


タイ国沿岸海運整備振興計画 事前調査報告書

昭和58年 4 月

国際協力事業団

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タイ国沿岸海運整備振興計画 事前調査報告書

昭和58年 4 月

国際協力事業団

国際協力事業団		
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序

日本国政府は、タイ国政府の要請に基づき、同国の沿岸海運整備振興計画にかかる調査を実施することを決定し、国際協力事業団を通じこの調査を実施することとした。

国際協力事業団は、本件調査を円滑かつ有効に進めるため、本格調査の実施に先立って運輸省海運局内航課長土井勝二氏を団長とする二回にわたる事前調査団（コンタクト・ミッション：昭和57年11月21日～同12月4日、事前調査：昭和58年2月13日～同2月19日）を派遣し、本件要請の背景、本件調査内容の確認、調査実施に関する問題点の整理を行うとともに、調査業務範囲等基本項目の協議、現地踏査及び関連資料の収集を行った。

本報告書は、現地業務の報告を兼ね、同業務を通じて得た本調査にかかるタイ国政府関係者の意向、本格調査実施上の問題点等を収録したものであり、今後実施する本格調査の立案等に関し参考となることを期待するものである。

最後に、調査に際して多大のご協力をいただいたタイ国政府関係者ならびに日本側関係者から心から感謝するとともに今後の調査が順調に実施されることを期待するものである。

昭和58年4月

国際協力事業団
理事 中 澤 弑 仁

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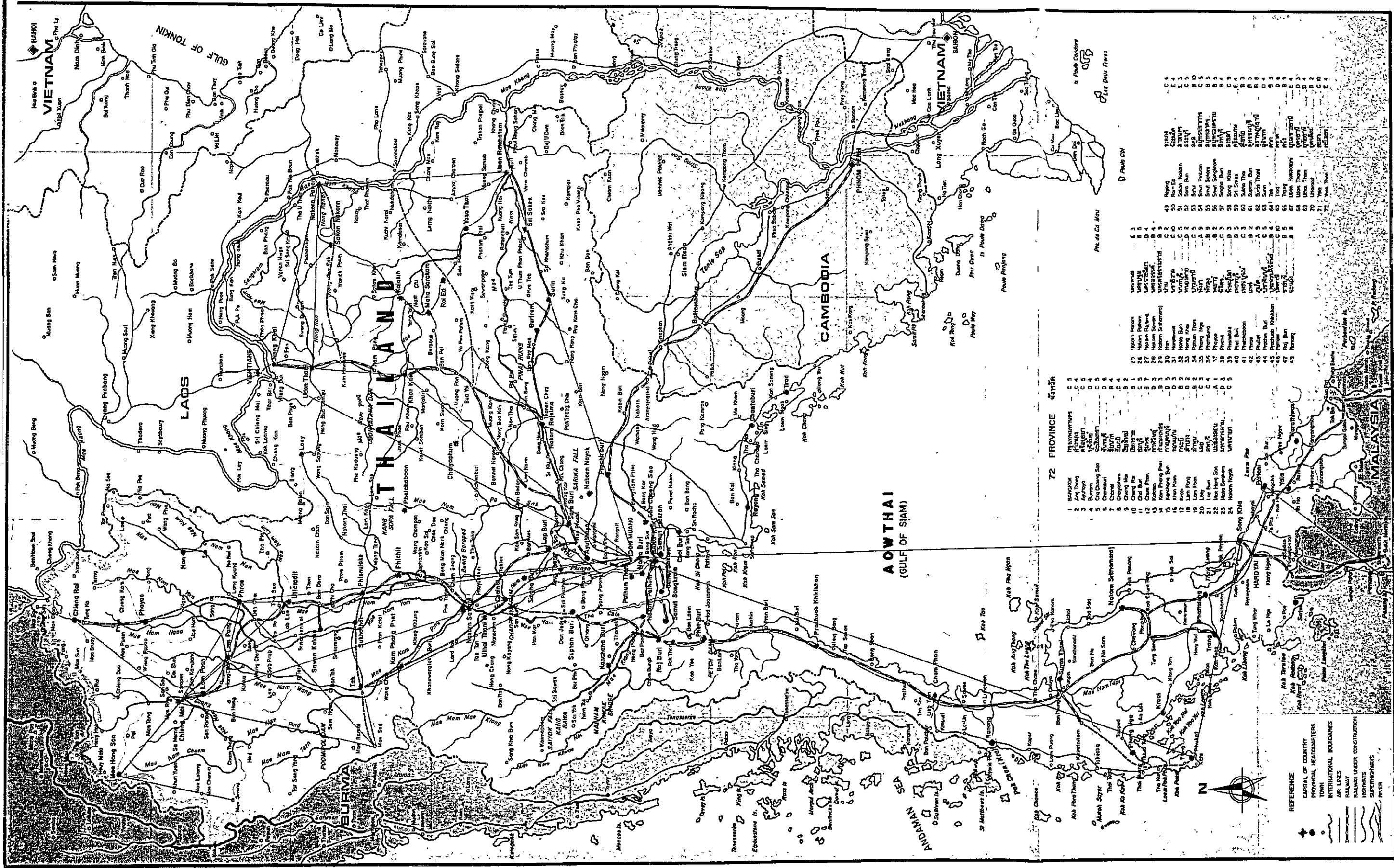
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 - RAILWAY
 - RAILWAY UNDER CONSTRUCTION
 - HIGHWAYS
 - SUPERHIGHWAYS
 - RIVER

PART I コンタクト・ミッション報告

I-1 調査の目的

タイ国政府は運輸・交通政策の主要な戦略として、省エネルギー型の輸送体系の整備を進めようとしており、この一環として沿岸海運の有効利用を推進する意向を有している。

このため同国政府は河川輸送を含む沿岸海運輸送体系の整備・振興を図るべく、その計画の立案につき我が国に協力要請してきた。

これに対し、日本政府では国際協力事業団を通じて本件調査を実施することとし、本格調査団の派遣に先立ち、先方の要請内容・背景を確認し、代表的な沿岸諸港、河川港、航路等を踏査し、先方関係者との協議を通じて我が方協力の基本方針、枠組等を検討するための基礎資料を得ることを目的として、コンタクト・ミッションを昭和57年11月21日より14日間タイに派遣した。

I-2 調査団の構成

団 長（総 括）土井勝二 運輸省海運局 内航課長
団 員（海運計画）三ツ矢憲生 運輸省海運局 定期船課補佐官
団 員（港湾計画）上田 寛 運輸省港湾技術研究所設計基準部 主任研究官
団 員（船舶計画）中崎郁夫 運輸省海運局 東京支局船舶検査官
団 員（業務調整）村田 晃 国際協力事業団 社会開発協力部 開発調査一課長代理

I-3 調査日程

I-3 調査日程

日順	月日	曜日	行	程	調 査 内 容
1	11. 21	日	東京 JL 461	→バンコク	
2	11. 22	月	大使館, JICA事務所打合せ, DTEC 打合せ, ジェトロ事務所打合せ		調査スケジュールの確定, 要請内容の確認, タイ国海運業の実情聴取
3	11. 23	火	ESCAP打合せ, 港湾庁(PAT)打合せ, バンコク港調査		ESCAP 海運専門家等との協議, バンコク港湾業務の実情把握
4	11. 24	水	タイ船主協会打合せ, 大使館打合せ		タイ国内航海運振興の可能性につき意見交換, 深谷書記官と意見交換
5	11. 25	木	チャオプラヤ川舟運実態調査		港湾庁船にてチャオプラヤ川踏査, 舟運実態, バンコク港湾業務の実情把握
6	11. 26	金	NESDB打合せ, バンコク → サタヒップ → ラヨン → バタヤ		NESDB の意見聴取, サタヒップ・ラヨン両港湾地区踏査, 内航海運用途につき意見交換
7	11. 27	土	バタヤ → レム・チャバン → バンコク		レム・チャバン港湾計画地区調査, 民間JETTYによる荷役業務(タビオカ)視察
8	11. 28	日	バンコク TH 406 → アケット		アケット港既存施設(主として錫輸出用)調査, プケット深海港計画地区視察
9	11. 29	月	アケット TH 371 → ハジャイ		団員打合せ
10	11. 30	火	ソンクラ港湾管理事務所訪問, ハジャイ TH 389 → バンコク		ソンクラ港湾管理事務所より港湾業務内容, ソンクラ深海港計画につき聴取, 港湾施設視察
11	12. 1	水	Harbour Dept. と協議, タイ海運振興会と協議		要請内容に関するHarbour Dept.の意見聴取, タイ海運振興会と協議
12	12. 2	木	Express Transport Office (ETO) と協議		ETO のフェリー導入計画につき聴取, 調査団主催レセプション
13	12. 3	金	大使館, JICA事務所打合せ, MOC 他との協議		大使館, JICA事務所への報告・協議, MOC 他との最終協議・資料収集
14	12. 4	土	バンコク KL 863 → 東京		

1 - 4 面会者一覧

DTEC (Department of Technical & Economic Cooperation)

- | | |
|-------------------------|-------------------------|
| 1. Mr. Kasem Urahasuvan | Deputy Director-General |
|-------------------------|-------------------------|

MOC (Ministry of Communications)

- | | |
|--------------------------------|--|
| 1. Dr. Chitti Wacharasindhu | Deputy Permanent Secretary |
| 2. Mrs. Krishnee Varanusupakul | Director, Transport & Communications Economic Div. |
| 3. Miss Tipsuda Charavejasarn | Chief, Development & Intermodal Studies Sub-Div. |
| 4. Miss Jatuporn Suwanparkpark | Transport Technical Officer |
| 5. Mr. Puchanee Suksamiti | " |
| 6. Mr. Siriwut Vadhananirantra | " |

Harbour Department

- | | |
|-------------------------------------|--|
| 1. Rear Admiral Prakit Prachuabmoh | Director-General |
| 2. Mr. Amphong Tiyaabhorn | Deputy Director-General |
| 3. Sen. Lt. Pongsakdi Vongsamootara | Director, Technical Div. |
| 4. Lt. Jg. Surin Charoenvat | Chief, Harbour Master Local Office 4, Songkhla |

PAT (Port Authority of Thailand)

- | | |
|--------------------------------|---|
| 1. Vice Admiral Kamnuan Punsri | Director-General |
| 2. Mr. Thara Rojthana | Director, Technical Office |
| 3. Miss Medhinee Sutdhiphisal | Engineer, Technical Office |
| 4. Mr. Ananda Wongsarnpa | Deputy Port Director,
Sattahip Commercial Port |

NESDB (National Economic & Social Development Board)

- | | |
|-------------------------|--|
| 1. Dr. Savit Bhotiwihok | Director, Center for Integrated
Plan of Operation |
|-------------------------|--|

OMMPC (Office of the Mercantile Marine Promotion Commission)

- | | |
|-----------------------------|-------------------|
| 1. Mr. Kamol Sandhikshetrin | Secretary-General |
|-----------------------------|-------------------|

ETO (Express Transport Office)

- | | |
|----------------------------|--|
| 1. Mr. Preecha Suwanametha | Director, Technical & Planning
Bureau |
|----------------------------|--|

TSA (Thai Shipowners' Association)

- | | |
|--|-------------------------------|
| 1. Mr. Kasom Kasemsuwan | Executive Secretary, TSA |
| 2. Mr. Bhumin Harinsutt | Harinsutt Transportation Ltd. |
| 3. Mr. Viroj Patamanivart | Thai Rung Roj Nawee Ltd. |
| 4. Miss Karnchana Singhachatprech-
akul | Wong Samutt Nawee Ltd. |
| 5. Miss Karoonrat Laisuwan | TSA |

ESCAP (Economic & Social Commission for Asia & the Pacific)

- | | |
|-------------------------|---|
| 1. Mr. Danko Koludrovic | Chief, Division for Shipping, Ports
& Inland Waterways |
| 2. Mrs. Keiko Kimura | Data & Information Service |
| 3. 大崎専門家 | 海運アドバイザー |
| 4. 永井専門家 | 港湾アドバイザー |

I - 5 意見交換内容の要旨

(本件調査内容に関する先方関係諸機関の考え方)

MOC : ① タイには現在 Coastal Shipping と呼べるものは実質的に無いに等しい。

日本側が既存貨物流動のうち、内航海運に適したものを洗い出し、先ずそれを内航海運に転移することに調査の力点を置くと言うのであれば、基本的には特に異存はない。タイにはこの分野での経験がないので、豊富な経験を有する日

本側の判断におまかせする。

- ② 提出した Terms of Reference に記載の内容を全て網羅しなければならないということではなく、日本側のやれる範囲で調査をしていただいて結構である。
- ③ 海運には、陸運、鉄道輸送には無い各種の制度上の制約要因があり、こうした制度面についても改善のリコメンデーションをして欲しい。

- PAT : ① バンコク港は主として国際貿易用であり、内航海運用としてはほとんど使用されていない。
- ② レム・チャバン港建設後のバンコク港との貨物流動は内航海運ではなく、陸運によることとなろう。
 - ③ チャオプラヤ河の舟運としてはバンコクの北方 240 km のナコンサワンとの間で、バージにより、上り 3～4 日、下り 2～3 日の行程で貨物流動がある。
 - ④ 輸入雑貨を輸入港から local ports にはしけで distribute する可能性は将来は考えられる。
 - ⑤ Cha-Am のセメント・プラントから現在陸運により東部地域にセメントを輸送しているが、Cha-Am→Sattahip 間を内航海運で連絡すればショート・カットになり、有利である。

Harbour Dept. :

- ① 内航海運振興は Harbour Dept. の進めている港湾整備計画と整合性の取れたものであることが必要である。
- ② 現在 Phuket, Songkhla 両深海港の整備計画を進めており、またチャオプラヤ河舟運に関しても仏のコンサルタントの調査結果がある（いずれも Harbour Dept. 所管）ので、参考にして欲しい。

NESDB : (NESDB は直接 involve され得る立場にないが、と前置き付きで)

- ① 南タイ地域開発計画と東部臨海工業地域開発とも関連づけて broad な観点から内航海運の可能性を考えてほしい。
- ② マレーシア、シンガポールとのネットワークを考慮に入れた regional coastal shipping の可能性も考えてほしい。

- TSA : ① タイ船主協会には 40～50 の海運会社が加入しているが、coastal shipping を担当しているのは 10 社以下であり、大手は coastal shipping には手を出していない。

- ② 船員資格により、内航、近隣外航（マレーシアのクアンタンまで行ける）、外航（世界どこへでも行ける）の３種類に分けられる。
- ③ バンコク→ソンクラ方向へ内航海運による general cargo の流動はあるが、逆方向はない。ソンクラ→バンコク方向は陸運、鉄道輸送が主体である。
- ④ 国家資金による道路整備、補助金付きの国鉄に比して、海運は何の補助もなく、備船すれば備船税を取られる等、極めて不利な立場に置かれ続けてきた。
- ⑤ チャオプラヤ河の河川航行に従事する tug boat は正確な数字はつかんでいないが、約 1,000 隻あるのではないか。米国ミシシッピ河の舟運を見習うべきことを以前から主張しているが、実行されない。
- ⑥ 今回の内航海運整備調査ではマレーシア、シンガポールへの航行を含めた地域内航海運も考えてくれるとありがたい。インドネシアは regulation が厳しく、touchy な問題を含んでいる。
- ⑦ （シャム湾内の原油の内航海運による輸送：中近東 → 南タイ西岸 → 南タイ東岸 → 東部タイ・バンコクの可能性につき質したのに対し）
陸運
内航
 原油の輸送はシャム湾内といえども国際 7 大石油資本に握られており、タイの内航海運業界の進出は困難であろう。
- ⑧ （T/R に要請のあるソンクラーサタヒップ間の RO-RO サービスの可能性につき質したのに対し）
 南タイと東部タイの間では見るべき物流、人流はない。

Songkhla Harbour Master Local Office 他：

- ① バンコク→ソンクラでは general cargo, oil, fertilizer 等が内航船で運ばれている。逆方向の内航輸送はほとんどないが、外航船がマレーシア・シンガポール→ソンクラ→バンコクという航行をしていく。
- ② 南タイ地域の諸港は主としてゴム、錫等の輸出用として使われている。

Ⅰ-6 コンタクト・ミッション見解

1. チャオプラヤ川の舟運は、農産物、セメント等の貨物について、相当の規模の輸送を行っており、かつ、かなり長い歴史と経験を有しているように見受けられる。
2. これに対しタイ湾沿岸の内航海運は、小規模かつ限定的なものを除き、実質的にはまだ無に等しい状態と認められる。
3. タイ側の今次協力要請は、これらの背景から出て来ており、日本側に対し、大規模かつ

長い歴史を有する内航海運の知識と経験を生かして、タイの沿岸海運整備振興計画を策定するよう求めているものである。

4. 現在、タイにおいては、本来内航海運に適したバルキーで、かつ、迅速性を要しない貨物を含め、国内の貨物輸送は、上述の河川運送を除き、殆ど全て陸上輸送（鉄道及びトラック）に依っているが、これらのうちには内航海運に転移させることが適当かつ可能な貨物があると見受けられる。
5. 今後の調査の力点としては、既存の鉄道、道路輸送体系との競合といった側面をも考慮しつつ、はじめから長期の内航海運整備振興計画を策定するというよりは、むしろ既存の国内貨物流動の内航海運への一部転移の可能性及びそのための必要な諸措置についての調査研究に置くことが適当である。そうすることにより、本件調査を単に調査のみに終わらせずに、より現実性のある具体化しうる計画の立案とすることができないかと思われる。
6. タイの国内貨物輸送が、殆ど全て陸上輸送に依っている原因として一般的な歴史あるいは経済事情のみならず、海上輸送の発達には不利な、いくつかの制度上の制約要因があると思われるが、タイ側は、これらについての改善策が提示されることを期待しており、当方としても注意深い配慮を加えた上、適切な提言をすることが望ましいと考えられる。
7. タイ側作成のT/Rの中では、かなり広範囲かつ多種の要請が盛られているが、先方との協議を通じて、必ずしもその全てを本件調査の中に網羅する必要はない旨両者一致している。

1-7 港湾の現況及び将来計画

コンタクトミッションが視察した港湾及び港湾計画予定地は以下の通りである（図-1参照）。

- (ア) バンコック港
- (イ) サタヒップ港
- (ウ) ラムチャバン港計画予定地
- (エ) ラヨン港（マプタプット港）計画予定地
- (オ) プケ港計画予定地
- (カ) ソンクラ港計画予定地

以下に各港ごとの港湾の現況及び将来計画について今回の視察を通じて入手した情報の概要を示すこととする。

1. バンコック港

(1) 現 況

バンコック港はチャオプラヤ川沿いに位置し、PAT (Port Authority of Thailand) により管理運営されているタイ最大の港湾である。河口より約 27 km 上流に位置するが、チャオプラヤ川は港より下流で -8.5 m (M.S.L.) の水深を維持しており、10,000 ~ 12,000 dwt の船の航行が可能である (図-2 参照)。

港湾施設の配置は図-3 の通りである。このうち主要な施設は、一般荷物用の岸壁が 10 バース、1,660 m あり貨物取扱能力は 2.2 百万トン/年、コンテナ用のふ頭が 1,528 m (同時に 6 隻のコンテナ船が着岸可能) ; この他、ドルフィンが 36 基、ブイが 6 基である。

取扱貨物量は、1981 年の統計で 4.93 百万トン/年の実績があり、このうち輸入量が 3.74 百万トン/年、輸出量が 1.19 百万トン/年である。なお、内貿貨物量は全体の 5 % 程度となっている。貨物量の最近 5 年間の推移を見ると、輸入はほぼ横ばい、輸出は 10 % 前後の伸びを続けている様である。また、貨物構成の特徴として、バンコック港の急激なコンテナ化を反映して輸出貨物の 88 %、輸入貨物の 8 % がコンテナ貨物であり、その傾向が年々顕著化していることがあげられる。

(2) 将来計画

年々増加する取扱貨物を現存施設でさばききれないため、バンコック港より 10 km 程度下流のチャオプラヤ川左岸沿いに 41 基のドルフィンを建設する計画がある。完成時には、12,000 dwt 級の船が 8 隻係船できることになる。

2. サタヒップ港

(1) 現 況

サタヒップ港は、軍港として整備されてきた港で 1979 年以来、商港として PAT の管理下に入っている。サタヒップ港の施設配置は図-4 に示す。サタヒップ港は、幅 100 m、長さ 2.7 km の航路を持ち、港の西方に位置する長さ約 1,000 m の防波堤で守られている。岸壁は西側に約 540 m、北側に約 360 m が整備され、水深は -10 m (L.L.W) が維持されている。

取扱貨物は、1980 年の統計によれば約 50 万トン/年で、内訳は輸入が 33 万トン、輸出が 17 万トンである。輸入品目は天然ガス用のパイプライン材料があり、輸出品目はタピオカである。

(2) 将来計画

サタヒップ港の将来計画は、シンガポールやオーストラリアのコンサルタントの手でかなり大規模な整備計画が提案されているが、現在は東部のラヨン港等のフィージビリティ調査が実施されており、大規模整備計画については中断の状況である。当面の計画としては、1983年にコンテナ貨物を取扱うため必要となる岸壁、突堤を整備する他、水深を-14.5m(L.L.W.)まで増深する計画等がある。

3. ラムチャバン港

ラムチャバン港はバンコック港の外港として以前から整備計画が検討されてきた。

1972年、1978年の2回にわたりオランダのコンサルタントにより調査されたが、現在はその見直しを進めているところである。ラムチャバン港の開発については1982年11月に閣議決定され本格的な検討に着手したところである。現時点の計画では、ラムチャバン港の開発プロジェクトは15～20年の期間を要し、最終段階では21隻の船が同時に係船できる総延長2,800mの岸壁を整備し、10.5百万トン/年の貨物を取扱う港湾を整備する予定である。ラムチャバン港の港湾計画を示したのが図-5である。

4. ラヨン港(マプタプット港)

ラヨン港は、マプタプット地区がタイ国内で重化学工業地区の最適地であり、そのための工業港として整備すべきだという方針に従って将来計画を検討している段階である。ラヨン港開発計画のフィージビリティ調査は現在日本のコンサルタントの手で進められている。

5. プケ港

(1) 現 況

プケ港には現在、FMO(Fish Marketing Organization)の管理する延長121mの係船岸、民間所有の延長25mの係船岸が4バース程度あるのみである。取扱貨物も、1979年の統計によれば20万トン/年程度の小規模なものである。内訳は輸入は石油がほとんどで13万トン/年、輸出は生ゴムと錫で7万トン/年であり、内貿はゼロである。

(2) 将来計画

プケ港は生ゴム、錫の大生産地を背後に控え、将来ともこれらの輸出量の増大が予想される。このため、タイ政府はオーストラリアのコンサルタントにプケ港の整備計画を作成させ、現在その計画に基づいて1983年から港湾整備に着手しようとしている状況である。整備計画の概要は表-1に示す通りである。

6. ソンクラ港

(1) 現 況

ソンクラ港の現存施設は延長25mの民間所有の岸壁が5バースあるのみである。取扱貨物量は1979年の統計で80万トン/年であり、内訳は輸入は石油、輸出は生ゴムがそのほとんどである。なお現存の岸壁はソンクラ湖内にあり水深が十分でないため、バージあるいは小型船で生ゴムを沖まで輸送し、そこで大型船へ積み直して輸出する荷役形態をとっている。

(2) 将来計画

ソンクラ港は背後にタイ国内で人口第2位の都市ハジャイを有し、将来は南部タイの拠点港として発展することが予想される。ソンクラ港の整備計画はブケ港と同じコンサルタントの手で作成され、この計画も1983年から具体的な検討に入る予定である。図-6は計画平面図であり、計画の概要は表-1に示す通りである。

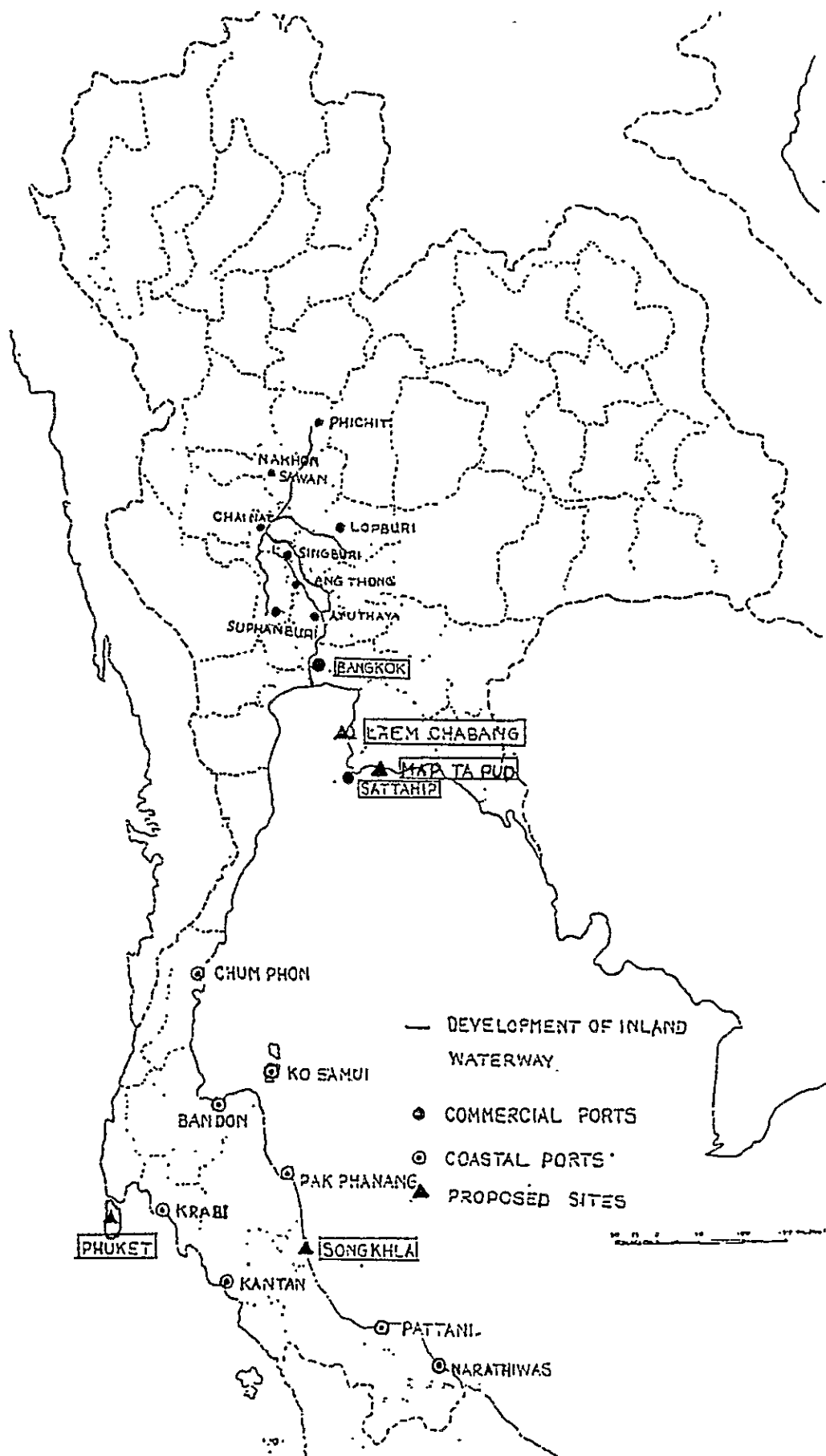
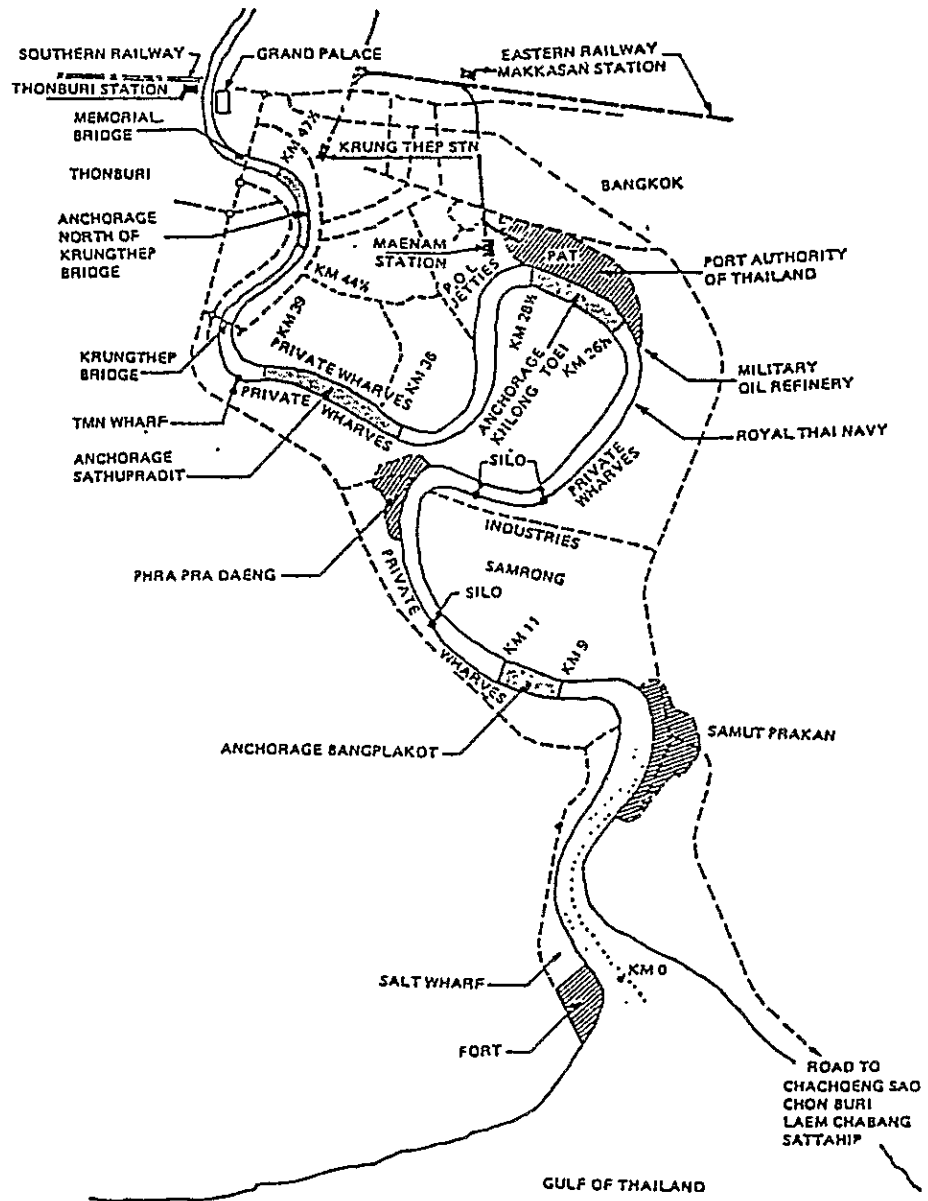
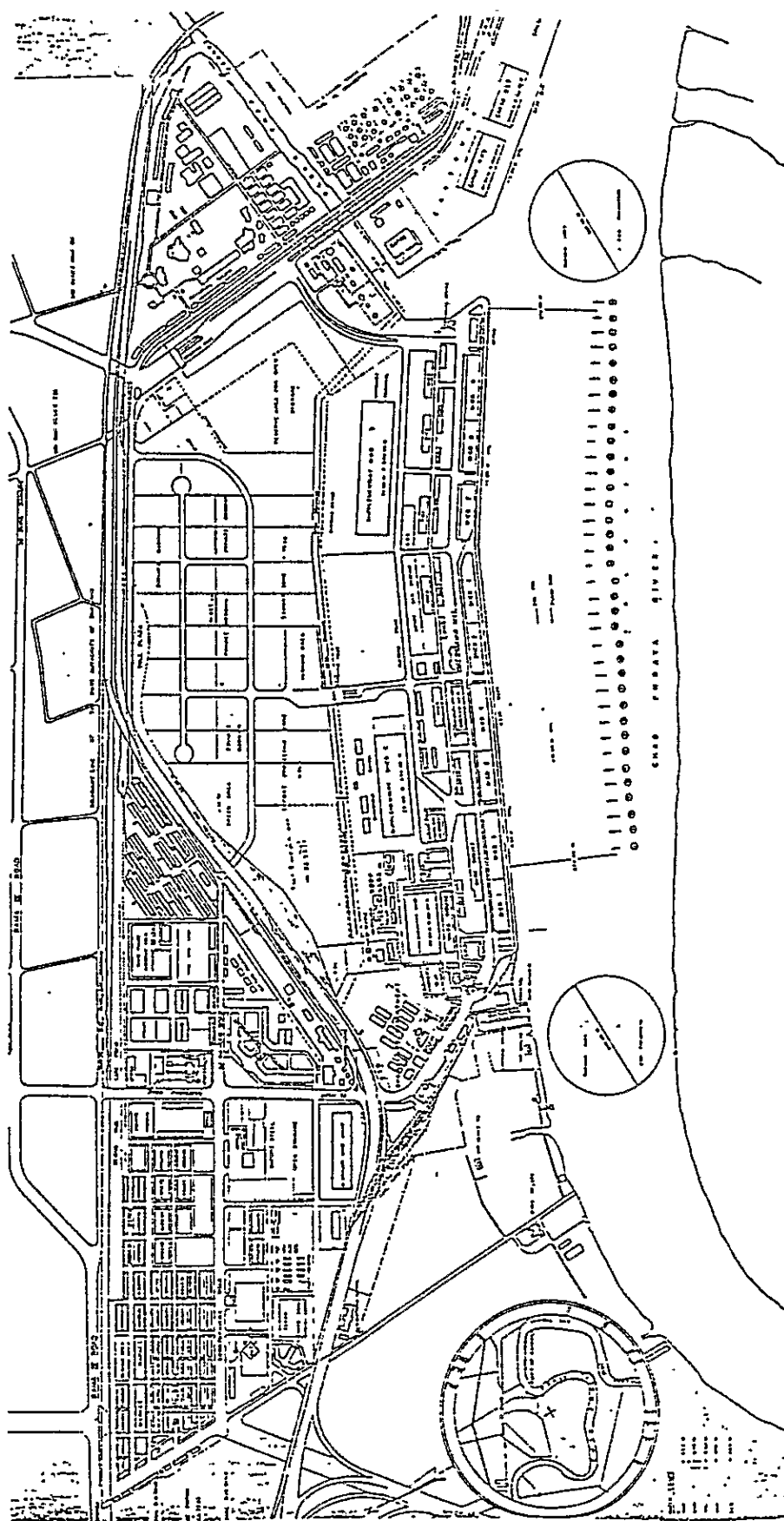


图-1 港湾位置图



図一2 バンコック港位置図



図面 3 バンコック 図面

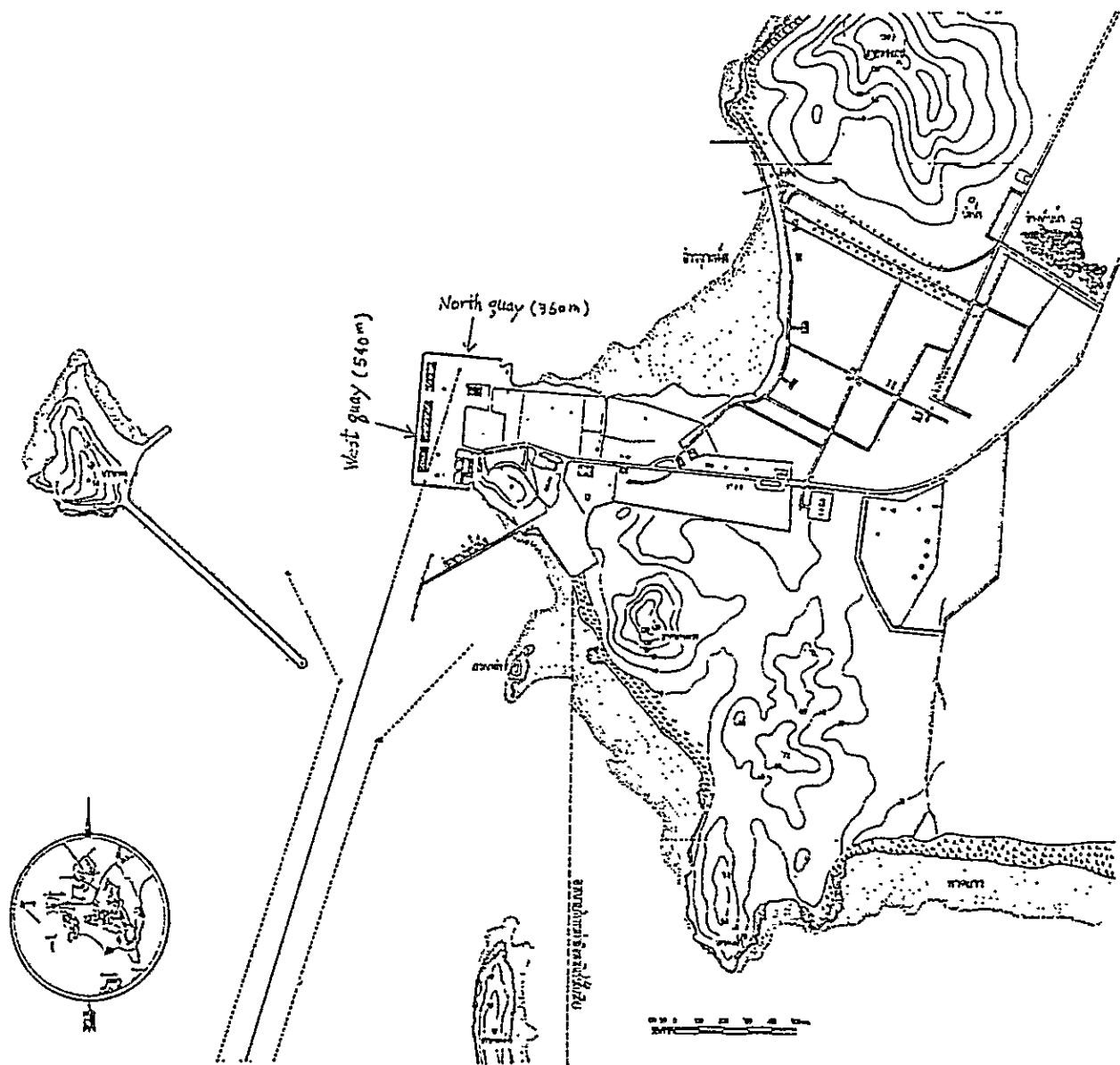


図-4 サタヒップ港平面図

Items	Songkhla Port	Phuket Port
Location	at the entrance to the extensive of Lake Songkhla	At Kham
Site	7 13' 40" N, 100 34' 20" E	7 49' 10" N, 98 24' 30" E
Number of berth	3	2
Type of commodity	general cargo and container	general cargo and container
Size of vessel	10,000 DWT.	15,000 DWT.
Quay Structure	Open-piled quay	Concrete gravity wall
Length of quays.. (metre)	510	360
Number of transit shed	1	1
Area of transit shed (metre ²)	6,720	3,600
Channel		
-width (metre)	120	120
-depth (metre below C.D.)	9	9
-diameter of a ship turning area (metre)	300	300

表-1 プケ港及びソクラ港の整備計画概要

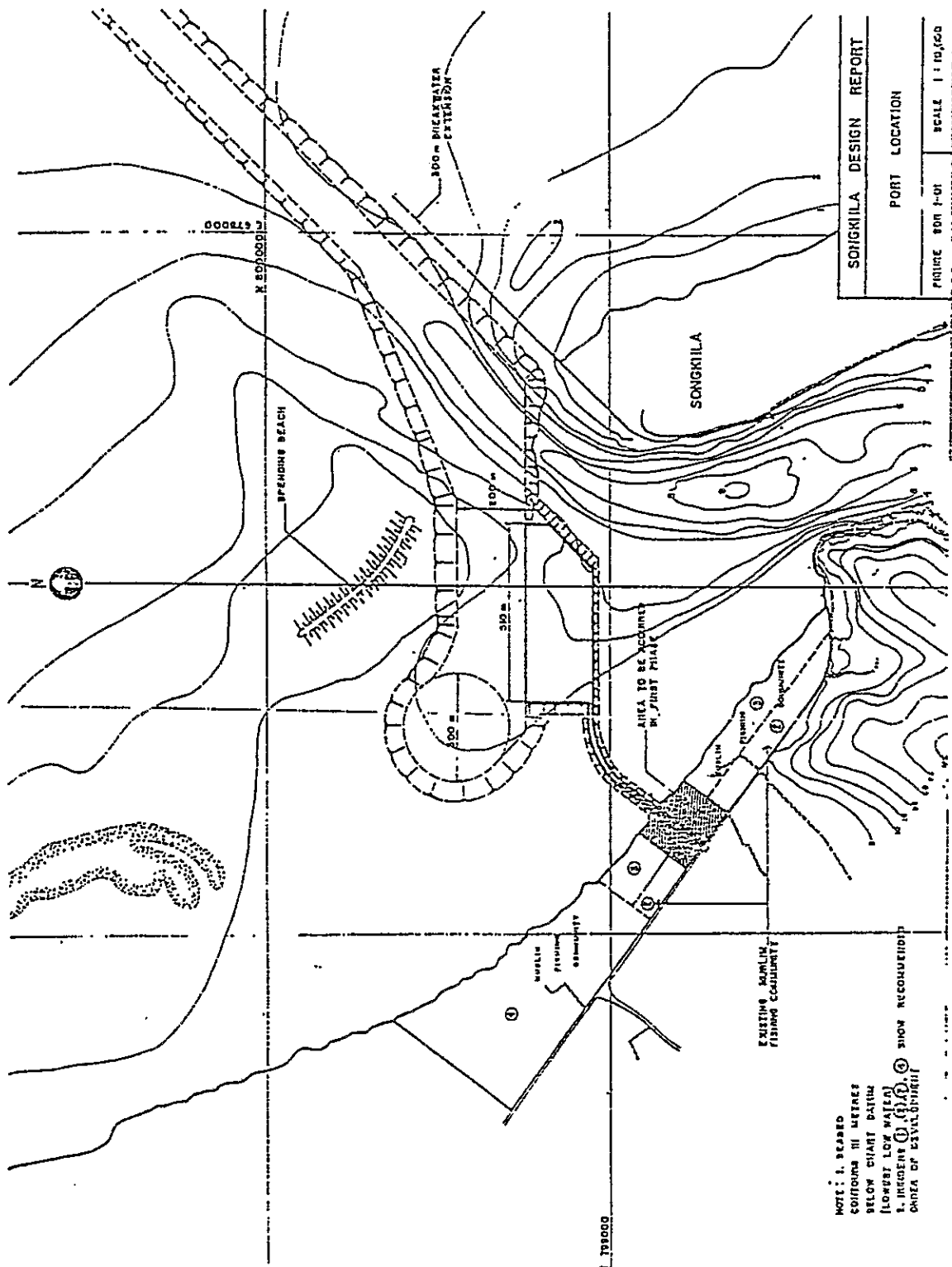


図-6 ソンクラ港計画平面図

PART II S/W協議ミッション報告

II-1 調査団派遣の背景・目的

昭和57年11月21日～同12月4日のコンタクト・ミッション派遣の結果に基づき、日本政府内で我が方協力の基本方針、枠組等に関し議論を重ね、本格調査の Scope of Work 案の作成を了したため、これにつきタイ側と協議し、S/W を締結することを目的として、S/W協議ミッションを昭和58年2月13日から7日間タイに派遣した。

II-2 調査団の構成

団 長（総 括）土井勝二 運輸省海運局内航課長
 団 員（海運計画）堀内哲夫 運輸省海運局外航課補佐官
 団 員（港湾計画）上田 寛 運輸省港湾技術研究所主任研究官
 団 員（業務調整）村田 晃 国際協力事業団開発調査一課長代理

II-3 調査日程

日順	月日	曜日	行 程	調 査 内 容
1	2/13	日	東京 $\xrightarrow{JL467}$ バンコク	日本大使館深谷書記官と打合せ
2	2/14	月	運輸通信省と協議, DTECと協議	運輸通信省 Jeon Jan 次官他とS/W協議, DTECとS/W協議
3	2/15	火	運輸通信省とS/W協議	運輸通信省 Chitti 次官補他とS/W協議
4	2/16	水	S/W署名	ミニッツ文面確認, S/W署名
5	2/17	木	Amphur Tha-Rua 視察(舟及び車)	舟艇にてバサック川沿岸の Amphur Tha-Rua 地区(セメント, 穀物の舟運拠点)視察
6	2/18	金	運輸通信省と協議, 日本大使館, JICA事務所と協議	Jeon Jan 次官他と協議
7	2/19	土	バンコク $\xrightarrow{KL863}$ 東京	

Ⅱ - 4 面会者一覧

MOC (Ministry of Communications)

- | | |
|--------------------------------|--|
| 1. Mr. Jeon Jan | Permanent Secretary |
| 2. Dr. Chitti Wacharasindbu | Deputy Permanent Secretary |
| 3. Mrs. Krishnee Varanusupakul | Director, Transport & Communications Economic Div. |
| 4. Miss Tipsuda Charavejasarn | Chief, Development & Intermodal Studies Sub-Div. |
| 5. Miss Jatuporn Suwanparkpark | Transport Technical Officer |
| 6. Miss Anong Sethanunt | Planning Div. |
| 7. Mr. Sayunh Sunantivathn | Director, Harbour Master Div., Harbour Dept. |
| 8. Mr. Pracket | Harbour Dept. |
| 9. Miss Tim Tien | Economist, Technical Div., Harbour Dept. |
| 10. Mr. Thara Rojthana | Director, Technical Office, Port Authority of Thailand |

DTEC (Department of Technical & Economic Cooperation)

- | | |
|-------------------------------|---------------------------------------|
| 1. Mr. Kasem Urahasuvan | Deputy Director-General |
| 2. Mr. Pracha Chawasilp | Director, External Cooperation Div. Ⅱ |
| 3. Mr. Sutin Susila | Colombo Plan Sub-Div. |
| 4. Mr. Surayuth Kungsadan | " |
| 5. Mr. Tirath Viputtikullavat | " |

MOF (Ministry of Finance)

- | | |
|---------------------------|---|
| 1. Lt. Jg. Anan Panananda | Director, Import Inspection Div., Department of Customs |
|---------------------------|---|

TSA (Thai Shipowners' Association)

- | | |
|-------------------------|---------------------|
| 1. Mr. Kasom Kasemsuwan | Executive Secretary |
|-------------------------|---------------------|

Ⅱ－５ 結論と提言

1. 本格調査の枠組に関する協議

(1) 主要討論点

(イ) 内陸水運開発計画に関し、タイ側はチャオプラヤ河の Nakorn Sawan 港及び

Taphanhin 港建設計画につき近く土地収用が開始される予定であり、これを日本側が見直すというようなことは計画（１９８４年より建設開始予定）そのものの事業化が遅れる恐れがあると強く主張し、上記両港の建設計画を所与の条件として受け取って欲しい旨強く要請した。これに対し日本側は従前内陸水運に開発政策の手がさし伸べられてこなかった状況の下で、折角タイ財政当局の承認も得て河川港建設計画の事業化が開始されようとしている折に、我が方調査の都合だけでこの計画を延期させてしまうことの得失を判断し、また日本側がたとえ上記河川港計画を見直すにしても、タイ側がそれを全く無視して事業化に着手してしまう可能性も予想されたため、先方の要請に応じた。

(ロ) タイ側はまた、沿岸海運を広義に解釈し、本件調査対象に近隣諸国〔マレーシア、シンガポール、インドネシア（北スマトラ）〕とタイとの sub regional な沿岸海運をも含めるよう要請した。ただしこの調査については特にこれら近隣諸国へ出向いて調査したりはせず、タイ側より入手可能な通関統計等の資料に基き実施する旨合意された。

(ハ) 海運整備振興には港湾整備が不可欠（特に地方諸港湾の整備が遅れているタイにおいては）であり、本件調査の中でも港湾整備計画調査が重要不可欠な位置付けを占めることとなるが、タイ側はこの中に port management の調査を含めて欲しい旨要請し、我方も合意した。

(ニ) タイ側は沿岸海運整備振興計画の立案に際し、制度的な問題にもメスを入れ、必要に応じ具体的提言（recommendation）をするよう強く要請するところがあった。

日本側もこれにつき充分留意する旨合意した。

なお上記(イ)、(ロ)、(ハ)、(ニ)については後掲の議事録（Summary of Discussions）に、双方合意した旨記載した。

(2) TERMS OF REFERENCE

THAILAND COASTAL SHIPPING STUDY

TERMS OF REFERENCE

1. INTRODUCTION: In accordance with the National Transport development strategy to increase efficiency in transport operation, the Thai Government has launched an extensive transport infrastructure projects aiming at switching from the more energy intensive mode to the less intensive at the same time to facilitate the linkage between modes.

In the area of coastal shipping projects have been launched to develop coastal ports in South Thailand to facilitate vessel handling and cargo handling. This together with development of other deepsea ports of Songkhla, Phuket and Sattahip would provide the basic infrastructure for coastal shipping, domestic and neighbouring countries.

The Government now wishes to ensure that coastal shipping is expanded to the extent practical and economical to distribute goods between the ports.

The study is expected to result in a series of programme which the government can promote or assist in arranging finance through the financial institution.

2. OBJECTIVES: To identify potential for coastal shipping services and landward linkage between the Bangkok Ports area (including Sattahip) and inland ports by determining the potential traffics which can be technically and economically feasible for coastal shipping services.

- To identify the package of fleet and operation system for coastal shipping services.
- To calculate the technical and financial viability of such services.
- To recommend promotional programme for development of coastal shipping services thus recommended.

3. SCOPE OF CONSULTING SERVICES:

- (a) To achieve the objective outlined above. The consultant shall undertake a preliminary review of the existing traffic between the hinterlands of the ports for all modes and identify list of potential commodities which are technically and economically suitable for coastal shipping.
- (b) To review the present state of coastal shipping services, including the structure of fleet, current services, forwarding and freight arrangement and the service cost to shipowners.
- (c) From traffic study and evaluation of present shipping services, the consultant shall review the situation of the existing ports and the development programme for ports improvement in respect to navigation and cargo handling and landwards linkages, to identify the type of shipping appropriate for serving the traffic. This could include fleet replacement programme, Ro-Ro services, and lightarage services from inland origins.
- (d) To define the fleet requirment, operation system and calculate the cost of services and determine the economic and financial feasibility for such programme.

- (e) To recommend to the Government the promotional activities required to effect such development.

4. REPORT AND SCHEDULING: The consultant shall commence the study within one month of signature of contract for consulting services. The following reports will be submitted in English in..... copies to the Government and..... copies to the World Bank.

(a) Interim Report Within , 2 months

(b) Draft Final Report Within 6 months

(c) Final Report within 8 months

5. GOVERNMENT SERVICES: The Government will

- (1) make available to the consultants all existing statistics, charts, vessels registration records and previous ports and transport project studies.
- (2) undertake to provide all related regulation on shipping navigation, customs arrangements, business laws and related regulations governing coastal shipping.
- (3) provide the services of professional and/or administrative liaison officers to facilitate data collection and advise the consultant on the institutional matters.

SUBJECT TO COVER

- 1) Modernization of present Bangkok South Coast shipping services.
- 2) RO-RO services between Sattahip/Songkhla.
- 3) Lighterage services linkage with inland waterways.

(3) SCOPE OF WORK & SUMMARY OF DISCUSSIONS

SCOPE OF WORK
FOR
THE COMPREHENSIVE DEVELOPMENT STUDY
OF
COASTAL SHIPPING
IN
THE KINGDOM OF THAILAND

AGREED UPON BETWEEN
THE MINISTRY OF COMMUNICATIONS
AND
JAPAN INTERNATIONAL COOPERATION AGENCY

Dated : February 16, 1933

Chitti Wacharasindhu

Dr. Chitti Wacharasindhu
Deputy Permanent Secretary
Ministry of Communications

Katsuji Doi

Mr. Katsuji Doi
Leader of the Japanese
Preliminary Survey Team

I. INTRODUCTION

In response to the request of the Government of the Kingdom of Thailand, the Government of Japan has decided to conduct the study on the coastal shipping in the Kingdom of Thailand (hereinafter referred to as "the Study") within the general framework of technical cooperation between Japan and the Kingdom of Thailand which is set forth in the Agreement on Technical Cooperation between the Government of Japan and the Government of the Kingdom of Thailand. The Japan International cooperation Agency (hereinafter abbreviated as "JICA"), the official agency responsible for the implementation of the technical cooperation programmes of the Government of Japan, will carry out the study in accordance with the relevant laws and regulations in force in Japan and in close cooperation with the authorities concerned of the Kingdom of Thailand.

II. OBJECTIVE OF THE STUDY

The Study aims at formulating a comprehensive development plan for the coastal shipping and ports in Thailand in order to contribute to the implementation of the National Development Plan made by the Thai Government in such sectors, by identifying potential traffics for coastal shipping services, comparing the costs among different modes of transportation and at the same time giving due consideration to the possible linkage between these modes.

III. SCOPE OF THE STUDY

- (a) To make a preliminary review of the existing surface cargo traffic and identify potential commodities which are technically and economically suitable for coastal shipping.
- (b) To review the present state of coastal shipping service (including inland waterways transportation), the structure of fleet, forwarding and freight arrangement, the service cost to shipowners, and regulations and institutions.
- (c) To review the situation of the existing ports including the amount of cargoes and the state of facilities.
- (d) To analyse and study the cargo traffic (present and future) with particular emphasis on the potential for shifting to coastal shipping from other modes.
- (e) To make a development and improvement plan for the Thai coastal shipping and ports in accordance with the result of the above-mentioned review and analysis.
- (f) The studies for coastal shipping and ports also include analysis of operation system, cost analysis, and study of the economic and financial feasibility for the plan.

IV. STUDY SCHEDULE

The Study shall start in June 1983 and end in 1984, as shown in Annex, unless otherwise any cause of delay.

V. REPORT

JICA will prepare and submit the following reports in English to the Royal Thai Government in the course of the Study.

(1) Inception Report

- 20 copies
- at the beginning of the field survey

(2) Progress Report

- 20 copies
- at the end of the field survey

(3) Interim Report

- 30 copies
- within 9 months after the commencement of the Study

(4) Draft Final Report

- 30 copies
- within 14 months after the commencement of the Study
- The Royal Thai Government will provide JICA with its comments within one month after the receipt of the Draft Final Report.

(5) Final Report

- 100 copies
- within one month after the receipt of the comments on the Draft Final Report

VI. UNDERTAKING OF THE GOVERNMENT OF THAILAND

In accordance with the Agreement on Technical Cooperation between the Government of Japan and the Government of the Kingdom of Thailand, the Government of Thailand shall accord privileges, immunities and other benefits to the Japanese Study team and, through the authorities concerned, take necessary measures to facilitate smooth conduct of the Study; especially

1. To provide the Study team with available relevant data, information, and materials for the execution of the Study, and also to make arrangements for the Study team to take those data and materials back to Japan for the finalisation of the Study.
2. To assign counterparts personnel to the Study team during the Study period.
3. To provide permits, if necessary, for field survey upon the request of the Study team.
4. To provide the Study team with suitable office space, office equipment, clerical services for the execution of the Study.
5. To provide the security for the Study team.

VII. UNDERTAKING OF THE GOVERNMENT OF JAPAN

1. To dispatch a full scale Study team to the Kingdom of Thailand to conduct the Study.
2. To bear travel expenses and fares between Japan and Thailand and those necessary for travelling within Thailand as well as charges of lodging^{and} and living expenditure for the members of the Study team.

TENTATIVE STUDY SCHEDULE

Months Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
work in Thailand																
work in Japan																
Submission of Report																
Explanation and Discussion on Report																
Supplementary Work in Thailand																

Remarks : IC : Inception Report PR : Progress Report MIT : Interim Report
 DR : Draft Final Report FR : Final Report

Summary of Discussions

on

Comprehensive Development Study of Coastal Shipping
in The Kingdom of Thailand Between the Japanese Preliminary
Survey Team and the Royal Thai Government Authorities Concerned

The Japanese Government¹, at the request of the Royal Thai Government², dispatched a preliminary survey team from February 13 to February 19, 1983, through the Japan International Cooperation Agency (JICA), to carry out the preliminary survey for the Comprehensive Development Study of Coastal Shipping in the Kingdom of Thailand. The team undertook a field survey and held a series of discussions with officials concerned of the Royal Thai Government. A list of participants to those discussions is attached as Annex 1.

The results of those discussions are as follows :

1. With regard to the developments plan of inland waterways transportation the Thai side requested to consider the on-going development projects of Nakorn Sawan and Taphanhin Ports as given conditions in the plan since further study would delay the implementation. The Japanese side agreed to the above request.

2. The Thai side requested to include in the Study of sub regional trade(home trade) traffic development between Thailand and Malaysia, Singapore and Indonesia (North Sumatra).

The Japanese side agreed to this, and it was mutually recognised that the Study should be implemented on the basis of the existing data available in Thailand, and the formulation of development plan of

/sub....

sub regional trade (home trade) traffic by the coastal shipping should be done as far as the review and analysis of the data available permits.

3. Both sides agreed to include the study on the port management in the analysis of operation system of III.(f) of the Scope of Work.

4. With regard to III.(e) of the Scope of Work, the Japanese side agreed to make necessary recommendations in line with the development and improvement plan for the Thai coastal shipping and ports.

Chitti Wacharasinhu
Dr. Chitti Wacharasinhu
Deputy Permanent Secretary
Ministry of Communications

Katsuji Doi
Mr. Katsuji Doi
Leader of the Japanese
Preliminary Survey Team

List of Participants

Japanese Participants

- | | |
|--|-------------------|
| 1. Mr. Katsuji DOI | Leader |
| Director, Coastal Shipping Division,
Shipping Bureau,
Ministry of Transport (MOT) | |
| 2. Mr. Miroshi UEDA | Port Planning |
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| 3. Mr. Tetsuo MORIUCHI | Shipping Planning |
| Deputy Director,
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Thai Participants

- | | |
|--|--------|
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| Harbour Department | |
| Ministry of Communications | |
| 8. Mr. Paramet Pornlert | |
| Harbour Department | |
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| 9. Miss Sunisa Pathommaras | |
| Harbour Department | |
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Port Authority of Thailand
11. Mr. Sutin Susila
Department of Technical and Economic Cooperation
12. Lt. Jg. Anan Panananda
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Ministry of Finance
13. Mr. Vishnu Ubolcholkett
Department of Customs
Ministry of Finance
14. Mr. Kasom Kasomsuwan
Thai Shipowners' Association
-

2. 本格調査に関する提言

(1) 本格調査の実施方針案

(イ) 調査目的

タイ国は、現在実施中の第5次国家経済社会開発計画（1982年～1986年）に基き、同国の交通体系の効率化を図るため、省エネルギー型の交通体系への移行と交通機関間の連携の促進をめざしているが、その一環として、河川輸送を含めた沿岸海運の振興を計画している。タイ国は、その計画の実施のため、我が国にその計画立案について、援助を求めてきたものである。本年2月に派遣された事前調査団とタイ国政府との間で締結された Scope of Work においても、調査の目的は、タイ国における沿岸海運に関する総合的な開発計画（comprehensive development plan）を作成することになっている。計画作成は、沿岸海運への転移可能な貨物の選定及び貨物量の想定、異種交通機関間のコスト比較及び異種交通機関間の連携の可能性の検討等踏まえて行うとともに、その計画の経済・財務分析を行うこととする。また、今回の調査においては、タイ国の強い要請に基き、現在同国内で利用しうる資料にのみ基づいて作業を行うことを条件として、「沿岸海運」に近隣諸国（マレーシア、シンガポール、インドネシア（北スマトラ））との間の海上輸送も含めて検討を行うこととする。

なお、計画作成に際しては、次の諸点に注意する必要があると思われる。

- ① 今回のタイ国沿岸海運整備振興計画の作成に当り、将来、計画の実行段階において極力利用可能であるように努める必要がある。
- ② 現在、タイ国においては、国内の貨物輸送は、チャオプラヤ川の河川運送を除き、殆ど全て陸上輸送に依っているが、これらのうちには内航海運に転移させることが適当かつ可能な貨物があると見受けられる。今後の調査の力点としては、既存の鉄道、道路輸送体系との競合といった側面をも考慮しつつ、はじめから長期の内航海運整備振興計画を策定するというよりは、むしろ既存の国内貨物流動の内航海運への一部転換の可能性及びそのための必要な諸措置についての調査研究に置くことが適当である。
- ③ タイ国は、Summary of Discussions にも盛り込まれているように、同国の沿岸海運の振興に関する政策的提言がなされることを期待しているので、この点についても配慮する必要がある。

(ロ) 対象地区範囲

2回にわたる事前調査における現地踏査、関係当局との折衝等を踏まえると、対

象地区範囲としては、次の地域が適当と考える。

タイ国の沿岸及び近隣諸国（マレーシア、シンガポール、インドネシア（北スマトラ））並びにチャオプラヤ川及びその主な主流。

（イ） 調査項目

1. 調査対象地域の物流に関し、以下の項目について調査し、その現況を把握するとともに将来の需要予測を行う。

（1） 物流の現況

- ① 河川及び内航運送による貨物流動
- ② 近隣諸国との交易による貨物流動
- ③ 他の輸送モードによる貨物流動
- ④ 社会・経済環境
- ⑤ 関連インフラストラクチャーの整備状況及び将来計画

（2） 需要予測

上記(1)より得られた物流の現況をもとに以下の要因を考慮しながら物流の需要予測を行う。

- ① 輸送モードの変換（内航海運適正貨物の抽出）
- ② 制度面の改善
- ③ 経済計画等

2. 海運経済、海運企業経営及び海運政策の現況を以下の項目について把握する。

- （1） 内航海運の活動状況及び位置づけ
- （2） 航 路
- （3） 財務及び収支
- （4） 組織（企業体、船隊、要員）
- （5） 法 制
- （6） 行 政
- （7） 海運助成
- （8） 国際条約

3. 港湾環境の現況を以下の項目について把握する。

- （1） 自然条件
- （2） 港湾施設の現況及び計画
- （3） 港湾施設の利用状況

(4) 港湾の管理及び運営

(5) 法 制

(6) 組織（管理形態，要員等）

4. 上記の調査結果を受け，以下の項目を検討しタイ国の内航海運整備計画を作成する。

(1) 海運関係

① 内航海運ネットワーク（航路計画，港湾配置計画等）

② 船隊計画，配船計画及び運航計画

③ 要員計画（陸，海）

④ 船舶設計及び船価

⑤ 企業及び管理運営体制

⑥ 経済分析

⑦ 財務分析

(2) 港湾関係

① 港湾計画

② 施設の概略設計及び工費

③ 管理・運営体制

④ 経済分析

⑤ 財務分析

5. 調査結果にもとづきタイ国内航海運振興のために必要な提言をとりまとめる。

(二) 調査期間及び要員計画案

業 務 内 容 (S/W対応)	要 員	現状調査	分析・予測	計画立案	計 算 (月)	要員別人・月
		タイ (月)	日本 (月)	日本 (月)		
1. 物流の現状把握と需要予測 S W(a)& (b)	A (海運需要)	5.0	4.5		9.5	A : 9.5
	B (港湾需要)	4.5	4.0		8.5	B : 8.5
2. 海運経済, 海運企業経営及び 海運政策の現状把握 S W(b)	C (海運政策)	1.0	1.0		2.0	C : 12.0
	D (海運経済)	1.0	1.0		2.0	D : 11.5
	E (海運企業経営)	1.0	1.0		2.0	E : 12.0
3. 港湾環境の把握 S W(c)	F (港湾計画)	1.0	1.0		2.0	F : 12.0
	G (港湾設計)	1.0	1.0		2.0	G : 8.5
	H (港湾管理)	1.0	1.0		2.0	H : 12.0
	I (港湾財務)	1.0	1.0		2.0	I : 12.0
4. 配船・運航, 船舶建造, 船価, 管理体制, 組織, 財務・収支, 経済評価 S W(e)&(f)	C	4.0	2.0	4.0	10.0	
	D	3.5	2.5	3.5	9.5	
	E	4.0	2.5	3.5	10.0	
	J (海 運)	3.5	2.5	4.0	10.0	J : 10.0
	K (船 舶)	2.5	2.5	4.0	9.0	K : 9.0
5. 港湾施設設計, 管理体制, 工 賃, 財務収支, 経済評価 S W(e)&(f)	F	4.0	2.0	4.0	10.0	
	G	2.0	1.5	3.0	6.5	
	H	4.0	2.0	4.0	10.0	
	I	4.0	2.0	4.0	10.0	
計	11 人					117.0

(ホ) その他

- ① 調査の内容に関し、沿岸海運整備振興についてはフィージビリティ調査のレベルまでの精度を要するが、沿岸諸港湾整備については本件調査の主目的があくまでも沿岸海運整備振興であって港湾整備ではないこと、また予算的にも、S/W記載のスケジュールからしてもタイ全土の沿岸諸港湾整備のフィージビリティ調査まで行う余裕はないことからして、プレ・フィージビリティ調査のレベルの精度の確保にとどめることとする。
- ② 調査のスケジュールに関し、インテリム・レポートの提出・説明後、約1カ月の現地補足調査期間を取ってあるが、これはインテリム・レポートで沿岸海運整備振興計画の大綱を取りまとめ、先方の了解を取りつけた上で、大綱に沿った具体的実行計画作成のための補足資料の収集、実行計画の内容に関する先方との協議、経済・財務分析のための関係資料と収集と先方との協議等を行うことを想定して設定したものである。

(2) 本格調査に関するその他の留意事項

沿岸海運の整備振興については現下の第5次国家経済社会開発計画の中でも認知された重要計画ではあるものの、運輸通信省内には沿岸海運を専門的に扱う部局がなく（我が国運輸省海運局に相当する部局がない）、他方同じ運輸通信省内には過去の実績を背景に強力な影響力を有する陸運部門があり、特にその中のETO（Express Transport Organisation）は、独自にフェリーボートの導入計画の検討を行ったり、チャオプラヤ河の既存舟運からトラック輸送への転移の可能性の検討を行うことを示唆する等（別添資料参照）の動きを示しており、本格調査に際しては基本的には本件調査の直接のカウンターパートとなる運輸通信省Transport & Communications Economic Divisionと密接に協議をしつつ、これら他種運輸交通部門の考え方にも充分留意する必要がある。

1. Questionnaire (コンタクト・ミッション)

You are kindly requested to provide us with information on the following items.

The purpose of the Questionnaire is to clarify and deepen our understanding on the study as well as obtain newest data, and answer to which is going to be a basis of the study to be followed.

1. Social and Economic Data

- A. Regional distribution of population
- B. Sectoral distribution of labor force
- C. Regional distribution of GDP
- D. Sectoral distribution of GDP
- E. Major crops and mineral products
- F. Major industries

2. The 5th National Economic and Social Development Plan

- A. Objectives of the Plan
- B. Expected growth rate of GNP during the Plan period
Any detailed data of economic growth rate by sectors
- C. Outline of specific regional development plan (if any)
- D. Expected roles of shipping, port activities and ship-building
in the Plan
- E. Outline of specific measures to transfer the current passenger
and commodity flow from other modes to shipping (if any)
- F. Any survey concerning the merits of coastal shipping

3. Characteristics of Commodity and Passenger Flow

- A. Any statistics concerning commodity and passenger flow
- B. Breakdown of commodity and passenger flow by modes of transportation, by origin/destination and by commodities (if any)

- C. Table of transportation costs (fares and tariffs) by modes of transportation and by commodities

4. Current Situation of Transportation

- A. Existing networks of all modes of transportation including their capacities and current traffic conditions (Road, Railway, Coastal Shipping, and River Transportation, Pipeline, Airway)
- B. Amount of investment in the development of transportation facilities in recent years
- C. Any specific plan for the development of transportation facilities

5. Shipping

(1) Merchant marine in Thailand

- A. Fleet; number and types of vessels and tonnages in G/T and DWT, by national flags and others
- B. Shipping companies with the latest annual reports

(2) Information about seafarers

- A. Class-wise number of seafarers (officers and ratings)
- B. Present system of training and certification for seafarers

(3) National shipping policy, international and coastal

- A. Ratification of international conventions in maritime sector
- B. Bilateral agreement with other countries in shipping
- C. Subsidy for national shipping, promotional and protective measures for shippers and merchant marine, including taxation and financing

6. Port Activities

- A. Dimensions of existing facilities of each port
- B. Record on cargo traffic of each port by domestic inbound/outbound, by import/export, by origin/destination, by routes and by commodities for the past five years

- C. Record on cargo traffic between ports and their hinterlands by modes and by commodities
 - D. Data on natural conditions at each port (including planned ones)
 - E. Expected volume of cargo to be handled at each port during the period of the 5th Economic and Social Development Plan
 - F. Any plan for future improvement of port facilities
7. Shipbuilding and ship repairing
- A. Number and capacity of shipbuilding and ship repairing facilities (including the capacity of each facility)
 - B. Record on shipbuilding and ship repairing for past five years
 - C. Any plan for future improvement of shipbuilding and ship repairing
8. Organizations and Regulations
- A. Administrative organization of the Thai Government for shipping, port activities (including planning, construction and management), shipbuilding and ship repairing
 - B. Statutes and regulations Re:shipping (international and coastal), port activities, shipbuilding and ship repairing
 - (i) A copy of the full text be prepared
 - (ii) Freight rates and passenger fares, how they can be decided in the coastal shipping?
9. Any other data or informations relevant to this project

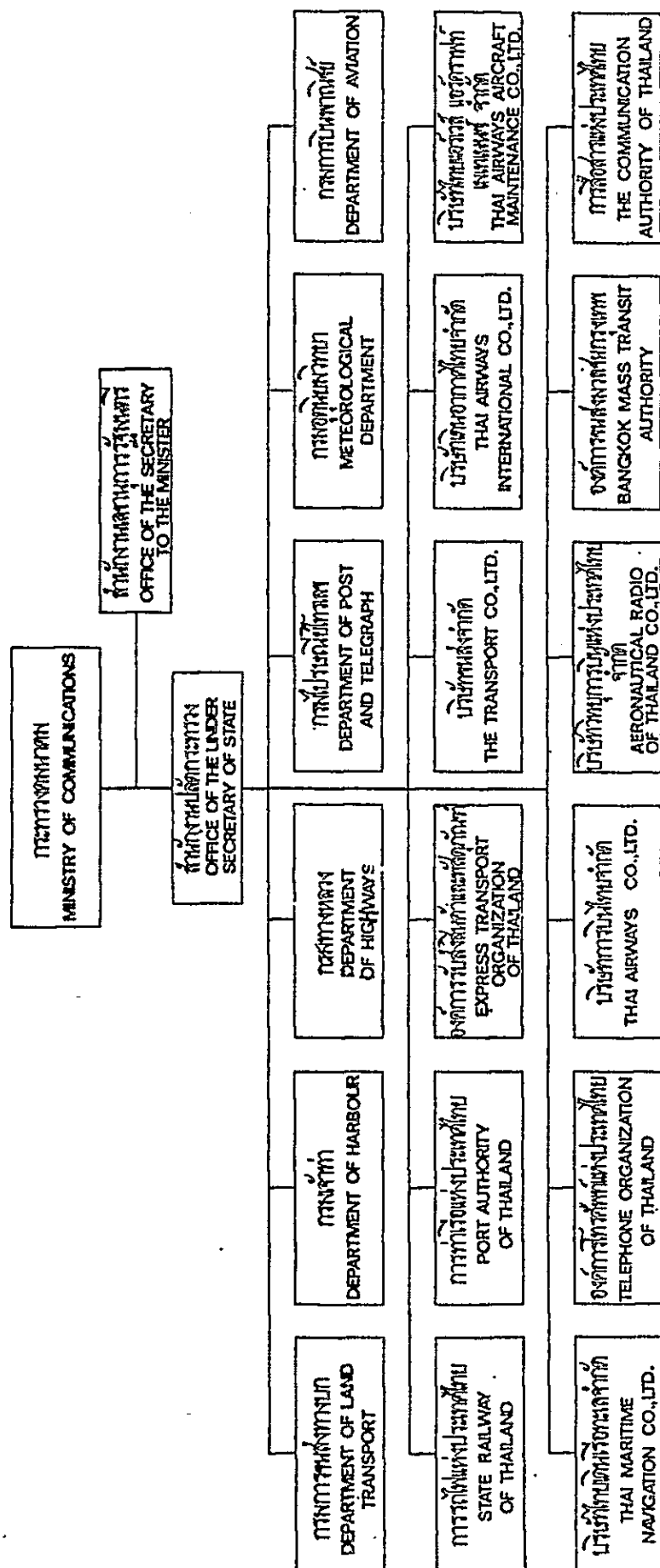
2 収 集 資 料 一 覧

	資 料 名	頁	種 類	収 集 先	作 成 者	作 成 期 日	備 考
1	Coastal Shipping Data Requested by the Japanese Mission		ペーパー他	M O C	M O C		
2	Inland Waterways Feasibility Study Phase III		報告書	M O C	仏 BCEOM社		
3	The Port Authority of Thailand (バンコク港概要カタログ)	1	カタログ	P A T	P A T		
4	バンコック港簡易図面	1	ペーパー	P A T	P A T		
5	Sattahip Commercial Port, Preliminary Master Plan, Drawing 3	1	ペーパー	P A T	P A T		
6	サタヒップ港平面図	1	ペーパー	P A T	P A T		
7	Organization Chart of Div., Sections and Personnel, Sattahip Commercial Port	1	ペーパー	P A T	P A T	Oct., 1982	
8	The Sattahip Commercial Port	4	ペーパー	P A T	P A T	June 30, 1981	
9	The Port Authority of Thailand, Five Year Statistics 1976~1980	1	カタログ	P A T	P A T		
10	The Development of Deep-Sea Ports on the Eastern Sea bord	5	ペーパー	P A T	P A T		
11	Organization Chart, The Port Authority of Thailand	1	ペーパー	P A T	P A T	1982	
12	Harbour Department (組織規程)	8	冊 子	Harbour Dept.	Harbour Dept.		
13	Hand Book of Port Authority of Thailand 1982	198	冊 子	P A T	P A T	1982	
14	ブケット港関連データ	4	ペーパー	M O C	M O C		
	Traffic Passing through Phuket for the Period 1975~1979						
	Origin/Destinations of Phuket: Major International						
	Import & Export Traffics 1975~1979						
	Forecast Traffic at Phuket Deep Water Port						
	Existing Traffic at Port of Phuket						
15	Rubber Shipped from S. Thailand to Japan during Jan.-Dec. 1979	1	ペーパー	Prateep Thai Patana Ltd. Partnership	同 左	20 Jan. 1980	

	資 料 名	頁	種 類	収 集 先	作 成 者	作 成 期 日	備 考
16	ソンクラ港及びブケット港諸元	2	ペーパー	M O C	M O C		
17	Port Record, March 1980						
	Petroleum Consumption is Big Factor in U.S. Transportation Costs.	2	雑誌抜萃	M O C	Port Record	March 1980	
18	Ao Udom-Ko Sichang Port Development Mission	162	報告書	NESDB	仏ACTIM	July, 1982	
	Kingdom of Thailand Eastern Seaboard Development Project						
19	Songkhla and Phuket Ports Project						
	Design Report : Songkhla Vol. 1		報告書	M O C	Maunsell Consultants 他	July 1981	
	Design Report : Phuket Vol. 1		報告書	M O C	Maunsell Consultants 他	March 1981	
20	Coastal Shipping Management, Proceedings of A Seminar	191	報告書	ESCAP	ESCAP		
21	UN ESCAP-Shipping, Ports & Inland Waterways						
	Progress Report on the Activities	18	ペーパー	ESCAP	ESCAP	July 1982	
	"	17	ペーパー	ESCAP	ESCAP	Oct. 1982	
22	Div. of Shipping, Ports and Inland Waterways / List of Publications Nov. 1982	6	ペーパー	ESCAP	ESCAP	Nov. 1982	
23	Report of Advisory Services on Phuket & Songkhla Port, Thailand July 1978 - Jan. 1979 by Akio Ogo.	142	報告書	ESCAP	Akio Ogo/ESCAP		
	Senior Port Expert						
24	経済協力国別資料 タイ 3訂版	87	報告書	外務省	外務省	昭和57年3月	

	資 料 名	頁	種 類	収 集 先	作 成 者	作 成 期 日	備 考
25	Report of Thailand Additional Refinery Capacity Study <small>改定 Sept. 23, 1981</small>		報告書	M O C	UNICO International, Tokyo, Japan	Sept. 1981	
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27	同 Part II "Restoration of the Country's Economic & Financial Position"	21	報告書	外務省	NESDB	Oct. 1981	
28	同 Part III "Structural Adjustment Programme & Improvement of Economic Efficiency"	66	報告書	外務省	NESDB	Oct. 1981	Chapter 7 運輸部門
29	同 Part IV "Specific Areas & Urban Development"	55	報告書	外務省	NESDB	Oct. 1981	
30	Eastern Seaboard Study, Interim Report 1, Main Volume	134	報告書	JICA内	NESDB	July, 1982	
31	Briefing Paper on Upper South Development		ペーパー	JICA内	NESDB	April, 1982	
32	South Thailand Regional Planning Study, 2 Physical Planning	21	報告書	JICA内	Hunting Technical Services Ltd		
33	同 3 Implementation	13	報告書	JICA内	同上		
34	タイ国造船関係データ (船舶修理ドックヤード建設事前調査団資料)		ペーパー	JICA内		昭和57年11月	
35	Interim Report on Development of Shipbuilding & Repairing Industry in the Kingdom of Thailand (JICA 派遣専門家報告書)	9	ペーパー	JICA内	M. Takebayashi 他	June, 1980	
36	国内沿岸海運に関する諸手続 (タイ語和訳)	15	ペーパー	M O C	M O C		

3. ORGANIZATION CHART OF MINISTRY OF COMMUNICATIONS



● Ferry service to South Consortium to study ETO plan

by
Singkarn
V. Panya

A TEAM OF SENIOR officials of the Express Transport Organization (ETO) has just returned from Europe to report that a team of Norwegian, Dutch and British experts will fly here in the middle of this month to discuss a plan to operate a coastal ferry service from Bangkok to Songkhla, via Surat Thani.

"The European consortium will at first conduct a feasibility study on the new plan of the ETO before investing in the plan and operating the service while the ETO would be paid a regular income for the permission to run the service," a well-informed source who led the ETO mission to Europe said.

Under the proposed multi-million-baht plan, part of the package to salvage the financially-troubled state enterprise, the coastal ferry service would employ two freighters at the initial stage to carry trucks and containers to Surat Thani and Songkhla and back to Bangkok.

"The initial talks we held in the three European countries were quite encouraging. They will send a team of experts to Bangkok in the middle of this month to discuss the plan," the source said.

The coastal ferry service is part of the several new projects being devised by ETO to improve on its financial status.

Other new projects are the construction of three truck terminals in the suburban areas (Bangna-Trat, Paholyothin and Petchkasem) and the use of heavy equipment at Klong Toey Harbour.

According to the source, who is also a member of the ETO board of directors, if the plans were carried through, ETO's financial position, which suffered a loss of 192 million baht at the end of the 1982 fiscal year (September, 1982), will be in the black, with an estimated profit of about 500,000 baht.

A major restructuring of the state enterprise is also underway to plug the loopholes. A new unit, known as policy planning and project development division, has been set up as the organization's "think tank" to analyse and make proposals for improvement. The division is headed by Pricha Suwannametha.

"The restructuring also involves closer coordination between the

headquarters in Bangkok with field offices in provinces all around the country," the source said, adding that the financial procedures, which are outdated and primitive, would be updated.

The ETO, set up 32 years ago, is staffed by about 5,000 personnel at various levels.

STUDY SHOWS DECLINING BUSINESS:

Meanwhile, a study conducted by an academician, Dr Issara Suwannabon, of ETO's business up until June, last year, shows that ETO's revenue was on the decline.

The study shows that even government organizations have recently decided to make use of other transport agencies instead of ETO.

They include the Public Works Authority which has stopped using ETO's services since 1981 although in the previous year, that state enterprise alone provided a revenue of about 1.6 million baht. In 1982, several government agencies and private firms, including Liquor Organization, also switched over to other channels.

Existing government agencies are also cutting down their businesses offered to ETO, including the Navy Ordnance Department, Army Transport Dept, Forest Industry Dept, Fish Marketing Organization.

The study pointed out that since the American military pullout, the ETO (which had made an accumulated profit of more than 200 million baht) has been in the red since 1974.

ETO Director Surasak Chavivong said that if government agencies would extend closer cooperation with his organization, the financial situation would certainly improve this year.

He said he had tried to resolve the overstaffing problem at the state enterprise. He estimated that before he assumed office at ETO last year, about ten per cent of the staff was redundant.

ETO proposes ferry service to the South

THE Express Transport Organisation wants to set up a ferry service between Bangkok and Songkhla, Communications Minister Amorn Sirigaya has disclosed.

Adm Amorn said it was cheaper to transport freight by water than by road.

He said the Communications Ministry had approved the proposal in principle and it had been submitted to the NESDB for final consideration.

An ETO study had shown that the ferry service would be 50% cheaper than the cost of delivering freight by road between Bangkok and Songkhla, Adm Amorn said.

Negotiations were underway with foreign companies which make and operate freight ferries. An investment of about 100 million baht will be needed to establish the service.

The ministry's proposal calls for each ferry to be capable of

transporting about 20 10-wheel trucks so that "the unit cost will be lower though the service might not be as speedy as road transportation," Adm Amorn said.

The ministry believed that an ETO ferry service would not infringe on the rights of the Thai Maritime Navigation Co, Adm Amorn said.

"We have checked the law on this matter, and the ETO has the legal right to engage in water transportation as well," he said.

But it was unlikely that the ministry would approve an ETO proposal to set up its own shipping line, he said.

"We have not been approached officially on this matter yet so it is difficult for me to discuss it," the minister said.

But he added that the proposal did not seem appropriate because the TMNC, which was also a state enterprise, was already operating a national shipping line.

21 Jan. 1983

Plan to cut costs at Songkhla port

THE Communications Ministry has initiated moves to make Songkhla port more competitive with those in neighbouring countries.

The ministry has instructed the Merchant Marine Promotion Commission to draw up plans to help reduce transportation costs out of the port.

Communications Minister Adm. Amorn Sirigaya said yesterday that the instruction was issued after studies showed that it was cheaper to export Thai products, especially rubber, to Japan via Malaysia.

The problem of high transportation costs is expected to remain after Songkhla gets a deep sea port, which is expected to go into operation in 1985.

Adm. Amorn said that until the deep sea facility is built goods shipped out of Songkhla port will re-

quire double handling because lighters are needed to transfer cargoes to ships anchored offshore.

Double handling costs will be reduced after the deep sea port opens, but it is then expected to face problems involving a possible container shortage and the small amount of goods to be unloaded at the port.

Adm. Amorn said that there was a shortage of containers in the Songkhla area. Exporters preferred to ship goods out of such ports as Butterworth where containers were more readily available and at a lower cost.

"In both cases the transportation cost from Songkhla to Japan is

higher than from other nearby ports, even though Songkhla is closer to Japan," Adm. Amorn said.

"The expected small volume of imports to be discharged at the deep sea port would also add to transportation costs because it would force ships to call at Songkhla empty.

SAVE

"What this means is that higher transportation costs will occur," the minister said.

However, Adm. Amorn forecast that the deep sea port, when fully estab-

lished in 1985, would help to save up to 130 million baht a year in handling costs.

This figure is expected to rise to 230 million baht a year by 1990 and 320 million baht a year at the turn of the century.

Adm. Amorn said that the international engineering consultants in charge of the project had predicted that Thailand would be able to export about 435,000 tons of rubber out of Songkhla in 1985, rising to about 680,000 tons in 1990 and about 960,000 tons in 2000.

"In contrast to these figures, the consultants predicted that there will only be 25,000 tons of imports passing through Songkhla in 1985 and volume will remain steady at 50,000 tons a year from 1990-2000," he said.

Many of the imports will be destined for an industrial estate which will soon be set up near the site chosen for the deep sea port.

"Oil" exploration companies operating in the Gulf of Thailand have also expressed a desire to shift their bases from Singapore to Songkhla once the deep sea port and other infrastructure has been established," Adm. Amorn said.

B240m river port to be built in Nakhon Sawan

THE Harbour Department is expected to invest more than 240 million baht in the construction of a large river port in Nakhon Sawan Province before the end of this year to help boost the in-land water transportation system.

According to Communications Minister Amorn Sirigaya, the construction of this river port is part of the Government's 1,200-million-baht plan to help reduce the high transportation cost.

The construction of this port, he said, will begin soon after the department completes its

plan to reclaim more than 400 rai of land on which to build the port.

"We will build silos and godowns for as much as five million tons of agricultural and mineral products to be transported to Bangkok and other areas in the Central Plains," he said.

He pointed out that river transportation will help a lot on transportation costs.

He cited as example the transportation of oil. "While a 24-tanker train can move only 800 tons of oil, one single convoy of barges can transport up to 3,000 tons on one trip using only one 500-horsepower tugboat."

Admiral Amorn noted that the Harbour Department had already hired ItalThai Industries for 400 million baht to dredge the Chao Phya River to an allowable depth last year.

"If the river was not dredged, the volume of products that could be transported would drop from 2.1 tons in 1981 to only 1.5 tons by the end of 1985," he said.

He said the dredging of

the Chao Phya River can now help the Government save as much as 395 million baht a year and to transport more than three million tons of products in 1995 and up to five million tons in the year 2000.

22 December 1982

Japanese firms likely to win port contract

JAPANESE firms have a good chance of winning a government contract to do an engineering survey, design work and prepare bidding documents for the Laem Chabang deep-sea port project, a senior official said.

Japanese technology and technical know-how and the fact that the Government agreed to use loans from the Japan-based Overseas Economic Cooperation Fund to finance the project, made it highly likely that Japanese firms would win the contract, the source said. He explained that the OECF would allow only engineering consultant firms from developing countries except Japan to participate in the bidding. It was unlikely that engineering consultant firms from developing countries would have technology as advanced as that of Japan.

"The OECF has offered the Government an interest rate about 3-4% lower than the 13 - 15% being offered by other financial institutions, especially those in Europe," he added.

The OECF has offered a 30-year repayment term with a grace period

of 10 years while others have offered a 20-year repayment term with a grace period of five to seven years.

"Because of the tight financial situation the Government has opted to take the OECF's financial offer, even though it will mean a higher trade deficit with Japan in the future," he said.

SECOND

This is the second loan that Japan has agreed to provide Thailand in the past year for developing deep-sea ports in the eastern provinces. Japan earlier agreed to provide funds for setting up Mab Tapud deep-sea port in Rayong Province.

The source said the Finance Ministry had told the Government that the OECF originally planned to include its loan offers for both deep-sea ports in the tenth Japanese yen

loan.

Laem Chabang deep-sea port will handle containerised and general cargoes, some agricultural products and support a light industrial estate to be set up nearby to handle export-oriented products.

A Communications Ministry working group is conducting an "in-house study" to determine the facilities needed in this project and to integrate the study into the project masterplan which was originally conducted by NEDECO, a Europe-based firm.

The study, which is expected to be completed this month, was carried out with the aim of accelerating the Laem Chabang deep-sea port project.

The Government believes that an earlier start on the project would create a better investment climate on the eastern seaboard.

22 December 1982

Sea-Trans to take control of Thai shipping firm

THE Sea-Trans Group of Companies has acquired some 70% equity holding of the financially troubled Thai Mercantile Marine Ltd (TMM), a long-established Thai shipping company operating liner services on the Thailand-Japan routes, reliable sources disclosed yesterday.

The transfer of shares between the new and old shareholders has been in progress, the sources said, adding that the new management team headed by Rear Admiral Sanong Nisalak, an adviser to Sea-Trans, is expected to take over the TMM operations next month.

The new board of directors of TMM has already been formed with Rear Adm Sanong as the new chairman.

Rear Adm Sanong is also the chairman of the Bangkok Shipowners and Agents Association.

Sea-Trans has appointed Mr Monthian Munthin as the new managing director of TMM, while the present managing director, Mr Vari Veerangkul, will remain as a member of the executive board, the sources said.

TMM shareholders who have decided to sell their shares to Sea-Trans included chairman Chin Sophonpanich and president Chatri Sophonpanich of Bangkok Bank, president Smarn Ophaswongse of the Rice Exporters Association, the Thai Wah Co, Mr Phorn

Leophairat, Mr Thapana Bunnag and Mr Osoth Kosin.

Two foreign shareholders of TMM, who have also sold their holdings, included the Hong Kong-based Ocean Shipping Enterprise, and Mr Tae Lian Tek, a rice importer in Kuala Lumpur.

COMBINE

All shareholders, both foreign and local, previously held a combined 70% of TMM shares.

Shareholders who have kept their shares in TMM included Mr C.P. Tao and Mr C.F. Tao, Mr Vari and Mr Pong Sarasin.

TMM was registered with a 40-million-baht capital. It operates two freighters with a total capacity of 11,307 dead-weight tons.

TMM is a member of both the Thailand-Japan Freight Conference and the Japan-Thailand Freight Conference.

Like other shipping

lines, TMM has been suffering financial losses in its operations in recent years due to unfavourable climate in the shipping industry. Its losses during the past two years amounted to some 35 million baht, the sources said.

The Sea-Trans Group of Companies included the Hong Leong Sea-Trans Liner Ltd and the Sea-Trans Marine Co. Hong Leong Sea-Trans Liner is a joint venture between Hong Leong Co of Singapore and Sea-Trans in Bangkok.

This joint-venture shipping firm has been operating shipping services between Bangkok and other Far Eastern ports.

The Sea-Trans Marine Co, meanwhile, operates tramping services between Bangkok-Japan and Korea.

The sources said the change in the TMM shares would significantly help improve its financial position to enable the firm to survive.

Japan loan 'is the only choice' for port project

THE Government has no option but to go ahead with its plan to use loans from the Overseas Economic and Cooperation Fund of Japan to finance the Laem Chabang deep sea port project, since its terms are the most favourable, Communications Minister Amorn Sirigaya said yesterday.

He said the OECF has offered an interest rate of only 3% while other financial institutions charge as much as 15% a year.

"They have also offered a 30 year repayment term with a grace period of 10 years while others have offered a 20-year repayment with a grace period of between five and seven years," he said.

Admiral Amorn made the statement after Member of Parliament Pol Lt Narong Thavekupt asked the ministry to review its plan to use the OECF fund.

The MP had earlier charged that using the OECF fund would not be in the interests of the country since the strings attached meant greater Japanese involvement and influence.

Lt Narong also urged the Communications Ministry to consider inviting international engineering consultant firms to participate in this project on a turn-key

basis so as to avoid the country having to rely on limited sources of financial support.

However, Adm Amorn rejected this proposal on the grounds that the promoters would draw up their own designs for the port, making it difficult for the ministry to make comparisons with other design concepts.

ACCEPTED

While Adm Amorn accepted that Japanese engineering consultant firms have a good chance of winning the engineering survey and design work contract for the Laem Chabang port if the Government decides to use the OECF loan, he maintained that there was no viable alternative to this.

However, he added, even though a Japanese firm is likely to be selected, "the ministry has the right to announce an international bid which is open to all countries for the construction of the deep sea port."

He admitted, however, that while the ministry will select both the engineering consultant firm and the contractor, "we will have to get approval from the OECF before hiring anyone."

Shipowners' plea for loan rejected

THE Finance Ministry has rejected the Thai Shipowners Association's appeal for help in acquiring a soft term loan from international financial institutions for the purchase of new vessels.

However, the ministry plans to help boost the local shipbuilding industry during the next three to four years, a ministry source said.

The source said the ministry believes that it would be wiser to help locate funds for the Thai shipowners after the local shipbuilding industry is in a better position to take up orders.

If the ministry helps to locate a soft loan now, the shipowners will have to order their vessels from other countries, and this will lead to the country losing a large amount of foreign exchange, the source said.

"Once the country's ailing shipping industry is in good shape, the shipowners can have their vessels built locally and at a cheaper cost. At the same time, the loan acquired will be used in Thailand," the source said.

The source added that the Government will con-

tinue to assist Thai shipowners in terms of packing credit where exporters who use Thai ships may rediscount with the Bank of Thailand, 100% of the value of promissory notes, 90% on letters of credit, 80% on purchase contracts or orders, and 50% on warehouse warrants, based on the value assessed by commercial banks.

The Government, he said, is still considering a plan to improve the local merchant marine business through the imposition of regulations requiring that some products will have to be carried only on Thai vessels.

At present, the Government requires government agencies and state enterprises to use only Thai vessels to transport their imports.

"Shipping lines all over the world are facing dif-

ficult times because of the world economic recession. Some have had to sell a number of vessels as the amount of goods being transported has dropped drastically over the past few years," he said.

But he predicted the situation would improve in the future, at which time Thai shipowners would still need more transport vessels in the form of semi-containerships because most of the country's exports are agricultural products.

As to the shipbuilding project, he noted that Laem Chabang deep sea port has been selected as the most suitable site, instead of Khao Bor Yar as earlier requested by the Ship Repairing and Building Association.

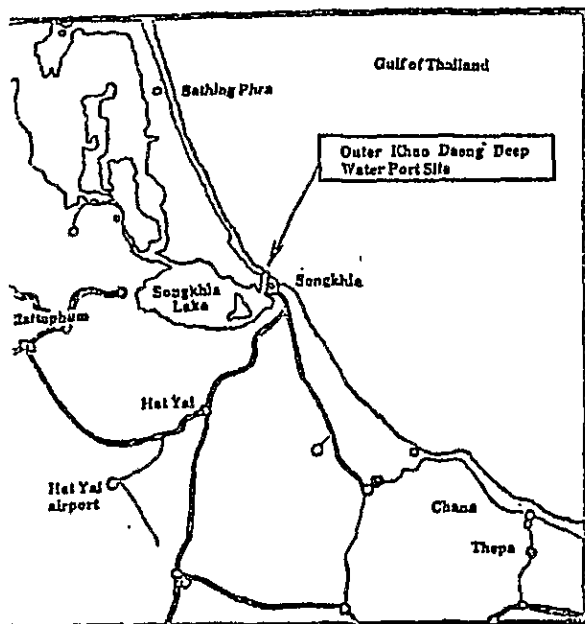
The shipbuilding project was previously proposed to the state-owned Bangkok Dock

Company, which was to be the major shareholder in the project. However, the company turned down the proposal, saying that it was already involved in building and repairing small vessels.

The Government then decided to have the private sector invest in this project, which is expected to cost as much as 1,000 million baht. The Government would provide all the necessary infrastructure which would help reduce costs and make the project more viable.

The project will provide repair facilities for vessels of up to 26,000 dwt, so that local companies can avoid spending millions of baht a year on having their ships maintained and repaired in foreign ports such as Hong Kong and Singapore.

Many problems facing Songkhla Port Project



THE ambitious Songkhla Deep-Sea Port Project faces many problems but with a lot of hard work they can be overcome. That was the consensus of a seminar organised last week by the Communications Ministry in which 90 people from government agencies and the private sector participated.

The seminar's aim was to pinpoint the major problems facing the project and discuss possible solutions.

Most of the government officials said they believed the project would benefit the nation's development a great deal. While they admitted there were many difficulties they said these could be solved through tight cooperation by everyone involved.

While a few representatives from the private sector said their firms were expecting to make use of the port as long as the facilities were up to scratch many others were less enthusiastic.

After hearing some of the major problems and learning of the relatively low interest expressed by the private firms, many attending may have had some doubts about the success of the project.

However, Communications Minister Adm. Amorn Sirigaya who presided over the seminar was optimistic. Adm. Amorn said that there were always obstacles when projects are initiated but "realising these obstacles exist and studying the problems would certainly help create some ideas."

He said that after acknowledging the problems, all concerned should join hands in solving them.

A master plan of the Songkhla Deep-Sea

Port has already been made by three engineering consultant firms, Sir William Halcrow and Partners Co, Maunsell Consultants Ltd, and the Sindh Poonswong and Friends Ltd Partnership.

The actual site of the port is planned to be at outer Khao Daeng as earlier surveyed by Rendel and Partners in 1978.

The construction of the port and its facilities will cost 1,488.3 million baht of which 826.85 million baht will be a loan from the Asian Development Bank and the rest a government allocation.

The Communications Ministry has decided to hire the three consultant firms to supervise the building which is expected to begin at the end of this year and to be completed by June 1988.

Here are some of the opinions heard during the seminar.

A representative from the Port Authority of Thailand: "The turning area for the ship in the port should not be only 300 metres but at least twice the 183 metre length of the ships which come to the port."

Songkhla's Governor Anek Rocharaphakboon: "A special committee should be set up to prepare for the birth of a new community near the port area."

Dr Prasert Chuapa-



Amorn

nich of the Provincial Water Works Authority: "The PWWA is having trouble finding water resources large enough to feed its plant to supply this area."

Deputy Director-General of the Harbour Department Amphol Teeyaporn: "The problems, such as the threatening water supply shortage, should receive special attention from the Government."

An official of the Highways Department: "Work on building the bridge across Songkhla Lake is expected to start by the middle of this year."

A State Railway official said the state enterprise is studying the possible resumption of operations on the Songkhla-Hat Yai route and routes to support the port should be immediately planned.

Capt Boonsorn Muksikanond, regional inspector of the Provincial Electricity Authority said the PEA is ready to supply the electricity to the project.

Mrs Orapin Veeravudhi of the Industrial Extension Division said the port project would encourage industries to this area.

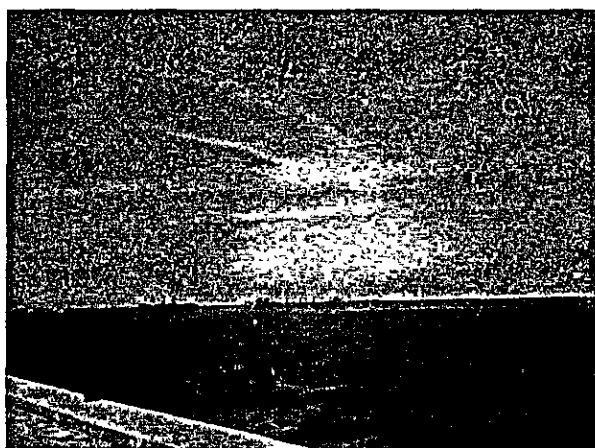
Governor of the Industrial Estate Authority Wanchak Vardilok said the IEA is planning to build an estate for the industries concerned with rubber products, fish canning and ores. The industrial estate is expected to be finished before the port.

Capt Smarom Boon-nak (RN) of the Off-shore Mining Organisation suggested that a shipyard should be included in the port project.

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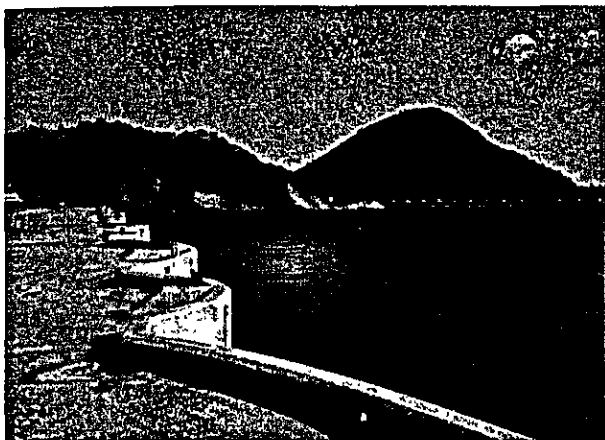
↑ バンコク港 →



Sri Racha 地区
既存民間棧橋
(タピオカ輸出用)



ラムチャバン港予定地



サタヒップ港



ラヨン港予定地



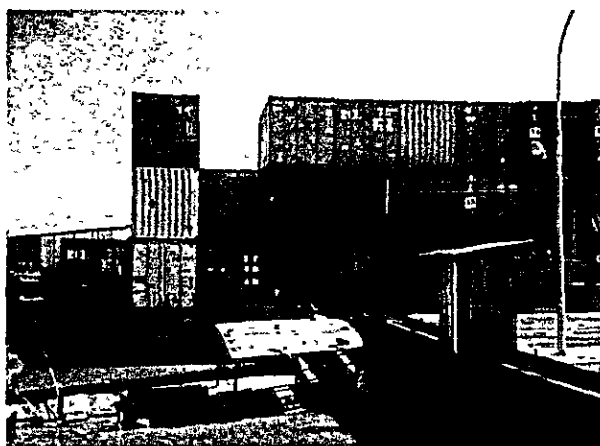
バサック川(チャオブラヤ川支流)沿い
Amphur Tha-Rua 地区
殺物の積込

同セメントの積込





↑ プケット港 →



↑ ソンクラ港 →



JICA

