# 付 属 資 料

1．要請書

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3．SCOPE OF WORK

4．MINUTES OF MEETINGS

5．ローカルコンサルタントリスト

6．収集資料リスト

# TERMS OF REFERENCE

# FEASIBILITY STUDY FOR MEKONG BRIDGE AT PAKSE

# IN

# THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

APRIL 1994

MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION

LAO PEOPLE'S DEMOCRATIC REPUBLIC

TERMS OF REFERENCE

FEASIBILITY STUDY FOR MEKONG BRIDGE AT PAKSE

IN

THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

1. BACKGROUND

Since "New Economic Mechanism" was adopted as a policy for national socio-economic development, the Lao People's Democratic Republic (hereinafter referred to as "Lao PDR") has begun to step forward to reorganize her economy under the market economy principle. For this end, utilization of international trade as well as goods distribution in LAO PDR seems to be indispensable. However, because Lao PDR is so-called "Land Locked Country", international trade must be through a surrounding Indochina country in order to access to the western countries. In this sense, it is one of the most important issues to establish a stable international trade route. For this purpose, a national development strategy should emphasize to create an international economic zone which is formulated with not only other Indochina countries such as Vietnam and Cambodia, but also Thailand, southern part of China and Myammar.

Although Lao PDR is divided into three socio-economic regions such as North, Central and South Regions, the South Region has the highest development potentials among them from the viewpoints of resources, an advantage on accessibility to Thailand on one hand, and Savannaket has a good accessibility to Vietnam on the other hand.

To activate economy on the basis of an international trade with market economy countries, relationship with Thailand shall be focused on as first priority, which recently keeps good economic performance and accumulates biggest economic power in the surrounding countries. In this sense, the Pakse Area and Mekong bridge at Pakse shall be paid special attention as a regional development center in the South Region with a short highway connection to Thai boarder. However, the traffic crossing the Mekong River is restricted by a ferry which has been a disadvantage in bringing about a rapid economic growth to this Area. To coordinate balanced development in the South Region, a regional development study for the Pakse Area and feasibility study for Mekong bridge at Pakse is indispensable at this moment and, in particular, a feasibility study for a concrete bridge crossing Mekong River

which may be economically viable in terms of fuel and time savings for users, and which can utilize local resources such as local manpowers, gravels, cement nearby to the maximum extend and maintenance cost is minimum for concrete bridge.

## 2. OBJECTIVES OF THE STUDY

Objectives of the study are summarized as follows:

a. To draw up a comprehensive development master plan for the Pakse Area in the South Region at a target year of 2010.

b. To prepare recommendations on institutional and organizational matters which are necessary to effectively promote the master plan.

c. To conduct feasibility studies on a concrete bridge crossing Mekong River at Pakse.

d. To promote technology transfer for Lao PDR counterpart personnel.

## 3. STUDY AREA

The study should relate to the entire southern region of Lao PDR, including Saravane, Attapeu and Champassak Provinces.

## 4. SCOPE OF WORK

### (1) Study structure

The study consists of four parts corresponding to the study objectives.

Part 1: Establishment of development frameworks
Part 2: Preparation of integrated development master plan.
Part 3: Formulation of institutional measures.
Part 4: Feasibility study of concrete bridge crossing over the Mekong River at Pakse.

In Part 1, socio-economic and spatial development frameworks are established for the entire Pakse Area. Existing plans and project proposals are examined for their effects on population distribution and transport network formation. In Part 2, an integrated master plan is prepared, clarifying development phasing, identifying core projects, and preparing an indicative investment plan for the Pakse Area.

Works for Part 3 and 4 will be carried out in parallel with those for Part 1 and Part 2. Recommendation on institutional measures to encourage private sector investments in the Pakse Area is formulated and may be revised during the feasibility study period of Part 4.

Priority infrastructure projects will be selected from core projects. A feasibility study will be carried out for the concrete bridge crossing Mekong River at Pakse.

(2) Tasks

Part 1

Part 1 for the establishment of development frameworks may be carried out through five tasks as outlined in the following:

(1.1) To study existing conditions.
Existing conditions in the Pakse Area are examined in all aspects covering socio-economy, infrastructure, natural conditions, development policies and institution.

(1.2) To evaluate development potentials.
Various development potentials in the Pakse Area are evaluated on the basis of capacity and capability of water resources, land, mineral resources, tourism objects and human resources, Locational conditions of various industries are examined.

(1.3) To prepare development scenarios.
Alternative development scenarios are prepared for the Pakse Area and the best one is selected, clarifying relative position of the Pakse Area in the context of both national and regional development, expected roles and characteristics and phasing of the development.

(1.4) To establish socio-economic framework.
A socio-economic framework is established, corresponding to each development scenario, by specifying target levels of regional development in terms of population, employment and economic structure.

(1.5) To establish spatial development framework.
A spatial development framework is established for the selected alternative, consisting of development axis/arteries,hierarchical structure and distibution of settlements.

Part 2

Preparation of an integrated development master plan in Part 2 may consist of the following three tasks.

(2.1) To establish frameworks for development areas.
Within the regional development frameworks, socio-economic and spatial development frameworks are worked out for each of development areas to be defined through Part 1. Types of industries and related activities are specified for each area.

(2.2) To project demand for infrastructure and utilities.
Demand for various infrastructure and utility facilities is projected, in line with the frameworks for development areas.

(2.3) To identify core projects and prepare invesment plan
Core projects are indentified for the Pakse Area and broadly phased for their implementation. An investment plan is prepared in an indicative way for core projects.

Part 3

Part 3 to formulate institutional measures shall consist of the following three tasks.

(3.1) To establish overall institutional/policy framework.
An overall institutional/policy framework is established to encourage private sector investments in the Pakse Area.

(3.2) To fomulate incentive measures for industries.
Specific incentive measures are formulated for industries to be promoted in the Pakse Area.

(3.3) To recommend institutional measures for regional development.
Institutional/organizational measures are recommended to facilitate the regional development planning and implementation in the Pakse Area, coordinating activities of different government agencies and the private sector.

Part 4

Feasibility study of concrete bridge crossing over the Mekong River at Pakse shall cover the following five tasks.

4.1 To assess the project.

4.2 To prepare conceptual design.
For the Pakse bridge, conceptual design is prepared and costs are estimated.

4.3 To analyze demand for the bridge.
Demand for the bridge is analyzed in line with the socio-economic frameworks for the Pakse Area, and its benefits are estimated.

4.4 To evaluate project viability.
Viability of the bridge project is evaluated from economic and financial points of view by using standard project evaluation methods.

4.5 To conduct preliminary EIA.
A preliminary environmental impact assessment is conducted for the bridge project.

5. Report

The study shall provide the following reports:

(1) Inception Report (30 copies).

The Inception Report shall be submitted within one (1) month after the commencement of the study.

(2) Progress Report (30 copies).

The Progress Report shall be submitted within four (4) months after the commencement of study.

(3) Interim Report (50 copies).

The Interim Report shall be submitted within seven (7) months after the commencement of the study.

(4) Draft Final Report (50 copies).

The Draft Final report shall be submitted within nine (9) months after the commencement of the study.

The Government of LAO PDR shall send the comments on the Draft Final Report to JICA within one (1) month after the submission of the Draft Final Report.

(5) Final Report (50 copies).

The Final Report shall be submitted within two (2) months after the receipt of the comments from the Government of Lao PDR.

6. Implementation of the Study.

(1) Work schedule.

Study period is expected to be 12 months.

(2) Study organization

The study shall be jointly carried out by Japanese expert team with a close cooperation of Lao PDR counterpart team which consists of officials from relevant agencies of the Lao Government.

To direct the study, a steering committee shall be set up.

(3) Expertise requirements

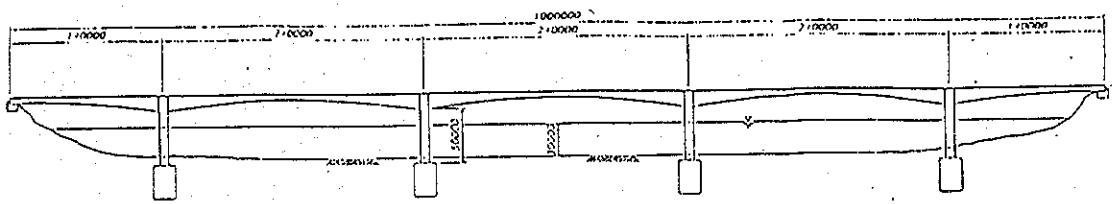
The study shall be carried out by a team of international class experts covering all the economic and the infrastructure sectors as well as macro physical and socio-economic planning and analyses. Specifically, the following experts may be required.

1) Team leader
2) Regional Economist
3) Industrial planner
4) Agricultural expert
5) Mineral resources expert
6) Tourism planner
7) Land use planner
8) Transport planner
9) Urban planner
10) Water resources planner
11) Water supply and sewerage engineer
12) Highway engineer
13) Bridge engineer
14) Power and telecommunication engineer
15) Institutional expert
16) Environmental expert

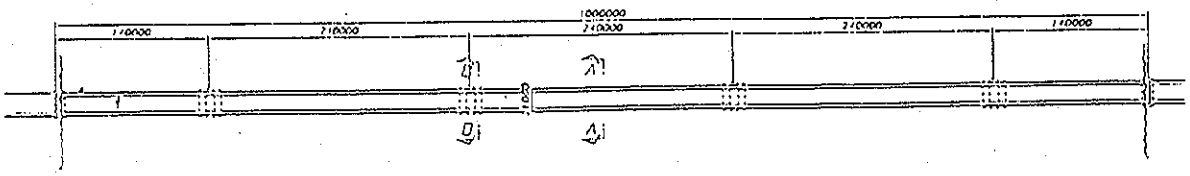
A total of some 120 man-months of these experts may be required to carry out the study.

7. Implementation of Mekong bridge at Pakse

Lao PDR Goverment is in a hurry to implement Pakse bridge so if this concrete bridge comes out to be feasible under this feasibility study, Lao PDR wishes to proceed to Basic Design phase for its implementation immediately.



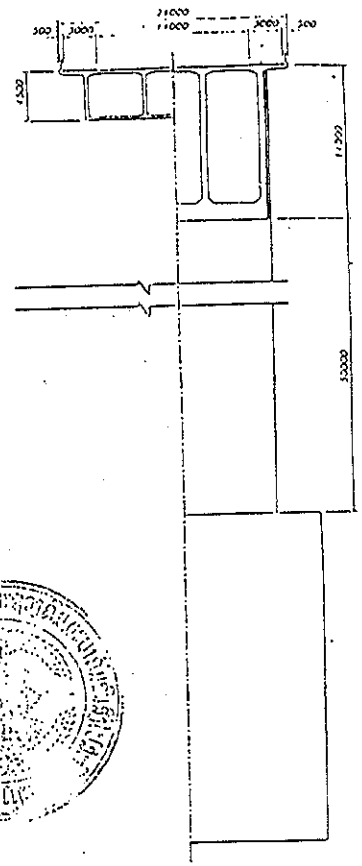
SIDE VIEW S=1/2000



PLAN S=1/2000

GENERAL VIEW

A-A SECTION B-B SECTION



TYPICAL SECTION S=1/200

# ラオス国パクセ橋建設計画調査対処方針案

## 1.目的

ラオス国の要請に基づき、パクセ市におけるメコン河を横断する橋梁の建設に係るフィージビリティ調査を実施するものであり、今回はS／Wを協議・署名することを目的として、事前調査団を派遣するものである。

## 2.要請背景、経緯

（1） 現在ラオスは、社会主義経済体制からの脱却を目指しNew Economic Mechanism（新経済機構）と呼ばれる政策の下、市場経済への移行を図っている。
（2）経済自由化の進展に従い、諸外国とのヒト・モノの交流は活性化することが予想され、それがラオスの将来の経済発展のために不可欠であることは疑いない。しかし、ラオスは内陸国であるがゆえに、海への出口を周辺諸国に頼らざるを得ないという制約の中にある。
（3）そのような中、隣国タイはラオスの貿易額のうち、輸出額で53%,輸入額で56%を占める最大の貿易相手国であり、年GDP成長率8%という好調な経済パフォーマンスから今後も引き続きラオスへの財、資本そして人的資源の流入が期待できる。
（4）本案件の対象地であるパクセは、タイ国境から30Kmという地理的好条件に恵まれているが、途中のメコン河が両国を結ぶ交通の障害となっており、本案件によりそのアクセスが改善されれば、タイとの一層の経済交流とそれによるラオス南部の発展が期待できる。
（5）またパクセから南下しカンボジアに至る国道、さらに将来、東のヴィエトナム方面に向かうことが計画されている国道は、ADBローンによる改修が実施または計画されており、それによりラオスの海へのアクセスは改善され、さらにインドシナ諸国とタイを結びつけるという意味ももつ。
（6）以上のような背景により、ラオス国政府は９４年４月に本件に係る正式要請書を提出した。

## 3.ラオス側受け入れ機関

Ministry of Communicatuion, Transport , Post and Construction

## 4.事前調査内容

（1）現地調査前国内作業
　a. 関連情報・資料の収集
　b. 調査対処方針案の検討

c. S／W案の検討・送付
d. Q／Nの作成・送付

（2）現地調査

a. ラオス側の調査実施体制（実施機関、関係機関、ステアリングコミッティーの設置の有無、カウンターパートの体制、本格調査団に対する便宜供与など）の確認
b. 要請背景の確認
・国家開発計画、特に南部地域開発計画における本件の位置付けの確認
・南部開発計画の現状と問題点把握
c. 調査の範囲及び内容の確認
調査対象地域、調査内容、調査期間の確認
d. 現地踏査
e. 情報・資料の収集
f. 他ドナー（主にADB）の援助動向の把握と調整方法の検討
g. 環境予備調査の実施
・情報・資料収集、スクリーニング、スコーピング
h. S／W案及びM／M案の協議・署名

（3）現地調査後の国内作業

a. 収集資料の整理・分析
b. 本格調査計画（基本方針、調査範囲・項目・内容、調査工程、調査実施体制、要因計画、調査用資機材、便宜供与、調査実施上の留意点）の立案
c. 事前調査報告書の作成

## 5.対処方針

（1）我が方提示のS／W案に基づき、ラオス側と協議を行い、本格調査の内容、作業工程等につき合意を形成し、双方で署名交換を行う。使用言語は英語、署名者は我が方が事前調査団長、ラオス側がMinistry of Communicatuion, Transport , Post and Construction の責任ある立場の者とする。

（2）S／W案の構成とその内容は別添3の通りとするが、協議の結果、ラオス側より修

正・追加等の変更を求められ、その内容が調査の本質に関わる、調査工程、調査経費に多大な影響を及ぼす等の重大な変更である場合には、東京へ請訓の上対処することするが、それ以外の軽微な変更については、以下の対処方針に従い、調査団内の判断で対応することとする。

1）調査の目的

要請書によると、ラオス国政府は南部地域の総合開発経済計画（目標年次2010年）の中で、近隣諸国との貿易の拡大による経済発展を指向している。その中で、特に経済発展が著しく、資本、人材の流入が期待できるタイとのアクセスを改善することが計画の重要なポイントとなる。以上のような経緯を受けて、タイ国境に近いパクセ市を流れるメコン河に橋を建設するためのフィージビリティ調査を実施することが今回の調査目的となる。

2）調査対象地域

パクセ市を流れるメコン河一帯。特に、現在渡河フェリーが運行されている付近が対象となる。

大まかな対象地域については問題はないと考えられる。ただ、ADBが計画中の第７次道路整備計画調査において、パクセ橋に続く国道１０号線、国道１３号線の整備が盛り込まれているため、架橋地点はそれらとの関係も考慮に入れる必要がある。そのため、現地協議前のADBとの意見交換の結果を踏まえる。さらにそれについてのラオス側の意見を聞く必要がある。

さらに、本案件の中に含まれると想定される、パクセ橋から主国道へと続く取り付け道路については、無償における資金量（現在６０億円を想定）の観点から計画を策定する必要がある旨を伝える。

3）調査内容

1.資料収集及び分析

次の分野について資料収集及び分析を行う。

・社会／経済データ
・運輸／交通データ
・土質／地質データ
・気象／地震データ
・水文／水理データ
・地形データ

・開発計画
・その他

2.現地調査

計画対象地域の現況を把握するために以下の調査を行う。

・交通量調査
・既存橋調査
・測量（地形、測深）調査
・土質／地質調査
・水門／水理調査
・土地利用調査
・その他必要な調査

3.交通予測

・将来社会経済フレームの設定
・将来交通需要予測

4.橋梁計画代替案の検討

交通現況調査、自然条件調査、交通需要予測等に基づき、架橋建設案を作成し、下記事項について架橋建設案を比較検討する。

・費用
・機能
・技術
・施工
・管理維持
・景観

5.最適案の検討

提案された最適案に対して技術的、社会的な検討を加え、現実的な案を選定し概略設計を実施する。

6.概略設計

・設計基準
・橋梁設計
・アクセス道路、取り付け道路設計
・数量算出

7.施工計画

・選定された最適案について、技術面から実行可能性の検証を行い、施工計画を立案する。

8.維持管理計画

・選定された最適案について、運営方法、維持管理方法を検討する。

9.費用積算

・選定された最適案について、経済・財務分析に必要工費の積算を行う。

10.環境影響調査(EIA)

当該地域の産業、経済、文化活動等の社会環境及び地域住民の生活環境に対するインパクトを予測し、その予想される影響を把握することで最終的な計画案を評価する。

・自然環境

・社会環境

11.プロジェクト評価（経済・財務分析）

最適案の実施に伴う経済的費用・便益を計測し、資金投入の有効性、財務的裏付けの検討を行う。

12.実施計画の策定

最適案を実施に移す手順を具体的かつ段階的に示す。

13.総合評価および提言

各分野の検討結果を総合的に評価し、最も望ましい計画案を提言する。

4）調査工程

S／W案添付の表のとおり。

ラオス側と協議の結果、調査内容に変更があった場合は、調査団の判断で工程を変更することを考慮する。しかし、提案した工程が無償援助へのスムースな連携を図ることを念頭においた工程であることを先方に伝え（4.開発調査と無償の連携について参照）、理解を得ることとする。

5）報告書

| | | |
|---|---|---|
| インセプションレポート（IC/R） | ：本格調査開始時 | （英文版30部） |
| プログレスレポート（PR/R） | ：調査開始後３ヵ月 | （英文版30部） |
| インテリムレポート（IT/R） | ：調査開始後６ヵ月 | （英文版50部） |
| ドラフトファイナルレポート（DF/R） | ：調査開始後９ヵ月 | （英文版50部） |
| ファイナルレポート（F/R） | ：調査開始後１１ヵ月 | （英文版50部） |

6）調査実施体制

ラオス側手配事項、我が方手配事項についてはS／W案のとおり。

我が方S／W案におけるラオス側手配事項で、先方が対応困難とする場合には、その旨M／Mに記載する。

JICA側手配事項の「技術移転」に関し、調査団よりカウンターパート研修制度について紹介し、ラオス側の要請がある場合にはその旨M／Mに記載する。

本格調査実施にあたり、車両、パソコン等の機材調達の要請があった場合にはその内容を確認の上、必要に応じM／Mに記載する。

（3）その他の協議・確認事項および留意点

本格調査時の現地再委託調査のために、ローカルコンサルタントの実態・能力の把握など情報収集を行う。

# 6.事前調査団員の担当事項

1.総括／交通計画

- 調査業務全般の総括
- 先方政府との協議への参加
- ADBとの意見交換への出席
- S／W案、Q／N案の検討
- 調査対象地域の道路整備状況及び将来整備計画の把握
- 交通に関する現状分析・予測・計画

・S／W署名
・本格調査の基本方針のとりまとめ
・事前報告書の執筆

2.橋梁計画
・先方政府との協議への参加
・ADBとの意見交換への出席
・調査対象地域の道路整備状況及び将来整備計画の把握
・橋梁計画に関する現状分析
　橋梁位置の妥当性、設計・施工に影響する制約条件の把握等
・橋梁計画に関する現地踏査、情報収集
・S／W案、Q／N案の検討
・本格調査内容（橋梁計画）の検討
・事前報告書の執筆

3.自然条件
　別添の通り

4.調査企画
・調査業務全般の企画、調整
・関連機関、在外公館との調整
・先方政府との協議への参加
・ADBとの意見交換への出席
・Q／N案、S／W案の作成
・事前調査報告書の執筆、とりまとめ

SCOPE OF WORK

FOR

THE FEASIBILITY STUDY

ON

CONSTRUCTION OF MEKONG BRIDGE AT PAKSE

IN

THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

AGREED UPON BETWEEN

MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION

AND

JAPAN INTERNATIONAL COOPERATION AGENCY

Dated the 6th of April 1995

Phetsamone VIRAPHANTH
Deputy Director of Cabinet
Ministry of Communication,
Transport, Post and Construction

Kozo HIGUCHI
Leader
Preparatory Study Team
Japan International
Cooperation Agency

## A. INTRODUCTION

In response to a request of the Government of Lao People's Democratic Republic ( hereinafter referred to as "the Government of Lao PDR"), the Government of Japan decided to conduct Feasibility Study on Construction of Mekong Bridge at Pakse ( hereinafter referred to as "the Study") in accordance with the relevant laws and regulations in force in Japan.

Accordingly, Japan International Cooperation Agency ( hereinafter referred to as "JICA "), the official agency responsible for the implementation of the technical cooperation programs of the Government of Japan, will undertake the Study, in close cooperation with the authorities concerned of the Government of Lao PDR.

Ministry of Communication, Transport, Post and Construction ( hereinafter referred to as MCTPC") shall act as the counterpart agency to the Japanese study team and also act as the coordinating body with other relevant organizations for the smooth implementation of the study, on behalf of the Government of Lao PDR.

This document sets forth the Scope of Work for the Study.

## B. OBJECTIVES OF THE STUDY

The objective of the Study is :

to conduct feasibility study for the construction project of Mekong Bridge at Pakse including its approaches for the period up to the year of 2010.

## C. SCOPE OF THE STUDY

To achieve the objectives mentioned above, the Study shall cover the following items;

1. Data collection and analysis;
   (1) Socio-economic data
   (2) Traffic and transport data
   (3) Soil and geological data
   (4) Climatic and seismic data

(5) Hydrological data
(6) Topographic data
(7) Development plans
(8) Others

2. Site survey;
(1) Traffic survey
(2) Existing bridge inspection
(3) Topographic survey
(4) Soil and geological survey
(5) Hydrological survey
(6) Land use survey
(7) Other necessary survey

3. Traffic forecast;
(1) Forecast of future socio-economic framework
(2) Forecast of future traffic demand

4. Comparative study of alternatives;
(1) Study on the construction of the bridge and approaches ( routes, location, bridge type and others)

5. Evaluation of alternatives;

6. Preliminary design;
(1) Design criteria
(2) Bridge design
(3) Approach roads design
(4) Quantity Estimate

7. Planning and scheduling of construction works;

8. Maintenance program;

9. Cost estimate;

10. Environmental impact assessment (EIA);
(1) Socio-economic environment
(2) Natural environment

11. Economic and financial evaluation;
(1)Economic and financial analysis

12. Implementation program; and

13. Conclusions and recommendations.

## D. STUDY SCHEDULE

The Study shall be conducted in accordance with the attached tentative schedule.

## E. REPORTS

JICA shall prepare the following reports in English and submit them to the Government of Lao PDR:

1. Inception Report
   Thirty (30) copies
   At the commencement of the Study;

2. Progress Report
   Thirty (30) copies
   Within three (3) months after the commencement of the Study;

3. Interim Report
   Fifty (50) copies
   Within six (6) months after the commencement of the Study;

4. Draft Final Report
   Fifty (50) copies
   Within nine (9) months after the commencement of the Study;

   The written comments on the Draft Final Report from the Government of Lao PDR shall be delivered to JICA within one (1) month after submission of the draft final report.

5. Final Report
   Fifty (50) copies
   Within two (2) months after the receipt of the written comments on the Draft Final Report from the Government of Lao PDR.

## F. UNDERTAKINGS OF THE GOVERNMENT OF LAO PDR

1. To facilitate the smooth conduct of the Study, the Government of Lao PDR shall take necessary measures:

(1) to secure the safety of the Japanese Study Team ( hereinafter referred to as "the Team");

(2) to permit the members of the Team to enter, leave and sojourn in Lao PDR for the duration of their assignments therein, and exempt them from foreign registration requirements and consular fees;

(3) to exempt the members of the Team from taxes, duties and any other charges on equipment, machinery and other material brought into Lao PDR for the conduct of the Study;

(4) to exempt the members of the Team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Team for their services in connection with the implementation of the Study;

(5) to provide necessary facilities to the Team for the remittance as well as utilization of the funds introduced into Lao PDR from Japan in connection with the implementation of the Study;

(6) to secure permission for the Team for entry into private properties or restricted areas for the conduct of the Study;

(7) to secure permission for the Team to take all data and documents (including maps and photographs) related to the Study out of Lao PDR to Japan; and

(8) to provide the medical services as needed, while its expenses will be chargeable on members of the Team;

2. The Government of Lao PDR shall bear claims, if any arises, against the members of the Team resulting from, occurring in the course of, or otherwise connected with, the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the members of the Team.

3. MCTPC shall, at its own expenses, provide the Team with the following in cooperation with relevant organizations :

(1) available data (including maps) and information related to the Study;
(2) counterpart personnel;
(3) suitable office space in Vientiane and Pakse;
(4) credentials or identification cards;

G. UNDERTAKINGS OF JICA

For the implementation of the Study, JICA shall take the following measures:

1. to dispatch, at its own expense, the Team to Lao PDR; and
2. to pursue technology transfer to the Lao counterpart personnel in the course of the Study.

H. OTHERS

JICA and MCTPC shall consult with each other in respect of any matter that may arise from or in connection with the Study.

TENTATIVE SCHEDULE

| Month | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Work in Lao PDR | | | | | | | | | | | |
| Work In Japan | | | | | | | | | | | |
| Report Presentation | △ IC/R | | △ PR /R | | | △ IT/R | | | △ DF/R | | △ F/R |

IC/R: Inception Report
PR/R: Progress Report
IT/R: Interim Report
DF/R: Draft Final Draft
F/R: Final Report

MINUTES OF MEETINGS

REGARDING THE SCOPE OF WORK

FOR

THE FEASIBILITY STUDY

ON

CONSTRUCTION OF MEKONG BRIDGE AT PAKSE

IN

THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

AGREED UPON BETWEEN

MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION

AND

JAPAN INTERNATIONAL COOPERATION AGENCY

Dated the 6 th of April 1995

Math SOUNMALA
Director
Department of communication
Ministry of communication,
Transport, Post and Construction

Kozo HIGUCHI
Leader
Preparatory Study Team
Japan International
Cooperation Agency

In response to the request of the Government of Lao People's Democratic Republic, the Preparatory Study Team of Japan International Cooperation Agency (JICA) visited Lao PDR from March 28 to April 6, 1995, to agree on the Scope of Work for the Feasibility Study on construction of Mekong bridge at Pakse in the Lao PDR(herein after referred to as "the Study" ).

The preparatory study team headed by Mr.Kozo HIGUCHI carried out the field reconnaissance survey on the Study area and held a series of discussion on the Scope of Work (S/W) with the officials of Lao side headed by Mr.Math SOUNMALA and Mr.Phetsamone VIRAPHANTH.

The final meeting was held on April 5,1995 at the office of Ministry of Communication, Transport, Post and Construction.The list of attendants is shown in Appendix. Both Japanese and Lao sides agreed on the Scope of Work.

The main issues which were confirmed are as follows;

1. Lao side requested strongly to receive grant aid from Japan.Japanese side promised the request is going to be conveyed to Tokyo. And both sides confirmed that smooth conduct and success of this feasibility study leads to the grant aid. So, Japanese side requested that Lao side should give facilities to the full scale mission as much as possible. And Lao side agreed on this .

2. There is a possibility that necessary equipment for geological survey have to be carried into the study site from Thailand. Japanese side requested that in such a case Lao side should give the full scale mission facilities.And Lao side agreed on this .

3. Both sides agreed that ,in order to recovery a part of maintenance cost , the full scale mission should analyze the possibility of Pakse bridge be a toll road bridge.

4. Lao side requested to accept a trainee in the training program in Japanese as a part of technology transfer.Japanese side agreed to convey the request to JICA Tokyo.

5. Japanese side requested that vehicles with drivers should be provided by Lao side. However, because of budget constraining, Lao side requested that cars and drivers should be rent by full scale mission at its own expenses. Japanese side agreed to convey the request to JICA Tokyo.

6. Japanese side requested two office spaces for the full scale mission in Vientiane and Pakse. Lao side agreed to provide them. However, because of budget constraining, Lao side requested that the equipment is provided by full scale mission at its own expenses. Japanese side agreed to convey the request to JICA Tokyo.

APPENDIX

## LIST of ATTENDANTS

Ministry of Communication, Transport, Post and Construction

| | |
|---|---|
| Math SOUNMALA | Director, Department of Communication. |
| Phetsamone VIRAPHANTH | Deputy Director of Cabinet. |
| Khanngeun KHAMVONGSA | Director, International Relations Division, Office of the Permanent Secretary. |
| Khamseng SAYAKONE | Deputy Director, Department of Communication. |
| Chansy NOUNMALY | Deputy Director, International Relations Division, Office of the Permanent Secretary. |
| Bounthavy KOUMALASY | Technical Control Section Chief, Department of Communication. |
| Somsana RATSAPHONG | Technical Control Section, Department of Communication. |
| Soukkhaseum PAKDIMANIVONG | Project Coordinate ADB, Department of Communication, Construction Division. |

Preparatory Study Team

| | |
|---|---|
| Kozo HIGUCHI | Team Leader |
| Seiichi SAITO | |
| Haruyuki SHIMADA | |
| Masashi OSHITARI | |

様式第１号

平成　　年　　月　　日作成

| 主管部長 | 文書管理課長 | 主管課長 | 情報管理課長 | 技術情報課長 |
|---|---|---|---|---|
| | | | | |

# 資料リスト（収集資料）

| 地域 | | 調査団名又は専門家氏名 | | 調査の種類又は指導科目 | | 作成部課 | |
|---|---|---|---|---|---|---|---|
| 国名 | | 配属機関名 | | 現地調査期間又は派遣期間 | 年　月　日～　年　月　日 | 担当者氏名 | |

| 番号 | 資料の名称 | 版型 | ページ数 | オリジナルコピーの別 | 部数 | 収集先名称又は発行機関 | 寄贈・購入（価格）の別 | 取扱区分 | 利用表示 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Topographic Map at Pakse 1:100,000 | | | オリジナル | 1 | | 購入 | | |
| 2 | Topographic Map at Pakse 1:50,000 | | | オリジナル | 2 | | 購入 | | |
| 3 | Topographic Map at Pakse 1:10,000 | | | オリジナル | 1 | | 購入 | | |
| 4 | Road Map 1:1,250,000 | B１ | | コピー | 1 | MCTPC | | | |
| 5 | Geological and Mineral Occurence Map | B１ | | オリジナル | 1 | DGM | 購入 | | |
| 6 | Topographic Map at Project Site 1:20,000 | A２ | | コピー | 1 | MCTPC | | | |
| 7 | National Transport Study (July 1990) | A４ | 68 | 抜粋コピー | 1 | MCTPC | | | |
| 8 | Summary of Annual Report (英訳) | A４ | | コピー | 1 | MCTPC | | | |
| 9 | Summary of Annual Report (ラオ語) | A４ | | コピー | 1 | MCTPC | | | |
| 10 | Geometric Standard 1994 (ラオ語) | A４ | 14 | コピー | 1 | MCTPC | | | |
| 11 | Environmental Guidelines | A４ | | コピー | 1 | MCTPC | | | |
| 12 | Lower Mekong Hydrologic Yearbook 1991 | A４ | 7 | 抜粋コピー | 1 | MCTPC | | | |
| 13 | Water Balance Study Phase 3 Report, Appendices | A４ | 11 | 抜粋コピー | 1 | MCTPC | | | |
| 14 | The Mekong River Bridge Proejct, Final Report June 1991 | A４ | 230 | 抜粋コピー | 1 | MCTPC | | | |
| 15 | Seventh Road Improvement Project, Inception Report (May 1994) | A４ | | コピー | 1 | MCTPC | | | |
| 16 | Seventh Road Improvement Project, Final Report (January 1995) Volume 1 and 2 | A４ | | コピー | 1 | MCTPC | | | |
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国際協力事業団

図書館提出用

JICA