payments in accordance with the DCA.

The **ceiling** for the designated and sub-designated accounts will be:

- Designated Account A held by PMU1
- Designated Account B held by PMU-W
- Designated Account C held by PMU-W
- US\$5 million Sub-Designated Account held by each PPMU US\$0.5 million. •

The above designated account ceilings will be limited to US\$2.5 million, US\$5 million, US\$2.5 million and US\$0.25 million respectively until credit disbursement exceeds SDR10 million. Replenishment application from each PMU and PPMU should be submitted monthly.

US\$5 million

US\$10 million

Counterpart Funds

The overall budget for the Project will be approved by the Department of Planning and Investment of MoT and submitted to MOF for budget allocation. The counterpart funds will be made available for the PMUs and PPMUs at the Central State Treasury (PMU1) and Provincial State Treasury (PMU-W and PPMUs). Each PMU and PPMUs will have an account at State Treasury and payments to contractors/ suppliers will be made upon approval of State Treasury on the payment claims.

Retroactive Financing

Retroactive financing in the aggregate amount of US\$ 450,000 would be provided for expenditures made prior to the date of the Credit Agreement but after appraisal date, for urgently required contracts, goods and consulting services. The procurement procedures shall be in accordance with the Bank's Procurement Guidelines in order for the eventual contracts to be eligible for Bank retroactive financing, and the normal review process by the Bank shall be followed.

Funds flow to Contractors and Beneficiaries from the Designated Accounts

Funds flow arrangements for payments from the designated accounts to suppliers and beneficiaries will be basically the same for the PMU-1, PMU-W and the PPMUs. Government procedures for processing of payment claims will apply, i.e. the project management units will prepare and check payments claims, the claims will then be submitted to the relevant treasury department (central or provincial) which will check validity of use of funds and approve for payment. The claim will be returned to project unit which will then prepare and issue the cheque or bank order to make the payment to the supplier/beneficiary from their designated account. The following steps are proposed (See figure 1 for the fund flows for the components managed by PMU1 and PMU-W and figure 2 for fund flows for the components managed by 13 PPMUs

Figure 1: Fund flows for the components managed by PMU1 and PMU-W



- 1. PMUs prepare the withdrawing application and send to IDA
- 2. IDA disbursed monies to the Designated Accounts of the PMUs at commercial bank
- 3. Contractor submit certificates, invoices to Consultant
- 4. Consultant reviews, certifies and then submit to PMUs
- 5. PMUs reviews, certifies and then submit to STD
- 6. STD checks, approves and send back to PMUs
- 7. PMUs send the request for payments to the STD and commercial bank
- 8. The commercial bank makes payment to the Contractors
- 9. STD makes payment to Contractors

Figure 2: Fund flows for the components managed by 13 PPMUs



- 1. PPMU (PMB) prepares the withdrawing application and send to PMU-W
- 2. PMU-W prepares the consolidated withdrawing application and send to IDA
- 3. IDA disbursed monies to the Designated Account of the PMU-W at commercial bank
- 4. PMU-W instructs the Commercial Bank to transfer monies to the PPMU subdesignated accounts
- 5. Commercial Bank transfer monies to the PPMU sub-designated account at Commercial Bank
- 6. Contractor submit certificates, invoices to Consultant
- 7. Consultant reviews, certifies and then submit to PPMU (PMB)
- 8. PPMU (PMB) reviews, certifies and then submit to STD
- 9. STD checks, approves and send back to PPMU (PMB)
- 10. PPMU (PMB) send the request for payments to the STD and commercial bank
- 11. The commercial bank makes payment to the Contractors
- 12. STD makes payment to Contractors

Financial Reporting and Monitoring

Quarterly Interim Financial Reports (IFRs) will be prepared by PMU-1 / PMU-W and each PPMU/PDoTs for monitoring of financial performance of the project in a format to be agreed between the representatives of the GoV and the IDA (*condition of negotiation*). PMU-W will also prepare the consolidate IFRs for all PPMUs based on the IFRs sent by the PPMUs. PMU1 and PMU-W must be able to produce the IFRs from their accounting systems before (*condition of effectiveness*).

PMU 1 and PMU-W will be required to submit IFRs to the Bank within 45 days of the end each quarter to the Bank. PMU-W, as described above is required to prepare and submit the IFRs for the components managed by 13 PPMUs. The IFRs will cover all project activities, including counterpart funding and will include:

Financial reports (analysing expenditures against budgets)

- Sources and Uses of Funds by expenditure category;
- Uses of Funds by project activities/components;
- Designated Account Statements (and Project Account Statements if applicable);

Contract monitoring reports

- Implementation Progress by contract (combined with Contract Monitoring);
- Procurement Process Monitoring.

The IFRs are not required to be audited.

Annual Project Financial Statements: Each project management unit will prepare annual financial statements covering the portion of the project components and activities for which they are responsible, i.e. there will be annual financial statements from PMU1, PMu-W and the 13 PPMUs. In the case of PPMUs, the consolidated financial statements for all 13 PPMUs will be prepared by PMU-W. 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:

- 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.
- 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 / grant withdrawals, listing individual withdrawal applications; and
- A Management Assertion that Bank funds have been expended in accordance with the intended purposes as specified in the relevant World Bank legal agreement.

The annual financial statements are required to be audited and submitted to the Bank within 6 months of the end of each financial year.

Audit Arrangements

External Audit. The Project annual financial statements will be audited in accordance with international auditing standards by independent auditors and TORs acceptable to IDA. The audited

financial statements and audit reports will be submitted to the Bank within six months of the end of each financial year, and the date of closing of the project.

There will be 3 audit reports required for 3 financial statements (for PMU1, PMU-W and for consolidated Financial Statements of 13 PPMUs). For each set of financial statements, the auditor would express a single audit opinion covering the Project Accounts, the use of SOEs and the Designated Accounts. In addition, a management letter addressing any internal control weaknesses of the implementing agencies (PMU1, PMU-W and PPMUs) will also be provided by the auditor together with the audit reports.

The PMU-W will be responsible for engagement and management of the audit contract. It will appoint the auditor at the early stage, within six (6) months after the singing of the DCA, following IDA procurement procedures. The audit contract will cover the annual financial statements for ALL project implementing agencies. The cost of audits will be financed from project funds

The annual financial statements and audit reports will be made publicly available through the MOT web-site.

Integrated Project Implementation Performance Audits. Integrated Project Implementation Performance Audits will also be undertaken through the life of the MTIDP project on a semi-annual basis with emphasis on assessment of proper use and accountability of funds, procurement, the physical implementation of the project, social and environmental monitoring and the availability of funds to the transport sector as a whole and at provincial levels.

Audit Report	Due Date
PMU1:	30 June
Project Specific Financial Statements	
Management Letter	
PMU-W:	30 June
Project Specific Financial Statements	
Management Letter	
PPMUs:	30 June
1 Consolidated financial statements for 13 PPMUs	
Management Letter	
PMU-W	Six-monthly
Integrated Project Implementation Performance Audits	

Internal audit.

There was no internal audit function within the PMUs, PPMUs or within MOT as a whole. Typically a donor funded project is subject to (a) annual financial audit done by an independent auditor (as required by donor, occurring after the year end), (b) Investment audit to check the finalization of investment expenditure of the project, done by an independent auditor (not applied for all project, only done at the request of the MOF/MOT or the People Committee, occurring after the project completes), (c) Audit of State Audit of Vietnam (not for all projects, occurring after the completion of the project), (d) inspection of the project (by Governmental Inspectorate, on an adhoc basis, occurring only when there is a problem with project management or implementation), (e)

inspection of the Department of Finance of MOT or People Committee (occurring after the year end, only for the counterpart fund).

It is noted that (a) all audits occur after the year end or the completion of the project which adds little value to prevent exceptions; (b) except for the financial audit (required by the donor), there is no frequent/ periodical audits and/or inspection and (c) there is neither internal audit function within the Project nor within MOT

In addition to the integrated implementation performance audit, there would be an internal audit function for the Project. Internal audit function needs to be set up for the MOT as a division of the Ministry's Inspectorate. The initial terms of reference for the function are to perform the internal audit function for MTIDP and RT3 projects which will be prepared and reviewed. In the longer term, it would carry out the internal audit function for all projects implemented by MOT regardless of the sources of funds (from donors or from government). A consultant will be hired to provide capacity building program to the Internal audit function which includes development of audit methodology, audit manual and training for internal auditors.

Supervision Plan

As the FM risk is assessed as substantial, supervision of project financial management will be performed at least twice a year. The supervision will review the project's financial management system, including but not limited to operation of Designated Account, Statement of Expenditures, internal controls, reporting and follow up of audit findings and mission's findings. The financial management supervision will be conducted by IDA's financial management specialist staff.

Strengths and Weaknesses

According to the Financial Management Questionnaire received from the six provinces and discussion with PMU1, PMU-W, Vinh Long and Can Tho PDoT, the following strengths and weaknesses have been observed.

Strengths.

- The Financial Management function have been set up and available (as a division of the PMU or PMB within PDoT);
- Except for Can Tho, the accounting system has been set up for all PMUs and PPMUs;
- The basis internal control procedures (for example: segregation of duties between procurement, payment and accounting function or annual assets inventory procedures) are in place.

Weaknesses

- i. There was no comprehensive financial management manual at PMU1, PMU-W and all PPMUs. An FMM is being prepared in PMU1 with the funding of Mekong Transport and Flood Protection (MTFP). Thus, PMU-W and all PPMUs will need an comprehensive FMM;
- ii. There is currently no integrated financial management software. PMU-W and Can Tho have no accounting software where the system of PMU1 and other PPMUs does not have budgeting and planning, contract management, assets management and reporting (IFRs) functions. Further, it has no link with the project implementation progress management. PMU1, with funding of MTFP is developing an integrated financial management system. Thus PMU-W and all PPMUs will need an integrated one.

- iii. Except for PMU1 and PMU-W, the personnel of all other PPMUs do not have knowledge and experiences managing projects funded by IDA in terms of disbursement, procurement or reporting. PPMUs staff will need trainings of IDA regulation, requirement on financial management and disbursement
- iv. There is no internal audit function set up at MoT, PMUs or PPMUs. An internal audit function should be set up as a part of the Ministry's Inspectorate which will initially perform the internal audit function of MTIDP and Rural Transport 3 projects.

Action	Responsibility	To Be Completed By
<u>1- Respond of Financial Management Questionnaires</u>	PDoTs of Soc Trang, Long An, Dong Thap, Hau Giang, Kien Giang, Tra Vinh	Negotiation
2- Agreed template of Interim Financial Reports	IDA, PMU1, PMU-w, PPMUs	Negotiation
<u>3-Personnel</u> PMU1 and PMU-W confirm the appointments and qualifications of the finance staff who will be responsible project acceptable to IDA.	PMU1 and PMU-W	Effectiveness
PDOTs appoint sufficient accounting/finance staffing with relevant qualifications and experiences or basic knowledge for capacity building acceptable to IDA.	PDOTs	Effectiveness
<u>4-Software</u> Development of integrated financial management software should be made in implementing units in PMU-1, PMU-W and PDoTs together with proper trainings. The additional improvements in the software should facilitate the preparation of project financial statement and also the quarterly Interim Financial Reports).	PMU-1, PMU- W, PDOTs	Effectiveness
<u>5-Manual and Training</u> FM manual for MTIDP project will be prepared in PMU-1 / PMU-W and PDoTs setting out in detail the structure, procedures, reporting and coordination between different levels of MTIDP project in financial management aspect. Training on IDA regulation, requirement on financial management and disbursement should also be provided.	PMU-1, PMU- W, PDOTs, IDA	Effectiveness
<u>6- External Audit</u> Appoint an independent external auditor for all implementing agencies with terms of reference acceptable to IDA	PMU-W	6 months after the DCA signing
<u>7- Internal Audit Function</u> Set up an internal audit function within MOT with terms of reference, scope and methodology acceptable to IDA	МОТ	6 months after effectiveness of the DCA.

Conditionality and FM Action Plan

Annex 8: Procurement Arrangements

VIETNAM: Mekong Transport Infrastructure Development Project

PROCUREMENT GUIDELINES

Procurement will be carried out in accordance with the World Bank's 'Guidelines : Procurement under IBRD Loans and IDA Credits' dated May 2004 and 'Guidelines :Selection and Employment of Consultants by World Bank Borrowers' dated May 2004, and the provisions stipulated in the Development Credit Agreement. For contracts procured through the National Competitive Bidding (NCB) procedure, the procedures listed in the Annex to the DCA shall be applicable. For each contract fiananced by the Credit, the different procurement methods and consultant selection methods, estimated costs, prior review requirements and time frame have been agreed between the Borrower and IDA in the procurement plan detailed in Attachment 1 to this Annex. The procurement plan will be updated at least annually, or as required to reflect the actual project implementation needs and improvements in institutional capacity.

Procurement Methods:

The procurement methods to be applied are as shown below.

Expenditure Category	Procurement Method
Civil Works (Improvement, Rehabilitation)	International Competitive Bidding (ICB): All Contracts at and above US\$ 2 million. <u>Note:</u> Depending on the volume and nature of works, prequalification of bidders may be required for the ICB works procurement, with prior agreement of the Bank. National Competitive Bidding (NCB):
Goods (port	International Competitive Bidding (ICB): Contracts at and above US\$200,000 per contract. National Competitive Bidding (NCB): Contracts below US\$ 200,000 but at and above US\$ 30,000 per contract.
and navigation aids equipment)	Shopping (S): Contracts for procurement of goods, e.g. office equipment including computers, printers, vehicles, below US \$30,000 per contract. <u>Note:</u> Three quotations from at least three qualified suppliers shall be obtained as stated in Article 3.5 of the Guidelines on Procurement under IBRD Loans and IDA Credits.
Consulting Services (Firms and Individuals)	Quality and Cost Based Selection (QCBS): Consulting services for contracts at and above US\$100,000.Selection Based on Consultant Qualifications (CQS): For small contracts estimated to cost less than US\$100,000 per contract for which the need for preparing and evaluating competitive proposals is not justified.

Table 8-1: Procurement Methods

Expenditure Category	Procurement Method
	Least-Cost Selection (LCS): For assignments of a standard or routine nature where well-established practices and standards exist.
	Selection of Individual Consultants (IC): For individual consultants in accordance with Section V of the Consultant Guidelines.
Training	All training will be conducted in-country. Note: Cost of training materials (printing), rental facilities, transportation, food and board, and tuition for trainees will follow Statement of Expenditures (SOE) procedures. Content of training, estimated cost for workshops and lists of trainees will be approved by the Bank before any expenditure.

Bidding Documents

For ICB contracts, the project will use the World Bank's Standard Bidding Documents. For ICB contracts for works estimated to cost over US\$ 10 million the Standard Bidding Documents for Works (SBDW) –May 2005. For ICB contracts estimated to cost between US\$ 2-10 million the World Bank's Standard Bidding Documents for Procurement of Works Smaller Contracts – May 2004 may be used. Contracts estimated to cost less than US\$2 million will be procured following National Competitive Bidding (NCB) procedures and the sample documents for NCB works developed by the World Bank, Vietnam Office, will be used, modified for MTIDP contracts as appropriate and acceptable to the Bank. For Goods (May 2005) will be used. For goods contracts procured through the NCB and Shopping procedures, the sample bidding documents for NCB and Shopping developed by the World Bank Vietnam Office will be used. The Bank's Standard Bidding Documents for Goods (May 2005) will be used. The Bank's Standard Bidding Documents for Goods (May 2005) will be used. For goods contracts procured through the NCB and Shopping procedures, the sample bidding documents for NCB and Shopping developed by the World Bank Vietnam Office will be used. The Bank's Standard Request for Proposals (SRFP) will be used for the hiring of consulting firms.

Domestic Preference:

For goods and works contracts procured under ICB, domestic preference would apply.

ELIGIBILITY ISSUES

State Owned Enterprises (SOEs). Government-owned enterprises in Vietnam shall be eligible to participate in bidding only if they can establish that they are legally and financially autonomous, operate under commercial law, and are not a dependent agency of the Borrower or the procuring entity. In particular, SOEs under the direct supervisory authority of the Ministry of Transport (MOT) shall be excluded from any bids for civil works, goods, or services under the project. State-Owned Enterprises (SOEs) under the direct supervisory authority of a Provincial People's Committee shall be excluded from any bids for civil works, goods and services which are procured by the respective PPMU. Military or security units which belong to the Ministry of Public Security shall not be permitted to bid.

PROCUREMENT REVIEWS

Prior Review of Goods and Works

The following contracts are subject to prior review by the Bank:

(a) Each contract for works estimated to cost the equivalent of \$300,000 or more, and each contract for goods estimated to cost the equivalent of \$200,000 or more. In reviewing these documents, the procedures set forth in paragraphs 2, 3 and 4 of Appendix 1 to the Guidelines

Post Review of Goods and Works

With respect to each contract not governed by the above, the procedures set forth in paragraph 5 of Appendix 1 to the Guidelines shall apply. At least one in five contracts will be post-reviewed.

Prior Review of Consulting Services

The following contracts are subject to prior review by the Bank:

- (a) With respect to each contract for the employment of consulting firms estimated to cost the equivalent of \$100,000 or more, the procedures set forth in paragraphs 2, 3 and 4 of Appendix 1 to the Consultant Guidelines shall apply.
- (b) With respect to each contract for the employment of individual consultants estimated to cost the equivalent of \$50,000 or more, the report on the comparison of the qualifications and experience of candidates, terms of reference and terms of employment of the consultants shall be furnished to the Association for its prior review and approval. The contract shall be awarded only after the said approval shall have been given. The provisions of paragraphs 2, 3 and 4 of Appendix 1 to the Consultant Guidelines shall also apply to such contracts.

Post Review of Consulting Services

With respect to each contract not governed by the above procedures, the procedures set forth in paragraph 5 of Appendix 1 to the Consultant Guidelines shall apply. At least one in five contracts will be post reviewed.

Procurement Plan

The procurement plan for the entire Project is attached (See Attachment 1). The Procurement Plan will be reviewed and approved annually by the World Bank and it will be monitored and implemented in accordance with the Bank's guidelines and the project legal agreement. All procurement under the project shall be carried out in accordance with the agreed plans, as updated at least annually.

Institutional Arrangements and Procurement Responsibilities

Direct responsibility for project implementation and day-to-day management oversight will be allocated to 15 "implementing units or project management units" directly reporting to, and seeking approvals from, the 15 respective "project owners" (i.e. VRA, VIWA and 13 PDoTs): (i) Project Management Unit-1 (PMU-1) for Component A ; (ii) Project Management Unit – Waterways (PMU-W) for Component B, C4ii and D; and (iii) Provincial Project Management Units (PPMUs) for Component C.

Assessment of Implementing Agency Capacities to Implement Procurement

The procurement environment in Vietnam in general is considered to be of high risk (see CPAR-October 2002, updated in December 2004). A Procurement Capacity Assessment (PCA) was conducted by IDA for PMU-1, PMU-W and the 13 Provincial Project Management Units (PPMUs) within the Provincial Departments of Transport (PDoTs) under Provincial People's Committees. Procurement questionnaires were sent to the respective PMUs and the responses analysed. From this anlaysis the overall procurement analysis was also confirmed as *high*. The Procurement Capacity Assessment will be updated and confirmed during the Appraisal Mission.

This *high* risk level is mainly due to the decision taken to fully decentralise the provincial roads (13 provinces) and feeder canals (2 provinces) sub-components of the project, to Provincial Project Management Units within Provincial Departments of Transport. Whereas a number of these provinces do have experience with donor-funded projects, some do not. The highest risks which have been identified so far are: i) misunderstanding of the applicable procurement procedures by the implementing agencies that are not familiar with Bank procurement procedures; and ii) manipulation of the procurement process and collusion among bidders.

To mitigate the above risks an Anti-Corruption Framework and Plan has been developed jointly by the Bank and Borrower and the Project includes significant technical assistance to help each of the implementing agencies in implementation of their respective components. The various TA packages all include procurement support and procurement training.

Procurement Training Plan.

The identification/selection of procurement staff at all levels will be completed as a condition of project negotiation. The World Bank Hanoi Office procurement specialists will provide initial procurement training for project procurement staff. *By project effectiveness*, the project procurement staff are expected to receive sufficient procurement training. Priority of the initial procurement training is given to PMU-1, PMU-W and procurement staff of 3 provinces participating in Phase 1 of the project.

During the project life, procurement training will be provided to the remaining 10 PPMUs whose provincial programs are to be carried out in Phase 2. Regional Support Centers (RSC) (2) will be financed out of the fund allocated to Component D of the project. The RSC will receive adequate procurement training from Consultants before delivering procurement training to PPMU staff. Training materials will be developed by the Consultants in consultation with the procurement specialist of the World Bank Hanoi Office.

The procurement training will be designed based on the needs of the procurement staff.

PLAN TO IMPROVE FAIRNESS AND TRANSPARENCY IN PROCUREMENT

The Plan to improve fairness and transparency in procurement recognizes the inherent risks of implementing 3 major project components across 13 provinces with 15 Project Management Units, where availability of skills and experience may be low. Risk management in this context includes measures related to procurement, financial management and the supervision of implementation.

The detailed Plan to improve fairness and transparency in procurement has been prepared for MTIDP (attached), and will be referenced in the the Development Credit Agreement. The Action Plan that has been prepared is based on an examination of the overall project cycle, to identify

where corruption is most likely to occur, and what mitigation measures are likely to be most effective.

(The detailed Anti-Corruption Action Plan will be finalized during Appraisal based on the lessons learnt from the RTP3 action plan. Attachment 2 is the draft Action PLna.)

The Action Plan is structured on the basis of six key elements:

- 1. Empowerment of Recipients
- 2. Empowerment of Civil Society for oversight and feedback.
- 3. Establishment of procurement policies to mitigate collusion.
- 4. Building strong task teams with effective tools.
- 5. Complaints handling system
- 6. Clear definition of remedies

The Borrower and the Bank are agreed that the framework and actions outlined below shall be implemented under the MTIDP in order to reduce the possibility of corruption, collusion and nepotism.

Emphasis on Achieving Improved Quality

The project will give substantial emphasis to improving construction quality control, through the introduction of a multi-faceted program that involves the following components:

- a. The introduction of an action plan that will target corrupt practices that directly result in reduced construction quality, and provide for penalties for those found to be involved in such practices, including Contractors, Consultants, and the staff of government agencies. It is expected that this will result in significant improvements to quality of construction
- b. Strengthening the powers and authority of the Construction Supervision Consultants that will allow them to reject defective works and/or refuse payments for defective works.
- c. Provide for an independent program of Integrated Project Implementation Audits, to be conducted by consultants to be contracted by PMU-W acting for DPI.
- d. Promote public awareness of the project, and encourage local communities and stakeholders to become actively involved in observing and commenting on what they may regard as issues of quality and corruption. A complaints mechanism will be developed, that will follow up and report on all complaints, and whose effectiveness and performance will in turn be monitored and publicly reported on.

These important new initiatives are being introduced in this project, and their performance will be closely monitored to identify ways of strengthening and refining the measures for use in subsequent projects.
Attachment 1 to Annex 8: Procurement Plan

Contr. No	Description	Type of contract	Procure Method	Base cost (US\$ mill.)	Bid Doc / ToR / RFP Prep.	Bank Review	Bid Doc/To R RFP approva I	Bid / Proposal Sub	Bid Doc. Or Proposal Evaluation	Eval. Report Approval	Contr. sign	Contr. Start	Contr. Finish
COMPONENT	A: National Highway												
Corridors	1: National Highway Corri	idors											
Improvements	n national mgnway com	10013											
NH 1 / PMU-1	NH53-3 (56-60+610) and NH53-10 (130+440 – 139+450) and new landing stage for ferry	Civil Work	ICB	7.103	Jun, 07	Prior	Aug, 07	Oct, 07	Dec, 07	Feb, 08	Mar, 08	Apr, 08	Feb, 10
NH 2 / PMU-1	NH54-5,6,7,8 (85+000- 125+854)	Civil Work	ICB	12.11 4	Jun, 07	Prior	Aug, 07	Oct, 07	Dec, 07	Feb, 08	Mar, 08	Apr, 08	Dec, 10
NH 3 / PMU-1	NH92-1,2 (7+000- 25+800)	Civil Work	ICB	10.51 4	Dec, 07	Prior	Jun, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Apr, 09	Dec, 11
NH 4 / PMU-1	NH92-1,2 (25+800- 50+889)	Civil Work	ICB	11.12 9	Dec, 07	Prior	Jun, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Apr, 09	Mar, 12
Component A2	2: Supervision, Design												
CS-1 / PMU-1	Design and Supervision of National Highways	Consulti ng Service	QCBS	2.692	Aug, 06	Prior	Oct, 06	Jan, 07	Mar, 07	May, 07	Jul, 07	Sep, 07	Apr, 12
COMPONENT	B: National Waterway												
Corridors Component B Improvements	1: National Waterway Cor	ridors											
WW-1/ PMU- W	Corridor 2- Km 80-170:	Civil Work	ICB	7.842	Jun, 07	Prior	Aug, 07	Oct, 07	Dec, 07	Feb, 08	Mar, 08	Apr, 08	Dec, 09
WW-2 / PMU- W	Corridor 2- Km 170- 253:	Civil Work	ICB	12.55 6	Jun, 07	Prior	Aug, 07	Oct, 07	Dec, 07	Feb, 08	Mar, 08	Apr, 08	Dec, 10
BR-1 / PMU- W	Rehabilitation 13 bridges on Corridor 2	Civil Work	ICB	3.502	Jun, 07	Prior	Aug, 07	Oct, 07	Dec, 07	Feb, 08	Mar, 08	Jun, 08	Dec, 09
WW-3 / PMU- W	Corridor 2- Km 0-80:	Civil Work	ICB	12.00 1	Dec, 07	Prior	Jun, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Apr, 09	Mar, 12

WW-4 / PMU- W	Corridor 3- Km 0-80:	Civil Work	NCB	1.945	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Apr, 09	Apr, 10
WW-5 / PMU- W	Corridor 3- Km 207- 310:	Civil Work	ICB	9.075	Dec, 07	Prior	Jun, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Apr, 09	Mar, 11
BR-2 / PMU- W	Rehabilitation 5 bridges on Corridor 2	Civil Work	ICB	2.640	Dec, 07	Prior	Jun, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Sep, 10
SL-1 / PMU- W	Shiplock construction on Corridor 2	Civil Work	ICB	7.620	Dec, 07	Prior	Jun, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Jun, 11
ES-1 / PMU- W	Navigation Aids for Corridor 2, 3 and Feeder Canals	Goods	ICB	1.929	Dec, 07	Prior	Jun, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	May, 09	Jun, 11
Component B	2: Supervision, Design												
CS-2 / PMU- W	Design and Supervision of Main Waterway Corridors	Consulti ng Service	QCBS	4.181	Aug, 06	Prior	Oct, 06	Jan, 07	Mar, 07	May, 07	Jul, 07	Sep, 07	Apr, 12
COMPONENT supply corrido Component C Provincial Roa	C: Connecting the poor to ors 1: Investment in ads	o the											
PR-1 / PPMUBT	DT 884-TC40/2 lane	Civil Work	NCB	1.307	Jun, 07	Prior	Aug, 07	Oct, 07	Dec, 07	Feb, 08	Mar, 08	Jun, 08	Jun, 09
PR-2 / PPMUBT	DT 884-TC40/2 lane	Civil Work	NCB	1.262	Jun, 07	Prior	Aug, 07	Oct, 07	Dec, 07	Feb, 08	Mar, 08	Jun, 08	Jun, 09
PR-3 / PPMUST	DT 04 - TC40/1 lane	Civil Work	NCB	1.408	Jun, 07	Prior	Aug, 07	Oct, 07	Dec, 07	Feb, 08	Mar, 08	Jun, 08	Sep, 09
PR-4 / PPMUST	DT 04 - TC40/1 lane	Civil Work	NCB	1.484	Jun, 07	Prior	Aug, 07	Oct, 07	Dec, 07	Feb, 08	Mar, 08	Jun, 08	Sep, 09
PR-5 / PPMUCM	CN-CDV - TC40/1 lane	Civil Work	NCB	1.640	Jun, 07	Prior	Aug, 07	Oct, 07	Dec, 07	Feb, 08	Mar, 08	Jun, 08	Sep, 09
PR-6 / PPMUCM	CN-CDV - TC40/1 lane	Civil Work	NCB	1.434	Jun, 07	Prior	Aug, 07	Oct, 07	Dec, 07	Feb, 08	Mar, 08	Jun, 08	Sep, 09
PR-7 / PPMUVL	DT 909-TC40/1 lane	Civil Work	NCB	1.195	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Jun, 10
PR-8 / PPMUVL	DT 909-TC40/1 lane	Civil Work	NCB	1.202	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Jun, 10
PR-9 / PPMUKG	DT BN-TH - TC40/1 lane	Civil Work	NCB	1.405	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Sep, 10

PR-10 / PPMUKG	DT BN-TH - TC40/1 lane	Civil Work	NCB	1.436	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Sep, 10
PR-11 / PPMUCM	DT TB-UM - TC40/1 lane	Civil Work	NCB	1.508	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Jun, 10
PR-12 / PPMUBL	DT CS-HCMR - TC40/1 lane	Civil Work	NCB	1.444	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Sep, 10
PR-13 / PPMUBL	DT CS-HCMR - TC40/1 lane	Civil Work	NCB	1.353	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Sep, 10
PR-14 / PPMUAG	DT 941 - Approach road (1.2km + 6 bridges)	Civil Work	NCB	1.308	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Jun, 10
PR-15 / PPMUAG	DT 941 - Approach road (1.4km + 7 bridges)	Civil Work	NCB	1.275	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Jun, 10
PR-16 / PPMULA	DT 835B -TC40/2 lane	Civil Work	NCB	1.777	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Jun, 10
PR-17 / PPMUTG	DT 865 -TC40/2 lane	Civil Work	NCB	1.728	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Sep, 09	Dec, 10
PR-18 / PPMUTG	DT 865 -TC40/2 lane	Civil Work	NCB	1.517	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Sep, 09	Dec, 10
PR-19 / PPMUDT	DT 841 - Approach road (0.8km + 4 bridges)	Civil Work	NCB	1.235	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Sep, 09	Sep, 10
PR-20 / PPMUDT	DT 841 - Approach road (0.6km + 3 bridges)	Civil Work	NCB	0.948	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Sep, 09	Sep, 10
PR-21 / PPMUCT	DT TT-TL - TC40/1lane	Civil Work	NCB	1.874	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Sep, 09	Dec, 10
PR-22 / PPMUCT	DT TT-TL - TC40/1lane	Civil Work	NCB	1.735	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Sep, 09	Dec, 10
PR-23 / PPMUHG	DT 928 - TC40/1lane	Civil Work	NCB	1.186	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Sep, 09	Sep, 10
PR-24 / PPMUHG	DT 928 - TC40/11ane	Civil Work	NCB	1.121	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Sep, 09	Sep, 10
PR-25 / PPMUTV	DT TN - TC40/1lane	Civil Work	NCB	1.098	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Sep, 09	Sep, 10
PR-26 / PPMUTV	DT 915 -TC40/1 lane	Civil Work	NCB	1.508	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Sep, 09	Dec, 10
PR-27 / PPMUTV	DT 915 -TC40/1 lane	Civil Work	NCB	1.457	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Sep, 09	Dec, 10

Component Ca Provincial Fee	2: Investment in eder Canals												
FC-1 / PPMUAG	Upgrade to Class 4 of Feeder Canals in An Giang	Civil Work	NCB	0.515	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Apr, 10
FC-2 / PPMUCM	Upgrade to Class 4 of Feeder Canals in Ca Mau	Civil Work	NCB	0.524	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Apr, 10
Component Cand Landing S	3: Investment in Provincia Stages	al and Distric	t Ports										
PPLs-1 / PPMU??	Upgrading Provincial & District Ports (North) (To be determined)	Civil Work	NCB	0.503	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Apr, 10
PPLs-2 / PPMU??	Upgrading Provincial & District Ports (North) (To be determined)	Goods	NCB	0.503	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Apr, 10
PPLs-3 / PPMU??	Upgrading Provincial & District Port (South) (To be determined)	Civil Work	NCB	0.503	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Apr, 10
PPLs-4 / PPMU??	Upgrading Provincial & District Port (South) (To be determined)	Goods	NCB	0.503	Dec, 07	Prior	Jul, 08	Aug, 08	Oct, 08	Nov, 08	Jan, 09	Jun, 09	Apr, 10
Component C Advisory Serv	4: Supervision, Design ar ices	nd											
C4i (13 contracts-one for each of the 13 PPMUs)	Design and Supervision of Provincial Roads & Feeder	Consulti ng Service	QCBS	2.855	Aug, 06	Prior	Oct, 06	Jan, 07	Mar, 07	May, 07	Jul, 07	Sep, 07	Mar, 11
C4ii / PMU-W	Consulting Services to Development of Regional Support Center	Consulti ng Service	QCBS	1.200	Aug, 06	Prior	Oct, 06	Jan, 07	Mar, 07	May, 07	Jul, 07	Sep, 07	Mar, 11
COMPONENT Ministry of Tra Component D Multi-modal tra	D: Institutional Support t ansport 1: Support to MOT on dev ansport	o the /eloping											
CS-4 / PPMU-W	Supporting multi-modal transport	Consulti ng Service / Training	QCBS	1.500	Aug, 07	Prior	Oct, 07	Jan, 08	Mar, 08	May, 08	Jul, 08	Sep, 08	Apri, 12
Component Di to VIWA	2: Institutional Support												

CS-5 / PPMU-W	Supporting to VIWA in management of the inland waterways network	Consulti ng Service / Training	QCBS	1.500	Aug, 07	Prior	Oct, 07	Jan, 08	Mar, 08	May, 08	Jul, 08	Sep, 08	Apri, 12
Component D3	3: Integrated Project n Audit Services												
CS-6 / PPMU-W	Providing heightened fiduciary, safeguards & general project monitoring	Consulti ng Service	QCBS	0.640	Aug, 07	Prior	Oct, 07	Jan, 08	Mar, 08	May, 08	Jul, 08	Sep, 08	Jun, 13
Component D4 Service	4: Financial Audit												
CS-7/(13 contracts-one for each of the 13 PPMUs)	External Audit Service	Consulti ng Service	LCS	0.360	Aug, 07	Prior	Oct, 07	Jan, 08	Mar, 08	May, 08	Jul, 08	Aug, 08	Jun, 13
Other												1	
CS-8 / PMU-1	Preparation of NTIDP	Consulti ng Service	QCBS	1.500	Aug, 07	Prior	Oct, 07	Jan, 08	Mar, 08	May, 08	Jul, 08	Aug, 08	Jun, 13

Торіс	Recommended Action	Timing	Responsible by/How to Implement
	KNOWLEDGE AND AWARENESS RAISING AND C	APACITY BUILDING	
1. Raising knowledge and awareness of Project leaders and staffs, bidders and community/ banaficiaries	 Training for project leaders and staffs involved with procurement of PMU-1/PMU-W and PPMUs on identifying and tackling collusion/ corruption and fraudulent activities. MOT to share copies of all investigation reports and sanctions taken in previous collusion/ corruption/ fraudulence cases with PMU-1, PMU-W and PPMUs. 	Before Effectiveness and throughout Project life Before Effectiveness	IDA to train staff of relevant MOT Training Institutions; MOT Training Institutions to train project staff (together with procurement training) MOT
	• Include a Clause in the PIP and ITB regarding penalties/ fines/ sanctions to PMUs/PPMUs and Contractors involved with collusion/ corruption/ fraudulence, respectively.	Throughout Project life	Elaborated in PIP
	 Project beneficiary representatives invited and allowed to attend bid opening 		PMUs Institutionalized in PIP PMU-1/PMU-W/PPMUs
	 Posting of all contract awards outside PMU-1/PMU-W/PPMU Offices, e.g. MOT website, provincial newspapers 		PMU-1/PMU-W/PPMUs
	 Dissemination meetings for bidders and community/beneficiaries at least twice a year in each province 		
	• Publication in MPI and MOT websites/procurement bulletin and provincial newspapers of all sanctions made against colluding bidders within two weeks of determination.		
2. Building project	 Procurement Training/workshops to be provided to project staff involved with procurement 	Before Effectiveness and throughout	IDA before Effectiveness and relevant MOT Training Institutions
capacity	 Preparation of case studies for staff study 	Project life	throughout Project life
	INTERNAL REGULATORY FRAMEW	VORK	•
1. Preparation of Project Implementation Plan	• Review and revise, as appropriate, the Project's PIP to reflect the required oversight necessary for mitigating collusion/ corruption/ fraudulence risks.	Before Effectiveness and throughout Project life	PMU-1/PMU-W/PPMUs with comments provided by IDA

Attachment 2. Proposed Action Plan to Improve Fairness and Transparency in Procurement

Торіс	Recommended Action	Timing	Responsible by/How to Implement							
	• The PIP should also include project-wide procedures for identifying, reporting and tackling collusion/ corruption/ fraudulence, in which responsibilities at each unit/level are clearly defined		MOT to develop the mechanism/procedure							
	MITIGATING COLLUSION/ CORRUPTION/ FRAUDULENCE IN PROCUREMENT PRACTICE									
1. Procurement planning	• Combining as far as reasonably possible small procurement requirements into larger packages to be procured using more competitive methods	Throughout Project Life	PMU-1/PMU-W/PPMUs/DDoTs/ Institutionalized in the PIP and reviewed by IDA in procurement							
	• When determining procurement method, priority always given to the more appropriate competitive method.		pian							
	• Annual procurement plans shall be sent to the Bank for review and approval before inviting any bids in that plan									
	• Approved procurement plan to be published in MOT website/ provincial newspapers 3 months before invitation for bid.									
2. Invitation for Bids	• Procurement (advertisement, BDs issuance, bid opening, member of Bid Evaluation Committee and recommendation for Bid award) to be implemented by an independent Consultant (DSCs for national roads/iww and Advisory Consultant for provincial infrastructures).	Throughout Project Life	PMU-1/PMU-W/PPMUs /Institutionalized in the PIP							
	• Advertising bidding opportunities in MOT website/ Procurement Bulletin/ Newspaper of national circulation and provincial newspapers									
	• Inclusion in Invitation to Bid of a warning on sanctions against collusion, fraud and corruption.									
	• No limitation of sale or issuance of bidding documents which should be available until 24 hours prior to the deadline for the submission of bids and everyone who is willing to pay the fee should be allowed to purchase.									
	• In the advertisement/Invitation for Bids, adding a sentence to specify the name and contact of higher official (PSC/ MOT VM/ provincial VC?) who can be contacted in case of difficulty in purchasing bidding documents									

Торіс	Recommended Action	Timing	Responsible by/How to Implement
	• No requirements for pre-registration or pre-qualification of bidders		
3. Bidding Documents	• Inclusion in bidding document of a provision requiring bidders to make undertaking not to engage in collusion/ corruption/ fraudulence.	Throughout Project Life	PMU-1/PMU-W/PPMUs /Institutionalized in the PIP
	• Post-qualification criteria should be clearly specified in bidding documents.		
	• Inclusion in bidding document of a provision allowing bidders to protest/complaint.		
	• Ensure bidding documents include updated provisions on collusion, fraud & corruption and consequences.		
4. Bid Submission and Opening	All bids which are submitted prior to closing time shall be accepted, opened and evaluated	Throughout Project Life	PMU-1/PMU-W/PPMUs /Institutionalized in the PIP and
	• Bids shall be opened immediately after bid closing in the presence of bidders' representatives and Project beneficiaries from local communities who choose to attend.		and contract documents.
	• During public opening of bids, name of bidders, bid prices and discount offers and where applicable, the presence or absence of a bid security shall be read aloud and recorded.		
	• Beneficiary community's representatives shall be allowed to attend bid opening		
	• Bid opening record shall be signed by all those who are present, including all members of the bid opening committee and all bidders' representatives and community representatives, and promptly copied to all bidders who submitted bids and to all community representatives who attend the bid opening.		
	• A copy of signed bid opening record shall be posted in easy-to- access public place immediately following the completion of the public bid opening until one month after notification of award.		
5. Bid evaluation	• Rationalize composition of bid evaluation committee in terms of the technical expertise and number of member committee.	Throughout Project Life	PMU-1/PPMUs /Institutionalized in the PIP
	• Bid evaluation report should include a section on allegation of		

Торіс	Recommended Action	Timing	Responsible by/How to Implement
	 collusion/ corruption/ fraudulence. Where such indicators are found, the bid evaluation committee should be required to include photocopies of the allegedly colluded elements of the bids in the bid evaluation report and to refer the report to a higher project authority for review. Recommendation of contract award for review/approval should include a statement by bid evaluation committee that, to the best of their ability, they did not find any indications of collusion/ corruption/ fraudulence in bids. If any indications found, the evaluation report and to recommend actions to be taken by the project authorities to address such indicators. 		
	• Evaluation committee members should certify that they have no association with any of the bidders and that they have carried out the evaluation without regard to any factors other than the pre-established evaluation criteria. Any member of an evaluation committee who has a relationship with a bidder, either by financial or business interest or by family relationship up to the third degree, shall be required to declare such relationship before the commencement of the evaluation of bids and to excuse himself from the evaluation committee. Failure to do so shall result in the application of an administrative penalty, to be specified in the PIP.		
6. Contract Award	 Contract award information (including information on names of losing bidders and reasons for their rejection) should be published within two weeks of notification of award in the Procurement Bulletin/a national newspaper/website and posted in easy-to- access public place for one month 	Throughout Project Life	PMU-1/PPMU-W/PPMUs/ Institutionalized in the PIP
7. Mechanism for Receipt and Handling of Bidders' Complaint	• Establishment in the bidding documents of a mechanism for receipt and handling of bidders' complaints without stopping the procurement process.	As required	MPI/MOT
	INTEGRATED IMPLEMENTATION A	AUDIT	
1. Integrated Implementation	• The Integrated Implementation Audit to include particular	Throughout Project Life	PMU-1/PMU- W/PPMUs/Independent Consultant

Торіс	Recommended Action	Timing	Responsible by/How to Implement							
Audit conducted by independent consultant	 attention to collusion/ corruption/ fraudulence. Systematic follow-up by the Borrower of cases of non-compliance and integrity issues with appropriate remedial measures. 									
	SUPPORT BY PROJECT PROVINCES/MINISTRY LEADERSHIP									
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/ fraudulence and systematic follow-up with sanctions	Throughout Project Life	MOT/Provincial People Committees							
	SUPERVISION AND SUPPORT BY THI	E BANK								
1. Consultation with the Bank	 Project staff are encouraged to consult Bank staff at any time For contracts subject to the Bank's prior-review, documentation relating to Project's handling of collusion/ corruption/ fraudulence 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. 	Throughout Project Life	Project Staff PMU-1/PMU-W/PPMUs/WB							
2. Bank's Review	• Bank's prior and post review to include particular attention to collusion/ corruption/ fraudulence.	Throughout Project Life	WB							
3. Bank's Follow- up	• Systematic follow-up by the Bank of cases of non-compliance and integrity issues with appropriate remedial measures	Throughout Project Life	WB							

Annex 9: Economic and Financial Analysis VIETNAM: Mekong Transport Infrastructure Development Project

Objective

An economic analysis was carried out to (a) help determine the optimum combination of the physical investments in roads, waterways and related facilities for the Mekong Transport Infrastructure Development Project (MTIDP) and (b) ensure that the optimum combination of investments meets the economic and/or social efficiency criteria as explained below.

Methodology

A two stage process was followed to arrive at the optimum investments. Stage 1 involved the modeling of traffic on the main roads and waterways in the Mekong Delta to compare the potential investment alternatives in primary infrastructure and ultimately identify the ones to be financed. Stage 2 involved the identification and selection of secondary infrastructure (feeder roads and ancillary infrastructure). Figure 1 provides a schematic overview of the approach followed in identifying the project investments in primary and secondary infrastructure.

Methodology for identifying investments in primary infrastructure

To identify the investments in national infrastructure, (i) traffic volumes used as a basis for determining time and vehicle operating costs and savings were estimated using a transport model; (ii) user and agency recurrent costs for national roads and national inland waterways were estimated using the Highway Development and Management (HDM-4) model and the Inland Waterway Transport Cost (IWTC) model respectively, (iii) capital costs were estimated as per Vietnamese designs and standards and (iv) environmental and resettlement costs were estimated following the Bank's procedures.

Freight and passenger movements were modeled using a disaggregate transport planning model and a standard transport planning program, TRANSCAD.¹ Data requirements for the model included (a) the definition of economic zones to model traffic movements in the project area, (b) the definition of the national road and waterway networks with and without the project's improvements using links and nodes, speeds, etc. and c) current and projected traffic movements within, as well as in and out of, the Mekong Delta.

Zones: The number of zones reflected the desired balance between socioeconomic homogeneity and complexity. A total of 23 zones were used, 3 of which were external to reflect international trade with Thailand, Cambodia and the rest of the world. The 20 zones within Vietnam were distributed as follows: one for each of the 13 provinces, five

¹ A transport planning model combining analysis with GIS presentation features.

for the key economic centers/ports of the Mekong Delta, one for HCMC and one for the rest of Vietnam.





National Transport Network: A total of **x** nodes and **y** links was used to define the national roads and waterways in the Mekong Delta. Links were also created to model ferry crossings on national roads and transshipment at intermodal transfer points at ports and landing stages. In particular, a link for the planned HCMC expressway was added in the 2010 and 2025 scenarios. Following a preliminary screening, five waterway corridors and 8 national roads were identified by GoV and the Bank as candidates for improvements (see Map x << to be inserted in the map section>>)

Transport Demand

<u>Current Demand</u>. Base year volumes and flows for passengers and certain commodity group were estimated for each province. For the freight analysis, commodities were divided into eleven groups: rice/paddy, sugar, fishery products, fertilizer, cement, sand, stone, wood, steel, coal and refined oil. A surplus/deficit approach was used to estimate production and consumption by commodity for each of the Mekong Delta's 13 provinces. A province would be a net exporter (importer) of a commodity if it were in a net surplus (deficit) situation. Estimating production and consumption volumes for each of the commodities was based on secondary data from GoV and the Bank and was supplemented by market/transport surveys to identify the origin, destination and volumes of long distance flows (excluding intra-provincial flows). The distribution of freight traffic for roads and inland waterways based on the OD surveys is presented in Tables 1 and 2 respectively.

Vehicle Type	Traffic	Average Load
	Share	in Tons
Light Truck & Pickups	11.5%	1.3
Medium Truck (2	60.7%	4.7
axles)		
Heavy Truck (3 axles)	23.2%	8.0
Articulated Truck (>4	4.6%	9.9
axles)		

Table 1: Distribution of road freight traffic and average load

Table 2: Distribution of inland waterwayfreight traffic and average load

Vessel Size	Traffic	Average	% of
	Share	Tons	Vessels
<5 Tons	2%	4.81	46%
5 – 50 Tons	9%	26.76	47%
51-100 Tons	11%	74.75	44%
101-200 Tons	13%	150.00	47%
201-300 Tons	15%	251.03	46%
301-500 Tons	24%	398.89	47%
>500 Tons	29%	501.75	46%

Table 3: Distribution of passengers per vehicle type for long distance trips

Most passenger trips on the waterways were intra-provincial with only a few trips starting and ending in different provinces. Consequently, the analysis of interprovincial passenger transport demand was limited to roads only. Generation and

Vehicle type	Passenger modal split	Average number of passenger per vehicle
Car	7.0%	3.7
Small Bus	42.5%	12.1
Large Bus	50.5%	33

attraction models were developed to estimate the number of trips generated by each zone using representative socio-economic data (population, average income, etc.). Table 3 shows passenger modal split and vehicle occupancy rates based on the OD survey. While motorcycles typically account for 80-90 percent of total trips on the national roads in the project region, these trips are usually intra-provincial. Therefore, motorcycles were not included as a mode when modeling inter-provincial movements. Their presence was however taken into account to reflect their use of road space. A gravity trip distribution model was developed to estimate the number of trips between each pair of zones using passenger and freight trip generations and attractions. The model was calibrated using actual traffic flows from the OD surveys.

<u>Future Demand.</u> Traffic projections were developed for 2010 and 2025. Future traffic was broken down into two main categories: (i) growth of normal traffic, the growth that would occur even without improving the road network; and (ii) generated traffic, which occurs as a result of the improvement of the road network.

Normal Traffic. Future inter-provincial flows were determined on the basis of expected growth in population and commodity consumption and production. Future intra-provincial traffic flows were directly linked to provincial GDP growth projections. Through 2011, intra-provincial trips by auto were expected to grow as fast as provincial GDP and trips by motorcycles to grow 50% faster (demand elasticity with respect to GDP of 1 and 1.5 respectively). Beyond 2011, growth in intra-provincial trips by motorcycle is projected to slow down to the rate of GDP growth while that for auto trips would increase slightly (demand elasticity of 1 and 1.125 respectively). The projected slower growth in intra-provincial motorcycle trips and faster growth in auto trips are an outcome of the increase income levels.

Generated Traffic. Generated traffic was assumed to be 20 percent of the levels of normal traffic in the following three cases: (i) improving a road in poor condition; (ii) adding two lanes to a four-lane highway, and (iii) upgrading and widening a six-meter surface treatment pavement into a seven-meter asphalt concrete pavement, with increased shoulders. Generated traffic was increased to 30% of normal traffic in the case of upgrading a one-lane surface treatment road into a two-lane asphalt concrete road. If a road is impassable, as is the case with NH53-10, generated traffic followed the pattern of the road section to which it was linked. Generated traffic was allocated to the road sections during the first year after the opening and was assumed to grow at the same rate as normal traffic thereafter.

Tables 4 and 5 show the projected traffic growth rates (both intra- and inter-provincial) for the Mekong Delta and for the national roads under consideration respectively.

	Growth Rates	Traffic	Levels
		million pa	ss/ton-km
	2005 - 2025	2005	2025
Passengers on national roads	??	??	??
Freight on national roads	9.3%	3.1	18.7
Freight on waterway network	4.9%	32.0	83.6

Table 4: Current and Projected Traffic Levels and Growth Rates

Source:

Table 5: Average traffic growth rates for the period 2006-2025

	NH91-2	NH80-3	NH61-3	NH53-3	NH53	NH53-	NH54-
					-7&8	10	5 to 8
		2006-	2010				
Motorcycles	6.0%	4.5%	3.0%	3.0%	3.0%	3.0%	3.0%
Autos	25.4%	17.6%	59.2%	13.1%	10.0	-	20.8%
					%		
Other passenger vehicles	10.2%	12.7%	18.9%	9.4%	4.0%	-	4.0%
Freight vehicles	8.5%	12.9%	24.5%	6.1%	4.0%	-	4.0%
		2011-	2025				
Motorcycles	3.0%	3.0%	2.3%	0.8%	0.8%	0.8%	0.8%
Autos	8.8%	5.6%	10.1%	3.9%	2.1%	2.1%	3.2%
Other passenger vehicles	8.2%	0.4%	5.8%	5.0%	1.0%	1.0%	1.0%
Freight vehicles	5.9%	-100.0%	8.0%	4.7%	1.0%	1.0%	1.0%
0							

Source

Modal Split. Table 6 shows the modal split for commodity flows based on the OD survey. Notwithstanding the importance of travel time and cost as determinants of the modal split, it was large largely influenced by the value of the commodity transported, and the logistics services available at the origin and destination. For relatively light weight, high value and time sensitive products, waterway transport is the preferred mode.

Table 6: Modal Split of Commodity Flows

_		
Type of Commodity	Road	Waterway
	Transport	Transport
Rice	7%	93%
Sugar	18%	82%
Fishery Products	63%	37%
Fertilizer	1%	99%
Cement	3%	97%
Construction materials	1%	99%
Refined oil	4%	96%
Coal	14%	86%
Wood	22%	78%
Steel	36%	64%

Steel has a high road transport share because a large proportion of the steel requirements of the Mekong Delta are shipped by road from the Northeastern region. A small increase in road transport's share is expected in the future particularly for light-weight high-value goods (see Table 7).

Table 7: Projected Change in Road Transport's Share

Type of Commodity	Projected change in Road transport's share by 2010	Projected change in Road transport's share by 2025
Low value – heavy	0.5 - 1.5%	2 - 5.0%
High value – light	2.5 - 5.0%	9 - 15%

User and Agency Costs. HDM-4 and IWTC models were used to estimate user and agency costs for the national roads and waterways under consideration. Inputs for the two models included traffic volumes (from Transcad) and the estimated capital costs. Key assumptions are presented in Tables 6 through 15 below.

Table 8: Average Freight Operators Fares, 2004(VND/ton-km)

	Food	Frozen Goods	Cement	Fertilizer	Other
Road	2,675	1246	1,429	2,434	1,308
Waterway	502	1,667	497	430	444
Source:					

Table 9: Average Transport Cost by Vehicle, 2004(VND per Km unless otherwise indicated)

Vehicle Type	Transport Cost
Container 20 feet (~16 tons)	35,000
Container 40 feet (~30 tons)	45,000
Car/Taxi	6,500
Bus (VND per passenger km)	350
~	

Source:

Table 10: Ferry Tariffs by Vehicle Category and Passenger, 2004 (VND)

Ferry	Can Tho	Others (Range)
Category		
Car, Taxi, 4WD	11,000	7,200 - 10,000
Light Truck & Pickup	20,500	12,200 - 21,667
Medium Truck (> 10 tons)	40,000	30,000 - 45,000
Heavy Truck (10-30 tons)	67,500	30,000 - 45,000
Articulated Truck (>30 tons)	80,000	45,000
Small Bus (<24 seats)	15,667	12,200 - 19,500
Large Bus (>24 seats)	25,667	15,200 - 32,500
Motorcycles	2,000	2,000 - 2,500
Bicycle	1,000	800 - 3,000
Passenger	500	500 - 1,000
a		

Source:

Table 11: Port Handling Costs

	Fixed Annual Post	Handling Cost
Port List	Costs (US\$/year)	(US\$/ton)
Can Tho	288,462	0.77
My Thoi	51,282	0.96
Cao Lanh	32,051	0.96
Hon Chong	19,231	1.60
Sa Dec	19,231	0.91
My Tho	26,000	0.77
Rach Gia	32,000	2.50

Source:

Table 12: Estimated Values of Time (VOT) for Freight and Passengers

Commodity Type	Market Price (VND/Kg)	VOT (US¢/hr/ton)
Paddy	2,400	0.17
Rice	3,750	0.26
Sugar Cane	300	0.02
Fish	30,000	2.11
Cement	820	0.06
Clinker	500	0.04
Wood	6,500,000	0.61
Sand	52,000	0.002
Stones	163,000	0.006
Fuel Oil	10,000	0.97
Fertilizer	5,400	0.38

Shrimp	82,500	5.80
Passenger		26.38
Value of travel time—need	ls reconciliation	
Per working hour	22.4 (based on a 500USD per capita	
_	income	
Per non-working hour	6.7 (30% of value of working time)	
Source		

Source:

Table 13: Average Speed Estimates

	Average Speed (km/h)
National Highway	
Good condition	45
Fair condition	35
Poor condition	25
Vessel Type	
Self Propelled Vessel (SPV)	11
Barge Convoy (BC)	7
_	

Source:

Table 14: Financial costs for Kilometer (unless otherwise indicated) for recurrent and periodic maintenance and upgrading*

Routine maintenance	US\$ 1,400
Patching	US\$ 8 per m ²
Edge repair	US\$ 11 per m^2
Thin overlay 25 mm	US\$ 7.9 per m^2
Surface dressing simple 20 mm	US\$ 3.41 per m^2
Reconstruct AC two-lanes, including raising embankments and widening	US\$ 607,332
shoulders for NH91-2	
Upgrade to light AC standards and widen carriageway and shoulders for NH80-3:	US\$ 380,242
Upgrade to AC standards with the addition of one lane for NH61-3:	US\$ 463,002
Upgrade to AC standards and widen carriageway and shoulders for NH53-3:	US\$1,089
Upgrade to AC standard for NH53-7&8:	US\$ 215,319
Upgrade to ST standards with the addition of one lane for NH53-10:	US\$ 332,542
Upgrade to AC standards with the addition of one lane for NH54:	US\$ 433,054

*Upgrading costs include detailed design, supervision, resettlement and physical contingencies Source:

Table 15: Cost Estimate for Upgrading Corridors 2 and 3 to Class III (excluding land acquisition and resettlement)

	Upgrading	Corridor 2 to Class III	Upgrading Corridor 3 to Class III		
Items	Quantity	Cost (US\$)	Quantity	Cost (US\$)	
1. Aids to navigation (-)	0	1 272 040	0	556 628	
2. Bridge (no)	18	6 143 644	1	1 557 583	
3. Slope protection (m)	3 200	2 817 139	2 500	1 275 817	
4. Dredging work (m ³)	13 047 410	29 582 038	4 297 832	9 744 357	
5. New port at Tan Chau/Bac	0	1 045 439	0	1 072 469	
Lieu					
6. Ship lock (at Rach Tranh)	1	7 617 000	0	0	
Total		48 477 300		14 206 854	

Methodology for identifying investments in secondary infrastructure

Investments in national infrastructure, the major transport arteries, are typically identified on the basis of economic efficiency criteria as explained above. Secondary transport infrastructure however plays the dual role of enhancing efficiency as well as providing connectivity and access to the main supply corridors and markets. Consequently, selection was based on a combination of poverty, agricultural production and rural accessibility, equity and efficiency considerations as explained below.

Roads: Drawing from provincial development plans and consultations with local governments, a preliminary list of candidate roads for improvements totaling 2,666 kms was selected. This was further reduced to XX kms using connectivity to the to the main supply corridors as a criterion to ensure that the benefits of multimodal connectivity are achieved. As this figure was well above the resources available for the project, further prioritization was required.

Prioritization at the provincial level was carried out with the help of two indices: an agricultural intensity/rural accessibility index and a poverty index. Since agricultural value added accounted for about one half of the Delta's GDP, an agricultural index calculated as the total agricultural production served by a road divided by its area was developed and used to reflect access of agricultural output to markets. The poverty index associated with a particular road was defined as the number of poor at the district level served by the road divided by the area of the district(s). The number of poor was estimated by multiplying the incidence of poverty as obtained from the VHLS by the population of the districts. The two indices were used to limit the candidates from each province to less than 100 kms. This resulted in 1210 kms.

The resulting 1210 kms were subjected to a cost benefit analysis using the Roads Economic Decision (RED) model.² Within the budget constraint and ensuring that ever province participated in the project, 50% of the roads were allocated on the basis of economic efficiency and 50% on the basis of poverty.

Port/Landing Stages and Rural Waterways

Economic Parameters and Conversion Factors

The economic discount rate used for the project is x?. Table 16 shows the conversion factors for fuel, labor and other component.

:		Wate	rways	Roads		
	Economic Conversion Factor	Weights for project cost	Weight for transport cost	Weights for project cost	Weight for transport cost	
Fuel	1.02	12	43	??	??	
Labor	1.00	28	14	??	??	
Other	0.85	60	43	??	??	
Weighted CF		0.92	0.94	??	??	

Table 16: Economic	Conversation	Factors
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Results

The main benefits of the investment in national infrastructure are the saving in resources due to time and vehicle/vessel operating cost savings as well as the reduction in maintenance costs.

² RED is a consumer surplus model designed to help evaluate investments in low volume roads. It is a spreadsheet based model.

WITH HCM Expressway	NPV (mil. of	IRR (%)	Total (*)
	USD)		construction
			cost (in US\$
			mil.)
NH53:			
- Upgrade to AC & widen NH53-3 in 2009	1.11	17.5	5.024
- Upgrade to AC NH53-7&8 in 2008/09	1.09	14.9	10.12
- Lane addition & upgrade to ST NH53-10 in	3.66	36.2	3.784
2009			
NH54:			
- Lane addition & upgrade to AC in 2007/08	3.83	16.5	17.69
<i>NH61-3</i> :			
- Lane addition & upgrade to AC in 2007	- 0.35	10.2	3.75
NH80-3:	4.63	16.0	21.60
- Upgrade to AC & widen in 2007/08			
<i>NH91</i> :	3.34	14.4	26.66
- Reconstruct NH91-2 in 2007/08			

Table 17: Economic Returns on Investments in National Roads under considerat	tion
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(*) Total financial cost including management costs, resettlement and physical contingencies for all sections.

The team's proposed investments are economically feasible for all sections except NH61-3, for which the existing and forecasted traffic levels do not justify the cost of the investment. Total financial cost without financial contingencies would be almost US\$ 85.0 million, in constant price 2005, without considering investment in NH63-3.

Total NPV is US\$ 17.66 million, without considering NH61-3. In present value term, most of the benefits associated with the short list of projects proposed above are derived from vehicle operating cost savings, representing 55 percent of total economic benefits. The second largest sets of benefits are: (i) time saving – 19 percent; and (ii) non-motorized transport travel and operating costs savings – 17 percent. Other benefits are reduction in accident costs – 5 percent – followed by recurrent maintenance expenditures – 4 percent.

			USD million					
	Length	Base cost	Project Mgmt	Resettl- ement	Continge ncies	Total Cost	NPV	
Corridor 2 only	253	48.5	4.8	19.6	4.8	77.8	167	
Corridor 3 only	183	14.2	1.4	1.5	1.4	18.5	<mark>??</mark>	
Corridors 2 and 3	436	62.7	6.3	21.1	6.3	96.3	??	

Table 3.2	Transport	Costs per	t-km in	2025 on the	e Waterways	network (in	n US\$)/t-km
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Route	Average Tra	Savings in Transport Costs		
	Existing situation (US\$/t-km)	Class III (US\$/t-km)	Class III (US\$/t-km)	
Corridor I (km 0-286)	0.057	0.051	0.006	
Corridor II (km 0-253)	0.060	0.047	0.013	
Corridor III (km 0-80 & km 207-310)	0.065	0.059	0.006	

Corridor V (km 0-20)	0.040	0.039	0.001

Table 3.3 Total Discounted Transport Costs on the Waterways Network in US\$ (2008-2025)

Improvement Projects	Without Bassac River Improvement
No Improvement	4.509 billion
Corridor 1 to Class III	4.490 billion
Corridor 2 to Class III	4.304 billion
Corridor 3 to Class III	4.503 billion
Corridor 2 and 3 to Class III	4.316 billion
Corridor V to Class III	4.508 billion

Secondary infra—results

While the selection of secondary roads was of provincial roads only, many of the provincial roads in Vietnam serve the dual purpose of connecting to main corridors while also providing community access.

Road ID	Road	Length	NPV	IRR (%)	Cost	IRI	Poverty	Рор
	Name	(Km)	(Million)		(Mill.)		Index	Served
1-AG	DT-941	2.60	3.64	27%	2.583	6.0	68	3,927
2-BL	CS-HCMR	26.36	3.11	27%	2.797	7.0	101	42,610
2-BT	DT-884	13.72	16.47	88%	2.570	12.6	146	60,324
2-CM	CN-CDV	9.00	1.30	17%	3.074	12.0	24	48,322
1-CM	TB-UM	9.50	0.80	18%	1.508	9.0	17	32,119
4-CT	TT-TL	11.90	-1.82	NQ	3.609	10.0	139	50,526
2-DT	DT-841	1.40	-0.16	NQ	2.183	15.0	108	4,164
3-HG	DT-928	24.40	4.20	38%	2.307	9.0	123	58,467
4-KG	BN-TH	16.85	1.22	19%	2.840	10.8	106	40,242
3-LA	DT-835B	11.97	12.04	69%	1.777	11.9	125	26,517
1-ST	DT-04	15.64	2.73	26%	2.892	17.1	121	208,183
1-TG	DT-865	13.05	23.84	70%	3.245	14.0	82	109,716
2-TV	TN	8.30	5.98	92%	1.098	20.0	117	47,645
6-TV	DT-915	20.00	-1.34	NQ	2.965	15.0	180	133,091
1-VL	DT-909	21.40	-1.04	NQ	2.397	13.3	135	78,160

Annex 10: Safeguard Policy Issues

VIETNAM: Mekong Transport Infrastructure Development Project

A. Social Safeguard Policy Issues

Social Assessment (SA)

A social assessment has been conducted in the project affected area in a number of selected districts in all 13 provinces which aimed to provide a comprehensive, participatory framework for deciding which issues should receive priority for attention and how operationally useful information can be gathered and used. It consists (i) in defining the macro level socio-economic profile of Mekong Delta and (ii) in carrying out a stakeholders and institution analysis in the context of Mekong Transport Infrastructure Development Project (MTIDP) in order to (1) identify key stakeholders and establish an appropriate framework for their participation in the selection of the project components, their design and implementation; (2) identify and prioritize social issues; and (3) establish a participatory process by ensuring that the project objectives and incentives for change are acceptable to the range of people intended to benefit from it. The SA has been using various tools for data collection and analysis, including literature review, key informant interview, field surveys by using techniques of Participatory Rural Appraisal (PRA), focus group discussions, public and community consultations (both in formal and informal settings), institutional review. The SA also helps determine whether Bank social safeguard policies with respect to involuntary resettlement and indigenous people are triggered by the project.

Macro level socioeconomic profile of Mekong Delta

The Mekong Delta is one of the regions with the highest concentration of the poor in the country with approximately 2.6 million poor people, or 18 percent of Vietnam's poor, making the region the second only to the North Central region. It is estimated that the Mekong Delta has the highest percentage of the population who "would be unable to sustain a serious adverse shock". This group of population does fall under the poverty line, but would fall back into poverty when adverse economic shocks hit because they have little asset to use as cushion. In a region where people heavily rely on agricultural activities, land is invaluable asset. Commonly, landlessness is highly associated with poverty, and it is on an increasing trend. The population of landlessness among the poor, accounted for 39 percent, is significantly higher than the average of the Mekong Delta. People in the Mekong Delta suffer severe limitation of access to social infrastructures in general. The health sector faces severe resource constraints although the higher incidence of health problems compared to the other regions. Supply of clean water is in shortage. Education is available but the cost of attending the schools makes it difficult for poor children's enrolment. Of people aged 15 and above, over 45 percent yet completed primary education, and this rate is significantly higher than the national average of 27 percent. Among the poor, only 5 percent has an education over primary school. Many hamlets lack access to all weather roads. Ca Mau province faces the most severe limitation with only 28 percent of the hamlets having reasonable access to all weather roads. This followed by Bac Lieu, Hau Giang and Soc Trang provinces.

Land acquisition and resettlement

Efforts are made to avoid and mitigate resettlement impacts. However, the project is anticipated to pose severe resettlement impacts due to required land acquisition for rehabilitation, improvement and widening of national and provincial roads and waterways, including some bridges and ship-locks. The level of land acquisition for the first year subprojects on both roads and waterways are presented in the table bellow. The Resettlement Policy Framework (RPF) was developed in accordance with Vietnam laws and World Bank OP 4.12. Safeguard documents prepared in accordance with this framework for the whole life of project will be subject to review by the World Bank. Two Resettlement Plans (RPs), one for roads and one for waterways, are prepared for the first year subprojects in accordance with the RPF. The RPs have been prepared in close consultation with Displaced Persons (DPs), relevant local authorities, and key stakeholders. The RPs provide adequate budgets for resettlement and compensation, as well as adequate institutional arrangements and mechanisms for implementation monitoring and grievance redress. The RPs are adopted by the Government following the Government's approval of the project RPF. The total compensation and resettlement cost for MTIDP waterway subprojects is estimated at US\$ 16 mil. for the first year implementation plan. The amount needed for national highways and provincial road is US\$ 4.2 mil has been specified in the Road-RP for the first year implementation.

Subprojects	Loss of	Loss of	Numbe	Provinces	Loss of	Loss of	Number
under National	Residenti	Agricult	r of	under	Residen	Agricult	of
Highways and	al land	ural	DPHHs	Waterway	tial	ural	DPHHs
Provincial	(m2)	Land		S	Land	Land	
Roads (RP for		(m2)		Subprojec	(m2)	(m2)	
the first year)				ts (RP for			
-				the first			
				year)			
1. NH53-3(Tra	1,191	23,294	540	1. Long An	17,400	22,434	121
Vinh)							
2. NH54-5-8	8,957	271,126	1051	2. Tien	139,661	226,304	1,934
(Km85-				Giang			
<i>Km125+854</i>)							
(Tra Vinh)							
3. DT884 (Ben	5,935	126,910	868	3. Dong	253,863	16,155	2,148
Tre)				Thap			
4. DT04 (Soc	1,513	92,853	249	4. An	152,320	324,866	2,785
Trang)				Giang			
5. CN-CDV (Ca	0	23,555	132	5. Kien	20,308	157,294	257
Mau)				Giang			
Total	18,050	578,215	2,840		583,552	747,052	7,245

Resettlement Impacts by MTIDP for the First Year Implementation Plan

Ethnic composition

The Kinh (Viet), which comprises approximately 85 percent of the national population, makes up over 90 percent of the Mekong Delta's population. Among the majority Kinh population, a number of ethnic minority groups live in the region. The Khmer is the largest ethnic minority group in the Mekong Delta (six percent of the region's population). Of the total Khmer population present in Vietnam, over 97 percent is living in the Mekong Delta. This is followed by Chinese (or Hoa, one percent), and the rest includes Cham, Tay, Ngai, Gia Rai, and so forth, yet the populations of these groups are very small. Most of the ethnic minority groups are found in the following nine provinces of the 13 Mekong Delta provinces: An Giang, Bac Lieu, Ca Mau, Can Tho, Hau Giang, Kien Giang, Soc Trang, Tra Vinh, and Vinh Long Provinces.

Kien Giang, Soc Trang, and Tra Vinh Provinces are the three provinces where the largest number of Khmer households is located. In these provinces, the Khmer minorities comprise 10 to 30 percent of the provincial population. Most of the Khmer population resides in remote districts, communes, and villages. For example, large proportions of the populations in Tra Cu District (Tra Vinh Province), and of Kim Son Commune (one of the communes that make up Tra Cu District), which are considered as a remote commune and a remote village, respectively, is of the Khmer ethnic group. The Khmer ethnic group comprises over 60 percent of Tra Cu District's total population, and nearly 100 percent of Kim Son Commune. Their standard of living is generally lower than the Chinese minority population and the majority Kinh. An Ethnic Minority Policy Framework (EMPF) is developed and will be approved by the client that complies with Bank's OD 4.20 Indigenous Peoples. An EMDP is prepared for the first year implementation for both waterways and national highways and provincial roads.

Stakeholder Analysis

Stakeholder groups are identified, including donor, government policymakers, implementing agencies, interested groups in public sector, intended beneficiaries, displaced persons, organized interest groups. While the GoV and MOT focus to remove bottlenecks of the current transport network to improve the overall connectivity in the Mekong Delta region as it is the most important paddy production area of the country. However, other groups are more interested in the improvements of the specific transport infrastructure they are in charge of. VRA and VIWA prefer the investments to be divided largely between roads and waterways. Provinces prefer more investments in the priority roads and waterways if their own than the overall connectivity for the whole region. The communities are interested in the improvements of the transport infrastructure in their respective communes/villages. It is clear that the proposed project requires land acquisition and compensation. Numbers of Displaced Persons (DPs) will be affected by the project and the issue of resettlement and land acquisition is the concern that was most often expressed by the community members during the consultation process.

Gender

Women are identified as one of the vulnerable groups in the region where the majority of the population relies on agricultural production. Women's income in agriculture sector is reported to be significantly lower than men. In the quickly developing aquaculture sector of shrimp farming, women are more disadvantaged because it is considered the work of men. The incidence of poverty among women headed households are higher than the average, while about 38 percent of all surveyed households fell below the poverty line, the incidence is over four percentage points higher among women headed households, at about 42 percent. However, the income is just one aspect of the multi-dimensional vulnerability of women in the Mekong Delta. Within household, the traditional role of women is to take care of most of the daily housekeeping issues, including cooking, washing, taking care of children, raising the livestock which place heavier burden on women. On the other hand, the only role that was clearly identified as men's role is building or repairing the house which is considered as "big" activity in the life. Other household roles, such as making decisions on important issues such as spending, farming, selling products, wage labor, attending village meetings are reportedly done by both male and female members.

Development Strategies

The lack of off farm employment opportunities is one of the most concerned issues in the Mekong Delta. Thus, the implementation of the project subprojects should take into consideration the potential for utilizing the manual works by local labors for income wage. Furthermore, prioritizing the income opportunities for the poor and other vulnerable groups, such as female headed households as well as ethnic minority peoples, would improve their living standards. To increase the benefits for the local communities also require more

comprehensive assistance to boost the agricultural productivity in the limited land space they have, including agricultural extension services and small credit programs, which needs to be get accessed by vulnerable groups and ethnic minorities. Routine maintenance and repairs are critical in keeping the improved infrastructure intact and bring long lasting benefits to the end users and communities. It needs to strengthen the institutions responsible for maintenance of the road and waterway systems. There are a number of complementary actions which can help maximize the project benefits to the poor which depends on the structure of the transport service sector. The majority of the poor understandably falls into the category of non owner end-users of services, and the a proportion of benefits that will be given to this category of the infrastructure users would be in the forms of lower passenger fares and tolls rates, which is realized by increased competition among the service providers.

Environment safeguards

In compliance with Bank OP4.01 the Borrower commissioned an independent environmental consultant to prepare an environmental impact assessment. Given that the project is dealing with multiple modes of transport and will be implemented in a phased approach, the EIA includes an overall impact assessment of the project, a specific impact assessment for the subprojects identified for the 1st phase, and an environmental framework governing the impact assessment process for the subsequent phase of the program.

The EIA report addressed the potential environmental impacts and risks following relevant national technical guidelines and international experience. The EIA identified the following main civil works activities as having an environmental impact:

- (i) Waterway dredging and disposal of dredging material
- (ii) Earth filling and excavation for road upgrading
- (iii) Piling work for building structures in water bodies
- (iv) Construction worker camps
- (v) Construction materials storage areas
- (vi) Concrete batching, asphalt hot mix plants

The major environmental impacts of waterway upgrading are the disturbance of water quality and aquatic species as a result of canal dredging, spoil disposal, and piling works for structures built in the water. For the road rehabilitation dust emission, noise, air pollution from earth filling & excavation works, hot mixing plants, material stockpiling and disposal of unused spoil are major impacts. These impacts are evaluated as short term and confined within the construction period.

Experience from periodic monitoring and supervision of other canal upgrading projects in the Mekong Delta suggests that water quality returns to normal within 24 and 48 hours of dredging. The long term impacts on water quality doesn't present so much of a concern because the project area is substantially influenced by daily tidal effects and high water exchange capacity with most of the upgrading along existing canals.

Dredging canals and upgrading roads which traverse areas containing acid sulphate soils need careful management to control acidic water leakage from soil disposal sites. These sites should be large enough for run-off water to be retained and settled before running to outside water bodies. The environmental mitigation and environmental management plan has incorporated these issues into civil works and and supervision contracts for compliance during construction.

The EIA concluded that the proposed project will not have significant adverse impact, provided the mitigation measures be properly implemented. The transport routes under

MTIDP are not close to sensitive ecosystems (national park, natural reserves) or historical and cultural sites. The Environmental Management Plan has specified the environmental management and supervision organizations and responsibilities, mitigation measures, monitoring and reporting programs, budget estimates and capacity building requirements. During EIA preparation public consultation with project affected people, local relevant stakeholders was under-taken, and their feedback taken into consideration when designing appropriate mitigation measures.

Annex 11: Project Preparation and Supervision VIETNAM: Mekong Transport Infrastructure Development Project

	Planned	Acutal
PCN review		
Initial PID to PIC		
Initial ISDS to PIC		
Appraisal		
Negotiations		
Board/RVP approval		
Planned date of effectiveness		
Planned date of mid-term review		
Planned closing date		

Key institutions responsible for preparation of the project:

Bank staff and consultants who worked on the project included:

Name	Title	Unit

Bank funds expended to date on project preparation:

- 1. Bank resources:
- 2. Trust funds:
- 3. Total:

Estimated Approval and Supervision costs:

- 1. Remaining costs to approval:
- 2. Estimated annual supervision cost:

Annex 12: Documents in the Project File VIETNAM: VN-Mekong Transport Infrastructure Development Project

Nga

Annex 13: Statement of Loans and Credits VIETNAM: Mekong Transport Infrastructure Development Project

			Origi	nal Amount	in US\$ Mill	lions			Differe: expecte disbu	nce between ed and actual irsements
Project ID	FY	Purpose	IBRD	IDA	SF	GEF	Cancel.	Undisb.	Orig.	Frm. Rev'd
P073361	2006	VN -Natural Disaster Risk Mngt Project	0.00	86.00	0.00	0.00	0.00	86.73	0.49	0.00
P077287	2006	VN-RRD RWSS	0.00	45.87	0.00	0.00	0.00	46.16	0.00	0.00
P079344	2006	VN -ICT Development	0.00	93.72	0.00	0.00	0.00	95.41	0.00	0.00
P084871	2006	VN-TRANS & DISTRIB 2	0.00	200.00	0.00	0.00	0.00	197.82	0.00	0.00
P085071	2006	Customs Modernization	0.00	65.90	0.00	0.00	0.00	64.91	0.00	0.00
P066051	2005	VN - Forest Sector Development Project	0.00	39.50	0.00	0.00	0.00	48.12	-0.23	-0.63
P073763	2005	VN-WATER SUPPLY DEV.	0.00	112.64	0.00	0.00	0.00	107.08	0.55	0.00
P074414	2005	VN - GEF Forest Sector Development Proj	0.00	0.00	0.00	9.00	0.00	8.50	0.90	0.75
P074688	2005	VN-RURAL ENERGY 2	0.00	220.00	0.00	0.00	0.00	215.94	12.50	0.00
P088362	2005	VN-Avian Influenza Emergency Recovery Pr	0.00	5.00	0.00	0.00	0.00	3.74	1.77	0.00
P085260	2005	VN-Targeted Budget Support for EFA	0.00	50.00	0.00	0.00	0.00	47.22	0.00	0.00
P085080	2005	VN-ROAD SAFETY	0.00	31.73	0.00	0.00	0.00	30.05	0.00	0.00
P080074	2005	VN-GEF-RURAL ENERGY 2	0.00	0.00	0.00	5.25	0.00	5.25	0.20	0.00
P082604	2005	VN-HIV/AIDS Prevention Project	0.00	0.00	0.00	0.00	0.00	30.49	-1.17	0.00
P082627	2005	Payment System and Bank Modernization 2	0.00	105.00	0.00	0.00	0.00	97.95	2.42	1.00
P065898	2004	VIETNAM WATER RESOURCES ASSISTANCE	0.00	157.80	0.00	0.00	0.00	147.21	4.77	0.00
P059663	2004	VN-ROAD NETWORK IMPROVT	0.00	225.26	0.00	0.00	0.00	216.61	45.55	0.00
P070197	2004	VN-URBAN UPGRADING	0.00	222.47	0.00	0.00	0.00	202.72	0.80	0.00
P071019	2003	VN-GEF DEMAND SIDE MGMT & ENERGY	0.00	0.00	0.00	5.50	0.00	4.27	0.23	0.00
P075399	2003	Public Financial Management Reform Proj.	0.00	54.33	0.00	0.00	0.00	56.76	21.36	0.00
P044803	2003	VN-PRIMARY EDUC FOR DISADVANTAGED CHILRE	0.00	138.76	0.00	0.00	0.00	179.43	29.15	0.00
P073778	2002	VN-GEF-System Energy Equitization- Renewa	0.00	0.00	0.00	4.50	0.00	3.86	3.44	0.00
P073305	2002	VN-Regional Blood Transfusion Centers	0.00	38.20	0.00	0.00	0.00	39.02	23.26	0.00
P072601	2002	VN - Rural Finance II Project	0.00	200.00	0.00	0.00	0.00	70.85	-58.70	0.00
P051838	2002	VN-PRIMARY TEACHER DEVELOPMENT	0.00	19.84	0.00	0.00	0.00	14.33	11.50	-0.68
P059936	2002	VN -Northern Mountains Poverty Reduction	0.00	110.00	0.00	0.00	0.00	65.22	18.20	0.00
P066396	2002	VN-SYSTEM ENERGY, EQUITIZATION & RENEWAB	0.00	225.00	0.00	0.00	0.00	191.90	139.71	0.00
P062748	2001	VN - COMMUNITY BASED RURAL INFRA.	0.00	102.78	0.00	0.00	0.00	73.61	31.81	0.00
P052037	2001	VN-HCMC ENVMTL SANIT.	0.00	166.34	0.00	0.00	0.00	156.83	70.09	61.83
P042927	2001	VN-MEKONG TRANSPORT/FLOOD PROT.	0.00	110.00	0.00	0.00	0.00	64.34	49.18	0.00
P059864	2000	VN-RURAL TRANSPORT 2	0.00	103.90	0.00	0.00	0.00	17.19	17.86	0.00
P056452	2000	VN-RURAL ENERGY	0.00	150.00	0.00	0.00	0.00	34.84	29.61	29.61
P042568	2000	VN - COASTAL Wetl/Prot Dev	0.00	31.80	0.00	0.00	0.00	11.67	9.95	3.21
P051553	1999	VN-3 CITIES SANITATION	0.00	80.50	0.00	0.00	0.00	45.88	41.63	14.73
P004828	1999	VN-HIGHER EDUC.	0.00	83.30	0.00	0.00	0.00	34.67	30.08	30.70
P004845	1999	VN - MEKONG DELTA WATER	0.00	101.80	0.00	0.00	0.00	47.35	43.76	-10.01
P004839	1998	VN - FOREST PROT.& RUL DE	0.00	21.50	0.00	0.00	0.00	7.31	5.82	5.99
P004843	1998	VN-INLAND WATERWAYS	0.00	73.00	0.00	0.00	10.28	8.26	15.19	15.67
P004844	1998	VN-AGRIC. DIVERSIFICATION	0.00	66.90	0.00	0.00	0.00	18.00	16.61	2.26

P045628	1998	VN-TRANSMISSION & DISTR	0.00	199.00	0.00	0.00	0.00	92.62	86.75	25.46
P004838	1996	VN-NATIONAL HEALTH SUPPORT	0.00	101.20	0.00	0.00	2.35	14.38	27.63	0.00
		Total:	0.00	3,839.04	0.00	24.25	12.63	2,904.50	732.67	179.89

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

			Comm	nitted		Disbursed				
			IFC				IFC			
FY Approval	Company	Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.	
2003	ACB-Vietnam	0.00	5.02	0.00	0.00	0.00	5.02	0.00	0.00	
2002	AZ/AGF Vietnam	0.00	0.69	0.00	0.00	0.00	0.69	0.00	0.00	
2002	CyberSoft	0.00	0.06	0.00	0.00	0.00	0.06	0.00	0.00	
2002	Dragon Capital	0.00	0.00	1.05	0.00	0.00	0.00	1.05	0.00	
2002	F-V Hospital	5.00	0.00	3.00	0.00	5.00	0.00	3.00	0.00	
2003	Glass Egg	0.00	1.17	0.00	0.00	0.00	0.04	0.00	0.00	
2005	Khai Vy	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1998	MFL Vinh Phat	0.13	0.00	0.00	0.00	0.13	0.00	0.00	0.00	
1997	Nghi Son Cement	11.42	0.00	0.00	3.75	11.42	0.00	0.00	3.75	
2004	Olam	20.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	
2005	Paul Maitland	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2001	RMIT Vietnam	7.25	0.00	0.00	0.00	3.50	0.00	0.00	0.00	
1996	SMH Glass Co.	3.33	0.00	0.00	0.00	3.33	0.00	0.00	0.00	
2003	Sacombank	0.00	2.77	0.00	0.00	0.00	2.77	0.00	0.00	
2004	Sacombank	0.00	2.31	0.00	0.00	0.00	2.31	0.00	0.00	
2005	Sacombank	0.00	2.05	0.00	0.00	0.00	2.05	0.00	0.00	
2002	VEIL	0.00	0.00	4.00	0.00	0.00	0.00	4.00	0.00	
2003	VEIL	0.00	8.00	0.00	0.00	0.00	8.00	0.00	0.00	
	Total portfolio:	61.13	22.07	8.05	3.75	43.38	20.94	8.05	3.75	

		Approvals Pending Commitment					
FY Approval	Company	Loan	Equity	Quasi	Partic.		
2000	MFL-AA	0.00	0.00	0.00	0.00		
2000	Interflour	0.01	0.00	0.00	0.01		
2000	MFL Mondial	0.00	0.00	0.00	0.00		
2002	F-V Hospital	0.00	0.00	0.00	0.00		
1999	MFL Minh Minh	0.00	0.00	0.00	0.00		
1999	MFL Chau Giang	0.00	0.00	0.00	0.00		
	Total pending commitment:	0.01	0.00	0.00	0.01		

Annex 14: Country at a Glance

VIETNAM: Mekong Transport Infrastructure Development Project

POVERTY and SOCIAL		East Asia &	low-	
	Vietnam	Pacific	income	Development diamond*
2004				
Population, mid-year (millions)	82.2	1,870	2,338	Life expectancy
GNI per capita (Atlas method, US\$)	540	1,280	510	Life expectancy
GNI (Atlas method, US\$ billions)	44.0	2,389	1,184	Т
Average annual growth, 1998-04				
Population (%)	1.2	0.9	1.8	
Labor force (%)	1.7	1.1	2.1	GNI GIOSS
Most recent estimate (latest year available, 1998-04)				capita enrollment
Poverty (% of population below national poverty line)	29			Y I
Urban population (% of total population)	26	41	31	
Life expectancy at birth (years)	70	70	58	\perp
Infant mortality (per 1,000 live births)	19	32	79	
Child mainutrition (% of children under 5)	34	15	44	Access to improved water source
Literacy (% of population and 15)	73	78	/5 61	
Gross primary enrollment (% of school-age population)	101	113	94	
Male	105	113	101	
Female	97	112	88	Low-income group
KEY ECONOMIC RATIOS and LONG-TERM TRENDS				
198	4 1994	2003	2004	Economic ratios*
GDP (US\$ billions)	16.3	39.7	45.2	
Gross capital formation/GDP	25.5	35.4	35.6	
Exports of goods and services/GDP	34.0	59.2	66.4	Trade
Gross domestic savings/GDP	16.0	27.4	28.3	
Gross national savings/GDP	14.5	31.5	32.2	
Current account balance/GDP	8.2	-4.9	-3.8	Domestic Capital
Interest payments/GDP	0.6	0.8	0.7	savings
Total debt/GDP	152.3	39.9	38.4	
Total debt service/exports	5.7	3.4	2.5	
Present value of debt/GDP		34.6		-
Present value of debt/exports		58.2		Indebtedages
1984-94 1994-04	1 2003	2004	2004-08	indebiedness
(average annual growth)				
GDP 5.9 7	7.0 7.3	7.7	7.5	
GDP per capita 3.6 5	0.6 6.2	6.6	6.3	Low-income group
Exports or goods and services 23.8 16	0.0 19.6	27.9	15.0	

	1984	1994	2003	2004	Growth of capital and GDP (%)
(% of GDP)					
Agriculture		27.4	22.5	21.8	
Industry		28.9	39.5	40.1	10
Manufacturing		14.9	20.5	20.3	
Services		43.7	38.0	38.2	
Household final consumption expenditure		75.7	66.3	65.3	99 00 01 02 03
General gov't final consumption expenditure		8.3	6.3	6.4	
Imports of goods and services		43.5	67.0	73.6	GCF → GDP
	1094-04				
(average annual growth)	1504-54	1994-04	2003	2004	Growth of exports and imports (%)
<i>(average annual growth)</i> Agriculture	3.3	1 994-04 4.1	2003 3.6	2004 3.5	Growth of exports and imports (%)
(average annual growth) Agriculture Industry	3.3 6.6	4.1 10.3	2003 3.6 10.5	2004 3.5 10.2	Growth of exports and imports (%) $30 = \frac{1}{2}$
(average annual growth) Agriculture Industry Manufacturing	3.3 6.6 3.4	4.1 10.3 11.2	2003 3.6 10.5 11.5	3.5 10.2 10.1	Growth of exports and imports (%)
(average annual growth) Agriculture Industry Manufacturing Services	3.3 6.6 3.4 8.2	4.1 10.3 11.2 6.0	3.6 10.5 11.5 6.5	3.5 10.2 10.1 7.5	Growth of exports and imports (%)
(average annual growth) Agriculture Industry Manufacturing Services Household final consumption expenditure	3.3 6.6 3.4 8.2	4.1 10.3 11.2 6.0 5.3	2003 3.6 10.5 11.5 6.5 8.0	2004 3.5 10.2 10.1 7.5 7.1	Growth of exports and imports (%)
(average annual growth) Agriculture Industry Manufacturing Services Household final consumption expenditure General gov't final consumption expenditure	3.3 6.6 3.4 8.2	4.1 10.3 11.2 6.0 5.3 4.0	2003 3.6 10.5 11.5 6.5 8.0 7.2	2004 3.5 10.2 10.1 7.5 7.1 7.8	Growth of exports and imports (%)
(average annual growth) Agriculture Industry Manufacturing Services Household final consumption expenditure General gov't final consumption expenditure Gross capital formation	3.3 6.6 3.4 8.2 24.9	4.1 10.3 11.2 6.0 5.3 4.0 10.2	2003 3.6 10.5 11.5 6.5 8.0 7.2 14.1	3.5 10.2 10.1 7.5 7.1 7.8 10.5	Growth of exports and imports (%)

Note: 2004 data are preliminary estimates.

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

PRICES and GOVERNMENT FINANCE					
Domestic prices	1984	1994	2003	2004	Inflation (%)
(%change)					¹⁵ T
Consumer prices		9.3	3.0	9.5	10 -
Implicit GDP deflator		17.0	6.7	7.9	5
Government finance					
(% of GDP, includes current grants)		23.2	22.6	23.1	99 00 01 02 03
Current budget balance		4.8	5.8	6.6	-5 ±
Overall surplus/deficit		-12	-2.0	-14	GDP deflator CPI
TRADE					
	1984	1994	2003	2004	Export and import levels (US\$ mill
(US\$ millions)	120	4.054	20.176	26 502	
Rice	430	4,054	20,1/6	20,503	40,000 T
Fuel		866	3,821	5,671	30,000 -
Manufactures		1355	10,748	14,842	20 000 -
Food	923	6,509	25,227	3 (954	
Fuel and energy		696	2,433	3,574	
Capital goods		1,772	7,984	8,624	
Export price index (2000=100)		101	105	107	98 99 00 01 02 03
Import price index (2000=100)		99	100	106	Exports Imports
l erms of trade (2000=100)		103	105	101	L
BALANCE of PAYMENTS					
	1984	1994	2003	2004	Current account balance to GDP (%)
(US\$ millions)					
Exports of goods and services		5,337 6 509	23,439	30,363	
Resource balance	 -1,178	-1,173	-3,366	-3,245	4 -
Net income	-77	-337	-815	-940	2 -
Net current transfers	26	170	2,239	2,484	
Current account balance	-1,229	-1,340	-1,942	-1,701	-2 +
Financing items (net)	914	1,812	3,870	2,381	
Changes in net reserves	315	-472	-1,928	-680	98 99 00 01 02 03
Memo:					L
Reserves including gold (US\$ millions)		876	5,620	6,300	
Conversion rate (DEC, IOCAI/US\$)	1.0	10,962.1	15,463.0	15,772.3	
EXTERNAL DEBT and RESOURCE FLOWS					
(LIS\$ millions)	1984	1994	2003	2004	Composition of 2003 debt (US\$ mill.)
Total debt outstanding and disbursed	55	24,799	15,817	17,374	
IBRD	0	0	0	0	G: 1,289
IDA	47	181	2,472	2,719	B: 2,472
Total debt service	2	306	805	777	F: 1,444
IDA	0	1	17	27	
Composition of net resource flows					D: 1,
Official grants					
Official creditors	2	100	1,373	1,812	
Private creditors	0 62	-29	-258 318	-138	
Portfolio equity (net inflows)					E 0.040
World Bank program					E: 8,819
Commitments	0	475	518	480	A - IBRD E - Bilatera
Disbursements	2	126	567	255	B - IDA D - Other multilateral F - Private
Principal repayments	0	1	2	8 747	C - IMF G - Short-I
Interest payments	2 0	125	15	247 18	
Net transfers	2	125	550	229	

Development Economics









9/12/05

Annex 15: Maps

VIETNAM: VN-Mekong Transport Infrastructure Development Project Chris de Serio