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FINAL REPORT

**PRIVATE SECTOR PARTICIPATION IN THE DEVELOPMENT
OF THAILAND INFRASTRUCTURE AND UTILITIES**

FOR

**U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
THAILAND MISSION**

PREPARED BY

**CENTER FOR PRIVATIZATION
2000 Pennsylvania Ave., N.W., Suite 2500
WASHINGTON, D.C.**

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LIST OF ABBREVIATIONS AND ACRONYMS

AAT	Airport Authority of Thailand
ADC	Advanced Developing Country
BIA	Bangkok International Airport
BMA	Bangkok Municipal Administration
BMTA	Bangkok Mass Transit Authority
CAT	Communications Authority of Thailand
DOH	Department of Highways
EGAT	Electric Generating Authority of Thailand
ESOP	Employee Stock Ownership Program
ETA	Express Transit Authority
MEA	Metropolitan Electricity Authority
MOF	Ministry of Finance
MWA	Metropolitan Waterworks Authority
NEA	National Energy Authority
NESDB	National Economic and Social Development Board
PAT	Port Authority of Thailand
PEA	Provincial Electricity Authority
PWA	Provincial Waterworks Authority
RTG	Royal Thai Government
SOE	State-owned Enterprise
SRT	State Railway of Thailand
THAI	Thai Airways International
TOT	Telephone Organization of Thailand
USAID/T	United States Agency for International Development/Thailand
USAID/W	United States Agency for International Development/Washington

EXECUTIVE SUMMARY

PRIVATE SECTOR PARTICIPATION IN THE DEVELOPMENT OF THAILAND INFRASTRUCTURE AND UTILITIES

This project is the first of a two phased effort. The required output is a report that identifies and provides the rationale for the selection of two or three infrastructure and utilities sectors/areas with the greatest potential for future USAID program activities and U.S. private sector involvement. Phase II will provide detailed assessments of the selected areas including a menu of recommended program activities.

USAID/T engaged the Center for Privatization to review the opportunities and constraints affecting USAID/T assisting the RTG meet its current and future infrastructure needs. The study was undertaken by a team of three consultants: two expatriate and one local. Project work began late-January with briefings at USAID/Washington and the Center for Privatization, followed by field work in Bangkok, February 12-March 9, 1990. This report summarizes the team's findings, observations, and recommendations for program development.

General Findings

The study encompassed a review of Thai infrastructure and utilities development to determine those sectors critical to sustaining Thailand's current growth path and assessing those areas where USAID/Thailand might focus its future program efforts. The review included an examination of RTG infrastructure priorities, RTG views on opportunities for the expanded use of the private sector in the development of Thai infrastructure and utilities, constraints to private sector involvement, future directions of RTG infrastructure development, and promising areas for USAID/Thailand development assistance. The team's general findings follow.

RTG Infrastructure Priorities

Thailand's Sixth National Economic and Social Development Plan (1987-1991), calls for the continuation of developing infrastructure services as a national priority. Infrastructure development is viewed as key to increasing national income and employment. Infrastructure and utilities account for more than 50% of the total government investment. Public utilities and amenities, energy, transport and communications are cited as vital to future RTG economic growth and development. Land transport and telecommunications are said to be serious problems both in terms of quality and quantity. These needs and priorities are likely to carry over into the Seventh Plan.

Government program priorities as stated in the Sixth Plan include: decentralization of prosperity to provincial areas; redefinition of pricing structures for services; expansion of private sector involvement and investments; opening competition and establishing free markets; legal and administrative reforms; and, expansion of capital markets. Given recent events, one must question whether the government possesses the political will to substantially increase the role of the private sector in the development of state-owned enterprises.

Team's Definition of Privatization

While privatization may take many forms, for purposes of this project, privatization is defined as the process of enhancing private sector roles in the ownership and control of government entities and activities. Privatization can be brought about by the direct transfer of assets from the public to the private sector, but also by a variety of other means, such as by relaxing monopolistic restrictions-- liberalization and deregulation, commercialization, policy reform, liquidation, partial divestiture, leasing, contracting, franchising and allowing the private sector to provide services that had previously been provided only by government agencies.

Need to Open Markets in Thailand

One approach to promoting effective economic development in Thailand is to open markets and to increase opportunities for the involvement of the private sector in the development of infrastructure sectors. The team believes that the provision of appropriate public services by the private sector can play an important role in opening up Thai societies, freeing up markets and allowing the many to enjoy benefits now confined to the few.

Areas of Infrastructure Most Critical to Thailand Growth

While each sector/area of infrastructure and utilities is important to Thailand's future growth and development and in sustaining its current patterns of economic growth, four areas appear to be most critical: power, telecom-munications, transportation, and utilities.

Of the many RTG officials interviewed, no one offered any specific program suggestions when queried about the kind of assistance they would like to see provided by USAID/Thailand. A few suggested that USAID/Thailand should position itself to respond to future technical assistance requirements that may surface as the RTG sorts through its problems and identifies specific assistance needs.

RTG Attitudes About Private Sector Involvement

The RTG appears to have a desire to expand the involvement of the private sector and possibly engage in some aspects of privatization in developing Thai infrastructure, but it lacks the political will to move firmly in that direction. This is also a barrier to USAID and U.S. private sector involvement in the development of Thailand's infrastructure.

Private Sector Roles in Infrastructure and Utilities Development

Power

Power generation and transmission in Thailand is dominated by the Electricity Generating Authority of Thailand (EGAT), which operates 180 power facilities. Other generators exist on private facilities, but the sale of surplus power is officially prohibited.

EGAT officials declare that they are interested in having the private sector finance their activities, but show no urgency to bring this about. EGAT unions have come out strongly against privatization, and have received assurances from the Prime Minister that existing facilities will stay in the public sector.

In the short term, the prospects for the private sector may be stronger in areas in which EGAT is not interested or lacks the wherewithal to respond to market demands.

Telecommunications

Telecommunication services in Thailand are provided by two governmental monopolies: The Telephone Organization of Thailand (TOT) supplies local services, and the Communications Authority of Thailand (CAT) supplies long distance and international services.

Another team of consultants engaged by NESDB are recommending that TOT and CAT be combined to form one monopolistic, regulated, private company, which would not be required to subsidize postal services. The team believes that other approaches should also be considered. USAID could be particularly helpful in advising on the possibilities of a network that would allow for competition where appropriate on technical and economic grounds.

Transportation

Buses. Thailand's main problem with buses is in Bangkok, where the RTG, acting on the advice of European consultants, nationalized the buses in 1976, to form the Bangkok Mass Transit Authority (BMTA). BMTA has been a persistent money loser since

its inception, and its liabilities now exceed its assets by the equivalent of over US\$ 300 million.

As satisfactory bus services are provided without subsidy in Chiang Mai and many other cities around the world, e.g. Buenos Aires, Hong Kong, Istanbul, Manila, and as they were provided in Bangkok without subsidy at low fares prior to the formation of the BMTA, buses are clearly a strong candidate for early privatization.

Whether privatization should be accomplished by selling buses back to their previous owners; giving them to their crews; selling them to other operators; or by a combination of these and other methods; is a question that merits early study.

Railways. The State Railway of Thailand (SRT) carries less than 10% of Thailand's passenger and freight traffic. Its share of traffic is declining and in the current year SRT expects expenditures to exceed revenues by Bt. 905 million (US \$36 million).

The straightforward way to deal with SRT is to privatize it completely, and to allow its managers to run at a profit those services that are viable, and to close down those that are not. If SRT seeks management expertise, USAID could be helpful in introducing the services of suitable U.S. consultants. However, slimming down a railway is a thankless task in any country, and USAID should not get involved except in response to a request from the highest levels.

Roads. Problems of the highway sector in Thailand, especially in Bangkok, are not due to lack of funds, nor of skills, but to the unwillingness of the authorities in Thailand to treat roads as the valuable economic assets that they are. If there were in place clear administrative and pricing guidelines that did not discriminate against the private sector, there could be a significant role for the private provision of roads.

In view of the US interest in this topic, USAID is well placed to finance the necessary studies if requested by the RTG. However, as key recommendations made by previous studies are yet to be acted on, it is difficult to recommend this as a promising sector for a USAID initiative.

Ports (Sea). Thailand's main port of Bangkok is now operating at its full capacity of 650,000 TEUs (20-foot Container Equivalent Units) per year. Additional capacity is urgently needed and is to be found at the existing ports of Sattahip, Phuket, Songkhla, Map Ta Pud and the private wharves in the vicinity of Bangkok. The first four berths of the new port of Laem Chabang (ultimate capacity 22 berths) are to be opened in 1991.

The RTG has decided that the private sector should finance additional port capacity and operate new ports, including Laem Chabang. The Port Authority of Thailand opposes

this action, as do the port-workers unions. Nevertheless, there is an urgent need and an opportunity for private sector involvement is within the realm of possibility.

Ports (Air). Bangkok International Airport (BIA) is operated by the Airport Authority of Thailand. Some services there are already contracted out to the private sector. The contracting out of other services, and even of the complete management, at BIA and other airports (e.g. Phuket and Krabi) would be beneficial, but would not have a substantial effect on development.

Aviation. The privatization of Thai Airways International (THAI) would be desirable if done in a way that would promote Thai share ownership. Even more desirable would be the deregulation of aviation in Thailand to allow the competitive provision of passenger and cargo service, by helicopter or conventional aircraft.

Utilities

Water Supply. Water is supplied by public agencies in Bangkok and (under the umbrella of the Provincial Waterworks Authority) in many other areas, some of which are not satisfied with present arrangements. There is scope here for services to be contracted out to private firms, and USAID could have a role in identifying opportunities and arranging for pilot projects to be undertaken by experienced US firms.

Sewerage and Solid Waste Disposal. The opportunities in sewerage and solid waste disposal are probably greater than in water supply, because these sectors have been neglected by the authorities, especially outside Bangkok. USAID could play a useful role in these sectors, which also have important environmental aspects.

Selection of Key Areas of Development

To help USAID/Thailand select infrastructure and utility sectors for future development assistance, the team used the following six criteria. The first five were in the project Scope of Work; the sixth was added for the reasons given in the Introduction:

- i. The impact of privatization on the growth of the Thai economy;
- ii. The prospects for early impact on the RTG;
- iii. Potential for expansion of US private investment;
- iv. Prospects for cooperation with multilateral donors;
- v. Availability of local capital; and

vi. **Impact on the diffusion of political power.**

The team ranked the relevant infrastructure and utility sectors against these criteria in accordance with the following scale of effects: 0 = Nil, or no importance; 1 = minor importance; 2 = moderate importance; 3 = substantial importance; and, 4 = exceptional importance.

Selection of Infrastructure Sectors for U.S. Involvement

In applying the criteria to the selection of promising areas for USAID development assistance and U.S. private sector involvement, the team regarded the first two criteria - effects on economic growth and prospects for early action, as critical, and excluded any activity that did not score at least 2 in either of them.

The areas selected as most promising for U.S. involvement on a small scale are: water supply and sewerage; transportation: bus systems; and, development of electricity co-generation and telecommunications systems.

Reactive Program. In view of the recent public confrontations in Thailand between the proponents and opponents of privatization, USAID should follow as a model the successful approach it used in developing the housing sector. The Mission should offer low profile interventions in key sectors, in both Bangkok and provincial urban areas. USAID's strategy should be reactive: responding to targets of opportunity as they arise with focused technical assistance.

Public Awareness. Helping the Thais appreciate that expanded involvement of the private sector and/or privatization benefits everyone, not just the rich, should be an important part of USAID/Thailand's development strategy. USAID/Thailand should assist the RTG, possibly through a third party, develop and carry out a broad-based, public awareness program directed at reaching all segments of Thai society.

Phase II Workplan

Tasks and activities undertaken in Phase II should be directed at mobilizing Thai and U.S. private sector resources in the provision of infrastructure and utility services in Thailand. USAID/Thailand should:

1. **Continue its overall policy dialogue activities with the RTG and program coordination with other donors to maximize policy dialogue results;**

2. **Sponsor activities to strengthen private sector organizations such as Chambers of Commerce, Federation of Thai Industries, and Thai/U.S. Bank Associations;**
3. **Support Thai public and private sector efforts to inform and educate the general public about the advantages of private sector involvement in the development of infrastructure sectors and utilities;**
4. **Assist ministries, departments, regional/provincial governments, and municipalities prepare pertinent studies; review and redraft laws, acts, regulations, etc., that discriminate against the private development of infrastructure and utilities;**
5. **Assist in activities that promote greater mobilization of domestic and international capital in Thailand; and,**
6. **Support the decentralization of government authority and empowerment of Thai consumers.**

PRIVATE SECTOR PARTICIPATION IN THE DEVELOPMENT OF THAILAND INFRASTRUCTURE AND UTILITIES

I. INTRODUCTION

Thailand has accomplished many of its national economic goals and objectives in recent years. At present, Thailand has developed its productive capacity to a point where it not only fulfills internal consumption demands, but is also capable of exporting products and competing favorably in foreign markets. These successes have brought many problems: traffic congestion, pollution, and a general degradation of the quality of life. Economic success also has burdened existing infrastructure, posing a potential threat of impeding future growth and development.

Project Background

Thailand's economic successes have caused USAID/Thailand to reassess its current role and future programs in Thailand. This reassessment suggested that USAID/T focus its future program efforts in assisting the RTG in "achieving greater integration into the world economy and global community, sustaining broad-based economic growth, and advancing U.S. interests in Thailand's becoming a fully mature and responsible international trading partner and collaborator on issues of global concern." Accordingly, the Mission's program portfolio is being restructured to include new projects in keeping with its new ADC strategy.

In furthering its restructuring effort, the Mission is undertaking a series of studies intended to provide it with an analytical base for determining specific program areas for action under the new ADC strategy. The purpose of this project segment is to produce information and recommendations that the Mission can use in developing a "coherent strategy for fostering greater private sector participation in Thailand's infrastructure and utilities development."

This project is the first of a two phased effort. The required output is a report that identifies and provides the rationale for the selection of two or three infrastructure and utilities sectors/areas with the greatest potential for future USAID program activities and U.S. private sector involvement. Phase II will provide detailed assessments of the selected areas including a menu of recommended program activities.

USAID engaged the Center for Privatization to review the opportunities and constraints affecting the Mission assisting the RTG meet its current and future infrastructure needs. The study was undertaken by a team of three consultants, two

expatriate and one local: Howard W. Edwards, Gabriel Roth, and Dr. Phipat Thaiarry. Project work began late-January with briefings at USAID/Washington and the Center for Privatization, followed by field work in Bangkok, February 12-March 9, 1990. This report summarizes the team's findings, observations, and recommendations for program development and further study under Phase II.

Work Elements

The following tasks were identified in the project statement of work for Phase I:

- A. Identifying those infrastructure/utilities sectors, e.g., power, telecommunications, transport, water supply and sewerage, which are particularly critical to sustaining Thailand's current growth path, i.e., expansion in largely urban-based manufacturing and service.

- B. Developing an analytical framework which will enable USAID/Thailand to set priorities for potential support for analysis of policy and program measures related to infrastructure and utilities taking into account the following criteria:
 - 1. Potential impact of greater private sector participation in the sector for the sustainability of Thai growth

 - 2. Relatively greater prospects for quick or high impact on RTG decisions to enable enhanced private sector participation, e.g., over the next year or two, if USAID were to provide expert assistance in policy analysis or structuring of privatization programs , policy -based disbursement incentives, or other appropriate financial support (e.g., credit, credit guarantees or equity support.)

 - 3. Potential for expanded private U.S. investment in the sector, either through debt or equity financing, or for expanded U.S. export opportunities because of U.S. comparative advantage in equipment of services of that sector. This analysis should include and assessment of role of mixed credits provided by other donors including it impact on competitiveness of U.S. firms in selected industries.

4. **Extent to which expanded cooperation appears warranted between USAID and such unilateral donors as IFC in providing technical assistance, credit, support for privatizations.**
5. **Current availability within Thailand of sufficiently sophisticated capital markets to meet financial resource mobilization requirements; and**
6. **Any other major criteria which, in the consultant's view need to be considered in light of anticipated limitations on USAID/Thailand financial and staff resources.**

Methodology

The project team used a number of methods to accomplish the above tasks. These included reviewing a wealth of extant information; analyzing statistical data; and, conducting interviews with USAID officials and staff, RTG ministry and state-enterprise officials and staff, representatives of Thai and U.S. private sectors, and representatives of the Thai academic community.

Privatization in Thailand

Privatization emerged as an issue in Thailand during the development of the First National Economic and Social Development Plan (1956-1961) which authorized the liquidation of certain state enterprises. The Government announced its initial privatization policy with the issuance of Cabinet Resolution dated October 18, 1983. This resolution authorized private sector involvement in joint ventures and management contracts in areas previously reserved for the private sector. It also provided for the Cabinet's consideration of individual proposals for divestiture originating with the Ministries.

Following the devaluation of the baht around the end of 1984, the Cabinet and its Economic Committee promulgated new public enterprise policies. This period was earmarked by extensive discussions and brainstorming on the subject of privatization. Efforts were made toward mounting a public awareness campaign. Government agencies worked closely with the Prime Minister and Minister of Finance in studying the problems and identifying solutions. These activities were the foundation of the policies promulgated by the Cabinet.

This enthusiasm for privatization carried over to the period 1985-1988. The concept of privatization was generally acceptable to government and the public. NESDB moved forward in preparing feasibility studies and preparing for policy implementation. NESDB prepared a study in late 1987 that suggested directions for increasing the private sector's role in the development of state enterprises. The report was scheduled for submission to the Cabinet following the 1988 general elections.

Following the 1988 general elections, decision-making was centralized at the Cabinet level. Policy formulation roles of government agencies, particularly that of the National Economic and Social Development Board, were reduced considerably. Following the formation of the new government, the leading party voiced its lack of support for implementing the privatization policy. Subsequently, the NESDB report was shelved and privatization was de-emphasized as a government policy. The government, however, did not abandon privatization in total. It has chosen instead to consider individual cases of privatization as they may surface thereby avoiding the subject of privatization becoming a political issue. Privately and informally, public enterprises have been made aware by the Government of the need to expand the private sector's role in the development of public enterprises.

Recently, there has been significant vocal opposition to privatization. This opposition has been mainly from state enterprise unions, groups and individuals with vested interests. The government, nevertheless, continues on the path of carrying out the unofficial policies related to expanding the role of the private sector in the development of public enterprises. To date, there has been some success and a few failures.

Implications for the Future

The preceding discussion has particular bearing on USAID's policy and program development considerations and strategies for Thailand. Any program or projects directed at providing support to the RTG in expanding the role of the private sector in the development of Thai infrastructure must be fully supported by the RTG. Given recent events surrounding the issue of privatization, it is unlikely that RTG will accept outwardly the need for assistance in this area.

General Issues

The discussion of the issues that follow sets forth the consultant team's understanding of the RTG's view on the subjects and their possible impact on USAID's program development process. RTG's policies, objectives and operational definitions will

determine how expanded private sector involvement in the future development of Thai infrastructure and utilities will evolve.

RTG Infrastructure Priorities

Thailand's Sixth National Economic and Social Development Plan (1987-1991), calls for the continuation of developing infrastructure services as a national priority. Infrastructure development is viewed as key to increasing national income and employment. Investments in infrastructure account for more than 50% of the total government investment and increased borrowing to support development has affected the national debt. Public utilities and amenities, energy, transport and communications are cited as vital to future RTG economic growth and development. Land transport and telecommunications are said to be serious problems both in terms of quality and quantity. These needs and priorities are likely to carry over into the Seventh Plan.

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Need to Open Markets in Thailand

As in many other countries, power in Thailand seems to be concentrated in the capital city. Few significant economic decisions can be taken without the approval of an official in Bangkok. This concentration of power leads not only to widespread allegations of corruption (which may or may not be justified) but also to a stunting of economic growth as entrepreneurs become more concerned with getting permits than with serving their customers.

One of the main obstacles to open markets in Thailand is the fixing of prices (e.g. bus fares, electricity tariffs, water charges) by central government. Another is government

over-regulation. In many instances people are precluded from providing services freely to one another. For instance, it may be illegal for a motorcyclist to carry a passenger along a street in Bangkok at a freely negotiated price; it is certainly illegal for one firm to sell to another its surplus electric power.

The idea that public services may be provided on a commercial basis may conflict with Thai traditions. Many Thais regard the provision of infrastructure services as a duty of the government, and only of the government. But, despite the efforts of dedicated officials, the development of infrastructure in Thailand has lagged, and its poor state has become a major constraint on development. Under these circumstances, the RTG may be receptive to taking a fresh look at other ways of providing public services, and particularly at possible roles for open markets utilizing the talents of Thai entrepreneurs at all levels of society.

As the US has had a variety of experiences with the private provision of public services, USAID is in a particularly strong position to assist the RTG in such an examination. The objective of this report is to indicate some of the sectors in which this work might be usefully pursued, and some methods which may be suitable.

II. PRIVATE SECTOR ROLES IN INFRASTRUCTURE AND UTILITIES

The following paragraphs discuss the findings and observations resulting from the project team's review of the literature, statistical data and field interviews.

Review of Infrastructure Sectors and Utilities

Power

Sector Description. Power generation and transmission in Thailand is dominated by the Electricity Generating Authority of Thailand (EGAT). Distribution in the Bangkok area is the responsibility of the Metropolitan Electricity Authority (MEA), and in provincial areas of the Provincial Electricity Authority (PEA). Distribution in remote areas is the responsibility of the National Energy Authority (NEA). Electricity rates are fixed by the RTG and are uniform throughout the country; there are no peak-period charges, nor does EGAT offer cut-price power at low rates to customers prepared to accept low service standards (e.g. to be cut off at short notice) as is common in the West. Some private plants generate their own electricity, but are not permitted to sell their surpluses.

EGAT operates 180 power facilities in Thailand. Its investment plan includes 35 projects costing Bt.130 billion (US\$ 5.2 billion) to be implemented by 1996, and a further 29 projects, costing Bt.170 billion (US\$ 6.8 billion) to be implemented by 2006. Some EGAT cooperation with other generators is already taking place (e.g. the National Petrochemical Corporation is reported to be generating 90 MW of power, and selling 10 with EGAT agreement) but EGAT does not officially admit this.

Scope for Privatization. There is talk of opportunities for private sector participation on a large scale in the generation area dominated by EGAT, for example through the medium of B-O-S ("Build-Operate-Sell") arrangements. Much of this results from a desire to have the private sector finance EGAT's investment program.

EGAT officials declare that they are interested in the privatization of some activities, but show no urgency to bring this about. They told the team that EGAT is meeting all demand for electricity (a claim disputed by others); that it does not need to buy power from private generators; and that the World Bank is helping to prepare a study on the possibilities of commercialization and privatization in their activities.

In the short term, the prospects for private sector involvement may be stronger in areas in which EGAT is not interested. Transportable power plants burning low-grade fuel (or even agricultural waste), with a capacity of 50 - 150 kw, (as used in rural USA in the 1920s) could be used to provide power where there is unsatisfied demand. Suitable generators, powered by air turbines, are currently manufactured in the U.S. at a cost of

US\$ 2,000 per kilowatt of capacity. The manufacturers claim this price could be halved if the generators were locally assembled, and if some of the components were locally produced. Local maintenance facilities could be provided. The introduction of mobile power units in areas with highly localized demand, such as industrial estates, could have important technology transfer benefits, in addition to satisfying immediate user needs. **The team recommends that the need for such facilities be explored by USAID staff with the National Energy Authority.**

Telecommunications

Sector Description. Telecommunication services in Thailand are provided by two state-owned enterprises, each having a monopoly: The Telephone Organization of Thailand (TOT) supplies local services, and the Communications Authority of Thailand (CAT) which supplies long distance and international services, and also operates the postal services. The 1934 Regulation relating to the powers of TOT is particularly restrictive of entry into the sector, and states explicitly that only TOT may install telephone equipment.

TOT does not meet the demand for telephone lines, but has improved its performance in recent years, so that the unrecorded fee that has to be paid to TOT staff for immediate service has dropped from the equivalent of US\$ 5,000 in 1988 to US\$ 1,000 today. As in the case of electricity, telephone rates are determined by the RTG; while they may be too low to support the rapid expansion of local service, TOT has never lacked funds for investment. On the contrary, it consistently fails to spend the funds allocated to it, because (it is generally believed) satisfying the demand for service would deprive its staff of the income derived from selling priority privileges to people on the waiting list.

CAT makes large profits on its long-distance and international calls (which are about three times as expensive as equivalent calls in the US), but is forced by the RTG to use some of its surplus to meet the losses incurred by the postal services. In this way, users of an expanding new technology are forced to subsidize declining ones.

Scope for Privatization. Another team of consultants engaged by NESDB are recommending that TOT and CAT be combined to form one monopolistic, regulated, private company, which would not be required to subsidize postal services. These consultants also suggest that small private companies be permitted by the new monopoly to serve areas in which the monopoly itself does not plan to provide service within an agreed time period. In view of TOT's blatant exploitation of its monopoly position, and the difficulties experienced by the RTG in regulating its agencies, it is not easy to feel sanguine about the outcome of this recommendation.

Other approaches to deal with the telecommunications service should also be considered. The simplest might be to allow both TOT and CAT to provide all services, and thus have a duopoly instead of a monopoly. (Both currently provide cellular service, and the competition is said to benefit users.) If the monopoly laws could be relaxed, the possibilities of competition in both long-distance and local service would appear to merit investigation. Competition in long-distance service is successful in the USA. Unrestricted entry to the provision of local service would be more difficult, but was common in the USA in the early stages of telephone development and resulted in rapid expansion of the sector. A supplier of suitable telecommunications equipment might be interested to sell it to local entrepreneurs and train them in its use. Small scale telephone companies would not only enhance local communications but also stimulate local economies and provide important technological expertise in areas that currently lack it.

In the light of experience in the US, USAID could be particularly helpful in the development of a network that would allow for competition where appropriate on technical and economic grounds, while retaining the technical standards necessary for country-wide service. It could commission the necessary studies, and finance pilot projects if the study results prove to be hopeful. If pilot projects were disallowed in some areas they could be introduced elsewhere, so the study results would not be wasted. The eastern seaboard, where a major industrial complex is being built, would be an ideal pilot area for introducing competitive telecommunication services since a large demand for high-quality service will be suddenly imposed on an area that is currently little served.

Transportation

a. Buses

Sector Description. Thailand's main problem with buses is in Bangkok, where the RTG, acting on the advice of European consultants, nationalized the buses in 1976, to form the Bangkok Mass Transit Authority (BMTA). Despite a doubling of fares regulated by the RTG, travel conditions are as poor as ever. It is generally accepted that the main beneficiaries from the nationalization are unionized bus-crews.

BMTA fares do not cover even its operating costs, and it has therefore been a persistent money loser since its inception. Daily losses on its 5,000 buses are equivalent to US\$ 120,000, or US\$ 24 per bus per day. BMTA's liabilities at the end of 1989 exceeded its assets by the equivalent of over US\$ 300 million. Because of this indebtedness, BMTA is incapable of replenishing its bus fleet, and is dependent on the RTG for bus purchases. However, the fact that private buses operate in Bangkok (some of them illegally) suggests that low fares may not be the only cause of BMTA's losses.

USAID staff calculate that BMTA's buses are wearing out at the rate of 200 a year, and that 2,000 more buses will be required in Bangkok by 1990 to return the bus fleet to its 1983 level.

The team agrees with the conclusions of the Short Term Urban Transport Review (STTR), which was commissioned by the NESDB in 1985, that buses (rather than trains) are the appropriate mass transit mode for Bangkok, and that segregated "busways" should be provided to speed their service. Buses on special high-speed lanes would not only provide a lower cost solution than a rail/bus system, but also higher door-to-door travel speeds for most trips.

Scope for Privatization. The 1985 STTR report also proposed that BMTA's monopoly be withdrawn; that more flexibility be introduced in fares; and that private companies be invited to bid for route franchises in competition with BMTA. This proposal involved privatization on a substantial scale, but there might have been a case for going further, e.g. for abolishing all economic restrictions on new entry, and allowing new services to be provided in response to market demand, at unregulated fares.

As bus services are satisfactorily provided without subsidy in many cities (e.g. Chiang Mai, Buenos Aires, Hong Kong, Istanbul, Manila), and as they were provided in Bangkok without subsidy at low fares prior to the formation of the BMTA, buses are clearly a strong candidate for early privatization. Involvement of the private sector in the provision of buses and bus services in Bangkok would not only improve mobility and reduce losses, it would also stimulate entrepreneurial development and provide investment opportunities both small and large-scale.

Whether the privatization should be accomplished by selling the buses back to their previous owners (thus following the example of the authorities in Buenos Aires in 1962); giving them to their crews; selling them to other operators; or by a combination of these and other methods; is a question that would merit early study unless the RTG decides to deal with BMTA in accordance with the 1985 STTR recommendations referred to above.

In view of the immediate need for more buses, this is a matter that needs to be dealt with urgently. USAID should consider whether it could assist in the financing and preparation of such a study, which could also consider the future of BMTA and the disposition of its debt.

b. Railways

Sector Description. The State Railway of Thailand (SRT) carries less than 10% of Thailand's passenger and freight traffic. Its share of traffic is declining and in the current year it expects its expenditures to exceed its revenues by Bt. 905 million (US\$36

million). As SRT serves many uneconomic routes, and few (if any) economic ones, no serious observers believe that it can be made to run profitably without the kind of reforms that have been hitherto unacceptable. There is no certainty as to whether even a reformed SRT would be financially viable or economically justified. Despite its losses, it still gets OECF funds for the construction of new lines, with no regard to financial viability.

The cost of supporting its large staff, 28,000 employees, is the heart of SRT's financial difficulties. Labor productivity is abysmal. SRT has 12 times as many staff per kilometer of track as the Malaysian Railroads. SRT employees have created the Kingdom's largest and most politicized labor union to defend the status quo. RTG's attempt to privatize SRT's workshops in 1988 quickly led to a strike which threatened to spread to other sectors. Given the unimportance of the railway system to the economy as a whole, there is little enthusiasm within the government to push for improvements in this sector.

SRT is not involved with the proposals for elevated mass transit systems ("Skytrains") in Bangkok. Two proposals are currently being considered by the Express Transit Authority. Neither is financially viable nor economically desirable as (for the reasons given above under "Buses") buses on their own segregated lanes would give better service at less cost. SRT has however suggested that portions of its track in Bangkok be elevated for the use of both commuter service and main line service. A much better suggestion (supported by the STTR consultants) would be to construct elevated "busways" over selected portions of the SRT track in Bangkok.

Scope for Privatization. SRT has experimented with contracting out to private firms the commercial operation of three trains. The experiment proved successful on two of them, in that there were substantial savings in wages, owing to younger, less experienced staff being employed to deal with passengers on the trains. Unfortunately, the experiments were terminated at the request of the RTG, following objections by union representatives that were made not to the SRT but directly to the central government.

To reduce its losses, the SRT has suggested that the RTG take financial responsibility for the track, while leaving a commercialized or privatized SRT responsible for the movement of passengers and freight on it. The reasoning behind this proposal is that, as road users do not pay for the use of roads, why should the rail users be burdened with the cost of the track? Proponents of this solution readily admit that it is "second-best", and that it would be better if road users paid for their infrastructure, and the SRT for its own. But, argue the proponents, in this imperfect world, where "the best is the enemy of the good", second-best solutions are often better than leaving things as they are.

However, the weakness of this particular second-best solution is that it avoids the essence of the problem, which is the poor utilization of the SRT's right-of-way. The main

difficulty faced by SRT- and by most other railroads- is the inability to attract sufficient paying traffic to cover the cost of expensive right-of-way. As road networks in Thailand improve, this difficulty is likely to become more critical.

The straightforward- and hard- way to deal with SRT is to privatize it completely, and to allow its managers to run at a profit those services that are viable, and to close down those that are not. US railways are among the few systems that are still profitable and, if SRT is seeking management expertise, USAID could surely be helpful in introducing the services of suitable consultants. However, slimming down a railway is a thankless task in any country, and USAID should not get involved except in response to a request from the highest levels.

There is investor interest in SRT non-transport assets, such as its land, hotels, etc., but these are remote from the subject matter of this report.

c. Roads

Sector Description. The Department of Highways (DOH) manages an extensive road system which comprises some 10,000 miles of national roads, 20,000 miles of provincial roads, and 70,000 miles of rural roads. Except in the Bangkok area (where some 15 public sector agencies are involved in the provision of urban transport infrastructure and services), the system is generally adequate and its condition does not yet constrain economic growth.

The pervasive traffic congestion in Bangkok is popularly regarded as due to a shortage of road capacity, which could be made good by an infusion of sufficient funds. But the underlying cause is a failure of management- the failure to apply to Bangkok's road space the well-known pricing and investment principles that are used for the allocation of other scarce resources. Unless effective measures are taken to improve public transport and raise the efficiency of the road network, Bangkok is likely to see economic growth diverted to other places- even to other countries.

Bangkok's road capacity was augmented by the provision of toll expressways, which are operated by the state-owned Express Transit Authority (ETA). ETA has recently approved a second toll expressway, to be constructed and operated by a private consortium which includes a strong Japanese element. Incredibly, there is general agreement that the second expressway is not financially viable, so over a third of its funds are to come from the surpluses earned by the first.

A private sector group is planning to build and operate an elevated toll expressway above the existing Bangkok airport expressway. This project will not require the purchase of additional land and is expected to be financially viable.

In 1984 bids were invited from the private sector to construct and operate three toll highways radiating out of Bangkok. Bids were submitted, but eventually the RTG decided to have the roads built by the DOH.

Scope for Privatization. Local roads are already being built in Thailand by the private sector in the process of property development. The provision of large-scale roads by the private sector is difficult for three reasons:

- (1) There are no guidelines laying down private sector roles in highways, so each case has to be separately negotiated, a process that can take years;
- (2) Except in the case of toll roads, there is no convenient process by which the road providers can get paid by the users;
- (3) Even if a convenient mechanism for payment could be introduced (such as the non-stop toll collection methods being introduced in the US) private providers would still find themselves competing against "free" roads provided by the DOH.

These difficulties are not insuperable. For example, one way to involve the private sector in the provision of roads would be to establish a trust fund that would finance all roads, whether privately or publicly provided, on an equal basis. As fuel taxes are comparatively low in Thailand they could provide an acceptable means of payment. The US Interstate Highway System- probably the greatest public works project of all time- was funded by a fuel tax of 4 cents a gallon.

A Thai highway fund might work as follows: It would be fed by specific road user charges, e.g. fuel taxes, axle-load taxes, etc. Fund revenues would be allocated as of right to any road provider, public or private, in proportion to the traffic using the road, as determined from traffic counts. The level of road user charges would be fixed so as to ensure that average road users paid the costs arising out of their use of Thailand's roads. Additional charges would be payable by those who cause additional costs, e.g. truckers and users of heavily congested roads.

An earmarked highway fund would meet the difficulties referred to above. The introduction of clear guidelines would reduce uncertainty; the revenues from the fund would be payable as of right to the road providers, in proportion to the traffic attracted to their roads; and competition from "free" roads would not be important, as all road users would be paying on the same basis; The main uncertainty would be doubts as to whether the authorities would stick to the governmental guidelines, an uncertainty that might be removable by insurance.

Recent events in Thailand do not suggest that the RTG is willing to give up control of the highways, nor that it is interested in payment mechanisms that do not discriminate against the private sector. But people and attitudes change and, if the RTG ever became interested in enabling the private sector to price roads and provide them in response to consumer demand, USAID would be well placed to finance the necessary studies.

d. Ports (sea)

Sector Description. Thailand's main port of Bangkok is now handling of 650,000 TEUs (20-foot Container Equivalent Units) per year, which is its full capacity under existing natural and administrative constraints. Additional capacity is urgently needed and is to be found at the existing ports of Sattahip, Phuket, Songkhla, Map Ta Pud and the private wharves in the vicinity of Bangkok. The first four berths of the new port of Laem Chabang (ultimate capacity 22 berths) is to be opened in 1991.

The Port Authority of Thailand (PAT) is responsible for dredging and maintaining the navigation channel in the Chao Phya river and for managing and operating the general cargo wharves at Klong Toei (part of the Port of Bangkok) where it exploits a government monopoly to handle all imports. The RTG has decided that the private sector should finance additional port capacity and operate the new ports, including Laem Chabang. The PAT management opposes this, as do its unionized port workers.

Scope for Privatization. There are no financial or managerial problems in the private operation of ports in Thailand; in fact the small ports of Phuket and Songkhla are already privately operated, as are many private wharves along the Chao Paya river. For example, the "Bangkok Modern Terminal", 20 miles south of Klong Toei, is owned by a rice importer and operated under license from the Harbor Department with the approval of the Customs Department. It employs non-union labor.

The main constraint to increased private sector participation is said to be union opposition, but it is not clear whether the opposition is based on legitimate concerns of workers or whether the unions are acting at the behest of other interests, such as the PAT management. It is difficult to see a role for USAID in this sector.

e. Ports (air)

Sector Description. Bangkok International Airport (BIA) at Don Muang is the dominant airport in Thailand, but there are also international airports at Chiang Mai, Hat Yai and Phuket. Substantial investment is being undertaken to upgrade other airports, e.g. at Buriram, Chiangrai, Krabi, Petchaboon, Ranong, Ubon Ratchathani, Udon Thani and U-Tapao, the latter (which used to be a USAF base) to international standards.

From time to time there is also talk of a second airport for Bangkok to be built on a piece of swampland at Nong Ngu Hao, to the east of the city.

BIA is operated by the Airport Authority of Thailand (AAT), which is responsible for operations at some- but not all- of Thailand's airports.

Scope for Privatization. Airports do not come cheaply and, in the heady days of 1989, RTG spokesmen welcomed the prospects of more private sector participation in the construction and operation of airports. But these words have not been backed by deeds. When the Lockheed Corporation, one of the most experienced airport operators in the world, wanted to operate the airport at Phuket, it was turned down, reportedly on the grounds that "the airport is a highly profitable source of government revenue". Lockheed was advised by Minister Anupong to "prove the company's managerial ability" by operating "less active and profitable airfields".

The US government has provided a US\$ 450,000 TDP grant for a feasibility study of the economic, technical, financial and marketing aspects of converting the airport at U-Tapao into commercial use. If this study goes ahead, it could provide an opportunity for an in-depth exploration of airport privatization options in Thailand.

f. Aviation

Sector Description. The leading airline in Thailand is Thai Airways International (THAI), which was formed in 1988 following a merger of Thailand's international and domestic airlines. The Scandinavian Air Services (SAS) used to be financially and managerially linked to THAI but these relationships were terminated. THAI is now 94% owned by the Ministry of Finance. THAI is well run and more than holds its own in international competition. Its domestic services, in which it holds a virtual monopoly, are not so well run, but the present THAI management has only recently taken control of them.

Scope for Privatization. The Ministry of Finance is reluctant to finance THAI's expansion needs, and would like to raise funds from the market. As neither the government nor THAI wish to lose control of the airline, proposals were made to sell 30% of the stock to investors in the form of non-voting shares. This seems to be another example of a view held in many governments that the ideal relationship between the public and private sectors is that of the rider and the horse. The team sees no point in USAID getting involved in exercises of this kind. On the other hand, a genuine privatization that would enable domestic and foreign investors to buy good quality voting stock would be beneficial in many ways.

Of more relevance to economic development is the virtual monopoly enjoyed by THAI in the domestic market. A cabinet ruling currently bans the establishment of

private airlines in Thailand, reportedly because of a wish to protect THAI from competition. It is not clear to what extent the monopoly is enforced: In early 1989 the Bangkok Airways Company, which built an airport for its operations on Samui Island, received permission to provide domestic services; on the other hand, when Thai Connector Cargo Airline was formed in 1989, to relieve chronic shortages of airfreight space, it was denied a license despite the support of the Ministry of Transport and Communications.

A significant aspect of the THAI domestic monopoly is that the flag airline is reported to be using less than half of its traffic rights. This behavior, which is consistent with classical monopoly theory, means that would-be travelers are denied travel opportunities, and economic development is inhibited. For example, the Chiang Mai Chamber of Commerce commented in June 1989 that "THAI should minimize its role to provide room for other airlines to operate more direct flights to Chiang Mai".

Air travel is a powerful stimulus to development, especially in a country as large and as diverse as Thailand. The US has successfully deregulated its air services, and USAID is well placed to assist the RTG to preside over the expansion of safe air services for both passengers and freight.

Utilities

a. Water Supply.

Sector Description. Water is supplied in Bangkok by the Metropolitan Waterworks Authority (MWA), which has a statutory monopoly. For the last two years MWA has been well run, and its costs are more than covered by revenues. Its problem is that it cannot expand its services quickly enough to meet growing demand.

MWA's charges are fixed by government at 5 Bt. per cubic meter for small users and 8 for large ones. But for people who draw water from their own wells, the charge is only 1 Bt. per cubic meter, and even that charge is often not levied by the Department of Mineral Resources, which is the nominal owner of the ground water. So users have an incentive to sink their own wells, and an overwhelming incentive to use wells that have already been sunk, because of the literally "sunk" costs involved.

The incentive for people to draw their own water from Bangkok's aquifer has an unfortunate consequence of major importance: Bangkok is reported to be sinking, at the rate of 10-15 cm per year, as a result of ground water pumping. Land subsidence not only weakens the foundations of buildings but also increases the risks of damage from flooding. But current public policy increases the incentive to pump ground water by (a) the charging structure, (b) the inability of MWA to provide water as quickly as required, and (c) by its legal monopoly which prevents other suppliers from meeting user needs when MWA cannot. Most of MWA's supply comes from surface water, not from ground

water. Another disadvantage of the MWA monopoly is that industrial quality water is not supplied in the Bangkok area, reportedly because of the influence of suppliers of chemicals for water treatment.

Outside Bangkok the situation is confused. The main actor is the Provincial Waterworks Authority (PWA), which was formed in 1979 to take over water supply in the provinces. PWA owns and operates 174 urban waterworks and provides technical support to 675 rural water systems operated by local authorities. The reasons for setting up PWA have never been made clear, as the change from local to central control has generally resulted in higher charges and lower standards of service. For these reasons, some 35 local authorities have refused to transfer their waterworks to PWA, preferring to stay autonomous.

Water charges in the provinces, as in Bangkok, are centrally determined.

Neither MWA nor PWA have responsibility for drainage or sewerage, which are often linked to water utilities in other countries..

Scope for Privatization. Piped water is not an easy substance for the private sector to supply, because of unclear property rights and the natural monopoly characteristics of water distribution.

The problem of property rights in water sounds esoteric, but the situation in Bangkok illustrates its importance. It is precisely because the Department of Mineral Resources does not take seriously its ownership of the aquifer that it allows its water to be drawn at a price that is obviously too low, as would be any price that allows the aquifer to be lowered. A study of what the price of ground water should be in Bangkok, and what institutional framework might ensure protection of the aquifer, could be extremely helpful, and there are US consulting firms qualified to undertake it.

Although water distribution has the characteristics of natural monopoly, there is scope for services to be contracted out to private firms. Many cities contract out the whole water supply operation, as well as the drainage and sewerage. If the complete operation cannot be contracted out, it is possible to arrange for the private sector to perform part of it. MWA, for example, is interested in contracting out services such as meter reading and cash collection, and even in buying water under contract if the price were right. It is planning major investments to bring water to Bangkok from sources 100 km away.

There is also scope for the private sector to supply industrial quality water in the Bangkok area if the MWA monopoly could be relaxed. MWA allows private developers to supply purified water to their tenants, but not to sell it outside their areas.

Opportunities for involving private firms in water supply are probably greater outside Bangkok, as many local authorities are anxious to escape the PWA umbrella. USAID can play an important role in identifying opportunities and arranging for pilot projects to be undertaken by experienced US firms.

b. Sewerage and Solid Waste Disposal.

Sector Description. In the Bangkok area, responsibility for sewerage and solid waste disposal (S/SWD) rests with the Bangkok Municipal Administration (BMA), which has not implemented any of the comprehensive sewerage schemes suggested by experts over the years. The main reason for this is the lack of an obvious source of funds other than general tax revenues which are needed for other capital intensive programs.

Outside Bangkok the responsibility for S/SWD rests on local authorities. Many tourist areas suffer from severe pollution due to untreated sewage being discharged into the sea. The team suspects that problems are worse in many non-tourist areas, but are less publicized.

Scope for Privatization. The neglect of S/SWD by the public sector in Thailand offers significant opportunities for the private sector. Bangkok is the largest city in the world (outside China) with no main sewerage system at all. Only one out of 120 Thai cities has a main sewerage system. The needs for such systems are widely recognized: for example proposals have recently been made that a private firm be contracted to provide sewage treatment plants for Hua Hin and Pattaya. Solid waste disposal by the private sector was tried on a small scale in Bangkok, but the experiment was not successful and not pursued.

The opportunities in sewerage and solid waste disposal are probably greater even than in water supply, because these sectors have been neglected by the authorities in Thailand, so that there are no vested interests (as in the case of water) to oppose private participation. Sewerage and solid waste improvements would have major implications for health and the environment. As the Thais consider the US to be the world leader in waste treatment technology, USAID has an immediate opportunity to play a useful role in identifying opportunities in these sectors.

There is also a need to look at the broader aspects of institutional reform. Water and sewerage are supplied by the private sector in many countries, within a framework of suitable legal and fiscal arrangements. For example, the definition of property rights in water can enable markets in water to be established, which would encourage the transfer of water from areas in which it is plentiful to areas of shortage. The joint supply of

water and sewerage provides a convenient method of charging for these services in many countries. Such institutional arrangements seem to be lacking in Thailand; USAID could help the RTG to establish them.

III. SELECTION OF KEY AREAS FOR DEVELOPMENT

This section outlines the method of developing and applying the analytical framework for selecting key sectors/areas for USAID to consider for future development assistance. A matrix is presented which indicates the relative ranking of each sectors/areas considered.

Development of Analytical Framework

To help USAID/Thailand select infrastructure and utility sectors for future development assistance, the team used the following six criteria. The first five were in the project Scope of Work; the sixth was added for the reasons given in the Introduction:

1. The impact of privatization on the growth of the Thai economy: This criterion relates not to the importance of the sector but to the effect of its privatization on the sustainability Thai economic growth. In electric power, for example, little would be gained by prioritizing the sector, since the government system is comparatively well run.

2. The prospects for early impact on the RTG's decision to proceed with privatization: The team took "early impact" to mean before 1992.

3. Potential for expansion of US private investment: This criterion related mainly to the comparative advantage (if any) enjoyed by US exporters in the sector concerned.

4. Prospects for cooperation with multilateral donors: This criterion was used mainly to assess the prospects of USAID cooperation with the International Finance Corporation (IFC). The team tended to be pessimistic about the possibilities of effective cooperation between two or more large bureaucracies.

5. Availability of local capital: The team was advised that indigenous capital was more easily attracted to small local enterprises than to remote large ones.

6. Impact on the diffusion of political power: This criterion related to the extent to which the privatization was likely to strengthen consumer empowerment or local government.

The relevant infrastructure and utility sectors were ranked against these criteria in accordance with the following scale of effects: 0 = Nil; 1 = Minor; 2 = Some; 3 = Substantial; and 4 = Exceptional importance.

In identifying sectors for consideration, the team distinguished between "large scale" and "small scale" operations in the energy and telecommunications sectors and looked separately at possibilities within and outside Bangkok for roads and railroads.

Selection of Promising Areas for U.S. Involvement

The resulting rankings, by sector and criterion, are shown in Table 1. The rankings involved some subjective judgement by the team; rankings by others may yield different results.

In applying the above criteria to the selection of promising areas for USAID involvement, the team regarded the first two criteria - effects on economic growth and prospects for early action - as critical, and excluded from further consideration any activity that did not score at least 2 in either of them.

The sector that seems to have the most going for it is sewerage, especially outside Bangkok. The main reasons for this are the importance of the sector in a growing economy and the absence of entrenched interests to oppose it. Buses in Bangkok, and water supply outside it, also appear to have good prospects.

The team is less optimistic about USAID prospects in critical sectors such as ports, electric power, telecommunications, and Bangkok transport. The ports and electric power problems are essentially struggles - in which the US should probably not be involved - between opposing Thai political factions. Telecommunications are run for the benefit of a clique which, the team was advised, would be very difficult to dislodge; nevertheless the sector may be susceptible to attack by small scale enterprises in outlying areas, and the same technique might be successful in denting the EGAT monopoly. Bangkok's transport problems would be relieved to some extent by the privatization of its buses, but the infrastructure shortages are unlikely to be relieved without policy decisions which the authorities show no signs of making. Perhaps the best way to lay the groundwork for change in these sectors is to build up a successful track record of privatizations in easier sectors (i.e., sewerage, buses and water supply.)

Our general conclusion is that, in view of the recent public debate in Thailand between the proponents and opponents on privatization, USAID should follow its successful activities in the housing sector and offer low-profile interventions in key sectors.

TABLE 1.

INFRASTRUCTURE SELECTION CRITERIA

Infrastructure Area

Sector	Electric Power		Telecom		Railroads		Roads		Ports		Transport		Utilities		
	lg	sm	lg	sm	Bgk	oth	Bgk	oth	Sea	Air	Bus	Air	Water	Sewerage Solid Waste	
Criterion															
Impact on Thai Growth	1	3	4	4	1	1	3	2	3	1	3	3	2	2	1
Prospects for Action Before 1992	2	3	1	2	2	2	1	1	4	2	3	2	3	3	3
Potential for Expanded U.S. Investment	3	3	3	3	1	1	2	2	2	2	0	3	3	3	2
Prospects for Cooperation with IFC, etc.	2	2	2	2	0	0	2	1	2	1	0	1	2	2	2
Availability of Local Capital	2	3	2	3	1	1	3	3	3	2	4	2	3	3	3
Impact on Diffusion of Political Power	3	4	3	4	0	0	2	2	4	3	3	3	3	3	2

Ranking Codes: 0 = Nil, 1 = minor, 2 = some, 3 =substantial, 4 = exceptional

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IV. PROGRAMS AND PROJECTS FOR DEVELOPMENT

This section discusses the status of the Mission's current program, its changing relationship with the RTG, and suggests a strategy for meeting Thailand's future development needs in the provision of infrastructure and utility services. Opportunities and constraints to future development are identified as well as suggestions for specific project activities. The findings and observations set forth below are not intended to be an extensive review of the subjects, but represent the team's views based on information developed from a limited review.

Status of Mission's Program Portfolio

The Mission's role and traditional development program in Thailand is undergoing change. In recognition of Thailand's economic growth and development and change in status to "Advanced Developing Country"; as well as the reality of impending Administration and Congressional budget reductions in international aid and an "emerging foreign assistance philosophy: open markets, open societies," USAID/T's program focus will change. Future program activities will require "highly flexible, rapidly responsive program mechanisms, which are generally short-term and relatively inexpensive." The thrust of the Mission's program will be to mobilize the resources of the private sector "to create mutually beneficial U.S.-Thai linkages."

Mission Development Strategy

In view of the RTG's lack of support of expanding the involvement of the private sector in the provision of infrastructure and utility services at this time, the Consultant Team recommends that the Mission take a reactive rather than proactive posture in providing future development assistance. This approach was generally supported by comments received from several key RTG officials interviewed. The approach is also compatible with current RTG plans and activities. As envisioned by the consultant team, USAID/Thailand should pursue a two point strategy in support of its future assistance program. The strategy would encompass the following elements:

1. Small scale, indirect efforts directed at private sector development projects in the selected areas: power; telecommunications; transportation; and, utilities, particularly water supply, sewerage and drainage. Support would involve studies, pilot projects, and those activities likely to open doors for the private sector.
2. Alleviate the perception that private sector involvement benefits the rich. USAID/T should stress the need for development

through the use of local resources for the betterment of low income groups.

The Team feels the Mission should focus on more modest sectoral objectives to coincide with its projected resources. In keeping with its ADC strategy, programs should be limited to non-capital intensive projects. Specifically, the Mission might consider a program focus that includes small scale project activities (targets of opportunity) in both critical and lesser priority sectors which have a high probability of success. The Mission might consider development projects in Bangkok in any of the infrastructure and utilities sectors where there is limited or no public enterprise involvement, e.g. sewerage, solid waste, and environmental protection.

As regards the issue of tied aid and mixed credits, the team found a general perception among the U.S. business community in Thailand that both are needed to establish a "level playing field" and to reestablish competitiveness with European and Far East competitors. The team feels that tied aid and mixed credits are a factor in the outcome of bidding for public projects in Thailand, but that other factors also come into play such as the appropriate use of basic business practices, particularly as they relate to cultural and social environment in Southeast Asia. This issue has been under review for over a decade by the U.S. Executive and Legislative Branches without resolution. It is a subject that merits further study.

Program Opportunities

Private sector participation in the provision of infrastructure and utility services is limited at this time. However, there are things that could be done on a low profile basis that could meet program objectives and eventually lead to full and open participation of the private sector. The team views the following as program areas of opportunity.

Directed Technical Assistance

Selected sectoral and feasibility studies, technical assistance, and technology transfer could be provided to targets of opportunity arising in those sectors/areas identified as critical to Thailand's development. Specific areas of assistance might include such things as a review of laws, regulations, and administrative procedures as they relate to privatization or private sector involvement; feasibility study of the Bangkok bus company as an ESOP; cogeneration of electricity; tariffs and pricing of infrastructure and utility services; solid waste management and environmental protection, and; conservation measures, to name but a few.

Public Awareness

Fears and concerns about privatization can be alleviated through a low-key, yet comprehensive and continuous public awareness program. USAID may wish to consider assisting the RTG develop and carry out a broad-based public awareness program directed at reaching all groups affected by privatization: management of State Enterprises, government administrators, Members of Parliament, military, labor and the general public. Such a program would prepare a proper environment for developing broad-based public support. The program would have to be supported by USAID/T at arms length in order to assure program credibility. A local, non-governmental institute or association generally perceived as objective by the Thai community would be an ideal candidate for this activity. USAID should encourage such a campaign and offer technical assistance in developing program strategy and essential materials.

Enhancing Understanding of Free Markets. There appears to be a widespread perception in Thailand that privatization is an activity designed to enable the rich to get richer by cheaply appropriating public assets. This perception seems to be consistent with a misunderstanding of the workings of free markets and open societies. USAID staff may wish to give this matter some consideration, though the role of USAID in free market education is by no means clear - explicit pro-market propaganda is obviously not called for. But USAID might be able to help local people to set up - at their own risk and expense - Thai free market institutes to do the kind of work so successfully undertaken by the Institute of Economic Affairs in London and the American Enterprise Institute in Washington DC.

Reaching an Understanding With Labor. To illustrate the need for civic education, one need only look at the obsessive opposition to privatization expressed by the Thai labor unions, and at the inept way this opposition is being handled by the Thai authorities, who seem to make no effort to explain to workers how they themselves could gain from the process.

Specific Program Assistance. Specific assistance might include providing technical expertise in developing and conducting public attitude or opinion surveys; preparation and distribution of studies addressing specific government fears and concerns; providing forums for discussing relevant privatization topics; and, drafting a comprehensive, professional public awareness program to be carried out by a competent public relations expert.

Assistance might also be given to a third party such as the Thai Council of Industry to undertake a wide range of activities including: preparation of position papers on relevant topics, establishing a data collection and information dissemination service, providing a national forum for exchanging views on key infrastructure and utility

development issues, and lobbying government and "elite" groups such as the military and labor unions.

Improving Capital Formation

A concrete way to enhance education in free market systems, and at the same time to improve domestic capital flows and individual security, would be to help the RTG design a social security system on the Chilean model, in which participants are enabled to buy financial security by establishing Individual Retirement Accounts ("IRA"s) in selected government-approved mutual funds. Advice on the establishment of ESOPs (Employee Stock Ownership Plans) might also be useful to the RTG, especially in the course of privatization.

USAID/T might arrange for one of the US free-market institutes to assist like-minded Thai personalities to set up an indigenous free-market educational body in Bangkok, to be financed entirely by Thais.

Program Constraints

The team views the following as constraints to USAID/T successfully achieving its objective of fuller participation of the private sector in the development of Thailand infrastructure and utilities.

Government Lack of Support

One of the major obstacles to expanding private sector involvement in the provision of infrastructure and utilities services is the government's (current Cabinet's) unwillingness to openly support programs and guidelines prepared by NESDB. Although not available for distribution, the team was able to review an undated document entitled, "Guidelines for Enhancing the Role of the Private Sector in the Development of State Enterprises." The document was thoughtfully prepared and outlined a realistic first effort at privatization of 41 of 61 SOEs. This document reportedly was shelved over a year ago following brief discussions among the Cabinet, MOF and NESDB.

Government officials cite the following as key issues surrounding the Cabinet's reluctance in supporting the privatization program outlined:

1. Philosophical and political conflict regarding the government's role in providing certain elements of infrastructure and utilities.

2. The perception that the RTG will forfeit power, particularly as it relates to current purchasing and procurement benefits.
3. Acts of political intervention into the management of government operations.
4. Potential corruption resulting from the privatization process, particularly from the selling of assets by politicians for personal gain.
5. Conflict between the Military and Government.
6. Union leadership pressures on government (considered by many to be "gangsterism" tactics.)
7. National interests and security reasons, the threat of foreign interests moving the country into a new kind of neo-colonialism.
8. Fear: Since capitalism produces unequal economic rewards, privatization will likely lead to some bankruptcies, unemployment, and large disparities in wealth and ownership.

A professionally developed and executed public awareness campaign could help alleviate these fears and concerns.

Future Mission Program Funding Levels

Future program and project development in Thailand is limited to current funding in the pipeline. Existing projects are being trimmed down or phased out. Funds that are freed up from this process will be reprogrammed for new project development under established program "umbrellas." Projected available funds for the next five years is in the neighborhood of 6-7 million USD a year. This anticipated funding level precludes undertaking any "major" projects.

Mission Mandate for Involvement in Infrastructure Projects

At present there is no clear mandate for the Mission's involvement in infrastructure development projects. The Mission's role should be clarified and formalized in respect to infrastructure and utilities development assistance in Thailand.

V. PLAN FOR PHASE II

The suggested Phase II workplan that follows outlines process tasks and provides specific action options for Phase II of the study. The expected outcome of Phase II is a series of recommendations for specific programs and projects and other information that will contribute to the project and program development cycle. Areas for further study during Phase II should be directed at mobilizing Thai and U.S. Private Sector Resources and Decentralization of Government Authority.

In mobilizing Thai and U.S. private sector resources, USAID should:

1. Continue its overall policy dialogue activities with the RTG and coordination with other donors to maximize policy dialogue results;
2. Sponsor activities to strengthen private sector organizations such as Chambers of Commerce, Industrial Council of Thailand, and Thai/U.S. Bank Associations;
3. Support Thai public and private sector efforts to inform and educate the general public about the advantages of private sector involvement in the development of infrastructure sectors and utilities;
4. Assist ministries, departments, municipalities prepare studies in reviewing and redrafting laws, acts, regulations, etc., that have an impact on infrastructure development, especially those discriminating against private provision of services; and,
5. Assist in activities that promote greater mobilization of domestic and international capital in Thailand.
6. Support the decentralization of government authority and the empowerment of Thai consumers.

Table 2. summarizes the specific project recommendations outlined in this report, briefly describes each component, and suggests a budget range for each activity.

Workplan

A suggested workplan for carrying out the activities recommended above for Phase II follows:

Pre-Phase II

late-March, 1990

Review comments and complete final report.

April-May, 1990

Mission decides on program for Phase II and prepares specific project terms of reference.

July-Aug., 1990

Identify and select consultants for Phase II.

Phase II Study

late Aug., 1990

Mobilize consultant team

Sept.- Jan. 1991

Conduct field work, prepare project reports.

**Feb.- March, 1991
March, 1991**

**USAID review of project findings.
Incorporate study recommendations into Mission development plan.**

May, 1991

Begin project implementation.

TABLE 2.

SUMMARY OF RECOMMENDED PROJECTS

PROGRAM COMPONENT	PROJECT DESCRIPTION	COUNTERPARTS	BUDGET RANGE
Targeted Sectors	Electric Power -- small scale projects including feasibility studies of opportunities for private sector involvement, ie., B.O.S. co-generation, transportable power plants, and the like.	EGAT, PEA, NEA	\$1-1.5 million
	Telecommunications -- Small scale projects to be determined by circumstances and events.	TOT, CAT	\$500,000
	Transportation -- Feasibility studies for increased participation of the private sector in Sea Ports and Buses.	BMTA, PAT	\$250,000
	Water and Sewerage -- Studies to determine feasibility of private firms providing potable and industrial use water and wastewater treatment.	BMA, MWA, PWA	\$250,000

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Reactive Projects	Directed Technical Assistance -- Selected technical assistance and technology transfer provided to targets of opportunity: legal reform, improved administrative procedures, ESOPS, tariffs and pricing policies related to infrastructure and utilities environmental protection, and conservation measures.	Undetermined	\$2-3 million
Public Awareness	Enhancing Understanding of Free Markets -- conferences, workshops, seminars directed at wide range of societal groups, associations, and interests, including unions, military, Parliament, private sector, et al.	Various	\$800,000/year
	Specific Assistance -- Public opinion surveys, course curricula development, professional public awareness development assistance, etc.	Various	\$500,000
	Policy dialogue -- Support policy dialogue activities with the RTG and coordinate programs with other donors to maximize policy dialogue results.	Prime Minister, MOF, NESDB	\$250,000
	Strengthen Private Sector -- Sponsor activities to strengthen private sector organizations such as Chambers of Commerce, Federation of Thai Industries, and Thai/U.S. Bank Associations.	Various	\$500,000

VI. ANNEXES

This section includes the following Annexes:

- o Privatization in Thailand: An Historical Perspective**
- o List of Persons Interviewed**
- o Project Scope of Work**

ANNEX 1

PRIVATIZATION IN THAILAND: AN HISTORICAL PERSPECTIVE

PRIVATIZATION IN THAILAND: AN HISTORICAL PERSPECTIVE

Since 1985, many developing countries have been faced with serious foreign debt problems. The Thai Government was no exception. It also felt the crippling effect of the heavy burden of foreign debt during this period. In response to its growing economic problems, the RTG took immediate steps to implement measures to stabilize the national economic and financial picture. These steps included formulating various national fiscal policies, e.g. domestic and foreign debt limitation, public enterprise efficiency and productivity improvement, and privatization policies. These policies formed the framework of the government's national economic development program. A key element of this development program was improving the efficiency and productivity of state (public) enterprises.

By 1990, the private sector has developed and expanded its investment, production and services capacity sufficiently to enable it to fulfill internal consumption needs as well as exporting goods to foreign markets. To maintain and increase this economic growth momentum, the RTG proposed a privatization policy to expand the role of the private sector in state enterprises.

Development of the RTG Privatization Policy

Privatization emerged as an issue in Thailand during the development of the First National Economic and Social Development Plan (1956-1961). The plan, however, limited actual privatization activities to the liquidation of certain state enterprises.

The Government announced its initial privatization policy with the issuance of Cabinet Resolution dated October 18, 1983. This resolution authorized private sector involvement in joint ventures and management contracts in areas previously reserved for the public sector. It also provided for the Cabinet's consideration of individual proposals for divestiture originating with the Ministries.

During the first two years of the Fifth National Plan, the National Economic and Development Board issued a report on the financial and operational status of 60 State Enterprises. The report contained the following recommendations:

1. A policy should be formulated to encourage public enterprises to increase productivity, increase revenues and maximize the use of investment capital.

2. Utility enterprises were encouraged to formulate plans for decreasing operational losses, improve management efficiency, reduce levels of personnel and overtime payments, and to make pricing adjustments to reflect true production costs.
3. Privatization (divestiture) was recommended for all public industrial enterprises with operations that could be managed more efficiently by the private sector or where the private sector could respond better to market demands.
4. RTG assigned responsibilities to Ministries for encouraging public enterprises to consider using management services from the private sector, e.g. production techniques, maintenance and security services and provision of welfare (social) benefits.
5. Privatization or liquidation should be imposed on the following categories of public enterprises:
 - a. those with several years of losses.
 - b. those lacking resources to pay employee salaries
 - c. those better operated by the private sector.

Following the devaluation of the baht around the end of 1984, the Cabinet and its Economic Committee promulgated new public enterprise policies. These policies included:

1. The call for improvement of management efficiency, pricing adjustments, decreases in loan guarantees, and suitable reductions of debt equity/ratios.
2. Mandate to the Ministries to develop proposals for privatization with the resulting strategies to include such things as the sale of shares to the private sector, concessions, joint ventures, divestiture and liquidation, and sale of private shares owned by the Government.
3. Establishment of an economic development fund to provide capital to be used by "certain" public enterprises to augment operations as necessary.

This period was earmarked by extensive discussions and brainstorming on the

subject of privatization. Efforts were made toward mounting a public awareness campaign. Government agencies worked closely with the Prime Minister and Minister of Finance in studying the problems and identifying solutions. These activities were the foundation of the policies promulgated by the Cabinet.

This enthusiasm for privatization carried over to the period 1985-1988. The concept of privatization was generally acceptable to government and the public. NESDB moved forward in preparing feasibility studies and preparing for policy implementation. NESDB prepared a study in late 1987 that suggested directions for increasing the private sector's role in the development of state enterprises. The report was scheduled for submission to the Cabinet following the 1988 general elections.

Following the 1988 general elections, decision-making was centralized at the Cabinet level. Policy formulation roles of government agencies, particularly that of NESDB, were reduced considerably. Following the formation of the new government, the leading party voiced its lack of support for implementing the privatization policy. Subsequently, the NESDB report was shelved and privatization was de-emphasized as a government policy. The government, however, did not abandon privatization in total. It has chosen instead to consider individual cases of privatization as they may surface thereby avoiding the subject of privatization becoming a political issue. Privately and informally, public enterprises have been made aware by the Government of the need to expand the private sector's role in the development of public enterprises.

Recently, there has been significant vocal opposition to privatization. This opposition has been mainly from state enterprise unions, groups and individuals with vested interests. These groups cite the following reasons for their objections to privatization:

1. Preservation of national interests
2. Necessity (legal) for state owned and operated utility enterprises
3. Lack of government control over pricing once public enterprises are privatized, thereby resulting in financial hardships for low-income groups.
4. Staff reductions normally following privatization will result in unemployment and loss of existing employment rights and benefits.
5. Loss of bargaining power of public enterprise labor unions.

The government, nevertheless, continues on the path of carrying out the unofficial policies related to expanding the role of private sector in the development of public enterprises.

ANNEX 2

LIST OF PERSONS INTERVIEWED

LIST OF PERSONS INTERVIEWED

Surkree Dheeragool
Deputy Director General
Department of Highways

Kenneth R. D~~unn~~co,
Economist
NTIA Project

Sudhisakdi Manibhandu, PhD.
Director
Manistee Limited

Choosak Ratanachaichan
Promotion and Development Department
Bank of Ayudhya, Ltd.

Lt. Nophadol Bhandhugravi
Fiscal Policy Office
Ministry of Finance

Eric M. Glasscott
Senior Technical Advisor
NTIA Project

John H. Rufe
Organization Development
NTIA Project

Suvicha Maingkwan
Senior Manager
Securities Exchange of Thailand

Sansern Wongcha-um
Director
Infrastructure Projects Division
NESDB

Chakramon Phasukavanich
Director
Gov't/Private Sector Cooperation Div.
NESDB

Dr. David M. Glickman
Managing Director
Lambert Holding Co., Ltd

Dayana Bunnag
First Senior Vice President
Phatra Thanakit Company, Ltd

Banyong Pongpanich
First Senior Vice President
Phatra Thanakit Company, Ltd.

Dr. Mauruey Phadoongsidhi
President
Securities Exchange of Thailand

J. Michael Thompson
Project Manager
Seventh Plan Urban and Regional
Transport Project

Robert W. Boulter
Area Manager
Bewater International Limited

Jira Sivayathorn, Bsc CEng
Business Development Manager
HALCROW Consulting Engineers

Chuanpit Dhamasiri
Deputy Governor, Engineering
Metropolitan Waterworks Authority

Philip Fishman
Country Program Director
Asian-American Free Labor Institute

Bill Dawkins
Commercial Attache
U.S. Embassy, Thailand

Amporn Larnlua
Deputy General Manager
State Railway of Thailand

William E. Sebastian, P.E.
President
LEMCO Engineers (Thailand), Inc.

F. Richard Erskine
Vice President
Bechtel International, Inc.

Malcolm F. Wallace
Resident Manager
HALCROW Consulting Engineers

Philippe E. Annez
Chief of Mission
The World Bank

Paopat Javanalikhorn
General Manager
Electrical Generating Authority

Mr. Amnuay Viravan
Chairman, Executive Board
Bangkok Bank, Ltd.

M.R. Chatu Mongol Sonakul
Controller General
Ministry of Finance

ANNEX 3

PROJECT SCOPE OF WORK

SCOPE OF WORK

PRIVATE SECTOR PARTICIPATION IN DEVELOPMENT OF THAI INFRASTRUCTURE AND UTILITIES

I. Introduction

Until very recently, the AID program in Thailand was targeted on addressing mutual U.S.-Thai security concerns within the Southeast Asia region and on assisting the Thai to achieve sustainable economic growth and social progress. With recent strong export-led economic growth (averaging more than 9% per annum from 1987 to 1989), 1988 GDP per capita of \$1,045, and less than one-fourth of the Thai population living below the poverty line, Thailand now appears to be achieving the confluence of rapid international economic integration, strong domestic economic growth, and stable social progress which we believe characterizes Advanced Developing Countries (ADCs). As a result of this progress, the web of mutual U.S.-Thai interests now encompasses a much broader range of increasingly mature economic relationships as commerce replaces aid as a dominant element in the bilateral economic relationship.

A.I.D. has recently undertaken a major reassessment of the Mission's role in Thailand to determine how the Agency can foster the development of a more mature economic partnership between the U.S. and Thailand. This reassessment is concluding that A.I.D. should focus on identifying and reducing continuing barriers to greater Thai integration with the world economy and global community, particularly in areas of mutual interest to the U.S. and Thailand. Broader and deeper integration of Thailand with the world economy will effectively advance not only Thailand's interests in sustaining broad-based economic growth, but also the U.S.' interest in Thailand's becoming a fully mature and responsible international trading partner and collaborator on issues of global concern such as environmental degradation. These themes are more fully outlined in Attachment A to this Scope of Work, "An Advanced Developing Country Strategy for Thailand - Concept Paper."

II. Program Background

Since the approval of the most recent Country Development Strategy Statement in 1985, USAID/Thailand has implemented a program strategy involving progressive movement away from the Mission's earlier focus on rural poverty alleviation, toward a "core project" approach targeted on helping the Thai to address emerging problems of a rapidly industrializing and modernizing economy. The "core program" now in place includes six development assistance-financed projects (and one Economic Support Fund-financed program, Affected Thai Villages II). The development assistance portfolio includes:

--Agriculture Technology Transfer and Science and Technology for Development projects that are broadening Thai institutional and human capacity to apply and develop new technologies which will enable effective Thai competition in world markets over the longer term;

--Emerging Problems of Development II, which provides a vehicle for exploration of emerging policy issues;

--Management of Natural Resources and Environment, which is bringing U.S. expertise and resources to bear on environmental problems constraining Thailand's growth path and forging new relationships among Thai and U.S. organizations concerned with environmental problems;

--Private Voluntary Organizations (PVO) Co-Financing II, which is being refocused on strengthening democratic institutions, local business and government organization empowerment, and enhancement of private groups' participation in public debate on issues of national concern, e.g., environmental degradation; and

--Rural Industries and Employment, which has encouraged the expansion of industrial development beyond the Bangkok region.

This program portfolio is being restructured to enable rapid implementation of new ADC themes. Rural Industries and Employment will be phased out more quickly than planned. A new Trade and Investment project is being developed for initiation in FY 90 to encourage expanded trade and investment by the U.S. and Thai private sectors. In addition, the Asia/Near East Bureau has tasked USAID/Bangkok with developing, by March, 1990, a detailed plan for pursuit of new ADC strategic themes over the next several years in new, as well as on-going, program mechanisms.

The work requested in this Scope of Work is a part of an eight-study analytical agenda which will provide the Mission with an analytical base for determining specific program focus areas under the new ADC strategy.

III. Background: Private Sector Participation in Development of Infrastructure and Utilities

Many observers have pointed out the need for significantly expanded infrastructure and utilities in Thailand if the Thai economy is to sustain its current growth path. Expanded infrastructure and improved utilities services are particularly important if Thailand is to continue to reap the benefits of a major inflow of foreign investment and remain competitive in international markets. The infrastructure shortfall in urban areas, particularly Bangkok, is now critical; over time, with continued economic growth, the infrastructure shortfall can be expected to affect secondary cities and rural areas as well. Moreover, major growth sectors of the Thai economy such as manufacturing and services (particularly tourism) are threatened by continuing shortages of utilities such as telephones, electricity, water and sewerage not to mention totally inadequate transportation network in the greater Bangkok area.

The Royal Thai Government (RTG) has been haltingly moving in the direction of opening infrastructure and utilities which have been the preserve of state owned enterprises to private sector investment, thereby enabling the RTG to maintain (or even reduce) its current public debt burden, and expand the avenues available within Thailand for productive investment. USAID believes that by opening private sector investment opportunities in infrastructure and utilities, along with coordinated promotional efforts by the U.S. private and public sectors, a significant amount of additional investment in Thailand by the U.S. private sector may be induced as well as opening major opportunities for the export of U.S. goods and services to Thailand in infrastructure and utilities-related areas where the U.S. retains a number of comparative advantages.

The on-going USAID project portfolio described in the "Program Background" section above does not at present contain any project elements specifically designed to promote the private provision of infrastructure and utilities. However, the Emerging Problems of Development II (EPD II) project has financed a number of analyses of individual infrastructure or utilities financing issues. For example, EPD II has financed analytical work and workshops on private sector co-generation of electric power; partially as a result of EPD II-financed efforts, the RTG has recently authorized private sector co-generation to supplement electricity provided by the Electricity Generating Authority of Thailand (EGAT). EPD II is also financing a major on-going analysis of telecommunications sector issues in Thailand, and several analyses relating to private sector sewerage provision in Bangkok are in process. In a related vein, recognizing that the most powerful opposition to private sector participation in infrastructure and utilities is the membership of state-owned enterprise unions, EPD II also financed a recent workshop on the possible application of employee stock option plans as a means of garnering union support for increased private participation in infrastructure and utilities development. Finally the new Trade and Investment project now in design will undoubtedly support policy studies and promotional efforts relevant to urban infrastructure and utilities needs.

Despite the relatively wide range of related activities which the Mission has already undertaken in this area, USAID/Thailand does not yet have a coherent strategy for fostering greater private sector participation in Thai infrastructure and utilities development. Earlier in the development of the Advanced Developing Country strategy concept for Thailand, USAID/Thailand and the Regional Housing and Urban Development Office/Asia, located in Bangkok, co-financed the development of an "Urban Strategy Annex", which outlines a number of issues and options for possible USAID consideration. Selected portions of this document are attached to this scope of work. The full text of the Annex can be obtained from the Office of Housing, Bureau for Private Enterprise, in AID/Washington or from USAID/Thailand.

IV. Statement of Work

The Mission proposes a phased approach to formulation of a strategy on private sector participation in development of infrastructure and utilities. Phase I will identify several areas with the greatest potential for program activities. Phase II will provide detailed assessments in the selected areas including recommendations for a program of activities.

This scope and statement of work covers Phase I only. Phase II will be carried out during the fourth quarter of FY90.

To accomplish Phase I, USAID/Thailand requires assistance in:

A. Identifying those infrastructure/utilities sectors, e.g., power, telecommunications, transport, water supply and sewerage, which are particularly critical to sustaining Thailand's current growth path, i.e., expansion in largely urban-based manufacturing and service industries;

B. Developing an analytical framework which will enable USAID/Thailand to set priorities for potential support for policy and program measures related to private sector participation in infrastructure and utilities taking into account the following criteria:

1. Potential impact of greater private sector participation in the sector for the sustainability of Thai growth.
2. Relatively greater prospects for quick or high impact on RTG decisions to enable enhanced private sector participation, e.g., over the next year or two, if USAID were to provide expert assistance in policy analysis or structuring of privatization programs, or policy-based disbursement incentives, or other appropriate financial support.
- ✓ 3. Potential for expanded private U.S. investment in the sector, either through debt or equity financing, or for expanded U.S. export opportunities because of U.S. comparative advantage in equipment or services of that sector. This analysis should include an assessment of role of mixed credits provided by other donors including its impact on competitiveness of U.S. firms in selected industries.
4. Extent to which expanded cooperation appears warranted between USAID and multilateral donors such as the IFC in providing technical assistance, credit and equity support for possible privatizations.
5. Current availability within Thailand of sufficiently sophisticated capital markets to meet financial resource mobilization requirements; and
6. Any other major criteria which, in the consultants' view, need to be considered in light of anticipated limitations on USAID/Thailand financial and staff resources.

C. Utilizing the criteria listed in B. above, select two or three areas with most promise for program development by USAID with rationale for selection.

D. Prepare Workplan for the Phase II detailed assessment of the two or three areas recommended by the team.

In carrying out the above tasks the contractor will to the extent feasible and relevant take into account related Mission strategies in process of formulation in environment, financial markets and science and technology. The Mission may, dependent on the schedules of teams working on these other elements of the ADC strategy, hold a formal meeting for purposes of developing a common approach in areas of program complementarity.

IV. Duration, Timing and Reporting

With a March, 1990 deadline for submission of the Thailand Advanced Developing Country Strategy document, USAID/Thailand considers time to be of the essence in initiating and completing the requested work. As a result, priority consideration for contracting will be given to those consultants who can field an appropriate team within as soon as possible after signing of a contract.

Recognizing the importance of this analysis to the ADC strategy and the breadth of the work requested, USAID urges that preliminary meetings (approximately two days duration) be held in Washington as soon as possible after the consultant team is identified. The purpose of these meetings would be to enable the team to meet and interact with various staff of the Asia/Near East Bureau, so that the team will more fully understand ANE's strategic program emphases, and so that AID/W staff can be fully brought into the analytical process. USAID suggests that appropriate AID/W staff be designated by Mr. David Hagen, Thailand Desk Officer, in coordination with Mr. Gary Vaughan, ANE Private Sector Office, and possibly including representatives from the Office of Development Planning, the Office of Project Development, and the Office of Housing of the Bureau for Private Enterprise.

The team will be comprised of three consultants one of whom will be a Thai national. USAID anticipates that the U.S. based consultants, who will work in Thailand, will travel to Bangkok after the meetings in AID/W, where they will spend their first several days in discussions with USAID and RHUDO/Asia staff, and initiate contact with relevant organizations within the Thai public and private sector, and with U.S. commercial organizations in Thailand.

By the end of the first week in Thailand, the consultants will present a workplan to the USAID/Thailand Program Office (PRO).

By the end of their third week in Thailand the team will submit an outline to PRO of their report with preliminary findings and conclusions.

Before departing Bangkok in week four the team will leave with the Mission (a) a concise draft summary version of the report of five pages and (b) a draft report.

Before departing Bangkok in week four, the team will make a presentation to USAID staff of the main findings, conclusions and recommendations.

If determined useful by USAID/Thailand, the Team Leader may be requested to stop in Washington on his or her return to the U.S. to present the team's findings and conclusions to AID Washington staff.

Within 15 days of receiving comments by the Mission on the draft reports, the contractor will submit final reports to USAID in five copies.

V. Contractor Qualifications

The Contractor will be a firm or group of individuals with substantial previous experience in analysis of investments in infrastructure and utilities, both in the U.S. and in developing countries. Previous experience in Thailand would be preferred. In addition, the Contractor should have knowledge of, and preferably experience in, the privatization or partial privatization of state-owned enterprises from policy, legal and/or regulatory perspectives. Previous experience in investment banking for infrastructure/utilities development would be a major asset.

VI. Payment

The contractor will receive payment as follows:

--advance for travel and per diem;

--40% upon presentation to the USAID/Thailand Program Office of a workplan for conduct of the required analysis less advance for travel and per diem;

--40% upon presentation of the summary version of draft report and the draft report; and

--20% upon presentation of the final report to the USAID/Thailand Program Office.