

RESTRICTED

TAR:STU 28249

ASIAN DEVELOPMENT BANK

*This Report has been prepared for
the exclusive use of the Bank.*

TECHNICAL ASSISTANCE

FOR THE

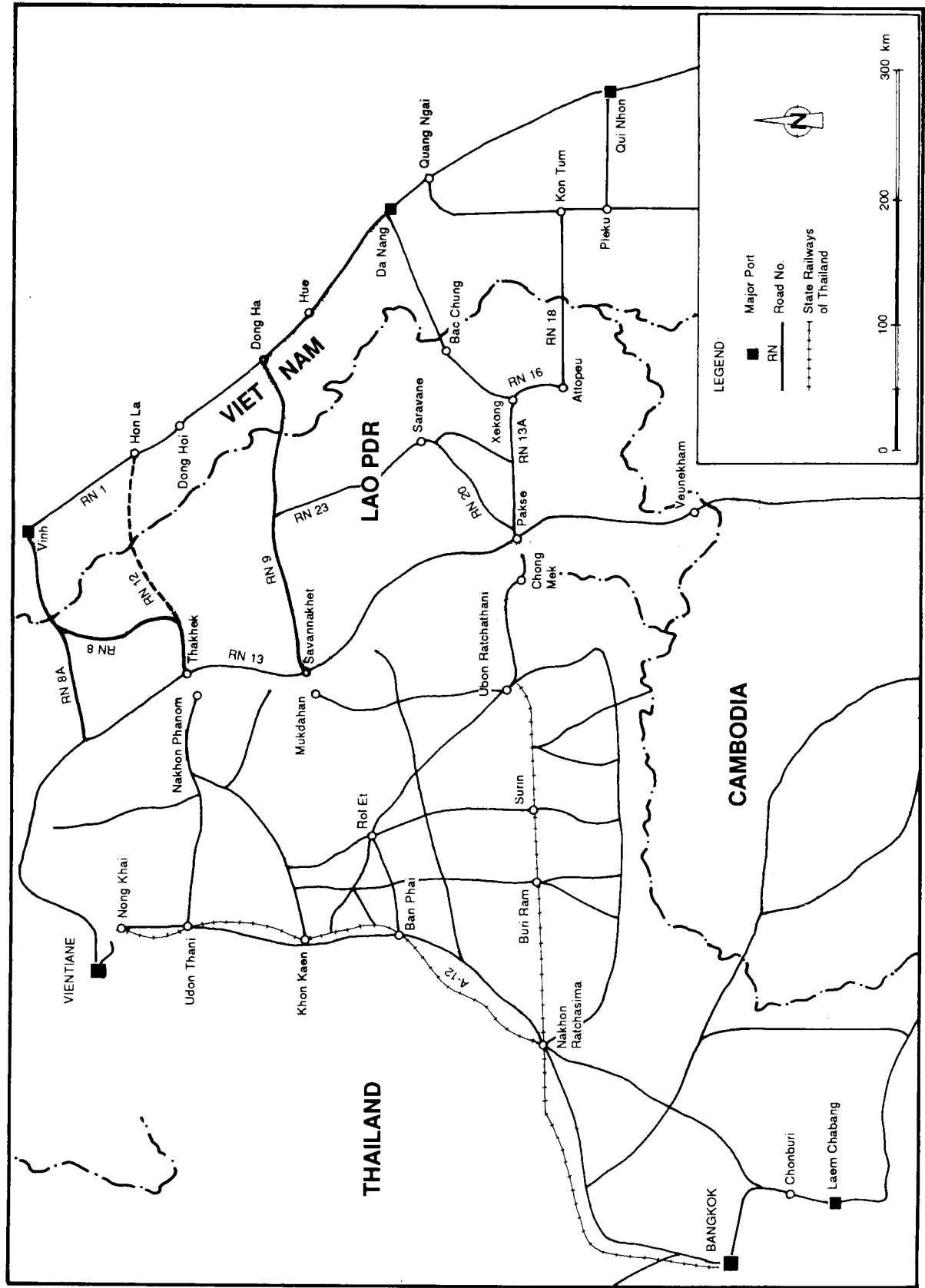
STUDY OF THE

LAO-THAILAND-VIET NAM

EAST-WEST TRANSPORT CORRIDOR

June 1994

THAILAND-LAO PDR-VIET NAM EAST-WEST CORRIDOR: Routes 8, 9 and 12 (Schematic Map)



Abbreviations

DOH	-	Department of Highways
ESCAP	-	Economic Commission for Asia and the Pacific
GMS	-	Greater Mekong Subregion
IMC	-	Interim Mekong Committee
Lao PDR	-	Lao People's Democratic Republic
MCTPC	-	Ministry of Communication, Transport, Post and Construction
MOT	-	Ministry of Transport
PRC	-	People's Republic of China
UNDP	-	United Nations Development Programme

Note

In this Report, "\$" refers to US dollars.

I. INTRODUCTION

1. The Bank is implementing a regional technical assistance (RETA) to promote economic cooperation among Cambodia, the People's Republic of China (the PRC), Lao People's Democratic Republic (Lao PDR), Myanmar, Thailand, and Viet Nam (hereinafter referred to as the Greater Mekong Subregion or GMS). Phase I of the RETA^{1/} was undertaken from August 1992 to February 1993. The key activities under Phase I included consultations between the Bank study team and each of the participating governments; the preparation of a draft framework paper on subregional economic cooperation; the convening of the First Conference on Subregional Economic Cooperation to discuss the results of the consultations and to agree on work to be undertaken under Phase II; and the publication of the results of Phase I. The publication covering Phase I became available in February 1993.^{2/}

2. Phase II of the RETA on subregional economic cooperation is expected to be completed in September 1994.^{3/} Three broad activities are covered under Phase II: (i) identifying frameworks and projects for collaboration; (ii) reinforcing the subregional consultative process; and (iii) generating the interest of external agencies and private sector entities in funding subregional projects. Activity (i) involves: preparing subregional transport and energy sector studies; conducting studies to explore opportunities for collaboration in environment, human resource development, trade and investment, and tourism; and assessing and preparing priority subregional transport projects. As a commencing activity for Phase II, the Second Conference on Subregional Economic Cooperation was convened in the Bank's Headquarters on 30-31 August 1993. This was followed by a Third Conference on Subregional Economic Cooperation, which was held in Hanoi, Viet Nam on 20-23 April 1994.

3. During the Second Conference on Subregional Economic Cooperation, the country delegations from the six countries agreed on five priority transport projects for which prefeasibility or feasibility studies would be undertaken. One of the priority transport projects identified during the Conference was the Thai-Lao-Viet Nam East-West Transport Corridor, which involves Road Nos. 8, 9 and 12 and associated ports in Viet Nam and bridges over the Mekong River from Lao PDR to Thailand. In December 1993, support for the East-West Transport Corridor Project was confirmed by the Governments of Lao PDR, Thailand, and Viet Nam. Such support was reconfirmed during the Third Conference on Subregional Economic Cooperation.^{4/}

^{1/} RETA No. 5487: Studies in Subregional Cooperation Among Cambodia, the People's Republic of China, Lao PDR, Myanmar, Thailand and Viet Nam (Phase I), for \$100,000, approved on 9 March 1992. The approved amount of the RETA was increased to \$190,000 on 19 May 1992 and to \$270,000 on 16 September 1992.

^{2/} Asian Development Bank, **Subregional Cooperation - Initial Possibilities for Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam and Yunnan Province of the People's Republic of China**, January 1993.

^{3/} RETA No. 5535: Promoting Subregional Cooperation Among Cambodia, the People's Republic of China, Lao People's Democratic Republic, Myanmar, Thailand and Viet Nam (Phase II), for \$4,000,000, approved on 10 June 1993.

^{4/} The proposed TA first appeared in *ADB Business Opportunities* in April 1994.

II. BACKGROUND AND RATIONALE

4. As established under the Bank's RETA on subregional cooperation in GMS, the lack of basic infrastructure is a major obstacle to trade, investment, and cooperation. Among infrastructure facilities, the most urgent need is to improve the transportation system linking the countries of the subregion. The transportation infrastructure, despite substantial assistance from aid agencies and multilateral organizations and investments by the countries themselves, requires further major commitments before minimum standards can be met and interconnections established. Many of the shortcomings can be addressed best by cooperative efforts. For landlocked Lao PDR, this is particularly true; access to sea ports requires the cooperation of Thailand, Viet Nam and/or Cambodia.

5. The proposed East-West Transport Corridor Project is expected to enhance the flow of goods and services between the three countries and between the latter and markets overseas. It will help Lao PDR overcome the difficulties associated with its landlocked status by providing access to a deep sea port along the central coast of Viet Nam. Goods produced in Northeast Thailand for export as well as for import in the opposite direction could also be shipped through Lao PDR and ports in Viet Nam instead of through Bangkok. Being underutilized at present, the deep sea port in Da Nang, Viet Nam, for example, could benefit greatly from increased traffic from Lao PDR and Thailand. Although the internal influence area of the proposed East-West Transport Corridor Project comprises northeastern Thailand, central Lao PDR and central Viet Nam, the external influence area could well extend to northern Cambodia and even further to northern Lao PDR and Kunming in southwestern PRC, especially if the Chiang Rai-Kunming road connection (via Lao PDR or Myanmar) is completed.

6. The expected increase in Thai-Lao-Vietnamese trade following the construction of an east-west transport facility would provide an important stimulus to production and development in the hinterland area of Savannakhet (Lao PDR) and will increase activity in the sea ports of central Viet Nam. In particular, accelerated development of this region will be stimulated by the increased trade and traffic flows from the improved access to new markets and reliable sources of a broader range of production inputs. The traffic by ferry across the Mekong River at Mukdahan/Savannakhet has increased from 15,000 metric tons (mt) in 1985 to 150,000 mt in 1988 and to an estimated 225,000 mt in 1989, including about 85,000 mt in transit between third countries. The total international trade of Lao PDR in 1989 amounted to about one million mt of which 60 per cent passed through Viet Nam, while the remainder mainly crossed the border with Thailand. Since then, there have been indications that relatively more traffic passes through Thailand. There is potential to increase Lao PDR's international trade across the Lao/Thai border, considering the substantially improved relations between these two countries recently. Further normalization of the relations between Thailand and Viet Nam would also result in an increase in trade.

7. Three main routes and transport facilities for the proposed corridor have been identified:

- (i) a bridge across the Mekong River between Mukdahan in Thailand and Savannakhet in Lao PDR, and improvement of Road No. 9, which crosses Lao PDR to Viet Nam and connects to the port at Da Nang;

- (ii) a bridge across the Mekong River between Nakhon Phanom in Thailand and Thakhek in Lao PDR to connect with Road No. 12, passing through Lao PDR into Viet Nam and ending at a new port proposed at Hon La; and
- (iii) a bridge across the Mekong River to connect with Road No. 8 and improvements to this road, which crosses Lao PDR to a new port proposed at Vinh in Viet Nam.

8. Although there is common agreement among Lao PDR, Thailand and Viet Nam that the road corridor is important and essential, more detailed studies are required to determine which route should be developed first to accomplish this goal. The choice between the routes is complex, because of technical reasons and the interests of the three countries are involved. An earlier Bank study^{1/} favored route (i), but consensus has not yet been reached among the countries concerned. A set of criteria to determine the best configuration and sequencing of investments, which takes into account the recent developments in the countries as well as the renewed commitment among the countries to further the subregional cooperation initiative, has to be developed.

III. THE TECHNICAL ASSISTANCE

A. Objectives

9. The long-term objective underlying the proposed TA is to facilitate subregional economic cooperation among Lao PDR, Thailand, and Viet Nam through the elimination of transport bottlenecks that constrain the flow of goods and services among and through them. The objective of the proposed TA is to prepare a strategy for road transport development in the Thai-Lao-Viet Nam East-West Corridor, including investment and action plans for the implementation of the strategy. The study will involve principally the assessment of the feasibility and approach to the development of Road Nos. 8, 9 and 12 and associated ports in Viet Nam and bridges over the Mekong River. For each route, the assessment will deal with each transport facility separately (bridge, road, and port) and in combination with each other.

B. Scope

10. The proposed RETA will involve the following activities:^{2/}
- (i) Analysis of the socioeconomic characteristics of the influence area of the East-West Transport Corridor Project, historic traffic movements along the corridor, as well as port activities, using, among others, data and findings of the Subregional Transport Sector Study and the Southern Thai-Lao Mekong River Bridge Project (see para. 8);
 - (ii) Technical and economic investigations of alternative routes for the corridor, including the possible bridge sites on the Mekong River and port sites in Viet Nam, taking into account construction, operation and maintenance cost, traffic, hydraulic foundation

^{1/} T.A. No. 5367: REG: Southern Thai-Lao Mekong River Bridge Project, approved on 27 February 1990, for \$550,000.

^{2/} The "soft" elements of the transport system (e.g., design standards, transit arrangements and regulations, and institutional factors) are being studied in parallel with the proposed TA.

and environmental and social considerations to determine the least-cost solution, and the economic and the financial rates of return (toll charges on bridges and roads and port charges are envisaged) for the alternative routes;

- (iii) Assessment of environmental impact in accordance with the Bank's *Environmental Assessment Requirements and Environmental Review Procedures*, dated March 1993;
- (iv) Assessment of the social impact of the proposed construction works in the corridor, including the identification of resettlement and community participation requirements;
- (v) Formulation of recommendations regarding the most feasible route for the corridor, including bridge type, port site and road alignment on the basis of technical, economic, environmental and social considerations;
- (vi) Formulation of a proposed program for design and construction of the selected route;
- (vii) Identification of financing options for construction or rehabilitation, and maintenance and operation of project components, particularly the potential for private sector participation; and
- (viii) Convening of subregional and country consultation meetings as well as workshops and conferences to monitor the progress of the proposed RETA and to provide a venue for presentation and discussion of results.

C. COST ESTIMATES AND FINANCING ARRANGEMENTS

11. The total cost of the proposed TA is estimated at \$1,000,000 equivalent. Details of the cost estimates are shown in Appendix 1. The TA will be financed by the Government of France on a grant basis with the Bank acting as administrator under the existing Channel Financing Agreement between the Government of France and the Bank. Approval of the proposed TA by the Bank will not commit the Bank to finance any ensuing project.

D. IMPLEMENTATION ARRANGEMENTS

12. The Interim Mekong Committee (IMC) will be the Executing Agency for the proposed TA, with the Bank's Projects Department concerned performing a central coordinating role in the implementation of the TA. The Bank is fully satisfied with the IMC's capability to act as Executing Agency in cooperation with its member countries. It is cooperating closely with the Economic Commission for Asia and the Pacific (ESCAP), the United Nations Development Programme (UNDP) and other multilateral and bilateral agencies. The statute of IMC provides that it may request on behalf of the participating Governments special financial and technical assistance and receive and administer such assistance as may be offered from multilateral and bilateral organizations. The Bank has cooperated with IMC in the past.^{1/} IMC will appoint a senior project engineer, acceptable to the Bank as Project Coordinator, who will act as counterpart to the consultants' team leader and be responsible for coordination between the

^{1/} For example it served as executing agency for RETA No. 5367, Southern Thai-Lao Mekong River Bridge Project; RETA No. 5441, The Mekong Geographic Information System for Natural Resources and Environmental Planning, approved on 16 April 1991 for \$600,000; and RETA No. 5456, Legal Training for the Interim Mekong Committee, approved on 19 August 1991.

team leader, cooperating agencies, provincial authorities and other relevant Government agencies in the three countries.

13. The ministries responsible for transport in the three countries will serve as cooperating agencies for the proposed TA. Each of the cooperating agencies in the three countries will assign a Project Liaison Officer and provide counterpart staff to work with the consultants to acquire on-the-job training in conducting feasibility studies and to ensure that the respective Government's inputs to the TA are provided in a timely manner. A Steering Committee will be established with representatives from IMC and the Bank together with three representatives each from the three countries. It will be responsible for providing overall direction and guidance in the conduct of the study. The chairman of the Steering Committee will be the Deputy Director of the Bank's Infrastructure Department (IFD), with the Manager of IFD's Transport and Communications (West) serving as the alternate. The Steering Committee will hold meetings at least three times during the study period or more often as necessary.

14. Implementation of the TA is expected to take about 10 months after mobilization of consultants. The proposed TA will require 30 person-months of internationally recruited consultants in the fields of bridge, highway, port, and geotechnical engineering and surveying; transport and development economics; and environment and social impact analysis. The consultants will be selected in accordance with the Bank's *Guidelines on the Use of Consultants*. The terms of reference for the consulting services are in Appendix 2.

IV. THE PRESIDENT'S RECOMMENDATION

15. It is considered that the proposed technical assistance in an amount not exceeding the equivalent of \$1,000,000 is necessary for the Study of the Lao-Thailand-Viet Nam East-West Transport Corridor. This technical assistance will be financed by the Government of France on a grant basis, and will be administered by the Bank under the existing Channel Financing Agreement between the Government of France and the Bank. The proposal for the Bank to administer the assistance is considered appropriate.

16. The President recommends that the Board approve the Bank administering the proposed technical assistance to be financed by the Government of France.

ESTIMATED COST OF THE TECHNICAL ASSISTANCE

	Amount (\$)
A. International Consultants' Remuneration and Per Diem a/	614,000
B. Travel Outside Lao PDR, Thailand and Viet Nam	40,000
C. Communications, Report Production and Office Supplies	10,000
D. Equipment b/	25,000
E. Meetings/Conferences	50,000
F. Support Staff	20,000
G. Engineering and Traffic Surveys	100,000
H. Office Furniture, Office Accommodation and Utilities	10,000
I. Travel within Lao PDR, Thailand and Viet Nam	15,000
J. Incremental Administrative and Operating Cost of IMC	10,000
K. Contingencies	<u>106,000</u>
Total	1,000,000

a/ Including remuneration and per diem of IMC Project Coordinator for 10 person-months.

b/ One four-wheel drive vehicle for use in the project area; one microcomputer with printer and one photocopying machine.

(Reference in text: page 4, para. 11)

TERMS OF REFERENCE FOR CONSULTING SERVICES UNDER THE TECHNICAL ASSISTANCE

A. Objectives

1. The main objective of the proposed consulting services is to assist the Executing Agency (the Interim Mekong Committee [IMC]) and the Cooperating Agencies (the Ministry of Communication, Transport, Post and Construction [MCTPC] of the Lao People's Democratic Republic [Lao PDR], the Department of Highways [DOH] of Thailand and the Ministry of Transport [MOT] of Viet Nam) in carrying out feasibility studies of transport facilities in a corridor covering Road Nos. 8, 9 and 12 in Lao PDR and Viet Nam, combined with two-lane bridges across the Mekong River at these roads' endpoints in Lao PDR, link roads to the existing Thai road network, and ports at their endpoints on the central coast of Viet Nam. For the bridges the consultants will rely on, but update (price-wise) data available from the Southern Thai-Lao Mekong River Bridge Project, June 1992 and from the Australian-financed bridge at Vientiane between Nong Khai and Thanaleng. The details of the three main routes and transport facilities in the subject transport corridor are:

- (i) a two-lane bridge (1,460 meters [m]) across the Mekong River between Mukdahan in Thailand and Savannakhet in Lao PDR, and improvement of Road No 9, which crosses Lao PDR for 245 kilometers (km) to Viet Nam at Ban Lao and proceeds to the port of Da Nang via Dong Ha (the distance in Viet Nam is 220 km);
- (ii) a two-lane bridge (about 1,420 m) across the Mekong River between Nakhon Phanom in Thailand and Thakhek in Lao PDR, and construction of Road No 12 which, as a track impassable for motor vehicles, traverses Lao PDR for 120 km to Viet Nam and proceeds to the proposed port at Hon La (the distance in Viet Nam is 50 km); and
- (iii) a two-lane bridge (about 1,400 m) across the Mekong River between Thailand and Lao PDR near Ban Lao,^{1/} and improvement of Road No 8 which passes through Lao PDR for 130 km to Viet Nam and proceeds to the port of Vinh (the distance in Viet Nam is 80 km).

For each route the feasibility study will deal with each transport facility separately (bridge, road and port) and in combination with each other. For the ports under study, the cargo potential shall relate to total commodity flows, whether these come from or go to Thailand, Lao PDR or Viet Nam (also domestic Vietnamese cargo shall be considered for these ports).

(Reference in text: page 5, para. 14)

^{1/} This bridge site was not investigated as part of the Southern Thai-Lao Mekong River Project, and assessment of the site conditions and likely cost implications are therefore needed.

B. Implementation Arrangements

2. The consultants will work under guidance of the Executing and Cooperating Agencies and the Project Coordinator from IMC and keep the Steering Committee^{1/} informed on progress of the work on a monthly basis. The services will be executed by consultants to be selected and engaged by the Bank. It is anticipated that the study period will last about 10 months and conclude with the submission by the consultants of the draft final report. The services will require about 30 person-months of consultants' services, experienced in the fields of highway, bridge, port, hydrological, materials and soils engineering and surveying, transport and development economics, and environmental and social planning.

C. Scope of Work

3. The consultants will work in close consultation with national counterpart staff and staff of IMC. The consultants' team leader will be responsible for preparation of consolidated reports, which will include all findings, conclusions and recommendations, and for liaison with the Bank, IMC and the Cooperating Agencies.

4. The scope of work for the consultants will include, but not necessarily be limited to, the following:

- (i) Review available reports and data on the transport sector relevant for the project in the three countries, and provide socioeconomic profiles for each of the route influence areas in the corridor. The profiles will be based on available data, updated to the year prior to commencement of the feasibility study, and information generated by field surveys and discussions with government and private institutions, and will include the level and pattern of economic activity, population and settlement distribution, agricultural and industrial resources, and existing infrastructure. The profiles will also include any planned major development scheme. The consultants will also, in cooperation with the provincial authorities, conduct public meetings and dialogues with the communities in the influence areas of the routes to obtain feedback on the proposed project and the social and environmental mitigation measures envisaged. The results of the dialogues will be summarized in the draft final report.
- (ii) Apply and update transport operating costs, prepared in 1990 by the National Transport Study for Lao PDR.

^{1/} Composed of representatives from IMC and the Bank (from time to time) together with representatives (maximum three each) from the Governments of Lao PDR, Thailand and Viet Nam. The Project Liaison Officers from MCTPC, DOH and MOT and key members of the consultants' staff will be co-opted as members of the Steering Committee, which will meet at least three times during the study period, or as often as considered necessary to make important decisions on the conduct and findings of the study, at mutually agreed locations.

- (iii) Review available traffic count data and carry out supplementary classified counts, including recording of the country of registration for trucks, on homogeneous sections of the roads and ferry services under study, as well as origin-destination surveys (one station per project road and ferry service) to obtain information on the current pattern and volume of vehicle and commodity movements. Axle-load surveys (one station each for Road Nos 8 and 9) will also be carried out by the consultants to determine the magnitude of vehicle overloading on the project road sections and for the purpose of pavement design. The consultants will also obtain information on commodity flows by type and origin/destination for port related traffic.
- (iv) Assess the possibility of traffic diversion between transport modes, considering the possibility of rail links extended to Mukdahan and Nakhon Phanom in Thailand, and from other road routes, taking into account transport costs and other relevant factors.
- (v) Establish traffic/commodity growth models for each representative vehicle type and for each port under study, on the basis of population changes and economic activities in the route influence areas in the three countries (including Northeast Thailand), and estimate expected new traffic to be generated by the proposed transport facility improvements.
- (vi) Carry out topographical surveys, including alignment plans, longitudinal sections, cross-sections and drainage surveys, and establish horizontal control points as required. Undertake investigations, including alternative wharf structures, warehousing and handling equipment, of required improvements at Da Nang port and of construction at the two other port options (Hon La and Vinh). Assessment and costing of any right-of-way requirements for the project road sections, the Mekong bridges and ports should also be made.
- (vii) Undertake investigations of the existing pavement structure, including roughness assessments, and Dynamic Cone Penetrometer and California Bearing Ratio tests to assess the existing pavement condition and strength, and the most economic way of improving it.
- (viii) Study alternative pavement structures and surfacings, using data available from pavement studies carried out under earlier externally-financed road projects, and also studies carried out internationally for comparable pavements with identical traffic loadings. The alternatives to be examined will include stabilization of on-site materials, by mechanical and chemical means, the use of geotextiles, the use of emulsions and cutback bitumens to lengthen sealing seasons, etc.
- (ix) Study the availability of primary construction materials in the vicinity of the project facilities.

- (x) Study existing roadside and cross-section drainage facilities and, following an analysis of rainfall and flood records supplemented by detailed field investigations, establish the adequacy of embankment heights and pavement levels, as well as side and run-off ditches.
- (xi) Investigate all bridges and culverts on the project roads to determine their condition, adequacy of waterway openings, load capacity and widths, anticipated future serviceability and the general extent of repairs and strengthening needed. In case of replacement or new construction of bridges, carry out subsoil investigations.
- (xii) Estimate maintenance costs (routine and periodic maintenance separately) for the study ports, the Mekong bridges and on existing and improved project roads for the purpose of economic evaluation.
- (xiii) Based on the results of the engineering investigations, prepare preliminary design, construction quantities and overall construction costs for each project component and for each improvement option, to a level of accuracy of ± 20 per cent. The costs should be broken down into foreign exchange, local currency and tax components. Also, prepare typical cross-section, port and bridge drawings, and location plans in scale 1:50,000. On the basis of projected traffic levels, pavement structure studies, and axle load considerations, as determined from the above activities, recommend the most cost-effective improvement option for each project component.
- (xiv) Calculate economic vehicle and port operating costs for each route's transport facilities and each transport component separately, including homogeneous road sections (including and excluding passenger time savings) with and without the proposed improvements, based on estimated changes in port facilities and road surface roughness^{1/} and gradients. Quantify the benefits for each project component and for each improvement option (including port berth configuration and road pavement type and width, alternative minor bridging and improved ferry services or bridging across the Mekong River), divided into savings in vehicle/port operating costs, changes in road and ferry maintenance and operating expenditures and other quantifiable benefits.
- (xv) Carry out an economic evaluation (20-year benefit stream period, starting in year 2000) of the alternative improvement options for each project component and route by calculating the economic internal rate of return (EIRR) based on benefits (including and excluding passenger time savings), under three different toll charge scenarios, and costs, including those for civil works, right-of-way, detailed engineering, and construction supervision. The choice between mutually exclusive improvement options will be based on the net present worth method.

^{1/} Pavement deterioration should be based on the Highway Design and Maintenance Standard Model (HDM III, PC version, 1987), developed by the World Bank, or equivalent model.

- (xvi) Identify any social benefits (or costs) likely to accrue from the different improvement options^{1/} and assess any environmental and social impact, in accordance with the Bank's *Environmental Assessment Requirements and Environmental Review Procedures* (March 1993) and *Guidelines for Incorporation of Social Dimensions in Bank Operations* (October 1993), within the route influence areas. Carry out an initial environmental examination (IEE) and initial social assessment (ISA) for each of the three routes in line with these guidelines. In case of relocation of people, prepare a resettlement program and action plan in line with current Bank practice.
- (xvii) Undertake a financial analysis, including calculation of the financial internal rate of return (FIRR) and the profit and loss account, of the proposed project facilities (combined and separately) to determine, in the long term, the optimum level of road/bridge toll and port charges needed to amortize the investment costs and to cover annual operation and maintenance costs. The analysis will be carried out over a period of 20 years after the opening year (year 2000).
- (xviii) Taking into account the economic evaluation, social benefits and environmental impact, recommend the most suitable improvement option for each route and its transport facilities. Assess the employment in terms of work-years (skilled and unskilled labor separately as well as men and women) expected to be generated by the proposed project's civil works component, shown separately for each project component. The consultants shall also present the results in a format showing road section name, length (in km), improvement level, present daily motorized traffic and port traffic, cost of civil works and EIRR/FIRR.
- (xix) Undertake sensitivity tests for the recommended improvements by appropriately varying the parameters with the highest risks, including benefits, toll/port charges, project costs and the implementation period.
- (xx) Propose a time schedule for design and construction of the most feasible route and transport facility option, and provide a tentative estimate of person-month requirements for consulting services for design and construction supervision (separately) by field of experience.

D. Reports

5. The consultants will submit the following reports in English, in the numbers and at the times indicated. IMC will resubmit copies to the Cooperating Agencies:

^{1/} In this connection, the consultants will identify the beneficiaries of the proposed project improvements by route, classify them according to income class and assess the poverty reduction aspects of the improvements and how many poor people would be affected in relation to the total population in the route influence areas (i) during construction; and (ii) during the benefit stream period. The consultants will also estimate the impact of the improvements, if any, on employment of women.

	<u>IMC</u>	<u>Bank</u>
Inception Report (after two months)	20	5
Progress Reports (monthly thereafter)	20	5
Draft Final Report (after 10 months)	20	10
Final Report	40	5

6. The inception report will outline a detailed work program and briefly describe the methodology proposed to meet the terms of reference. The progress report will briefly describe progress in a standard format. It will also include the main findings made during the reporting period as well as Minutes of Steering Committee meetings. The draft final report will summarize the results of the various studies and investigations, fully describing the methods and assumptions used, and the findings and recommendations. The report will include all relevant information which supports the conclusions in sufficient detail to enable the calculations to be verified and allow recalculation with modification of the key assumptions without the need for supplementary data. The final report will include all revisions deemed relevant by the consultants following receipt of consolidated comments from the Bank, incorporating those of IMC, the Lao, Thai and Vietnamese Governments, which will be consolidated by IMC. This report will be submitted within one month of the receipt of comments from the Bank on the draft report.

E. Obligations of the Interim Mekong Committee

7. The IMC will assist, through the Project Coordinator, the consultants in establishing Project offices and in obtaining required traffic and engineering data and maps from the participating Government agencies, as well as provide relevant data available with IMC. The IMC will coordinate the activities under the TA, and particularly take care of travel arrangements for consultants between the three countries involved, provide liaison and information services to the Governments concerned, and arrange Steering Committee meetings, including distribution of papers and reports to the members.