

SCOPE OF WORK  
FOR  
THE DEVELOPMENT STUDY  
ON  
COASTAL ROADS IN EAST COAST OF SUMATRA  
IN  
THE REPUBLIC OF INDONESIA  
AGREED UPON BETWEEN  
DIRECTORATE GENERAL OF HIGHWAYS  
MINISTRY OF PUBLIC WORKS  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY

March 12th, 1991



Ir. Syarifuddin Alambai  
DIRECTOR OF PLANNING  
DIRECTORATE GENERAL  
OF HIGHWAYS,  
MINISTRY OF PUBLIC WORKS



Mr. Yasuo Kashima  
LEADER OF  
THE PRELIMINARY SURVEY TEAM  
JAPAN INTERNATIONAL  
COOPERATION AGENCY

## I. INTRODUCTION

In response to the request of the Government of the Republic of Indonesia, the Government of Japan has decided to implement the Development Study on Coastal Roads in East Coast of Sumatra in the Republic of Indonesia (hereinafter referred to as "the Study") in accordance with the relevant laws and regulations in force in Japan.

Accordingly, the 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 the Republic of Indonesia.

The present document sets forth the Scope of Work with regard to the Study.

## II. OBJECTIVES OF THE STUDY

The objectives of the Study are:

- 1) to formulate an arterial roads plan in the east coast of Sumatra.
- 2) to select priority projects and to carry out a feasibility study on the selected projects.

## III. STUDY AREA

The Study shall cover the area between Medan, Pekanbaru, Jambi, Palembang, and Bandar Lampung and its vicinities.

## IV. SCOPE OF THE STUDY

In order to achieve the objectives mentioned above, the Study shall be conducted in two(2) phases, the road network formation study(Phase I) and the feasibility study(Phase II) and each phase shall cover the following items:

## 1. PHASE I

- 1) Collection and review of existing data.
- 2) Supplementary investigations.
- 3) Collection and review of future development programs.
- 4) Forecasting of future transportation demands.
- 5) Study on alternative routes.
- 6) Traffic forecast and analysis.
- 7) Establishment of strategic roads formation.
- 8) Pre-Feasibility study on selected roads links.
- 9) Determination of priority road links for the feasibility study.

## 2. PHASE II

- 1) Study of socio-economic framework.
- 2) Traffic investigation and traffic demand forecast.
- 3) Field survey.
  - soil and materials investigations
  - hydrological survey
  - topographic survey
- 4) Determination of design standard.
- 5) Preliminary engineering design.
- 6) Cost estimate.
- 7) Economic evaluation and socio-economic impact study.
- 8) Preparation of implementation program.

## V. STUDY SCHEDULE

The Study, shall be carried out in accordance with the attached tentative schedule.


## VI. REPORTS

JICA shall prepare and submit the following reports in English to the Government of the Republic of Indonesia.

1. Inception report  
Thirty(30)copies at the beginning of the study in the Republic of Indonesia.
2. Interim Report  
Thirty(30)copies within six(6)months after the beginning of the Study.
3. Progress Report  
Thirty(30)copies within nine (9)months after the beginning of the Study.
4. Draft Final Report  
Thirty(30)copies within eleven (11)months after the beginning of the Study.
5. Final Report  
Fifty(50)copies within two(2)month after the receipt of the written comments on the Draft Final Report from the Government of the Republic of Indonesia, while these comments are expected to be delivered to JICA within fifteen(15)days after submission of the Draft Final Report.

## VII. UNDERTAKINGS OF THE GOVERNMENT OF THE REPUBLIC OF INDONESIA

1. To facilitate smooth conduct of the Study, the Government of the Republic of Indonesia shall take necessary measures;
  - 1) to secure the safety of the Japanese study team.
  - 2) to permit the members of the Japanese study team to enter, leave, and sojourn in the Republic of Indonesia for the duration of their assignment therein, and exempt them from alien registration requirements and consular fees.

- 3) to exempt the members of the Japanese study team from taxes, duties, fees, and other charges on equipment, machinery, and other materials brought into the Republic of Indonesia for the conduct of the Study.
  - 4) to exempt the members of the Japanese study team from income tax and other charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Japanese study team for their services in connection with the implementation of the Study.
  - 5) to provide necessary facilities to the Japanese study team for remittances as well as utilization of the funds introduced into the Republic of Indonesia from Japan in connection with the implementation of the Study.
  - 6) to secure permission for entry into private properties or restricted areas in connection with field survey, according to prevailing regulations of the Government of the Republic of Indonesia.
  - 7) to make arrangements for the study team to use the data, maps, and materials for analysis in Japan subject to the approval of the Government of the Republic of Indonesia.
  - 8) to provide medical services as needed. Its expenses will be chargeable on the members of the Japanese study team.
3. The Government of the Republic of Indonesia shall bear claims, if any arises, against the members of the Japanese Study 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 wilful misconduct on the part of the members of the Japanese study team.
4. The Directorate General of Highways, Ministry of Public Works, shall act as a counterpart agency to the Japanese study team and also as a coordinating body in relation with other Governmental and non-governmental organizations concerned for the smooth implementation of the Study.
5. The Directorate General of Highways, Ministry of Public Works, shall provide the Japanese study team with the followings, in cooperation with other agencies concerned;
- 1) available data and information related to the Study including ~~aerial photographs and maps.~~ 
  - 2) counterpart personnel.
  - 3) suitable office with necessary office equipment in Jakarta and Study sites.

- 4) credentials or identification cards
- 5) available vehicles with drivers necessary for the implementation of the Study.

#### VIII. UNDERTAKINGS OF JICA

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

1. to dispatch, at its own expense, study teams to the Republic of Indonesia.
2. to pursue technology transfer to the Indonesian counterpart personnel in the course of the Study.

#### IX. CONSULTATION

JICA and the Directorate General of Highways, Ministry of Public Works, shall consult with each other in respect of any matter that may arise from or in connection with the Study.

TENTATIVE SCHEDULE

Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Work in Indonesia				← Phase I →			← Phase II →							
Work in Japan														
Reports								ΔIC/R		ΔIT/R		ΔDF/R		ΔF/R

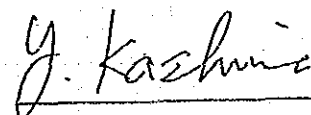
Remarks: IC/R...Inception Report    IT/R...Interim Report  
P/R...Progress Report  
DF/R...Draft Final Report    F/R...Final Report

MINUTES OF MEETING  
 ON  
 SCOPE OF WORK  
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## MINUTES OF MEETING

The Japanese Preliminary Survey Team, Headed by Yasuo Kashima, visited the Republic of Indonesia for the purpose of discussing the Scope of Work for the Feasibility Study for Development of Coastal Roads in East Coast of Sumatra from March 4 to 15, 1991.

The team had a series of discussion with Indonesia side for exchanging the views and opinions and conducted field surveys in the study area around Pekanbaru and Palembang.

The list of attendants of the meeting is attached hereto.

As the results of the above, the both side have confirmed the following points.

1. Both side agreed that the Indonesia counterpart agency shall be the Directorate General of Highways, Ministry of Public Works and they shall coordinate all agencies concerning the implementation of the Project.
2. Both sides agreed that the total length of roads to be implemented in the basic plan study(Phase I - 1) to 7)) will be approximately 1,850 km, from Medan to Bandar Lampung.
3. Both sides agreed after recommendation of Basic Plan in point 2 the total length of roads to be conducted for the pre-feasibility study in Phase I would be approximately four hundred fifty(450) km.
4. Both sides agreed that the total length of roads to be implemented in Phase II(Feasibility Study) is part of 450 km above, but would be approximately one hundred fifty (150) km.
5. Both sides agreed to <sup>n</sup>clude environmental considerations.
6. The Directorate General of Highways expressed that they will make their efforts to get permission from the authorities concerned for getting maps.
7. Both sides agreed that the Directorate General of Highways shall provide the study team with a main office to conduct the study at site and a liason office in Jakarta.

8. The Directorate General of Highway requested that, taking into consideration the current budgetary constraint faced by the Indonesian Government, vehicles used in the study shall be provided at the expenses of JICA. The Team expressed that they will convey the request to the Japanese Government.
9. The Directorate General of Highways requested that the counterpart training shall be conducted in Japan. The Team expressed that they will transfer the request to the Japanese Government.
10. The Directorate General of Highways strongly requested to carry out the feasibility study of minimum 450 km in length, the Team expressed that they would convey it to the Japanese Government.

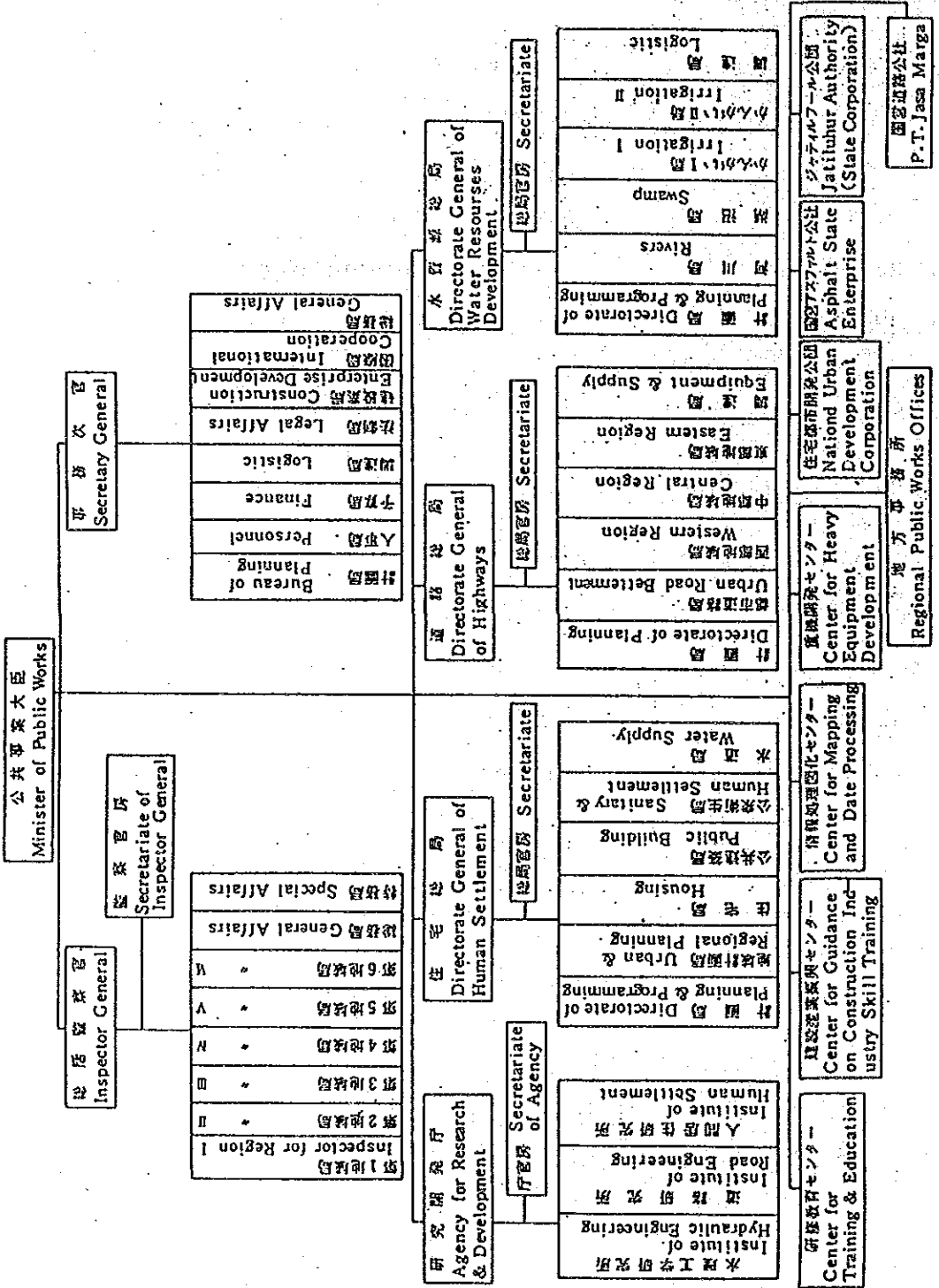
LIST OF ATTENDANTS  
AT  
MAJOR MEETINGS

Directorate General of Highways

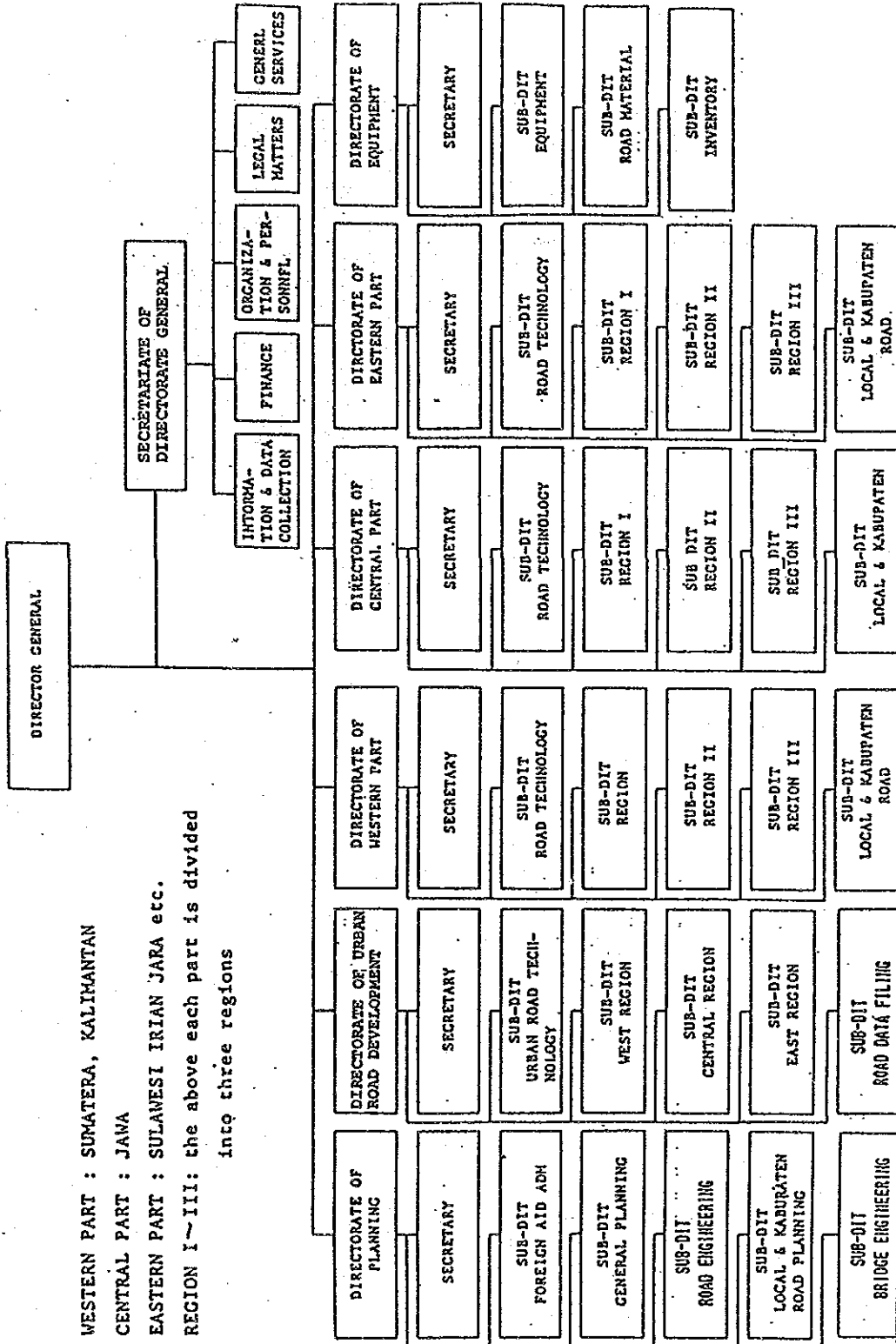
Ir. Syarifuddin Alambai	Director of Planning
Ir. Junius Hutabarat	Chief, Sub-Directorate of Planning
Ir. Koesno Soedarmadji	Chief, Sub-Directorate of Foreign Aid Administration
Mr. Didi Rasidi	Traffic & Economic Section
Mr. Kazuo Honna	JICA Expert

Japanese Preliminary Study Team

Mr. Yasuo Kashima	Team Leader
Mr. Masakatsu Abe	Member
Mr. Hiromasa Kishi	Member
Mr. Ko Kuwata	Member
Mr. Masayuki Koike	Member



公共事業省組織



WESTERN PART : SUMATERA, KALIMANTAN

CENTRAL PART : JAWA

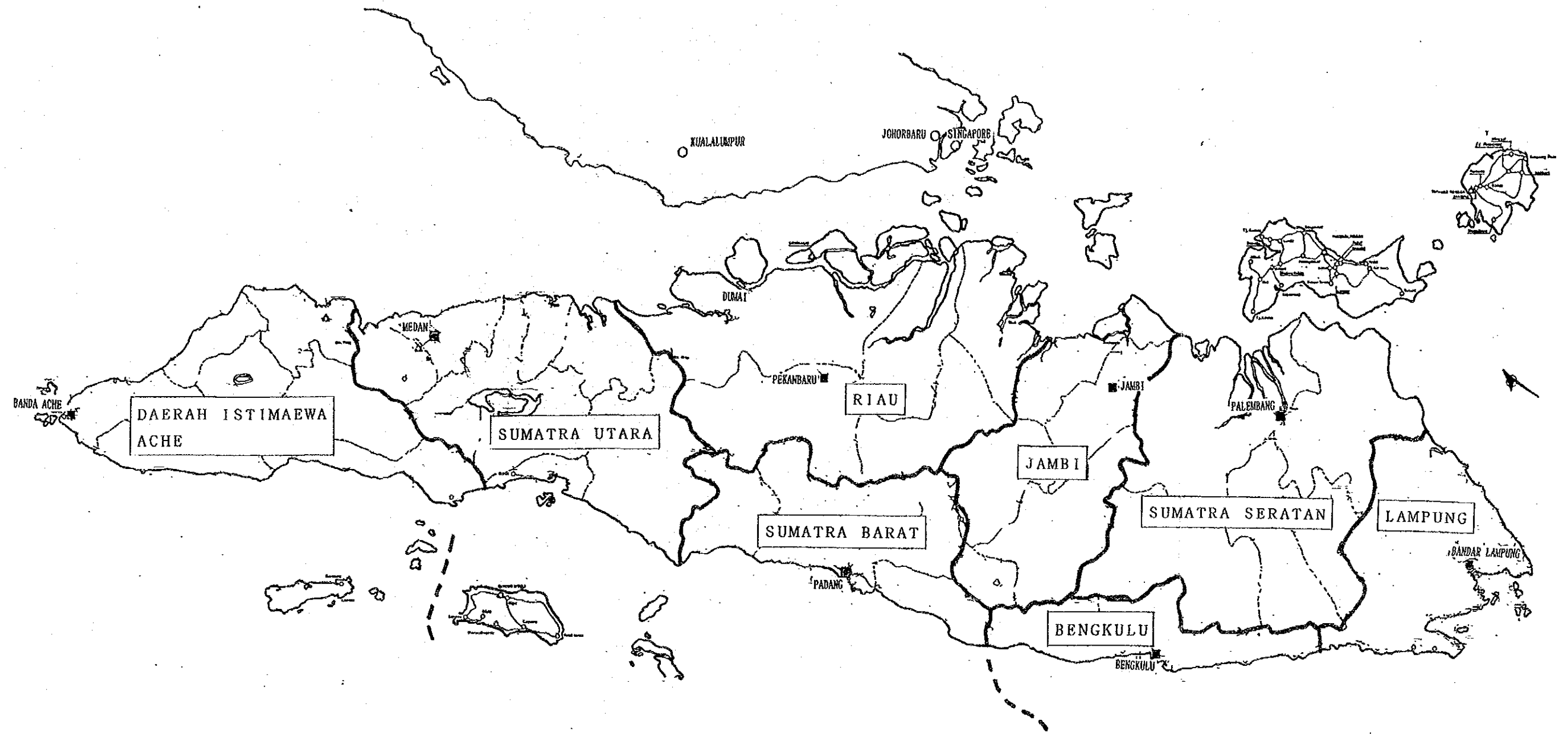
EASTERN PART : SULAWESI IRIAN JARA etc.

REGION I ~ III: the above each part is divided into three regions

公共事業省道路總局組織圖



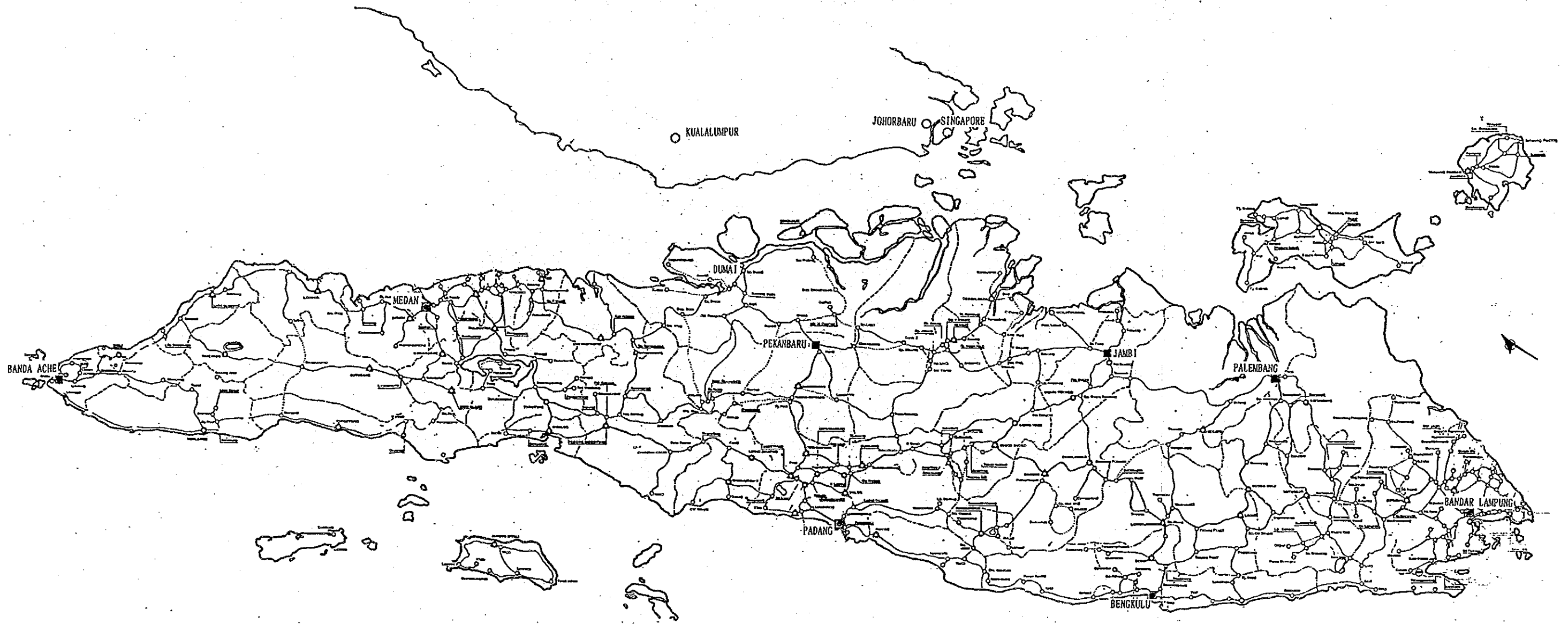




スマトラ州分布図

—— 州境界  
----- 群境界





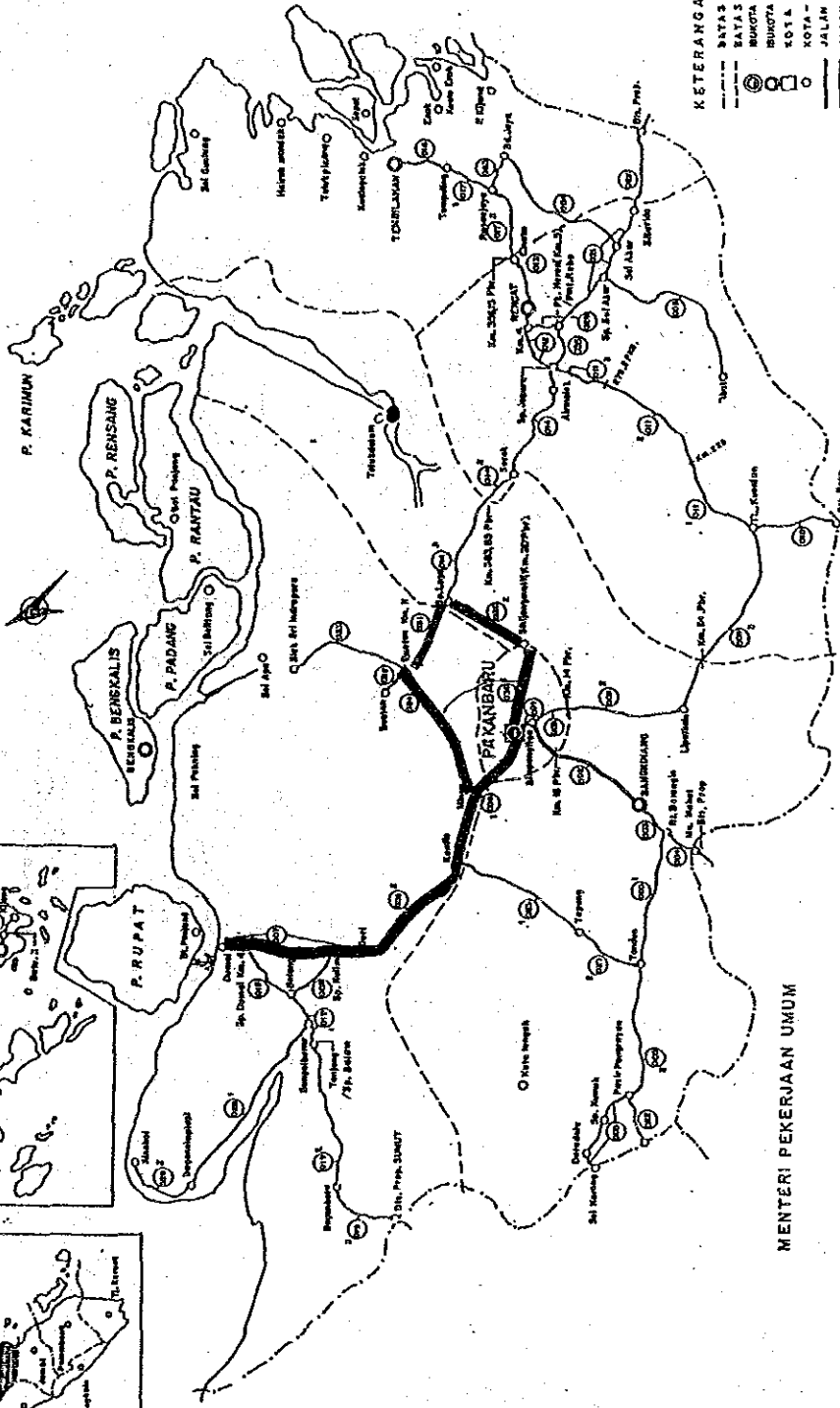
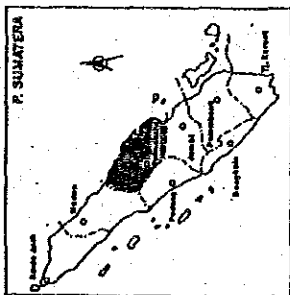
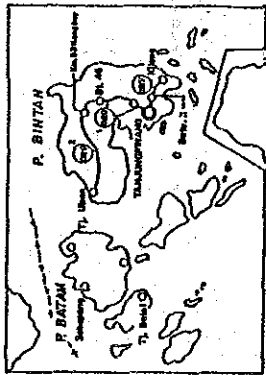
スマトラ道路網図

- |       |       |     |     |
|-------|-------|-----|-----|
| ———   | 主幹線道路 | ——— | 州境界 |
| ———   | 幹線道路  | ——— | 群境界 |
| ..... | 地方道   |     |     |



LAMPIRAN 4A : KEPUTUSAN MENTERI PEKERJAAN UMUM  
 NOMOR : /KPTS/1990  
 TANGGAL :  
**PROPINSI R I A U (09)**

現地調査ルート



- KETERANGAN :
- BATAS PROPINSI
  - BATAS KABUPATEN
  - BUKOTA PROPINSI
  - BUKOTA KABUPATEN
  - KOTA MADYA
  - KOTA-KOTA LAIN
  - JALAN ARTERI
  - JALAN KOLEKTOR
  - JALAN LOKAL
  - NOMOR RUAS JALAN
  - NO. 200 RUMAH JALAN
  - PELABUHAN

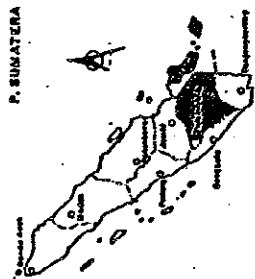
Skala :  
 0 5 10 20 30 40 50

MENTERI PEKERJAAN UMUM

RADINAL MOOCHTAR

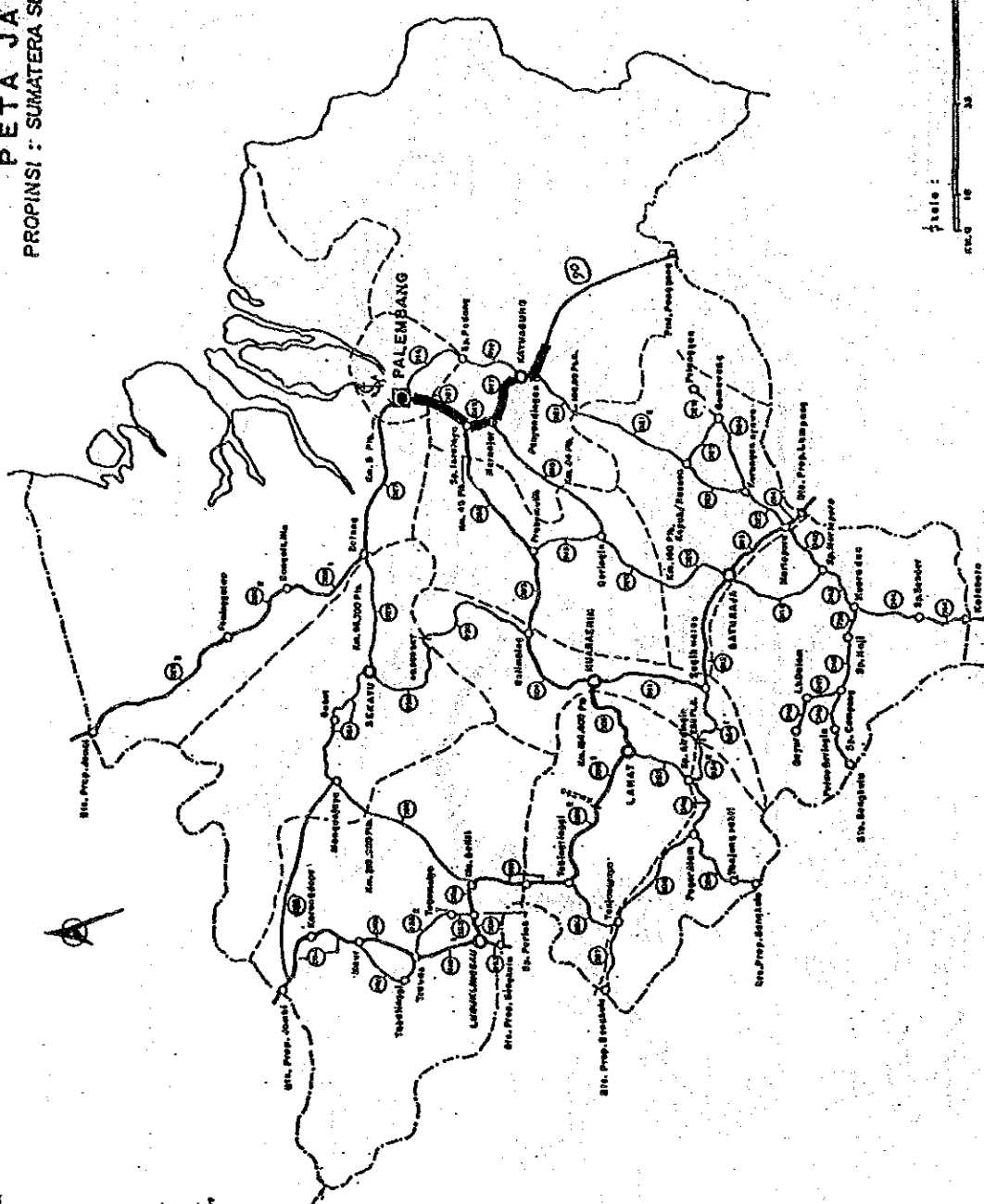
PETA JALAN  
PROPINSI : SUMATERA SELATAN

現地調査ルート



KETERANGAN :

- BATAS PROPINSI
- BATAS KABUPATEN
- BATAS PROPINSI
- BATAS KANTON
- BATAS DESA
- BATAS DESA LAM
- BATAS DESA BARU
- JALAN NASIONAL
- JALAN PROPINSI
- JALAN KANTON
- JALAN DESA
- JALAN RING JALAN
- PELABUHAN





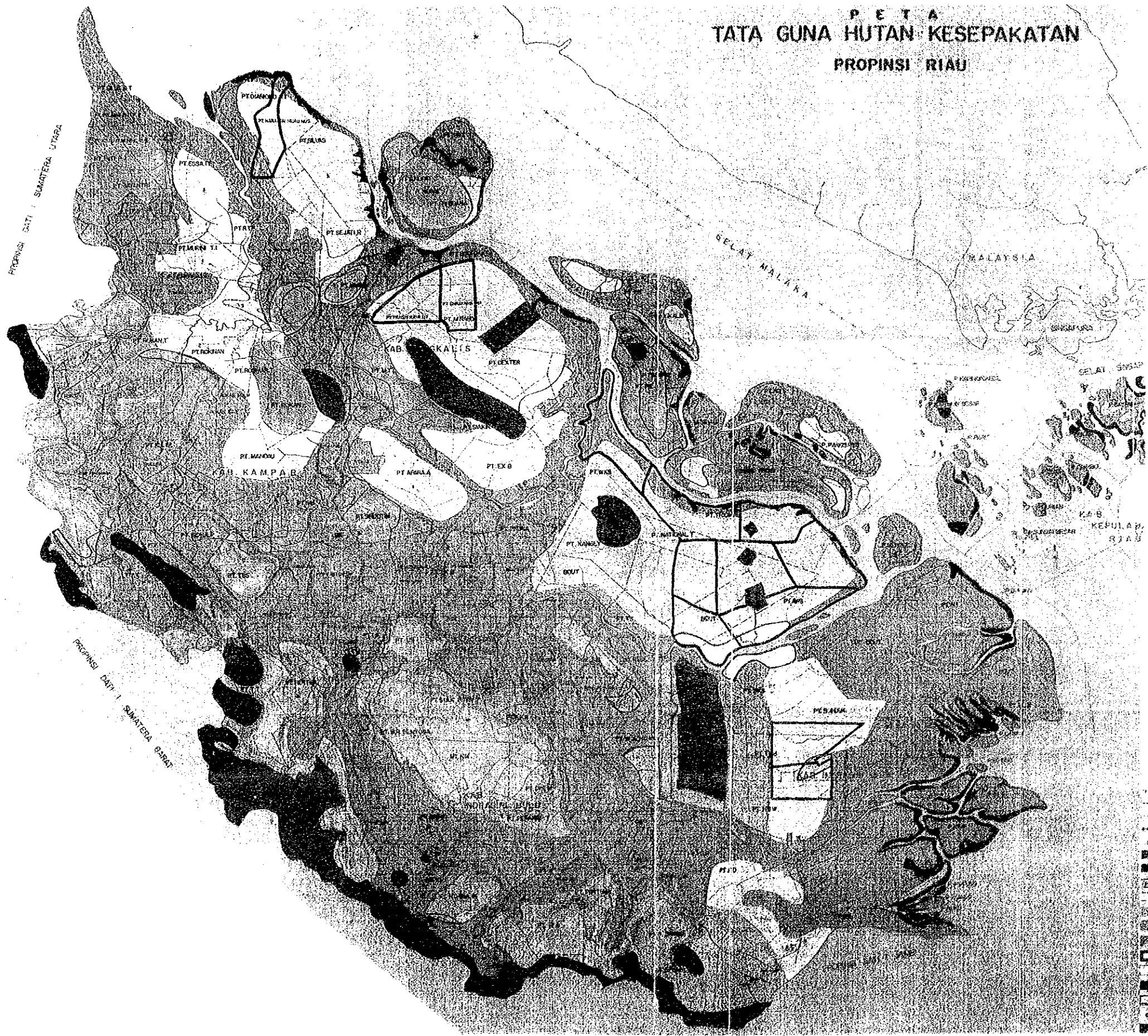
PETA  
TATA GUNA HUTAN KESEPAKATAN  
PROVINSI RIAU



凡 例

- 州境
- 州境
- 森林境界
- 道路
- 河川
- 自然保護林
- 保護林
- 限定林業用林
- 林業用林
- 転用可能林
- プランテーション地域
- 入植地域
- 特別処理プランテーション地域
- 産業育林
- 湖木林
- 転換林
- 確定境界線
- 教育林

リアウ州土地利用計画図  
 PETA  
 TATA GUNA HUTAN KESEPAKATAN  
 PROPINSI RIAU



凡例

- 領海線
- 州境
- 森林境界
- 道路
- 河川
- 自然保護林
- 保護林
- 固定林業用林
- 林業用林
- 転用可能林
- プランテーション地域
- 入植地域
- 特別制度プランテーション地域
- 産業森林
- 潮木林
- 転換林
- 固定境界線
- 教育林





## 収集資料リスト一覧表

### 1. 図 面

- (1) スマトラ道路網図
- (2) リアウ州道路網図
- (3) 南スマトラ州道路網図
- (4) リアウ州開発計画図

### 2. 文 献

- (1) インドネシアの道路 1991年3月 JICA派遣専門家 本名一夫 (インドネシア公共事業省道路総局計画局)
- (2) Road Condition Surveys 89/90 調査結果
- (3) REPELITAV Chapter13 Communication and Tourism
- (4) Statistical Year Book of Indonesia 1989
- (5) RIAU in Figures (Annual Statics) 1988/1989
- (6) 経済協力計画策定のための基礎調査 -インドネシア- 昭和63年 (財)国際開発センター
- (7) インドネシア・ハンドブック(1989/90年版) ジャカルタジャパクラブ法人会
- (8) 北部スマトラ地域総合開発計画調査 最終報告書 1990年3月 国際協力事業団

## 対処方針案

### < 項目 >

### < 対処方針 >

1. 調査の名称  
和文名を“インドネシア国スマトラ東海岸道路開発計画調査”とし、英文名を“Development Study on Coastal Roads in East Coast of Sumatra”とする。  
→先方T/Rは、東海岸、西海岸両方の要請内容を含んだものであったため、東海岸道路の開発のみを対象とした調査名を上記の通り策定した。先方より強い変更要請があった場合英文調査名の変更もありうる。
2. 要請の内容
  - 1) メダンとバンドルランポンを結ぶ道路の基本計画の策定  
→地域道路網 (Network) を重視するのか、縦貫道を重視するのか、先方の要請背景をよく確認する。
  - 2) 優先区間についてのフィージビリティ・スタディの実施  
→基本計画策定の目標年次が要請書に記されていないので、先方に確認する。  
→F/S対象となる優先実施区間については、具体的な区間の明示は避け、最大実施可能な距離をM/Mに記載するにとどめる。  
調査団としては、新設区間・改良区間を併せて合計約150kmを限度として協議に臨む方針としたい。  
→なお、Phase Iにおいて、第1次F/Sを行ない、約450km程度を選定し、大きい意味での路線選定を行ない、その上で更に150kmを選定することとする。第一次F/S対象区間についても最大実施可能な距離をM/Mに記載する。
3. 報告書  
以下の報告書を作成するものとする。
  - a Inception Report 英文版30部  
(調査実施方針・スケジュール等を記載、現地調査開始時)

- b Interim Report 英文版30部  
(基本計画内容を記載、調査開始後6ヶ月)
- c Progress Report 英文版30部  
(F/Sに関する現地調査の結果を記載、  
調査開始後13ヶ月)
- d Draft Final Report 英文版30部  
(最終案を記載、調査開始後15ヶ月)
- e Final Report 英文版50部  
(dに対するコメントを踏まえた最終報告書  
上記コメント受領後2ヶ月)

→先方の要請書には報告書に関する記述が欠落している  
ので、我が方より上記を提案する。部数については、  
必要に応じて変更できるものとする。

- 4. 調査日程 調査期間は18ヶ月程度とする。S/WのTENTATIVE SCHEDULEの通り。  
→しかし、上記F/S対象優先実施区間との兼ね合いで、柔軟に対応出来ることとする。
- 5. 便宜供与 調査用車両、運転手等について、先方が対応困難と回答したときは、その旨をM/Mに記載することとする。
- 6. C/P研修員 C/P研修員受入れの要請があった場合、その内容をM/Mに記載することで対応する。
- 7. その他
  - 1) アンダーテイキングの内容の変更等については、請訓する。
  - 2) 調査内容の大幅な変更については、請訓する。
  - 3) 技術的な事項については、調査団の権限で対応できるものとする。
  - 4) 本格調査の実施時期については、平成3年度下半期を目途とするが明言は避ける。  
(本調査の前提となる将来開発計画の骨子はJICAで実施予定の南部スマトラ総合開発計画調査のP/R IIの中で提言がなされる予定である。1991年12月頃。)

- 5) 本格調査では、環境問題に対する配慮が必要になると思われるので、M/Mにその旨記載する。
- 6) 本調査の調査対象地域となっているが、今回の事前調査で訪問しない州の政府関係機関には、公共事業省道路総局より、調査への協力を依頼するよう要請する。
- 7) 地形図は、既存の5万分の1のものを航空写真撮影にて補足する方法で対応することを提案する。しかし、先方より、図化作業の要請があった場合は、調査団内で協議の上、対処方針を決定する。



JICA