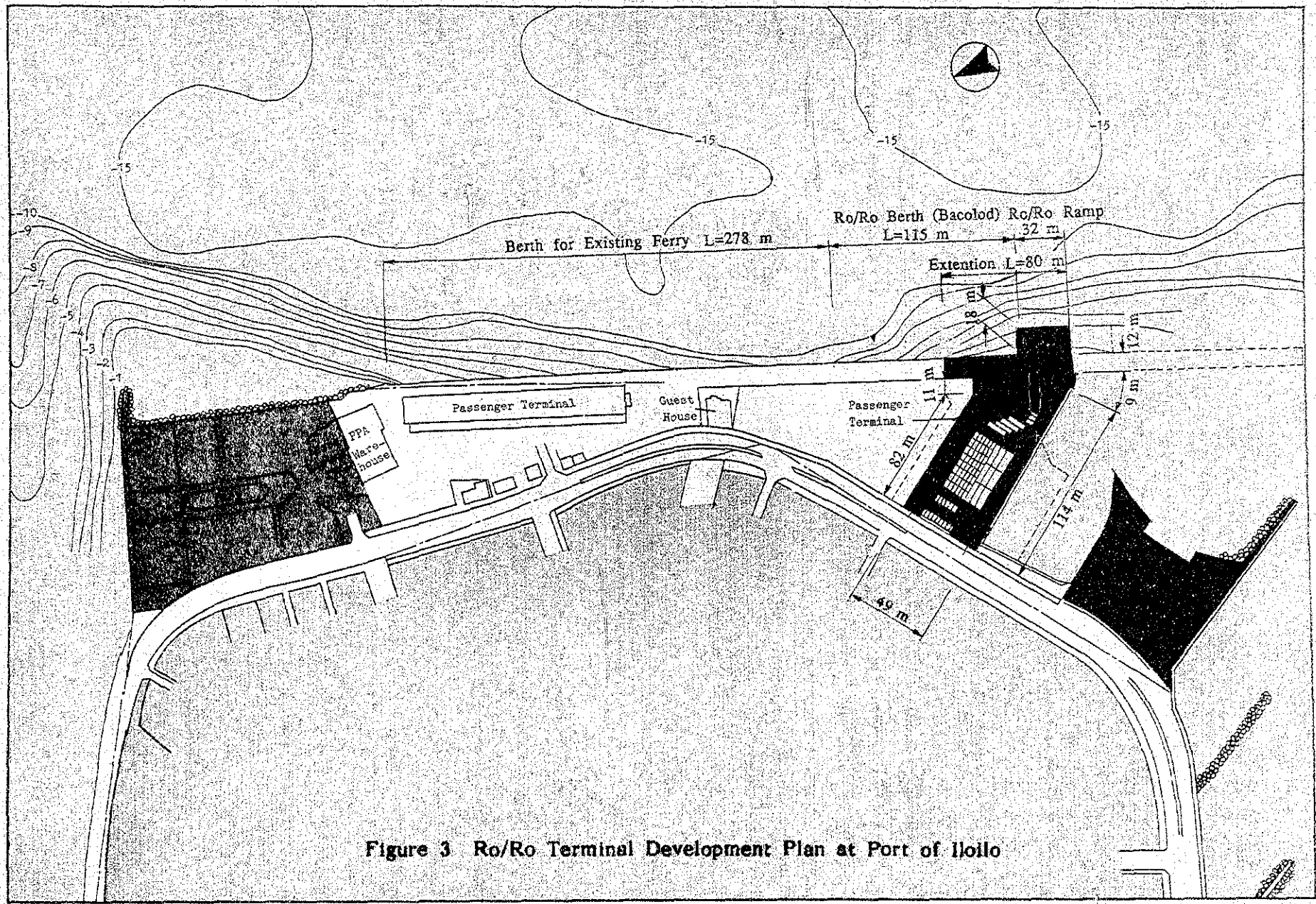

Figure 3 Ro/Ro Terminal Development Plan at Port of Iloilo

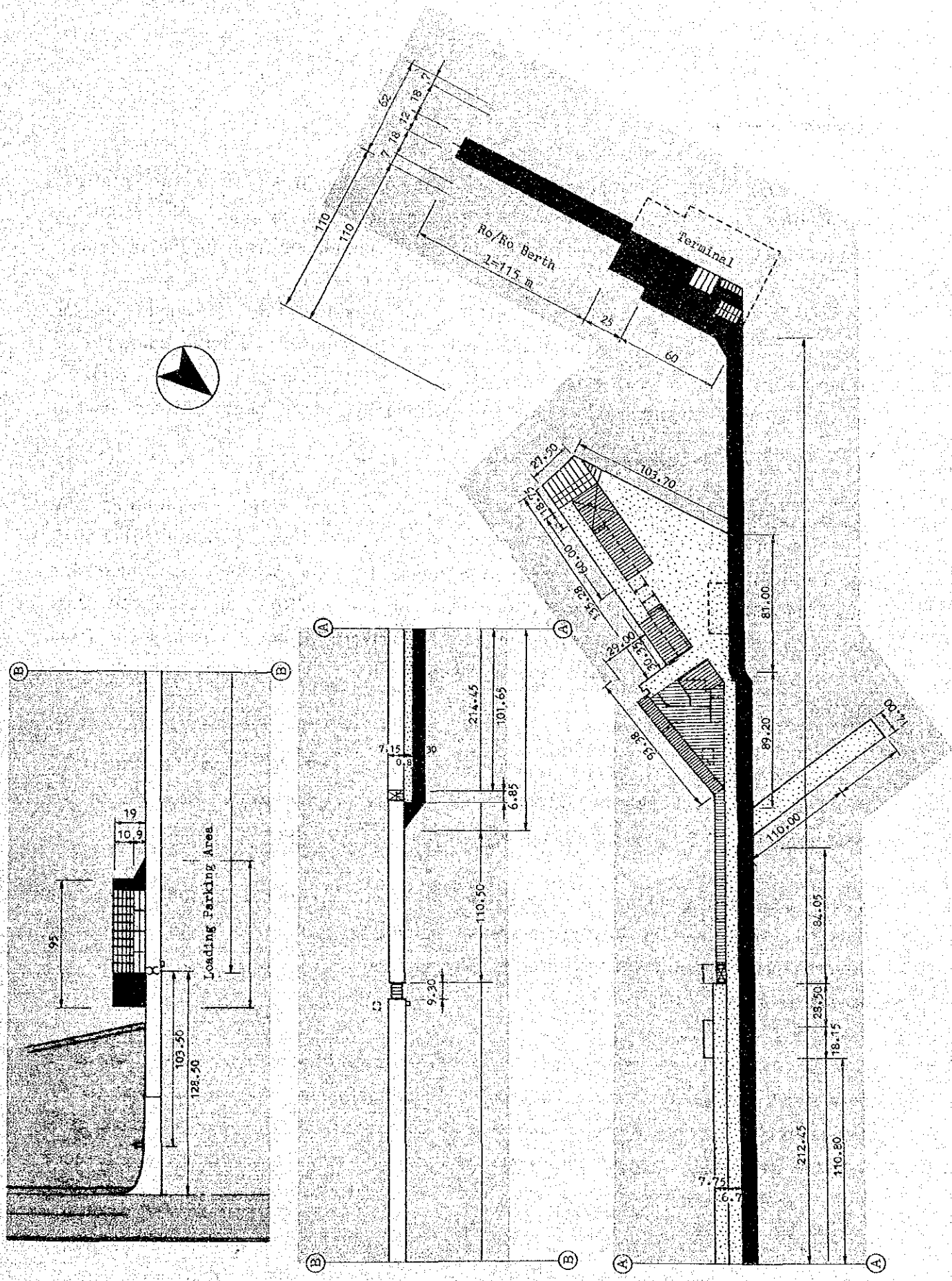

Figure 4 Ro/Ro Terminal Development Plan at Port of Bacolod

Recommendations

The Iloilo - Bacolod link is one of the links with the highest potentiality for introduction of the Ro/Ro transportation system. The following are summary recommendations for the successful implementation of the project.

1. To attain the financial viability of Bacolod Port, financial and/or technological support from the government will be required. As the causeway is mainly utilized as a road rather than a port facility, the public sector such as the government should compensate the port management body for the partial construction cost with a subsidy.

2. There is a possibility that a private firm might implement the development work of the Ro/Ro terminal. In general terms, private firms may not be qualified to obtain direct public loans. In view of the importance and magnitude of the social economic benefits of the Ro/Ro project on this link, the government should make arrangements for private firms to obtain loans from foreign or international public lending agencies like some projects actually conducted by private firms.

3. Prior to the actual development of the Ro/Ro ferry terminal at Bacolod, additional subsoil investigation at the construction site should be conducted to obtain supplementary subsoil data for the detailed design.

4. During development works of the Ro/Ro terminals at Iloilo Port and Bacolod Port, suitable safety measures should be taken to avoid unexpected incidents because construction works have to be carried out in the existing port operation area.

5. It is recommended that a meteorological observatory be set up as a permanent station in Bacolod to provide continual meteorological information for the project. As the Bacolod coastline is characterized by heavy siltation, it is also recommended that an additional function be added to the existing reference tide station at Bacolod to enable the periodical observation of the siltation caused by current.

INTRODUCTION

A. Background

Land and People

1. The Philippines, one of the largest archipelagoes in the world, consists of 11 major islands and 7,107 islets, strung 1,854 kilometers on a north-south axis and spanning 1,107 kilometers from the west to the east at its widest point.

2. Containing within its borders 300,439 square kilometers of land, the Philippines is divided into three geographical regions: Luzon, the Visayas and Mindanao. Luzon, the largest island, has a land area of 139,859 square kilometers; Mindanao, the second largest, has a land area of 95,830 square kilometers. The Visayas, which are a cluster of smaller islands between Luzon and Mindanao, has a total land area of 14,750 square kilometers.

3. The Philippines had a population of 60.2 million in 1990, and this figure is expected to reach 75.2 million in the year 2000. In terms of population distribution, the country is rural, with 57.3% of the people living in the country side.

4. The country's political, social and economic center is Metropolitan Manila. A large sprawling group of 4 cities and 13 towns, it is home to almost 7.9 million people. The other major cities are Cebu in the Visayas and Davao in Mindanao.

Economy

5. Since the late 1970's, strong growth has been seen in the national and regional economies of the Philippines. As the country has moved toward industrialization, the percentage share of the urban population has increased steadily from 33.6% in 1975 to 37.5% in 1980.

6. The Philippines experienced an economic and financial crisis starting

in late 1983. The roots of the problems are seen to be structural weaknesses in the foundation of the economy, errors in economic management and so on.

7. In response to the economic crisis, a recovery program was launched in late 1984. The program strove to attain external and internal stability and to restore a normal growth process as soon as possible.

8. In 1986, the Medium-Term Philippine Development Plan, spanning the years 1987-1992, was formulated as the framework of the development policy. The plan states that the major aims during this period will be to focus on the economic recovery in the short run and sustainable growth in the long run.

B. Concept of Ro/Ro Transportation

9. In pursuit of the attainment of sustainable economic growth, development of basic infrastructure such as trunk roads, airports and ports is proposed in the plan. Particular emphasis is given to port development since waterways function as a basic transportation means in the archipelagic nation.

10. In the Visayas region, which boasts the second largest economy in the country, it is critical to provide the basic infrastructure for its local economic development and welfare promotion. Ro/Ro transportation plays an important role in the regional business activities, and ferry ships form a vital link between neighboring islands. Thus, in addition to this infrastructure, a transportation system such as Ro/Ro Ferry Network System needs to be constructed in the near future.

11. In the report published by the Permanent International Association of Navigation Congress (PIANC), the Ro/Ro transportation services are defined as follows;

(i) Ro/Ro Transport: A mode of marine transport in which the cargo comprises a series of units each capable of being loaded into and unloaded from the ship by essentially horizontal movements, every unit being moved on its own wheels or by a temporary mobile system

which may or may not be carried with the unit on the ship for use at both ends of the voyage.

(ii) Ro/Ro Ships: Ships which can be so disposed when at the terminal as to permit of cargo units being received and discharged in the manner defined in Ro/Ro Transport and which may for this purpose be provided with ship ramps or flaps.

(iii) Ro/Ro Terminals: Port facilities (which may or may not include buildings or storage areas, etc. but which must include road access) designed to accept Ro/Ro ships under defined conditions of water level and ship loading so as to permit cargo units being received and discharged in the manner defined in Ro/Ro Transport. They may include bridge ramps, hinged at the shore end and capable of being raised and lowered at the ship end, for the purpose of minimising the degree of adaptation required by the ship itself. Each terminal may include more than one berth at which Ro/Ro Ships can be moored and from which they can operate.

12. The above definition distinguishes Ro/Ro cargo from palletized cargo (e.g.) that is shifted from the Ro/Ro vessel to the dock or vice-versa with the use of fork-lifts or similar equipment. The latter type is not, strictly speaking, Ro/Ro cargo.

13. Ro/Ro transportation services greatly facilitate the movement of cargoes since no intermediate handling and storage is required. The movement of cargo is dependent only on ship departure schedules, as on ship arrival it continues directly to its destination. For similar reasons, bus and car traffic also benefit from such services.

14. The Ro/Ro concept is flexible enough to accomodate a variety of cargo types such as vehicles, loaded road trailers or semi-trailers and containers on chassis with a minimum of port investment. In addition, Ro/Ro vessels are often used to carry passengers. Ro/Ro concept established door to door transport as an efficient method of carrying freight in the domestic market. The principal aim of the Ro/Ro concept, stated briefly, is to reduce the overall transport cost to the exporter, the consumer, and the receiver, thus helping to stimulate the national economy.

C. Scope of Study

15. The scope of the Study is twofold; namely, preparation of a master plan of the nationwide Ro/Ro ferry transportation and the implementation of a feasibility study on the short-term development program.

Master plan

16. One of the main objectives of the study is to prepare a development strategy for nationwide Ro/Ro transportation focusing on the effective utilization of existing transportation facilities. A basic development policy for Ro/Ro ports shall be prepared in the light of national and regional development policy.

17. To increase the likelihood of the master plan being implemented, a maritime policy shall be discussed. The policy will cover various features closely related to Ro/Ro operation. However, as many teams are conducting similar studies in this area, this part of the study will be developed in an outline form only.

18. More specifically, the Study for the formulation of a master plan shall, inter-alia:

(i) suggest institutional arrangements, regulations on franchising and pricing, and incentives for the acquisition of vessels.
(ii) formulate a conceptual network plan of Ro/Ro ports, taking into account factors such as traffic demand and technical feasibility.
(iii) estimate the amount of investment needed for the improvement of Ro/Ro ports in 2010, and outline the types of Ro/Ro port facilities needed and so on.
(iv) prioritize the Ro/Ro ports to be developed within the conceptual network in view of the basic development policy for Ro/Ro ports mentioned earlier.

Feasibility Study

19. The other objective is to conduct a feasibility study on one Ro/Ro route between Iloilo and Bacolod for the target year 1997.

20. Ro/Ro ferry operation began in 1979 on the Matnog-Allen route as a segment of Phase I of the Pan Philippine Highway Project. The route connects the southern tip of Luzon island with the northernmost point of Samar island.

21. Since then, several Ro/Ro routes have been developed between major islands, such as the Liloan-Lipata route between Leyte island and Mindanao island, and the Batangas-Calapan route between Luzon island and Mindoro island. Development of these Ro/Ro routes has promoted inter-island passenger and cargo movement and enhanced regional and national economies.

22. Panay island and Negros island comprise a major portion of Visayas region in terms of economic scale and population size. The capital cities of the two islands, Iloilo City and Bacolod City, are located on opposite sides of the Guimaras Strait, the width of which is only 40 km. More than 500 thousand passengers cross the strait annually, and commodity movement between the two island is also at a high level. However, no Ro/Ro transportation has been observed on this route to date.

23. In light of the magnitude of passenger and cargo movement between Iloilo city and Bacolod city, a feasibility study will be part of the study. More precisely, the Study shall cover the following items:

- Ro/Ro port planning
- Ferry operation plan
- Port management / operation
- Preliminary design and construction schedule
- Cost estimation
- Economic analysis
- Financial Analysis

D. Organization of the Entire Report

24. This report consists of the Executive Summary and the Main Report, which is composed of four (4) volumes. The remaining section of Volume I deals with the nationwide long-term Ro/Ro transport development plan. Volume II deals with the feasibility study on the Iloilo-Bacolod link. Volume III compiles appendices related with both Volume I and II. Detailed information on the study ports is summarized in Volume IV "Port Inventory."

E. Participants in the Study

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Ms. Gloria C. Templo	Clark/Typist	DPWH

-Staff

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Mr. Takahashi Akira	Maritime Policy II
Mr. Endo Shigeki	Demand Forecast
Mr. Kanzawa Hikari	Port Management/Financial Analysis (up to April 1992)
Mr. Uemura Norio	- do - (from May 1992)
Mr. Hotta Isamu	Design
Mr. Iba Tomoo	Natural Condition (Topography/ Oceanography)
Mr. Hasegawa Mitsuhiko	Natural Condition (Soil)
Mr. Orishimo Sadao	Construction Schedule/Cost Estimation
Mr. Okamura Naoshi	Traffic Analysis/Economic Analysis
Ms. Ventia Lynn M. Sison	Traffic Investigation

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The study team conducted a lot of interviews and hearings with the private companies of various fields such as shippers, ship operators, stevedoring companies, manufacturers and consultants, including, inter alia, Negros Navigation Co., Inc. which is also operating the Banago Pier in Bacolod. All of them are very informative, and the team would like to express its gratitude.

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Chapter 1 Present Situation of Shipping and Port

A. Institutional Structure of Domestic Shipping

Government Institutions

1. In modern society, a business activity has many features, and it consequently interfaces or interconnects with various sides of the society. Thus, the case where the governments intervene in broad terms against such business activity is inevitably increased. Domestic shipping also, or even more, is regulated, restricted or intervened in by a large number of the government department. Under the circumstances, it is not meaningful to enumerate all the government departments which conduct intervention. What is important for studying the viability of promoting new scheme such as Ro/Ro Ferry System is to look into what policy a department has in mind, or by what background it is exercising the function. With these points in mind, delineation is made to the government organization which is the most relevant to the study.

1) DOTC

2. In July, 1979, by virtue of EO No. 546, DOTC was formally organized as an individual Department. Prior to this time, Transportation and Communications were placed together with Public Works under one Department by the provision of PD No. 1 of 1972, that is known as the Integrated Reorganization Plan (IRP). The Department of Public Works, Transportation and Communications was the principal agency responsible for providing the infrastructure to support the sustained development effort and economic growth. However, transportation and communications problems, kept on mounting so fast that it was necessary to give as much attention to transportation and communications needs as any other public works projects, and, thus, there is a need to entrust in one Department all the functions pertaining to the promotion, rationalization and establishment of a dependable network of transportation and communication system in the country. EO No. 546 abolished the Department of Public Works, Transportation and Communications, and creating instead two departments, the Department of Pubic Works and the Department of Transportation and Communications. In 1987, EOs No. 125 and 125-A were issued to reorganize MOTC structually and functionally,

and right after these EOs, Administrative Order No.15 is issued to change into present DOTC in consonance with the present presidential form of the government.

3. DOTC is the policy-drafting, planning, programming, coordinating, implementing, administrative entity of the executive branch of the government in the promotion, development and regulation of a network of transportation and communication system. In order to achieve the mandate, DOTC has, inter alia, following objectives:

- Promote the development of dependable and coordinated network of transportation -- system;
- Guide government and private investments in the development of the country's intermodal transportation -- system in a most practical, expeditious and orderly fashion for maximum safety, service and cost effectiveness of traffic patronage; and
- Impose appropriate measures so that technical, economical and other conditions for the continuing economic viability of the transportation -- entities are not jeopardized, and do not encourage inefficiency and distortions of traffic patronage.

Beyond these objectives, however, it is the ultimate desire to make transportation a vehicle for a speedier realization of national development goals.

4. DOTC is composed of Office of the Secretary, Department Proper and Sectoral Officers which are segmented for Air transportation, Postal Services, Land Transportation and Telecommunication, and attached Agencies/Corporations. The Office of the Secretary is responsible for the adoption and promulgation of rules and regulations necessary for carrying out the Department's policies and objectives and for exercising general supervision and control over the organizations under the Department. While Sectoral Offices exercise their supervising, controlling, intervening and guiding functions statutely or administretively vested to DOTC as the frontline department, Department Proper is the 'office of staffs' carrying out internal management, disposing of legislative and legal matters, and of budget, financial affairs and comptrolling. The Department Proper also carries out planning and project development, and information and project management services.

5. Within DOTC, the offices most closely connected with the Ro/Ro Trans-

port System Development Project are Undersecretary for Transportation and Transport Planning Service, Assistant Secretary for Transportation, Assistant Secretary for Project Management and Information Services, Transport Planning Service, and Water Transport Planning and Project Development Division. Their functions include, among others; to assist the Secretary in formulating policies and guidelines on planning, project development in accordance with those established by NEDA, and project implementation relative to transport, and to provide technical assistance in (i) the preparation of integrated long, medium term and short term plans and programs in relation to overall development thrusts and objectives of the government, (ii) conduct of feasibility studies for transportation projects, and (iii) management and monitoring of the implementation of infrastructure project of the Department. Water Transportation Planning and Project Development Division has such mandates as to coordinate with MARINA and PPA with regard to the plans and programs for the water transport development to draft the integrated maritime transportation master plan, and to maintain liaison with other government and private offices/organizations related to water transportation.

6. DOTC has thirteen (13) Attached Agencies/Corporation, among which are Civil Aeronautics Board (CAB), Manila International Airport Authority, Metro Manila Transit Corporation (MMTC), Philippine National Railway (PNR), National Telecommunication Commission (NTC), and includes PPA, MARINA.

Attached Agencies/Corporations have powers to conduct their own policy of personnel, to make their contract and to own and operate their assets, carrying out day-to-day business assigned to them. On the other hand, the Secretary of DOTC is the ex-officio chairman of the board, and through this capacity, he can intervene in the Agencies/Corporations business where and when necessary. As far as budget and account of the Agencies/Corporations are concerned, relationship with DOTC are diversified. For example, while PPA has their own budget and account utilizing their revenue mainly from operation of ports, budget and account of MARINA is accommodated in those of DOTC.

2) MARINA

7. MARINA was created in June, 1974 by virtue of PD No. 474. Initially, the power vested to MARINA has included to develop, formulate and implement

policies, plans, projects, rules etc. for the promotion and development of maritime industry, the growth and effective regulation of shipping enterprises. In 1985, the function to issue CPC is vested to MARINA by virtue of EO No. 10-11.

EO No. 125 and 125-A of 1987 provides additional functions of MARINA, which includes; i.a., (i) registration of vessels as well as issuance of certificates and licenses, and (ii) safety regulatory functions pertaining to vessel construction and operation.

The governing body of MARINA is a board known as the Maritime Industry Board. It is composed of following eight (8) members; the Secretary of Transportation and Communications as the Chairman, Secretary of Trade and Industry, Secretary of National Defense, Secretary of Energy, Chairman of the Board of Investments, Chairman of the Development Bank of the Philippines, the General Manager of PPA and the Maritime Administrator, who is also acting as the head of the management.

Within the organization, most closely tied with the Ro/Ro Project is Planning and Policy Office.

3) PPA

8. PPA was created in July 1974 by virtue of PD No. 504, which was subsequently amended by PD No. 857 in December 1975, known as the Revised Charter of the Philippines Port Authority. The amendment was made, because it became right after the promulgation of PD No. 504, perceived that the broader role of ports goes beyond the function of servicing the hub of maritime trade, and extends to the wider area of acting as catalyst that may hasten expansion of the development of economy of the area, and that there is a need to integrate and coordinate port development at the national level, and, further, to promote the growth of regional autonomous ports responsive to the needs of localities. PD No. 857 broaden the power and functions to facilitate the implementation of an integrated program for planning, development, financing, operation and maintenance of ports or port districts. In 1987, EO No.159 was issued to give PPA corporate autonomy to ensure rapid development of ports and to authorize it to execute port projects under its port program. Prior to the creation of PPA, port administration was merged with the functions of revenue collection of the Bureau of Customs. Maintenance and construction were carried

out by the Bureau of Public Works.

Followings are included in the prescribed PPA's function;

- formulate and implement a complehensive and practicable port development plan in coordination with NEDA,
- supervise, control, regulate, construct maintain, operate and provide such facilities and services as are necessary in the ports,
- license, control, regulate, supervise any construction or structure within any port district,
- coordinate with the Bureau of Lands or any other government agency or corporation in the development of any foreshore area, and
- provide or assist in provision of training facilities not only for their staff but also for operators and users.

9. The governing body of PPA is the Board of Directors, consisting of eight (8) members, i.e. the Secretary of Transportation and Communication as the Chairman, the PPA General Manager as the Vice-Chairman, and members are the Director-General of NEDA, the Secretaries of Public Works and Highway, Finance, Trade and Industry, Natural Resources, the Administrator of MARINA and one other person who shall be appointed by the President and who by his experience and knowledge is deemed to be fit and proper to be the member. He is representing the private sector.

The General Manager as the Chief Executive Officer is assisted by three Offices and three Departments. Of these organizations, directly involved in the Ro/Ro Transport Project are Office of the Assistant General Manager for Engineering Services, in particular, Project Development Department, that is responsible for the preparation of master plans and studies of port projects and for formulation of annual and medium port development plans and program.

4) NEDA

10. NEDA in the present form and functions has its legal basis in EO No. 230 of July 1987. By virtue of the Executive Order, the NEDA was reorganized, structurally and functionally, to enhance its ability to coordinate the development planning and policy formulation process in order to achieve the objectives of sustainable economic growth coupled with an equitable distribution of income and wealth. Prior to the date, National Economic Development Authority was creat-

ed by PD No. 1 (known as IRP), which aimed to encompass and integrate the task of national economic planning which was then dispersed among several economic planning bodies and ad hoc groups. After the February 1986 revolution, based on the proposal of the Presidential Commission on Government Reorganization (PCGR), the National Economic and Development Authority (NEDA) was to be reorganized, and February 1988, NEDA commenced operations under its new organized structure.

11. NEDA, after due consultation with the private sector, community organizations and beneficiaries, local government units and appropriate public agencies, shall be responsible for coordinating the formulation of continuing and integrated socio-economic development plans, policies and programs, including, in particular, the formulation of annual and medium-term public investment programs and the monitoring and evaluation of plan implementation.

NEDA is composed of two separate and distinct entities: the NEDA Board and the NEDA Secretariat. The NEDA Board, in that the power and functions reside, is composed of; the President as the Chairperson, Director-General, NEDA Secretariat, and eleven Members from Secretaries of Departments and the NEDA Executive Secretary. Assisting the NEDA Board are six Cabinet-level inter-agency committees, among which most relevant to the Ro/Ro Transport Development Project is the Committee of Infrastructure. The functions include it to recommend the President policies, programs and projects concerning infrastructure development consistent with national development objectives and priorities. Members of the Committee are Director of the President Office, Director-General of NEDA, Secretaries of DBM, Department of Finance, DPWH and DOTC.

The NEDA Secretariat, headed by a Director-General, is composed of three major offices. Three Deputy Director-Generals are responsible for each major office, namely, National Development Office (NDO), Regional Development Office (RDO) and Central Support Office (CSO). Most relevant to the Ro/Ro Transport Development Project among NEDA Secretariat organizations are Infrastructure Staff of NDO, of which functions include to provide technical staff support in coordinating the formulation of physical plans for the transportation etc., and to monitor sectoral performance.

5) DPWH

12. The pre-history of DPWH is long and complicated. In short, RA No. 1192 of 1956 created the Bureau of Public Highways under the administrative control of the Department of Public Works and Communications. In 1972, PD No. 1 (IRP) gave birth to the Department of Public Works, Transportation and Communications. In May 1974, Bureau of Public Highways are separated from DPWTC and elevated to a Ministry. In July 1979, EO No. 546 provide for the division of the MPWTC into the Ministry of Transportation and Communications and the Ministry of Public Works, however, soon after that in 1981, recognizing the importance of infrastructure as a basis of national growth, EO No. 710 was issued to merge the Ministry of Public Works and the Ministry of Public Highways to create the Ministry of Public Works and Highway (MPWH) for simplicity and economy in operation. EO No. 124 of January 1987 reorganizes MHWH, redefining its power and functions in order to promote economy and effectiveness in delivery of public service. Right after that when AO No. 15 (in 1987) were issued to convert Ministries into Departments, the MPWH was automatically converted to DPWH that is the present form.

The functions of DPWH include, among others, following;

- provide technical services for planning, design, construction, maintenance and/or operation of infrastructure facilities,
- dentify, plan, secure funding for program, design, construct ---- of public work projects ----,
- assist other agencies, including the local governments, in determining the most suitable entity to undertake the actual construction of public works projects, and
- provide an integrated planning for highways -- and the public works.

13. DPWH is headed by the Secretary, and has five Undersecretaries, and consists of the Department Proper, five Staff Bureaus, Regional and other local Offices and Project Management Offices (PMOs). PMOs include the National PMOs and Regional PMOs. The functions of the National PMOs include, i.a., to provide general administration and supervision over the construction of all foreign assisted projects under it and to ensure that all DPWH policies, rules and regulations are complied with, and to coordinate with lending institutions providing funds ... for the sumplementation and completion of DPWH foreign assisted projects, and to perform such other related functions as may be assigned. The

most closely connected with the Ro/Ro Transport Project is the Feasility Study Office of the National PMO.

6) Other institutions

14. A number of government agencies are directly related to shipping activities. For instance, NAMRIA, PAGASA, PMMA have a large influence on various aspects of maritime safety. Particularly, PCG, which is attached to DND, deploys, maintains and operates the navigation aides, and in 1988, took part of the MARINA-PCG Task Force to inspect vessels.

15. A number of government organizations require domestic ship operators/masters to provide documents in relation to clearance etc.. Since the clearance procedure affects the efficiency of ship operation and the benefits of cargo owners/passengers, these issues will be dealt with in the maritime policy.

7) Local government

16. Among 67 ports under the Ro/Ro Development Study, 34 ports are municipal ports. In this respect, while local governments has no statutory power to intervene in the planning and programming for the Ro/Ro transport project, they should take the task for the implementation. Furthermore, all the plans and projects which affect the region shall be properly set forth in the plan of the Regional Development Council. Recently, Local Government Code are enacted, and since the financial position of the local government are strengthened the local government will play more significant role in terms of development and maintenance of Ro/Ro ports. Besides that, there may be the cases where the heads of the local governments who are elected by the residents may have an influence on the decisions of the central government with respect to problems of their own region.

Private Institutions

17. There are a number of private institutions that aim at unifying the

interests of those who engage in maritime and related business. Most of shipping related firms are organized under the Chamber of Maritime Industries of the Philippines (CMIP), which is the umbrella organization of six (6) associations related to shipping sectors, both domestic and international.

The six (6) associations are;

- Filipino Shipowners' Association (FSA) Association of shipowners engaging overseas trade,
- Filipino Association for Mariners' Employment (FAME) Association of agencies which recruit seafarers for overseas,
- Philippine Chamber of Arrastre and Stevedoring Operators (PCASO),
- Association of Private Port Owners and Operators of the Philippines (APPOOP),
- Philippine Shipbuilders and Shiprepairers Association (PHILSAR), and
- Philippine Ship Agents' Association (PSAA).

18. Strangely, there is no association of shipowners of domestic trade under the umbrella of CMIP. In fact, Philippine Interisland Shipping Association (PISA) resigned from CMIP more than two years ago. PISA is composed of individual domestic shipping companies including liners, trampers, tankers and tug barges. Although PISA gave associate membership to the following four institutions, it cannot be claimed as an umbrella organization;

- Conference of Inter-island Shipowners and Operators (CISO)
- Lighterage Association of the Philippines (LAR)
- Philippine Tankers Organization (PHILTANKO)
- Visayan Association of Ferry boat and Coastal Service Operators (VAFSCO) and South-western Mindanao Shipowners Association (SMSA).

19. CISO was established in 1964 as a social organization, and in 1983 it was formalized as a non-profit, non-stock organization. It is no restriction for liner shipowners/operator to become a member of or resign from CISO. There are seventeen (17) members at present, among whom 9 to 10 are actively engaged in the liner business. Despite the name of the conference, and notwithstanding it being criticized by some international and foreign institutions as a liner cartel supported by the government's regulatory policies that inflates the costs of inter-island transport, nevertheless, CISO cannot be claimed as a shipping conference in the terminology of international shipping-related commercial circles. Normally, shipping conference is organized in routewise, fixes their rates and

charges by themselves, or, more in the recent cases with consultations by shippers organizations, levies surcharges against hectic currency fluctuations, port congestions, increase of fuel prices and trade of dangerous areas. In order to protect interests cultvated for a long time by members from foray of outsiders, it gives loyal shippers fare incentives. And for the purpose of limiting malpractice and excessive competition among members, the conference sets up a machinery of policing and makes a pooling or share arrangement. CISO is not a routewise organization, and it neither gives loyalty incentives to cargo owners nor does it have a machinery for policing or pooling/share arrangement. However, only CISO takes initiative of filing a petition to MARINA to increase rates on behalf of the liner companies, and negotiates this with shippers bodies. It does have an agreement among CISO members not to engage in unfair competition, and parties who fail to adhere this agreement may be penalized. With these facts in mind, CISO may be understood as a quasi shipping conference.

20. There are two locally-based organizations of shipowners in the area, viz., VAFSCO and SMSA. Both of them are active to express their shared opinion to the Government.

VAFCSO has its main office in Cebu and is composed of 75 relatively small shipowners. Zamboanga based SMSA is an organization of large Shipowners, and is composed of 6-9 members. Both of them are actively working for their common interest, and wish to form an affiliation to lobby the government more effectively.

21. APPOOP which is unique by the nature is the organization for owners and operators of private ports. It was established in July 1981 with registration to SEC. Initially, the member was only nine(9) corporates, but has become 38. Its objectives is to promote ad project the interest and welfare of owners and operators of private ports and to assist in their growth and development. Negros Navigation Company which owns and operates the Banago Pier in Bacolod is one of the incumbent members.

22. Two organizations are actively working for cargo interest. One is the Philippine Shippers' Council,1/ and the other is the Distribution Management of the Philippines (DMAP).

1/ It is informed that recently Philippine Shippers' Council has changed its organization to become Philippine Shippers' Bureau.

23. The present Philippine Shippers' Council is the second shippers' council in the country. The first council was organized in 1968 by the Philippine Chamber of Commerce and Industry (PCCI) in order to cope with the escalation of freight rates by liner conferences to and form the Philippines. The Council is patterned after the shippers' council already existing in Asia. The council's financial arrangements were approved by SEC in 1968; however, it encountered financial problems, which could not be overcome. In 1972, Philippine Chamber of Commerce and Industry requested the Ministry of Trade to establish a shippers' council to be attached to the Ministry for policy coordination. In March 1973, a PD was promulgated, creating the Philippine Shippers' Council.

The Philippine Shippers' Council is a quasi-governmental, non-stock corporation, and is more of a service-oriented than a profit-oriented entity. A small budget is provided for by the Department of Budget and Management. In addition, the Council also generates its own revenues to fund its operations. In 1976, the Freight Booking and Cargo Consolidation Center was created by another PD. The Center is an integral part of the council, because while the Shippers' Council is the policy making body, the Freight Booking and Cargo Consolidation Center implements policies of the Council.

24. The Council is headed by one chairman and ten board members. The Chairman is the Secretary of the Department of Trade and Industry. While the members of the Board include government representatives such as the General Manager of PPA and the Administrator of MARINA, there are eight members who comes from private sector including the President of PCCI, the Confederation of Philippine Exporters, and the presidents of all other commodity groups. Since the government members are outnumbered by the members from the private sector, it could be contended that the policy of the Council is more responsive to the private sector. The staff of the Council is eighteen (18) people. The primary function of the Shippers' Council is to protect and promote the interest of all shippers. Further, the Council conducts various activities; in particular, it gives practical advice about trade business to small exporters, most of whom are are locally-based. The function is similar to that of PCCI.

25. Distribution Management of the Philippines (DMAP) was organized in the middle of 1989 when the MARINA released MC No. 46. The Memorandum Circular stipulated that freight rate be increased by 8%, and the circular reclassified the commodity classification with the removal of the ad valorem rate and the addition of 0.3% of valuation surcharge. In addition to this, it set a standard

measurement of 28 cubic meters per 20 foot container van. This restructuring of the tariff increased the shippers' cost, in DMAP's opinion, by an average of 25%. Shippers appealed to MARINA for a review of the rate increase. At first, four manufactures, members of the Soap and Detergent Association of the Philippines, formed an ad hoc committee to tackle their common problem of sea freight rate increase. Finding the need for a formal group of shippers to make a proper and strong representation, the above ad hoc committee was expanded to a core group of ten (10) leading manufacturers of consumer goods. The DMAP was officially registered with the Security and Exchange Commission on March 5, 1990. The organization's membership has increased to 17 firms, and it is said that the sea freight of the member firms accounts for more than 50% of the total domestic liner freight.

26. The objectives of the DMAP are:

1) To provide a forum of cooperation, consultation, exchange of information, discussion of issues, concerns and ideas on matters pertaining to distribution management as well as on change in the external environment and technology that impact on the field of distribution management.

2) To provide avenues for the professional development of practitioners in the member firms in the field of distribution management.

3) To act as the official representative and liaison of the members with the government and its instrumentalities, and with private organizations and affiliations for the purpose of advocating and advancing the common use of distribution practitioners.

As seen in the DMAP objectives, although domestic shipping is the prime concern of the DMAP, it concerns the vast area of physical distribution, which includes warehousing, trucking, handling, custom service, inventory planning and control, and distribution planning.

27. DMAP is run by a ten persons Board of Directors duly elected by the general membership. The Board of Directors elect among themselves five officer charged with the task of leading and managing the affairs of the DMAP for a term of one year. To ensure equal focus on different distribution activities and to adequately respond to the needs of the organization, the following standing committees were established;

The Advisory Committee, the Public Relation Committee, the Sea Transport Committee, the Land Transport Committee, the Warehouse Operations Committee, the Education Committee, and the Membership Committee.

B. Present Aspects of Port Management

Categories of Port

28. In the Philippines there are currently reported the 18 (eighteen) base ports, 75 (seventy-five) secondary ports, 528 (five hundred and twenty-eight) municipal ports and more than 300 private ports. As an archipelago country, while it is said that around 1,000 ports are reported to be found on these islands, the accurate number of the ports is not known yet.

29. Among these ports, the base and secondary ports are managed under the administration of PPA ; the others are either under Municipal Government or under private companies.

30. PPA is the agency in charge of port development, management, traffic and other relevant administrative matters. The ports under PPA are selected as important sea transport points from the national viewpoint. The base ports act as the major international/regional ports, where PPA port-management offices are usually installed for the administration of the ports in the territory.

31. The secondary ports could also be called sub-base ports. While they do not have the same transport density as the base ports both in cargo and passenger traffic, they functionally assist and supplement the base ports in regional sea transportation.

32. The municipal ports are mostly small and tiny ones , often including tiny inlets or shoal beaches, but play a crucial role in the transport of local products and subsistence commodity. Usually, they are constructed by the national government and transferred to the municipal governments.

33. Many of the private ports are built and operated as industrial ports for the exclusive use of factories, electric generators, or petroleum refineries, but some are used for public purposes. Banago Pier of Negros Occidental is a private port, where port services are provided publicly.

P P A

1) Organization

34. PPA has the power to prescribe regulations necessary maintain order and safety within the port district. And PPA also has financial autonomy as far as imposing the dues, raising funds, and implements its own budget. PPA is a public utility operated under a financial self-supporting accounting system. The agenda of the PPA charter is for this organization to become the authority responsible for the execution of development, administration and supervision over all ports in the country.

35. Figure 1-1 shows the organization chart of PPA. PPA has five(5) Port District Offices (PDOs) over the country, under which Port Management Offices (PMOs) are put throughout the regions. PMOs functions as administrative bodies of the port operation and management.

2) Financial System

36. PPA was once under the strong control of the national government, and in particular its budget was determined by the Office of Budget management under Ministry of Budget. "However, the issuance of Executive Order No. 159, dated 13 April 1987, granted PPA fiscal autonomy and allowed PPA to adopt its own annual budget." That is, all revenue generated from administration of ports can be spent on operation, maintenance, improvement and development of its port facilities by PPA.

37. PPA's accounting is based on a commercial accounting system to understand its financial situation(position and perspective) as a public utility from year to year. And PPA submits to the Board the consolidated financial statement connecting PMOs - PDOs - HQ(head quarter), although each PMO issues its own financial statements, it to is not independent financial entity as mentioned previously.

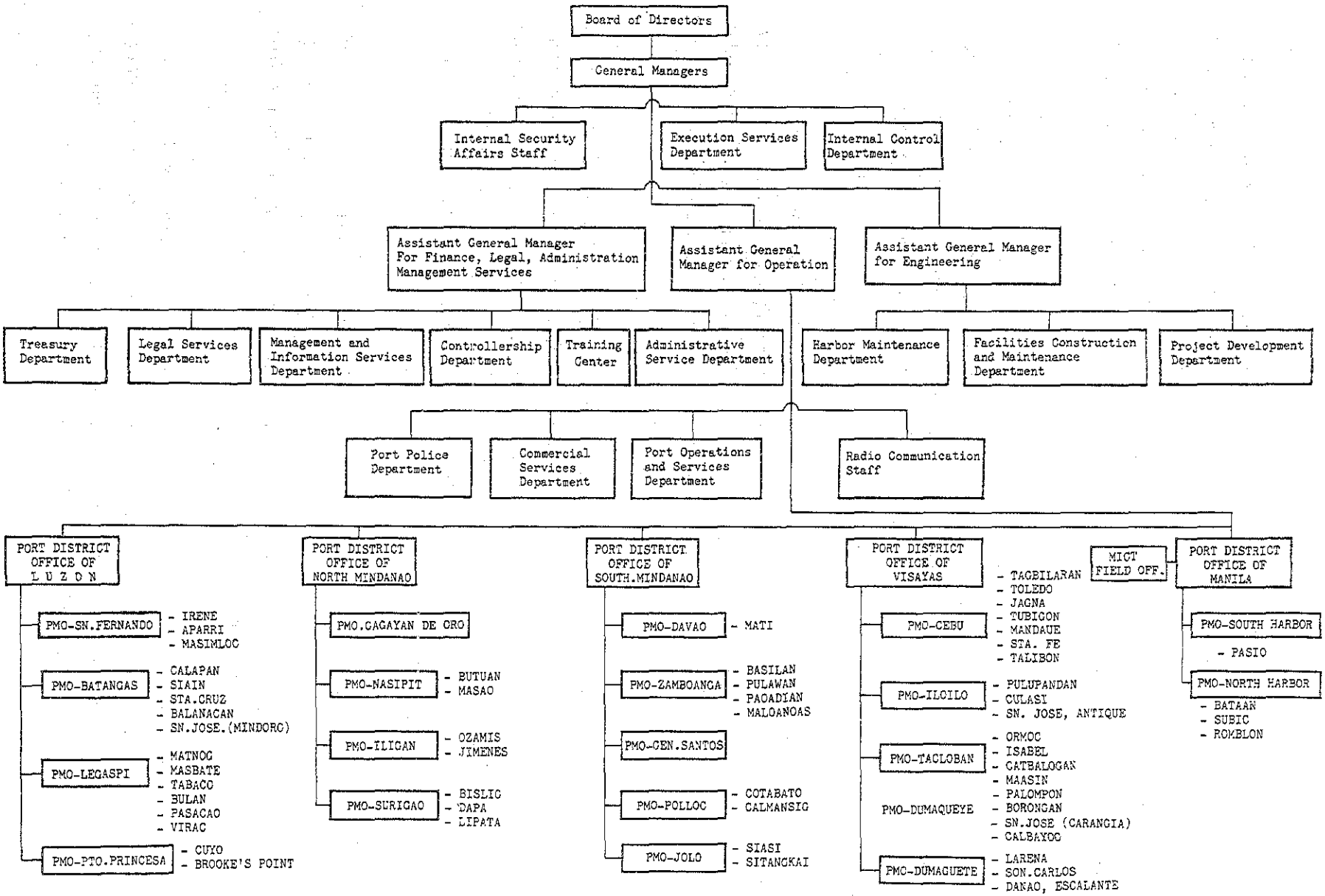

Figure 1-1 Philippine Ports Authority Organization Chart

Source: JICA Study Team based on the infantries offered by PPA

3) Port Tariff

38. PPA has the power to levy duties, rates and charges for the use of facilities. PPA can spend the income on daily operations of ports, and on its investment of construction and improvement. The port tariff rates can be changed if warranted by the financial situation of PPA after approval of the President of Philippines.

39. According to the Presidential Decree No. 857, dues includes harbor fees, tonnage and wharfage dues, berthing charges, and port dues. These dues are inclusive of all rates and charges such as any toll or rent for facilities and services provided both by PPA itself and private companies within a port district. PPA can collect shares from cargo handling contractors at a rate of more than 10% of their gross income.

40. The PPA tariff is classified into 3 major rates; charge for vessels (paid by ship companies), charge for cargoes (paid by shippers), and share for stevedoring/arrastre services (paid by stevedoring/arrastre companies). In addition, the passengers who pass the government owned terminal have to pay the terminal fee as a usage due.

41. As far as the domestic transportation through the ports is concerned, vessel should pay the usage or lay-up fee when it enters and stays in any ports whether government or privately owned ports. On the cargoes passing through the wharves, wharfage fee should be charged. The cargoes remaining within the government-owned ports beyond the free storage period are charged the corresponding storage fee.

42. The share burdens against the stevedoring and arrastre services are paid to PPA out of the gross revenue earned through the provision of the stevedoring and arrastre services. The portion of the share usually varies from 10% to 30% of the gross revenue.

43. In addition to the PPA charge, the companies related with the port operation services apply their own tariff rate on their users, so these charges and fees are usually levied and collected by the companies directly. Conversely, the users have to pay the dues and fees separately.

44. PPA also has the power to regulate the rates of charges for port or port-related services for individual ports taking into account the development needs of the hinterland. When the companies/associations increase their rates applying for the port services. They require PPA's approval of the change.

4) Past Financial Performance

45. PPA's financial performance during fiscal year 1987-1990 is summarized in Table 1-1, 1-2, and 1-3, compared with that of 1980 and 1985. Each year there is an increase of operating revenue in the income statement operating revenue, and net operation income (gross profit) is also growing to reach 754 million pesos in 1990. Rates of return are 97% in terms expressed above. A large portion of the operating revenue in 1990 was derived from port dues/fees such as charges for vessels, wharfage dues and storage fees. Charge on arrastre/stevedoring services from the private contractors permitted by PPA, accounts for 19% of the total. The operation revenue comes not only from government-owned ports but also private ports. The latter accounts for 43% of the operating revenue in 1990.

Table 1-1 Income Statement of PPA

[Unit: Million Pesos, %]

	1980	1985	1987	1988	1989	1990
①Operating Revenue	223.1	612.1	955.96	1,104.89	1,310.02	1,523.78
②Port Charges	140	452.7	682.06	706.21	817.14	830.31
③Arrs./Stev. Income	60.2	121	217.26	231.47	247.87	286.34
④Non-traditional Income	22.9	38.4	56.64	91.99	103.20	126.33
⑤M I C T				75.22	141.81	280.80
⑥Operating Expenses	173.3	302.5	528.41	558.02	699.83	770.06
⑦Personnel Services	54.2	73.9	85.36	154.40	207.10	229.79
⑧Repairs & Maintenance	14.3	35	47.10	57.15	87.72	100.27
⑨Other Admn. Cost	25.8	75.9	117.66	69.80	104.14	120.99
⑩Dredging Expenses	33.9	29.7	28.79	24.55	47.34	64.57
⑪Depreciation Cost	45.1	88	249.50	252.12	253.53	254.44
⑫Net Operating Income	49.8	309.6	427.55	546.87	610.19	753.72
⑬Other Income and Charge	38.9	-85.5	-173.36	-233.24	-229.19	-329.04
⑭Fund Management Income	58.6	102.1	62.52	73.86	96.46	133.81
⑮Less Other Expenses	19.7	187.6	235.88	307.10	325.65	462.85
⑯Inerest of Loans	13.5	141.7	230.34	301.23	320.34	408.73
⑰Amort.-Deferred Charge						48.33
⑱Others	6.2	45.9	5.54	5.87	5.31	5.79
⑲Net Income(Loss)	88.7	224.1	254.19	313.63	381.00	424.68
Working Ratio(%) (⑥-⑯)/①*100	57.46%	35.04%	29.18%	27.69%	34.07%	33.84%
Operating Ratio(%) ⑥/①*100	77.68%	49.42%	55.28%	50.50%	53.42%	50.54%

Source:Manila South Port Rehabilitation Project,June,1987,JICA(1980,1985)
:Data offered by PPA(1987-1990),Financial Performance Evaluation Report,11,March ,1991,PPA

Table 1-2 Balance Sheet of PPA

[Unit: Million Pesos, %]

	1980	1985	1987	1988	1989	1990
Current Assets	458.9	519.9	1,112.67	1,380.22	1,604.18	1,886.67
Cash & Temp. Investment	267.6	110.9	972.26	1,214.19	1,385.34	1,614.60
Accounts Receivable			101.09	89.76	66.19	44.67
Note Receivable					45.37	32.37
Other Current Assets	191.3	409	39.32	76.27	107.28	195.03
Fixed Assests	2278.4	2533.3	7,131.74	7,432.78	7,587.83	8,801.22
Land	730.8	604.7	1,290.81	1,290.81	1,500.89	2,496.06
Construction in Progress	369.5	638	536.01	1,064.60	1,096.06	1,336.66
Depreciable Assets	1946.5	2094.6	7,932.35	7,958.26	8,129.16	8,347.27
Less:Accum. Depreciation	768.4	804	2,627.43	2,880.89	3,138.28	3,378.77
Other Assets	151.8	172	25.83	77.17	92.74	1,233.91
TOTAL ASSETS	2889.1	3225.2	8,270.24	8,890.17	9,284.75	11,921.80
Current Liabilities	112.5	85.3	214.67	268.22	321.67	459.19
Accounts Payable	112.5	85.3	176.88	177.42	177.29	327.00
Other Current Payable			37.79	90.80	144.38	132.19
Long-term Liability	186.4	486.7	3,104.77	3,295.55	3,440.47	4,329.52
TOTAL LIABILITY	298.9	572	3,319.44	3,563.77	3,762.14	4,788.71
Networth	2590.2	2653.1	4,950.80	5,326.40	5,522.61	7,133.09
Capital Contribution	2349.5	2320.3	2,301.47	2,297.55	2,299.46	3,292.42
Appraisal Supplus	88.7	98.9	1,475.92	1,471.32	1,270.09	1,465.29
Surplus Reserve			1.47	14.57	9.77	5.27
Contingent Surplus	-5.5	-6.8		33.21	55.12	98.05
Retained Earnings	157.5	240.7	1,171.94	1,509.75	1,888.17	2,272.06
TOTAL LIABILITY and NETWORTH	2889.1	3225.1	8,270.24	8,890.17	9,284.75	11,921.80

Source:Manila South Port Rehabilitation Project,June,1987,JICA(1980,1985)
:Data offered by PPA(1987-1990), Financial Performance Evaluation Report,11,March ,1991,PPA

Table 1-3 Cash Flow of PPA

[Unit: Million Pesos, %]

	1980	1985	1987	1988	1989	1990
Beginning Cash Balance	398.1	601.7	1,200.72	972.26	1,214.19	1,385.35
Cash Inflow	314.4	1145.7	1,080.26	1,553.09	1,562.93	1,830.27
Operating Revenue	219.9	579.6	955.96	1,104.89	1,310.02	1,523.78
Fund Managemant Income	58.5	114.6	53.35	65.50	96.46	133.81
Acct. Rec'ble-Beg.			110.96	101.09	89.76	111.56
Acct. Rec'ble-End			101.09	89.76	111.56	76.56
Foerign Loan Avail.	36	451.5	51.08	371.37	176.25	137.68
Equity Contribution					2.00	
Bidder's Bond			10.00			
Total Cash Available	710.5	1747.4	2,280.98	2,525.35	2,777.12	3,215.62
Cash Outflow	313.6	762.4	1,308.72	1,311.16	1,391.77	1,601.01
Operating Expenses	94.5	168.2	278.91	290.90	446.30	515.62
Debt Service	30	31.4	712.04	459.14	546.30	635.37
Interest	13.5	15.7	342.27	278.55	287.52	373.56
Principal	16.5	15.7	369.77	180.59	258.78	261.81
Infrastructure Project	156	526.5	207.50	544.45	416.33	401.83
Infrastructure Project	30	29.7				
Dividend Payment				15.00	28.39	37.79
Acct. Payable-Beg.			287.15	176.88	131.74	177.29
Acct. Payable-End			176.88	177.42	177.29	166.89
Other/Real estate Tax	33.1	6.6		2.21		
Ending Cash Balance	396.9	985	972.26	1,214.19	1,385.35	1,614.61
Debt Service Coverage Ratio	418.00%	1310.19%	95.09%	177.29%	158.10%	158.67%

Source:Manila South Port Rehabilitation Project,June,1987,JICA(1980,1985)
:Data offered by PPA(1987-1990), Financial Performance Evaluation Report,11,March ,1991,PPA

46. As for operation expense,it also increased according to the increase in the operating revenue. A large portion is taken by personnel and depreciation costs. The latter rises from 45.1 in 1980 to 254.4 millions in 1990(5.6 times in 10 years).

47. Net income is calculated by operating revenue less both operating and non operating expense such as interest on loan or deferred charge. Net income grows year by year, and so does the interest on the loan increase, reaching a total 408.7 million pesos in 1990 and the balance of long term loan amounted to 4,330 million pesos. The average interest rate in 1990 was 9.2% per year, calculated from the balance sheets and cash flow tables.

5) Long-term Foreign Loan

48. PPA borrows a amount of the long term loan, and is accounted to 4,330 million pesos in 1990 as mentioned above. All the balance in 1990 are loan by ADB(Asian Development Bank), IBRD (International Bank for Reconstruction and Development), KFW(Kreditanstalt fur Wiederaufbau), and OECF(Overseas Economic Cooperation Fund) as follows:

BOND	Rate per Ann.	Balance in 1990
ADB - 412 - ICT	7.60%	372.79 Million Pesos
ADB - 875 - PHI	6.53%	115.84
ADB - 126 - PHI	7.50%	96.89
IBRD-1048 - PH	N.A	56.72
IBRD-1855 - PH	8.25%	1,114.17
IBRD-2823 - PH	7.76%	419.28
IBRD- 939 - PH	7.25%	94.54
KFW - AL - 644	3.00%	120.4
KFW 1 & 2	2.00%	238.07
OECF - PH - P20	3.25%	527.04
OECF -PH -P20-2	3.25%	799.15
OECF - PH - P40	3.00%	298.73
OECF - PH - P61	3.00%	34.86
OECF - PH - P91	3.00%	29.95
OECF - PH - P84	3.00%	11.09
T O T A L		4,329.52

Source: Information offered by PPA

49. Working and operating ratios are usually used to indicate the a financial viability of the administrative body. Those of PPA are shown in Table 1-4, and in 1990 both of them are below the criteria of IBRD. IBRD accepts less than 50-60% of working ratio, and less than 70-75% of operating ratio as effectiveness and viability of the body.

50. On the other hand, debt service coverage ratio is applied as a standard for repayability of the long-term loan. The IBRD requires the ratio to be above 1.75 . PPA's was far above this ratio beyond until 1983, and is now below the line (1.59), soon, however, PPA should reach the line.

51. Though the individual PMOs make financial statements by themselves, they are not fiscally independent from PPA. PMO-Iloilo is one of the PMOs which PPA deploys throughout country. Port tariffs are uniformed throughout the country, except charges on arrastre/stevedoring service which vary with the each particular port to port. All the revenues are absorbed into the PPA. As a reference, the balance sheet and income statement of PMO Iloilo in 1990 are shown in Table 1-4 and 1-5. Table 1-6 shows the working ratio to be calculated at 44.1%, and the operating ratio at 78.0%.

Table 1-4 Balance Sheets of PMO Iloilo in 1990

[Unit: thousand pesos]

ASSETS	84,465
Current Assets	42,396
Cash on Hands & in Bank	35,109
Accounts Receivable	6,960
Other Current Assests	327
Investment & Fixed Assests	577,681
Non Receivable Assets	174,955
Land	174,955
Construction in Progress	
Depreciable Assets	593,153
Land I,provements	590,767
Others	2,386
Accumu. Depreciation	190,428
Other Assets	275
Defered Charge	84
Contingent Assets	191
Miscellaneous	
Total Assets	620,352
LIABILITIES & NETWORTH	
Current Liability	4,550
Accounts Payable	3,384
Other Account Liab.	1,165
Networth	615,802
Contingent Surplus	191
Cleaning Account	615,611
Total Liability & Networth	620,352

Source:Data from PPA

Table 1-5 Income Statement of PMO of Iloilo

[Unit: thousand pesos, %]

①Operating Revenue	51,032
②Port Charges	33,095
③Arrs./Stev. Income	15,189
④Non-traditional Income	2,748
⑤M I C T	
⑥Operating Expenses	39,820
⑦Personnel Services	10,387
⑧Repairs & Maintenance	4,979
⑨Other Admin. Cost	5,171
⑩Dredging Expenses	1,962
⑪Depreciation Cost	17,321
⑫Net Operating Income	11,212
⑬Other Income and Charge	-61,730
⑭Fund Management Income	
⑮Less Other Expenses	61,730
⑯Inerest of Loans	61,730
⑰Amort.-Deferred Charge	
⑱Others	
⑲Net Income(Loss)	-50,518
Working Ratio(%) (⑥-⑭)/①*100	44.09%
Operating Ratio(%) ⑥/①*100	78.03%

Source:Data from PPA. Financial Evalution Report,1990,PPA.

Local Government Port

52. The local government port plays an important role in the development and administration of small ports, which are the primary means of handling cargo and passengers in isolated areas, in particular in those areas where water transportation is only a measures of sustaining life and residence. Some ports may link islands together, and others may be linked to larger ports.

53. In this case, municipal governments in provinces, cities and municipalities identify the location of ports to be constructed, prepare preliminary cost estimates, and justify the needs for the ports in their Municipal Development Plans which are consolidated with other Municipal or Provincial Development Plans into a Regional Development Plan. At the regional revel, the different projects are prioritized and approved by the Regional Development Council. These ports are usually called feeder ports, and approved projects are generally submitted to DPWH and DOTC, which draft the detailed designs. These projects are funded by the national budget.

Private Port

54. Private companies are able to construct and operate their own ports with permission from both the Bureau of Land and the PPA. It is policy of the PPA to recommend the utilization of existing PPA or municipal ports. But PPA usually accepts such private ports requests where particular handling techniques, systems, facilities and equipment are necessary. There are some other cases where permission is granted for privately owned ports if residential interest is strong.

55. The coastline belongs to the national government, so the private company requires the Bureau of Land's permission to use it. The Bureau of Land consults with PPA before it grants permission. After permission is granted, certain procedures must be followed. The private company should submit a detailed feasibility study for the PPA's appraisal of the port. If the PPA approves, construction and operation of the port may commence. At this time, the private company usually make a contract with PPA, which contains a

transfer of the port after the expire of the term as well as stipulations to observe the general rules of port administration and operation concerns.

56. In the private ports the developers(terminal operators), ship, shipping and stevedoring/arrastre companies are obliged to pay certain fees or charges to PPA.

C. Overview of Domestic Shipping Activities

57. As a unique archipeloagic state located at the eastern edge of the Pacific Ocean, the Philippines has been much dependent for the maintenance of its economy and its human lives on the seaborne trade in terms of overseas trade as well as inter-island and coastwise.

58. Since World War II, the shipping industry of the Philippines has grown at a remarkably high rate. At the end of the war, the Philippines owned only three vessels, 21 thousand grt.; however, in 1960, its fleet has grown to 365 vessels, about 240 thousand grt., and in 1970, vessels registered in Philippines are 1,296 thousand grt..

Table 1-6 Philippines Merchant Marine Fleet, 1986-1989

in thousand grt.

	1986	1987	1988	1989
Overseas :	(397 vessels)	(469)	(472)	(427)
:	7,350.6	9,187.6	9,564.5	8,447.2
Domestic :	(2977)	(3832)	(4179)	(4417)
:	359.1	791.1	895.6	876.3
TOTAL :	(3374)	(4301)	(4651)	(4844)
:	7,689.7	9,978.7	10,430.1	9,323.5

Source : MARINA, Management Information System & Technical Library
Note : Excluding fishing vessels

After the oil crisis in 1973, a fleet flying Philippines flag still has been growing, and in 1980 it reached 2,910 thousand grt..1/ Recent four years' progress in shown in Table 1-6. According to the Lloyd Statistics which counts steel hull vessels over 100 grt. including fishing vessels, the Philippines owned the world's eleventh largest fleet in 1989 (its registered tonnage was 15,468 thousand grt.).

59. Despite the fact that two types of trade, viz. overseas and domestic and segmented in general terms, under the Special Permits of MARINA, temporary change from domestic to overseas and vice versa are to a large extent granted (Table 1-7). In 1989, total gross tonnage granted for temporary change accounted for some 8% of the entire merchant fleet. A breakdown of Philippine's merchant vessels registered for domestic trade are shown in Table 1-8.

Figure 1-2 shows the age profile of the domestic merchant marine. Vessels of more than 16 years are relatively large, the average of which is more than 400 grt., while average size of vessels of less than 5 years are only 49 grt. and vessels of 6-10 years average 138 grt., most of which are considered to be wooden hull vessels. Aged vessels are the imported or bare-boat chartered vessel, because due to the insufficient shippowers' financial capability and the low profitability of the shipping business, it is not possible to invest in new vessels.

60. According to the National Transport Planning Project Study, 1982, the sea transport sector carries around 12 billion ton-kilometers and 53 billion passenger-kilometers, which account of 35% and 7% of national cargo and passenger movement respectively. Although no available figures of this kind exist for recent years, based on the volume of freight and passenger traffic recorded in the current statistics it can be presumed that ton-kilometer and passenger-kilometer of all modes have increased steadily, particularly after the depressed 1984 and 1985. Modal split between road and sea in terms of cargo movement, and between air and sea in terms of passenger movement can be estimated to be remain unchanged based on the data shown in Table 1-9.

In so far as inter-island transport is concerned, the shipping sector are considered to carry an overwhelmingly large portion of both cargo and passenger

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1/ The figure is based on the Lloyd Statistics, however, MARINA Annual Statistical Report, 1981 counts 2,439 thousand grt. for domestic fleet and 1,559 thousand grt. for overseas fleet, total 3,997 thousand grt..

Table 1-7 Number & Tonnages of Vessel Granted Special Permit for Temporary Change of Vessel Operation by the Type of Vessel Utilization and by the Type of Services 1989 and 1988

VESSEL UTILIZATION/TYPE OF SERVICE	No. of Vessels		TOTAL GRT		TOTAL DWT	
	1989	1988	1989	1988	1989	1988
DOMESTIC TO OVERSEAS				1/	2/	3/
Cargo	92	75	242,232.58	165,175.36	296,903.81	207,112.66
						4/
Tanker	6	20	8,178.18	17,898.64	N/A	17,615.77
				5/	6/	5/
LPG Carrier	12	7	9,929.53	1,410.00	6,291.00	1,268.00
Tugboat	5	1	1,070.01	1,469.00	-	-
Barge	6	3	6,980.46	21,315.54	-	-
					5/	5/
LCT	5	7	4,015.65	4,873.72	750.00	750.00
Fishing	98	107	40,523.43	37,704.51	N/A	N/A
				7/		
No Information	-	3	-	2,943.66	-	-
S U B - T O T A L	224	227	312,929.84	252,790.63	304,029.81	226,746.43
OVERSEAS TO DOMESTIC					8/	9/
Cargo	36	42	120,743.42	117,424.68	168,418.48	171,338.66
					10/	
Tanker	23	15	190,527.00	90,433.20	359,533.35	129,380.80
				11/	12/	13/
LPG/Carrier	57	22	98,938.00	26,787.03	928,670.15	24,319.03
Log Carrier	2	-	6,019.76	-	11,946.34	-
			7/			
Tugboat	4	1	995.52	95.44	-	-
			14/			
Barge	5	-	7,320.00	-	-	-
Passenger Cargo	-	1	-	272.87	-	551.38
Ore Carrier	-	2	-	9,742.00	-	17,370.00
Working Boats	8	-	-	-	-	-
Fishing	1	15	99.51	4,632.72	N/A	N/A
No Information	-	4	-	22,327.73	-	42,730.20
S U B - T O T A L	136	102	424,643.21	271,715.67	1,468,568.32	385,690.07
G R A N D T O T A L	360	329	737,573.05	524,506.30	1,772,598.13	612,436.50

Notes

1/ for 77 vessels only
2/ for 42 vessels only
3/ for 64 vessels only
4/ for 16 vessels only
5/ for 1 vessels only
6/ for 9 vessels only
7/ for 2 vessels only
8/ for 30 vessels only
9/ for 39 vessels only
10/ for 22 vessels only
11/ for 11 vessels only
12/ for 56 vessels only
13/ for 20 vessels only
14/ for 3 vessels only

Source: MARINA Management Information System

Table 1-8 Domestic Merchant Ships by Type of Service and by Type of Operation in 1989

Type of Service	Number of Vessels	Type of Operation	Number '000 grt.
TOTAL	4,417	TOTAL	4,417
Passenger Ferry	420		876.3
Passenger Cargo	98	Liner	1,709
General Cargo	2,737		268.1
Container	24	Tramp	2,488
Liquid Cargo/Lighterage	40		531.2
Barging	450	No Info	220
Oil Tanker	117		77.1
Towing/Salvage	365		
Pleasure	36		
Pilotage	17		
Others	82		
No Information	31		

Source: MARINA Technical Library

traffic. That is to say, virtually all the cargo is carried by vessel, since air transport is negligible (a little more than 180,000 ton-kilometer in 1989), and 85% of passenger movement is said to be borne the by sea transport sector. 2/

2/ This percentage of passenger traffic carried by water appeared in one preceding study. However, air transport in 1989 was recorded at less than 2 million passenger-km(pk), which is virtually non-existent even comparing it with 1982's 53,000 million pk of seaborne traffic; accoringly it can be assumed that almost all the inter-island passenger traffic is borne by shipping.

Also, with respect to inter-island cargo movement, the Final Report on Inter-island Shipping by the Presidential Task Force (February 1989) mentions 85% for the sea portion. Again, freight by air is too small - less than two hundred thousand ton-km - to claim a 15% share.

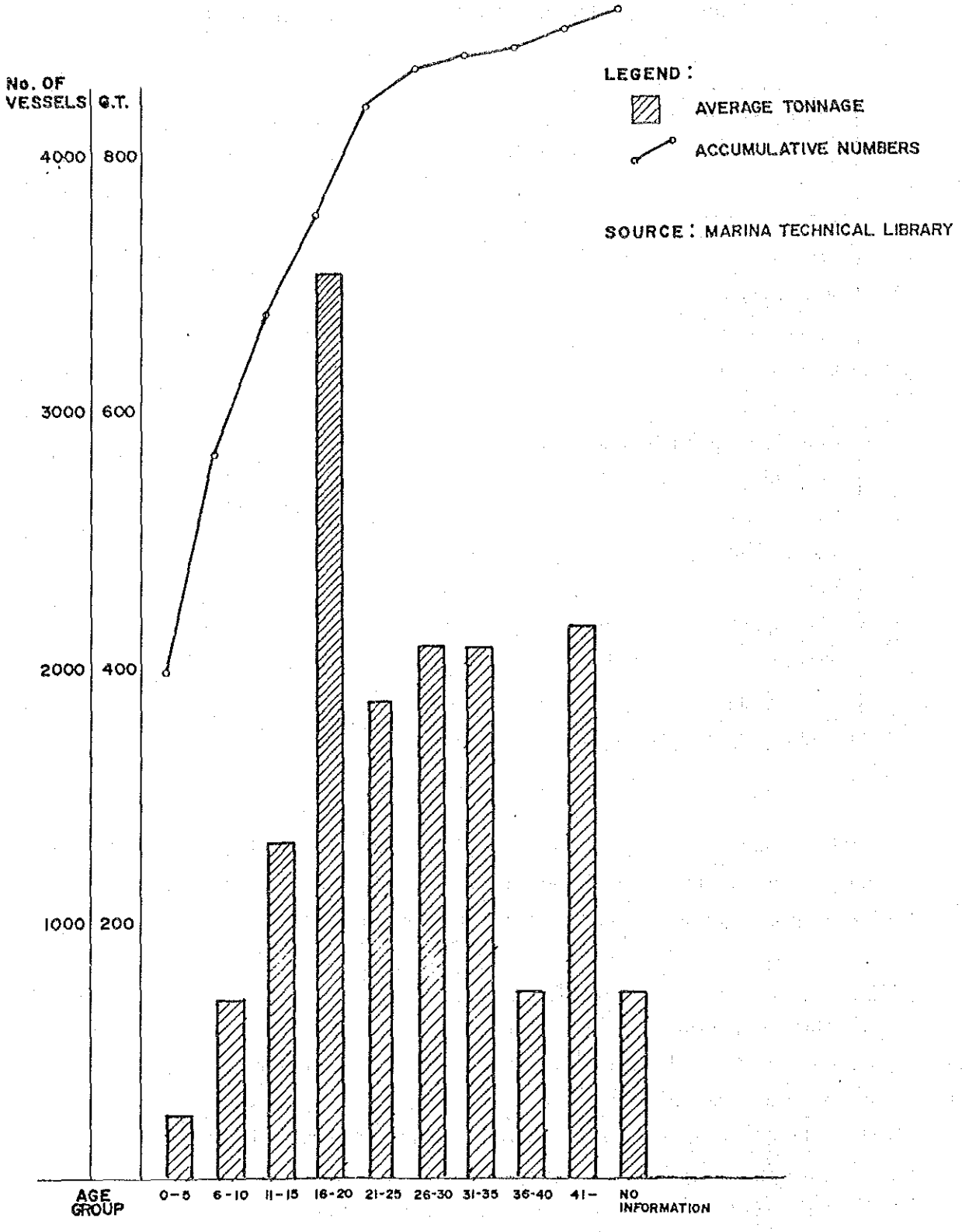

Figure 1-2 Merchant Fleet: Average Gross Tonnage by Age Group and Accumulated Number of Vessels by Age Group

Table 1-9 Domestic Cargo Transportation (1981-1990)

Year	Cargo Handled in Ports in million tons	Passenger-km by Air in thousand pk	Number of Registered Motercars in thousand
1981	16.7	1,167	819
1982	17.2	1,259	867
1983	17.9	1,393	923
1984	16.7	1,452	895
1985	16.8	1,552	862
1986	17.1	1,620	883
1987	20.0	1,775	913
1988	23.3	1,868	976
1989	27.4	1,921	1,100
1990	29.0	n.a.	n.a.
81/89	1.64	1.65	1.34

Note : n.a. = not available

Source: PPA, Philippine Air Lines and Land Transportation Office. Number of registration excludes motorcycles and tricycles.

61. Despite the existence of considerable number of government owned vessels (mainly tanker and Ro/Ro vessels operated by private carriers), domestic shipping is all but carried out by the private sector without any significant help from the government. The size of domestic shippowers is relatively small in terms of average paid-up capital, which in 1989 accounted for 575 thousand pesos. Shippowers may be classified by their size in three groups, the first of which consists of the ten major shipping lines, all of whom are members of the CISO. The second group consists of the companies approved for incorporation by MARINA and registered by SEC, numbering 103 in 1989. The last one consists of the inestimable number of small and individual Shipowners plying for short distance passenger services, small trampers, barges, lighters and bancas. Nevertheless, it is possible to describe the Philippine domestic shipping as dynamic.

62. Philippine domestic shipping, in terms of the geographic areas of the business are three fold in structure. That is to say, regionwise cargo and passenger movement centers on Metro Manila (NCR), Southern Tagalog (Region IV) notably Batangas and Central Visayas (Region VII). Although the gap between the previous three is large, Northern and Southern Mindanao (Region X and XI) come next, and can be claimed as the fourth center.

The busiest route of seaborne cargo movement is Region VII/Region X route, transporting a quantity of about 1,580,000 tons in 1987 (approximately 10% of nationwide cargo movement); the southbound quantity is 1,140,000 tons while 440,000 tons are northbound (see Table 1-10). NCR/Region III route is the second busiest, and cargos bound for NCR are some 1,090,000 tons. In terms of cargo value, Region VII origin cargos are the highest representing the value of 17,520 million pesos, and they are scattered through all the regions. This suggests that the ports of Central Visayas, particularly Cebu, are the distribution center of relatively high valued commodities. Such commodities seem to be mainly destined for NCR. Value of NCR-bound goods is more than 29,400 million pesos which accounts for about 30% of the total cargo carried by vessels. 3/

63. For seaborne passenger traffic, again Central Visayas is the focal point. In 1990, the traffic of the Region is some 7,700 thousand, which includes both embarking and disembarking passenger, accounting for nearly 30% of the nationwide figure. The second is Iloilo, accounting for 4,413,000(17% of nationwide traffic). Northern Mindanao, Southern Tahalog and Western Mindanao stand next (see Table 1-11).

3/ With respect to cargo handled in port, figures of two kinds are available, one is from PPA and the other is from NSO. Figures of PPA are 20-30% higher than NSO. Regional matrix appeared in the Statistical Year Book of 1990, and that data in utailized here. Also see Chapter 6A.

Table 1-10 Domestic Cargo Flow by Regionwise Origin and Destination in 1987

(Quantity in thousand kilograms; Value in thousand pesos)

Year/ Mode of Transport/ Origin	Total		Destination: Metropolitan Manila Area (NCR)		Region 1		Region 2		Region 3		Region 4		Region 5	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1987														
All Commodities	15,621,817	95,984,898	4,382,695	29,434,538	335,939	2,202,111	31,613	225,340	29,272	178,524	936,981	4,964,090	471,090	2,572,107
Metropolitan														
Manila Area (NCR)	1,028,466	12,196,364	87	4,373	700	2,450	820	12,208	1,139	9,254	55,382	516,976	23,858	214,848
Region 1	112,440	1,506,093	-	-	-	-	-	-	-	-	-	-	-	-
Region 2	1,875	636	1,875	636	-	-	-	-	-	-	-	-	-	-
Region 3	2,512,973	14,928,838	1,092,646	6,406,207	105,886	770,521	22,680	152,213	2,368	13,932	255,720	1,485,877	38,845	232,329
Region 4	2,095,285	13,966,681	197,968	1,241,722	191,104	1,285,691	6,839	48,644	17,508	119,156	462,853	2,167,686	140,628	1,022,643
Region 5	158,640	738,905	35,366	239,935	-	-	-	-	-	-	15,140	42,805	33,813	204,831
Region 6	1,275,410	7,701,563	521,389	3,651,592	20	120	595	8,660	2,331	6,772	19,877	89,643	21,317	158,213
Region 7	3,405,442	17,518,488	379,806	2,970,953	14,938	55,129	673	3,574	2,948	13,700	34,519	266,131	71,605	474,328
Region 8	726,062	3,148,835	250,535	1,002,588	19,090	83,600	-	-	2,977	15,710	5,070	14,305	12,015	52,148
Region 9	477,408	3,024,934	41,399	514,060	-	-	5	41	-	-	1,574	23,283	-	-
Region 10	1,166,273	7,020,885	518,511	3,631,069	-	-	-	-	-	-	12,796	59,179	2,492	18,397
Region 11	1,385,030	8,577,941	748,275	6,119,955	4,200	4,600	-	-	-	-	33,238	91,942	44,324	51,791
Region 12	1,276,513	5,654,735	594,837	3,651,448	-	-	-	-	-	-	40,813	216,262	82,192	142,579

Year/ Mode of Transport/ Origin	Destination: Region 6		Region 7		Region 8		Region 9		Region 10		Region 11		Region 12	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1987														
All Commodities	1,541,023	10,297,191	2,703,323	16,248,920	1,156,452	7,131,812	719,335	4,420,772	1,661,623	6,761,331	1,008,530	7,653,614	643,942	3,894,549
Metropolitan														
Manila Area (NCR)	224,866	2,873,527	314,153	3,402,393	50,300	581,949	50,550	504,163	103,063	1,394,734	146,894	2,055,373	56,653	624,115
Region 1	-	-	-	-	112,440	1,506,093	-	-	-	-	-	-	-	-
Region 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Region 3	189,725	1,298,151	308,560	1,554,390	91,403	606,300	53,768	424,760	100,494	427,978	145,757	889,418	105,121	666,763
Region 4	207,716	1,678,197	332,890	2,504,387	62,681	434,160	44,473	347,595	135,887	977,084	228,481	1,663,127	66,258	476,590
Region 5	8,680	17,925	24,103	85,712	8,419	42,333	2,836	15,049	16,693	25,518	3,749	10,879	9,840	53,918
Region 6	235,644	1,184,071	288,676	1,476,439	48,961	302,014	75,104	474,651	22,831	151,418	13,378	104,983	25,286	92,988
Region 7	346,501	2,339,623	290,847	1,777,937	636,527	3,195,963	120,132	824,752	1,139,862	3,084,031	209,803	1,585,823	157,280	926,543
Region 8	55,082	225,735	131,273	607,732	33,858	180,610	11,121	49,407	51,595	225,674	41,914	180,461	111,532	510,865
Region 9	2,064	19,965	85,480	469,642	678	5,664	254,367	1,422,552	4,035	19,254	49,222	360,784	38,583	189,689
Region 10	47,704	246,085	439,338	2,239,881	3,728	26,842	6,897	63,537	54,467	315,967	50,875	233,486	29,464	186,441
Region 11	43,293	70,982	286,928	1,300,078	44,149	167,686	55,324	195,503	4,668	36,861	86,931	426,363	33,701	122,180
Region 12	179,748	3,242,929	201,075	830,329	63,308	82,198	44,763	98,803	28,028	102,813	31,526	142,917	10,224	44,456

Note: Totals may not add up due to rounding.
Source: National Statistics Office.

Table 1-11 Passenger Traffic by Region and PMO

in thousands

Region and PMO	1989	1990
Total	22,318	25,848
NCR	50	85
MNL North Harbor	-	- (1549)
MNL South Harbor	50	85
Region I, II and III	0	0
San Fernando	0	0
Region IV	2,273	2,810
Batangas	2,163	2,667
Puerto Princessa	110	143
Region V	873	1,032
Legaspi	873	1,032
Region VI	4,339	4,413
Iloilo	4,339	4,413
Region VII	7,731	7,708
Cebu	6,346	6,267
Dumaguete	1,385	1,441
Region VIII	874	1,160
Tacloban	874	1,610
Region IX	2,403	2,555
Zamboanga	2,403	2,555
Jolo	-	- (552)
Region X	2,656	4,881
Surigao	688	634
Illigan	598	2,801
Nasipit	556	588
Cagayan de Oro	814	858
Region XI	413	434
Davao	286	326
General Santos	127	108
Region XII	252	320
Polloc	252	320

Note: i) MNL North Harbor and Jolo were not included due to incomplete report. However, provisional figures are shown in blackets.

ii) Figure of Illigan should be reviewed because of large dicrepancy beween 1989 and 1990.

Source: PPA Annual Statistical yearbook, 1990

D. Present Situation of Ro/Ro Transport Services

64. In the last ten years the inter-island liner fleet has been extensively modernized in terms of its shipping and cargo handling system. The main development has been in containerization. Another important development has been the introduction of Ro/Ro pallet services on secondary routes. In the National Development Plan, the Philippine government stresses the early establishment of a comprehensive Ro/Ro network system to integrate the isolated islands, and to spread the national development benefits beyond major cities to rural areas. In line with this policy, and as an integral component of the Daang Maharlika Highway, a regular Ro/Ro ferry service was implemented between Luzon and Samar, and between Leyte and Mindanao. The development of Ro/Ro ferry service in the philippines has gone through various stages, and its history is to be seen in the Table 1-12.

Table 1-12 History of Ro/Ro Operation

Route	Date of Operation	Source of Information
Matnog-Allen	1979	NTPP/PPFST-Review of Transport Projects in the MTPIP 1987-1992 January 1988
Matnog-San Isidro	1984	-do-
Batangas-Calapan	1980	-do-
Liloan-Lipata	1980	-do-
	Withdrawn in 1981 reopened in 1986	-do-
Carmen-Isabel	1989 Ceased operation in 1990	RORO Report
Argao-Loon	1986 Ceased operation in 1990	-do-
Escalante-Tuburan	1983	-do-
Tandayag-Bato		
Tubod-Tangub		

Source: IATCTP Inception Report

65. Domestic liner routes are composed of trunk (primary), secondary, tertiary, feeder and developmental routes designated by the MARINA under the franchise system. While container services have established their steady position on the trunk routes which connect Manila with other main islands (Cebu, Leyte/Samar, Panay/Negros, Palawan, Northern Mindanao and Southern Mindanao), Ro/Ro services are growing in importance on the main secondary routes to Visayas and especially northern Mindanao. The main operators are members of CISO, Sulpicio, Gothong and Sweet Lines.

In Ro/Ro pallet service systems the cargo handling method usually involves passing pallets between a fork-lift on board and another on shore. All these Ro/Ro pallet services also carry a large number of passengers, unlike the trunk routes container services, most of which do not carry passengers.

Most secondary routes connect Cebu with nine other areas in addition to Manila/San Jose, Batangas/Calapan and Iloilo/Bacolod, totaling 12 routes served by operators with 26 vessels as of 1989. Although the total number of tertiary, feeder and developmental routes is reported to be around 200, it is said that most of the routes have remained undeveloped or are in unsatisfactory conditions.

66. There is a large fleet of short-distance passenger-cargo ferries, mainly built domestically and wooden hulled. They are owned by small local operators rather than the big companies that control the trunk route liner services as members of CISO. The passenger ferry vessels are defined as ships of under 250 grt operating on regular shuttle services mainly on routes where sailing time is less than four hours. Most of the vessels employed in the liner routes are combined passenger cargo vessels with an average capacity of 1,200 dwt for medium routes like Manila/Cebu. Vessels employed on short routes less than 100 NM., range from 150 to 500 dwt.

67. Liner shipping is the most important sector of domestic shipping. The shipping companies engaged in liner services could be classified into three groups which are:

(i) The members of CISO (The Conference of Inter-island Ship-owners and Operators)

(ii) Small and medium scale companies duly authorized by MARINA.

(iii) Others

Group (ii) is composed of many small companies which are plying in local waters 900 small vessels including Ro/Ro type (mostly locally built and wooden hulled). Group (ii) operators appear, in general, to have been engaging in fragile operations in terms of maritime safety and are presumably in urgent need of the government's financial support. VAFSO consists of these small local shipowners with a membership of 75 companies and SMSA also has a membership of several larger operators with 30 operating vessels in the region.

[References]

1. National Transport Planning Project Study 1982

2. Philippine Statistical Yearbook 1990 NSO

3. Annual Statistical Report 1990 PPA

4. Profile of Philippine Ports 1989 PPA

5. Lloyds Registers Statistical Tables 1970, 1980 & 1989

6. Shipping of South-East Asia 1963 S. Matsuo et. al.
original Japanese

7. Organization Manual 1988 DOTC

8. National Economic and Development Authority NEDA

9. Organization Manual 1989 DPWH

10. Final Report of Manila South Port Rehabilitation Project
1987 JICA

11. Financial Performance Evaluation Report 1991 PPA

12. The Philippine Coastal Fleet Renewal Project, 1989 SHIPDECO

13. Sub-sector Study on Inter-island Shipping/Ship Repair Vol. 1, 1990
Development Bank of the Philippines

Chapter 2 Maritime Policy

1. Maritime policy in broad terms includes various aspects ranging from safety of life at sea to preservation of marine environment. However, in the Study, having in mind the development of Ro/Ro transport system which requires very efficient manner of vessel operation, cargo handling and carrying out of the business, consideration is concentrated to the following four points; franchising, pricing, vessel acquisition and institutional matters. Among these, franchising and pricing are common problems of regulating private business activities by the government, which are nothing new, but are recently criticized. Thus, these two problems are examined altogether.

A. Franchising and Pricing

History and Background

2. Regulation of public utilities or public service commenced with the enactment of Act No. 520 by the Philippine Commission in 1902 creating the Coastwise Rate Commission. Later, Act No. 2307, which was patterned after the Public Service Law of the State of New Jersey, was approved in 1914, creating the Board of Public Utility Commission (years later changed to Public Service Commission). In November 1936, the National Assembly enacted Commonwealth Act No. 146, generally called as "Public Service Act". Later the Act as amended several times, but is still valid to regulate public service industries.

3. Section 13 of the Public Service Act enumerates the following public services under the jurisdiction of the Commission:

- common carrier: i) railroad, ii) street railway, iii) traction railway, iv) sub-way, v) motor vehicle for freight and passenger, vi) freight or carrier service of any class, vii) express service, viii) steam boat or steam ship line, ix) pontines, ferries and small water craft engaged in the transportation of passengers and freight.

- shipyard
- marine railway
- marine repair shop
- warehouse
- wharf or dock
- ice plant, ice refrigeration plant
- canal
- irrigation system
- gas
- electric light
- water supply and power
- petroleum
- telephone
- wire or wireless telegraph system
- broadcasting radio system

4. By virtue of Section 15 of the Public Service Act, no service shall operate without possessing a valid and subsisting certificate from the Public Service Commission, known as "Certificate of Public Convenience" (CPC), to the effect that the operation of the said service and the authorization to do business will promote the public interests in a proper and suitable manner. In addition to this, Section 16(a) of the PSA indicate that there are two (2) requisites to be complied with before any CPC may be granted, to wit: (i) citizenship, (ii) financial capability.

5. The Maritime Industry Authority (MARINA) was created in 1974, and then through the Executive Order 10-11 in 1985, powers and responsibilities prescribed in the Act over domestic shipping were transferred from the Board of Transportation, one of the successor of the Public Service Commission. From time to time, implementing measures are promulgated mainly in the form of MARINA's Memorandum Circulars (MC).

6. The ground of the statute to regulate public services was indicated in the Court sentence of Munn vs. Illinois, which states:

> "The service furnished by the public utilities is of such importance to the public that the State usually assumes jurisdiction over service

matters. Jurisdiction may be exercised by direct legislation, or more often through a Commission. It seems to be an established rule that service may be regulated."

For the registration of application, issue or renewal of CPC or other permit and supervision and regulation under the Public Service Act, the authority (ies) can collect fees by virtue of the Public Service Act, Section 40.

Current Arrangements for Domestic Shipping - Franchising

7. For commencing domestic shipping business, any person or company must obtain a Certificate of Public Convenience (CPC), or a Provisional Authority (PA). CPCs (or PAs) are issued to each vessel of the applicant. While CPC for vessels in liner services records the name and type of vessel, the trade routes, detailed sailing frequency and schedule, CPC for trampers only requires information on the vessel name and home port.

8. In order to enforce the laws and the policies thereof, MARINA issued Memorandum Circulars (MCs) to shipowners, ship operators and others concerned. MC No. 26 (1982), MC No.26(A)(1983) and MC No. 39 (1987) are issued to notify interested parties on the policy guidelines governing the issuance and amendment of the CPC as well as the termination of service and evaluation of applicants' capability. When provisions are conflict each other between MCs, the latter MC is prevailing. The policy seems to have two (2) principles; one is to promote public interest, and the other is to protect the interest of the existing operators. The first principle appears in the following clauses:

- The route may be declared open for entry in any of the following cases: ... ii. Inadequate quality of service of franchised operator;

  MC No. 39 Part One I. A. 1. a)

- Abandonment/withdrawal/suspension of service shall not be allowed without prior authority from the MARINA. In the interest of the public, the MARINA may require the ship owner/operator to continue the service for a month after notification of such abandonment/withdrawal/suspension of service even for a longer period of time, as it may be necessary to avoid disruption of service.

  MC No. 39 Part One III.

- A shipping line authorized to call a port sharing the same market with other ports 1/ may be allowed to shift operations to other port only if: ...3. Public interest is not jeopardized as a result of the shift in operations.

MC No. 39 Part One IV

9. The second principle appears in the following clauses, for instance:

- Entry to a development route shall be allowed and the applicant therein shall be protected in his investment by not allowing another operator to ply the same route until such time that the applicant shall have recovered his investment, unless....

MC No. 39 Part One I. A. 1.

- If ---- the route applied for is already served by a franchised operator(s), the affected operator(s) shall be duly notified by MARINA for comment and a market study of the route shall be made.

MC No. 39 Part One I. A. 2. a)

(For adding vessel's capacity and re-routing by existing franchised operator, the above rules are also applied.)

10. The above mentioned two principles are included in the following clause:

- The "prior applicant"----- and "protection of investment" rules shall generally be observed. However, they cannot take precedence over public interest in cases where the resulting competition shall benefit the public through improvement in services, overcapacity or underutilization in the subject route/link notwithstanding.

No.39, Part One, V

1/ This concept is introduced in MC No. 26, which MC identifies fours examples, viz;(1) Pulupandan-Banago-Bacolod, (2) Batan- Kalibo -Dumaguit-New Washington, (3) Nasipit-Butuan, and (4) Polloc-Cotabato.

11. The Public Service Act and its arrangements, despite its proclamation on both public interest and protection of investment, are actually working for the restriction of innovations and flexible management in the domestic liner market. Entering into a specific liner service, adding capacity of services and withdrawal from particular services are very difficult to attain. The procedure of MARINA to examine the above matters is four-tiered, i.e., hearings by a Hearing Examiner, technical and financial evaluation by the Domestic Shipping Office, the review and decision by the Administrator and the final decision by the Board of MARINA. Adding capacity, including new entry, is particularly cumbersome since the views of existing operator(s) of the route have to be cleared, who are naturally of the opinion to oppose any increase of the capacity of the route they are plying. Such policy could be called status quo-oriented. In MC No. 26, typical status quo-oriented clauses was found, such statement as "The replacement shall not be replaced by another three (3) years. ---Approval for the acquisition of modern tonnage to expand a traditional operator's capacity in the route shall only after ample proof that there exists excess demand that is largely unserviced, i.e., undertonnage---." (Section 6) This kind of clause do not appear in MC No. 39, however, it does not necessarily amend the existing provisions of MC. No.26 being used as guideline on issuance of CPC.

Current Arrangement - Pricing

12. Until very recently, all the passenger fare and freight on liner trade inclusive of surcharges had to be stipulated in the Order of the Maritime Industry Board. However, following the recommendations by various sources and in consonance with the world's growing trend of deregulation, some mitigating steps have been taken.

- The ad valorem rate, which was criticized due to a long standing low threshold value, has been abolished.

- The first and second class passenger rates are now unregulated.

- Refrigerated cargo, transit cargo and livestock are liberalized.

- Number of commodity classified as "Basic" are reduced from nine (9) to seven (7), viz., rice, parley, corn, corngrits, fruits and vegetables.

- An indicative or base rate scheme has been introduced for both passenger and cargo with plus 5% of base rate as the upper limit and minus 5% of the lower limit.

13. Even with these steps, still rates of liner freight and passenger fare are under strict control by the government. The following reasons are frequently mentioned;

(i) to curb the monopolistic tendency of liner operations,
(ii) to control inherent tendency of domestic ship operators of engaging in ruinous competition, and
(iii) to protect small operators. For free rates, big operators give discount for soliciting a large volume of shipment, thereby putting the small operators at a disadvantage.

14. Although the first and second items sound contradictory, both issues are understandable since it could be well observed elsewhere that while in some routes, a few operators enjoy a healthy operation under the CISO umbrella or by cooperation among themselves, in some other routes, operators carry out a "cut-throat" competition.

15. CISO normally takes the initiative to increase the rate by filing a petition with MARINA. MARINA in turn refers the content of this petition to the shippers' organizations. Soon after that, a hearing is held and rates are negotiated between the shippers and CISO. After said negotiation, the rates agreed upon by both sides are placed under the evaluation/ validation of MARINA per existing methodologies/quasi-juducial procedures to determine the acceptability of the agreed rate change. The procedure of MARINA examination is similar to that of franchising.

16. Aside from the issues on regulation or liberalization, which will be taken up later, there are some observed questionable points with respect to rate structure and condition of application.

(i) Freights are categorized in four classes, namely class A, B, C and class C (BASIC). The four-class categorization has been in existence since 1928. More than 60 years have passed and this same tiered-classification and its component should be placed under continuous review, since an enormous number of new cargo entered the shipping market.

(ii) Tariff of basic commodity is, according to 1990 revised rate, 57.8% of class A rate. The spread between class A rates and basic rates are relatively narrow, having in mind that among A class cargo very high valued goods are included. And, although basic commodities are vital to the nation's life, however, looking at the reality of the transport business, some of the goods bear the high cost of transport. The tariff of fruit and other perishable commodities should be reviewed taking into account the existing price supporting policy as well as the share of transportation cost in retail price.

(iii) Any of the Memorandum Circulars implementing the rate increase provide for such clause as:

"only member-companies of CISO and any other operators who have filed applications for rate increase by paying the corresponding filing fee --- are authorized to implement the revised structure/system and schedule of rates ---."

The clause was phrased on the ground that the CISO is considered to be the representative of a group which forms the majority of link/route served in the interisland shipping.

This can be interpreted as the nationwide uniform cargo rate not existing.

17. As already mentioned (paragraph 6 of this Chapter), the Public Service Act allows the Commission to collect fees as its statutory works. In fact, MARINA collects fees in relation to franchising cases. The idea of collecting fees in relation to franchising may be upheld because franchising gives the applicant a certain extent of benefit by setting up aa specific right to him. If he does not pay the fees, only he alone losses the advantage. On the other hand, in the case of rate increase, uniform rate structure is established ac-

cording to government's policy. Consequently, the promulgation of uniform rate is the responsibility of the government. If some operators fail to pay the fee, they are forced to apply their old rate. Hence, the existence of two sets of rates cause confusion to the general public who entrusts the government to enforce the uniform rate system. In this case, it is hardly justifiable to collect fees from persons who are not extended a specific right. Furthermore, in the case of rate decrease, cases should be looked into where many operators fail to pay.

Issues on Regulations

1) Methodology of the Study

18. A large number of studies and projects have already been made with respect to Philippine's shipping and related matters.

These studies and projects, whatever their main objectives may be, focus their attention on the problem of the government regulating franchise operations and price of services. All of the views incorporated in these studies and projects point out that the regulations impede the creation of an efficient water transport, especially for liner services. The views appearing in the Philippine official projects are more or less in consonance with those included in the reports by the foreign and international institutions. In fact, policy declarations by those in the government service or office proclaim their desire to see more liberalized and less regulated domestic shipping market. 2/

19. However, for those who wish to take a more prudent approach, (an approach the Ro/Ro Development Study is expected to take), two other element should be recognized.

2/ The examples are seen in "Updates of the Philippine Development Plan 1990-92", Chapter 11, 2.1., "Policy Thrust for Transportation", and more in detail in "the Five-Year Development Plan for the Domestic Shipping Sector 1992-96" Goals/Targets.

The first is the human factor. A policy or a set of policies, however logically or theoretically drafted, cannot be workable, if the people concerned regard it as disagreeable to their long accustomed practice. In order to reform such practice, it is necessary for a policy to incorporate both theory and the human factor. Therefore, from the outset of the study, the views and opinions of both those who are implementing the policy and those who are affected by it should be carefully examined.

20. The second element concerns predicting the future, or "the years after". One policy may have an unpredictable aftermath which could affect persons both directly and indirectly involved. The latter comprises such persons as the clients, passengers and others of the peripheric maritime industry.

21. Industrialized countries are capable of absorbing the ill effects of such a policy mentioned above since their economy, their industry, their administration and their community have enough strength to endure the impact or rescue those affected. However, in the case of developing countries, where the economy is vulnerable, their industry fragile, and their administration and community hampered by so many problems, damage caused by the impact can be so great that it would take many years to recover, even with immediate policy revision.

22. Philippine maritime industries and water transportation have grown to meet the demands of the clients to a large extent, despite its many defects as pointed out by several studies, and there is potential for even more growth in the industry. A drastic change in maritime policy such as vigorous liberalizations would have too strong an effect and the industry would be unable to adapt to the new situation such a policy would create; the effect would be a disruptive one. There is a Far-eastern proverb which says "Do not kill the ox by trying to correct his distorted horn."

2) "Human Factor"

23. As has been said, many previous studies and policy declarations advocate the deregulation/liberalization of maritime business, on the grounds that

competition in a free market will encourage the efficient operation of the vessels and reduce costs, and stimulate the firm's investment. On the contrary, the pricing practice of liner cartel, combined with the government's regulation that restricts market entry and price flexibility, tends to inflate inter-island transport cost. This a brief theoretical background of the policy of deregulation/liberalization.

However, there are no such statements that recommend the immediate and entire removal of all the regulations concerning franchising and pricing in previous observations, however gradual and/or partial liberalization is mentioned.

24. MARINA has officially announced in its five year plan (1992-1996) the policies liberalizing entry into routes stating, inter alia, as follows;

- Allowing minimum of two operators in any route/link,
- Guaranteed 5-year protected of investments in developmental/ pioneering routes/links,
- Allowing swapping of vessels, changing of sequence of port calls, amending of schedules, adjusting frequency of calls of vessels, authorized ports of call for purely cargo services,
- Finalization and/or completion of studies on regulation of rates.

25. The study team conducted interviews with the government officials concerned, ship operators and their associations and shippers' associations. For the deregulation of franchising, both shipowners and shippers argue that while primary and secondary routes could be liberalized, tertiary, feeder and developmental routes/links which are not very lucrative should be regulated to protect the small shipowners who ply these routes. Some of the commercial circles suggested the government should subsidize the developmental routes as in the case of Japan.

No one contends to MARINA's authority to approve pricing, although shippers are of the view that existing pricing procedures (see paragraph 15 of this Chapter) should be improved so as to allow more time for deliberation by the shippers on the cost and impact.

3) "the Years After" problem

26. What follows are examples of the possible repercussions which may occur as a result of the deregulation policy and the effect they would have on the industry and the general public:

i) MC No.39 requires that those who apply for the certification of vessels comply with the shipping service standards and provisions of the PMMRR. Even though the safety standards are said to be outdated in terms of the international level in this respect, and while the team found that many vessels do not adhere to these standards when in operation, the above requirement may be of some use for enforcing safety measures. The maintenance of safety measures is particularly important in the Philippines, where maritime casualty causes loss of the lives in many instances. On this point, one may say that the death toll of maritime casualty is much less than that of road accidents. Such comparison of figures is absolutely wrong, since the rate of maritime casualty and death toll thereof are exceptionally high in the shipping nations' level. Furthermore, while in most road accidents, the casualties involved are the drivers who are themselves responsible for the accident, victims of maritime casualty, however, are mainly their innocent clients.

As many studies have said, the means of enforcing safety measures are inadequate and shipowners, masters, officers and crews often disregard the regulations. Furthermore, it cannot be said that disposition of seafarers and, in particular, shipowners to observe the rules is high. In these circumstances, the total abolition of government intervention for franchise may further reduce enforceability of the safety regulations.

ii) When considering the issues on franchising and pricing, passenger and freight should not be treated in the same manner. In almost every country, scheduled passenger transport in any mode is placed under the specific care of the central and/or local government. The reason is to protect the interest of general public by maintaining safety, reliability and regularity of operations. Greater care in passenger transport is advocated on the basis that while cargo owners are assumed to be, and actually they are, very knowledgeable with respect to their cargo transfer as a pivotal part of the business, most of the passengers, particularly users of regular shipping services,

have little knowledge about the shipping and other transport business, and consequently they are vulnerable to various forms of incidents. Passengers should be more protected than cargo owners by a specific set of measures, which does not necessarily mean that all such measures should be conducted by hands of the government (e.g., insurance). However, a greater emphasis should be placed on the passengers' interest.

With these points in mind, it should be fair that even though many of the regulations regarding franchising and pricing may be removed, many features of the passenger service should remain regulated by the government.

iii) Free market policy will in some cases encourage formation of an oligopoly in the industry. Particularly in transport industries, where the sunk cost is relatively large, and as a result of that, monopoly is inherent, oligopoly in the market may occur soon after the removal or relaxation of the regulations. An example is found in the United States domestic airlines. Admitting the above phenomena, those who insist that market liberalization is necessary claim that even in such a market under oligopoly, the interests of the clients will be guarded, since circumstances always exist in which newcomers can enter into the market if the quality of service is less than the clients expect. However, it may well be the case that a possible newcomer will be reluctant to enter the market when the competitors currently plying the market are too strong. Moreover, in the process of restructuring the market, many firms will drop out, and when such restructuring occurs in developing countries without any remedial steps social and political problems may arise.

iv) As has been mentioned in paragraph 25 of this Chapter, CISO is not a shipping conference; however, it still functions effectively to protect the ship operators interests against the cargo interests. Although it is hard to predict who is more powerful the ship operators or the shippers, in terms of bargaining the price of freight transport on water, if the balance leans to one side without any government intervention, the fares of water transport might become unreasonably high or low.

27. At this stage it is more encouraging for the development of an adequate Ro/Ro transport system to adopt the policy in which the government works closely with the relevant industries with the view to making and enforcing the guidelines for better operations rather than advancing a free

market policy. In order to mitigate the possible adverse effect of liberalization/deregulation, a Fabian approach is recommended.

4) Future framework of regulations

28. With the above points in mind, the Study Team formulates the possible framework of the regulations in terms of franchising and pricing of Ro/Ro ferry service.

29. As far as the policy on franchising is concerned, presumably freight transport by liner vessels in the primary and secondary routes will be deregulated within the framework of already established policy in near future in accordance with the generally prevailing opinion. However, most of the study routes have a relatively limited volume of traffic at present, and in future, even with estimation of a high growth rate, a large number of routes will still be under a thousand persons in terms of port traffic passengers per day and under 10,000 M/T in terms of yearly port traffic cargoes in 2005. Those routes may not be served by major operators which ply the primary or secondary routes but served by operators whose financial positions are very weak. Since traffic demand may not be sufficient for double trucking, such minor operators should be placed under the aegis of governmental regulation. 3/

It is therefore suggested that the existing franchise scheme should be maintained for the Ro/Ro routes where the traffic demand is too small to be served by more than two operators. 4/

30. In light of the bad casualty records involving passengers in recent years, protection of life at sea should be the highest priority in future maritime policy alternatives. In this context, the government should maintain its function of controling the passenger vessels' operation, until such time as the safety regulations which comply with the current international safety requirement are properly enforced by the administration, and the vessel operators are dedicated to the adherence of the regulations.

To be more accurate, the existing Certificate of Public Convenience scheme should, with some amendments, continue to be implemented as far as passenger transport is concerned. The market evaluation for the issuance of CPC (Part one of the Memorandum Circular No. 39) may be conducted in a like manner as freight transport, but the technical evaluation (Part two of the said Memorandum Circular) for the vessels which have a passenger capacity beyond a certain number should be put into force, paying attention to modernized safety criteria with a view to ensure the safety of vessels.

31. MARINA has already applied to the Provisional Authorities (PAs) and Special Permits (SPs) for temporary operations. Generally speaking, passenger transport in the Philippines is subject to large seasonal variations, and consequently PAs and SPs should be more extensively utilized for operators adjusting their vessels to meet seasonal changes. As a result of recent decentral-

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3/ MARINA classifies ferry routes trunk (primary), secondary, tertiary, feeder and developmental (pioneering) routes. The classification is traditionally based on volume of cargo and passengers. Trunk routes connect Manila with Cebu, Leyte/Samar, Panay/Negros, Palawan, Northern Mindanao and Southern Mindanao. Secondary routes connects Cebu with nine other areas in addition to Manila/San Jose, Batangas/Calapan and Iloilo/Bacolodo. Although the total number of tertiary, feeder and developmental routes are said to be around 200, the entire picture of these routes is not entirely clear. While the classification of routes is needed for identifying of the routes where the continuation of the service is ensured, and some rearrangement is needed, the updating of the classification has not been undertaken due to the absence of relevant data/information (see 4/).

4/ The Five-Year Development Plan for the Domestic Shipping Sector 1992-1996 avowed to guarantee five years' protection of investment in development and pioneering routes/links in compliance with the recommendation of the Final Report of the Presidential Task Force on Inter-Island Shipping (February 1989). However, it is not certain whether five years is sufficient for generating traffic demand to sustain more than one ship operators. It may be preferable to establish a quantitative criteria to open the route/link for newcomers.

ization of franchising procedures, granting of the PAs and SPs are delegated to MROs. Under the circumstances, it is of a growing importance that an adequate reporting system from MROs to the headquarters of MARINA and the proper archive system be instituted in order that headquarters can grasp the exact situation and thus take the appropriate steps for balancing demand and supply. MARINA has already been implementing the establishing of report/archive system, however ,there are much to be clone for further improvement.

32. As for the freight pricing, in general terms it seems to be a consensus of the commercial circles concerned who wish to maintain the existing scheme. However, the procedure of freigt pricing should be improved with the view to allowing more time available for deliberating by the shippers concerned. As for the passenger fare, first and second class fares are now freely set by the carriers, while third class fare are subject to the approval of MARINA. Since no one insists on deregulating third class fares, the existing arrangement should stand as it is.

33. Finally, the study team wishes to make the standpoint concerning maritime transport clear by stating that competition in the free market should be useful, provided that the market failure which is inevitably associated with free market is endurable to the concerned, and if the social and economic environment permits, hence commercial activities should not be circumscribed by the governmental regulations. In this sense, it is desirable that the freight rates are fixed only by negotiations between shipowners and cargo owners without any intervention by the government. However, this free negotiation should be brought about only after all firms or group of firms of all industries are under the control of adequate antimonopoly laws. Simple liberalization of pricing will cause, contrary to desires of preceding studies, a hike in freight rates.

34. Aside from the existing fare structure, a specific Ro/Ro tariff should be introduced with a view to encouraging the expansion of Ro/Ro service. A specific tariff for Ro/Ro service, particularly on cargo transport, makes calculation of the charge simple and clear, thus the client would be in a position to make a quick settlement. The operators of the Batangas-Calapan route, the distance of which is 22 NM has been prescribing specific Ro/Ro rates based on the type of vehicle. Ro/Ro rates in Japan are assessed by the

length of the car. Several examples are shown in Table A-1-2-1 of Appendix. This means of assessment is a sensible one assuming that the cost of a vehicle carriage on board is specified by the area of the car-deck covered with the vehicle, irrespective of the weight and its cargo. This kind of rate can be prescribed only when car drivers are obliged to carry the certificate of car registry which shows the length of the car. In this country, however, vehicle registry and inspection scheme is said to be now under way of improvement by LTO, and consequently it may be premature to introduce this means of assessment. Under the circumstance, it would be appropriate that in order that collectors easily identify the charge to be levied, rates are specified by type of vehicle, eg. motorcycle, private car/small truck, jeepney, large truck and bus.

35. Charge of each vehicle includes one driver's second class passenger fare; however, passengers of any vehicle should pay separately the passenger fare, since carrier's cost and responsibility is not included in those of the carriage of vehicle. In this sense, it is debatable whether an additional charge for the cargo on a vehicle should be levied. Passengers will move away from their vehicle, while cargo does not, and carrier's responsibility for passengers is much more grave. In this respect, cargo may not be levied separately, however, if one might consider it unfair that an empty car and a car carrying cargo are charged the same fare, a certain percent of cargo surcharge may be levied. This pricing policy will be dictated by the operator's judgment concerning profitability of the route.

B. Institutional Matters

Streamlining of Policy Procedures

36. The Inception Report of Nationwide Roll on Roll off Transport System Development Study (October 1989, IATCTP) in its Section 2.3 identifies the function of various government agencies in terms of policy procedures with respect to the development of Ro/Ro ferry transport. The Report said that the basic function of the relevant agencies are divided into three phases, viz., (i) policy formulation, (ii) infrastructure construction and (iii) administration and enforcement. According to the existing legal instruments, DOTC is generally responsible for the policy formulation and the planning, and programming of the Ro/Ro project excluding roads and bridges. Implementation of the project, and administration and regualtion of the indutries are carried out by itself or through its attached agencies and their local branches, namely PPA, MARINA and LAFRB. DPWH is responsible for the construction and maintenance of municipal ports.

NEDA coordinates in formulation of policies and projects, and incorporates them into development plans and investment programs of the government.

37. The above arrangements of functions of agencies are, in general terms, well constituted. However, the team observed some defect in the detailed allocation of works and responsibilities, implementation of the arrangements and organizational structures of each agencies.

38. In the first phase, i.e. policy formulation stage, major role of which is played by DOTC, any transport policy, and Ro/Ro development policy in particular, should be coordinated and concerted locally with related project, eg., roads, land use, industrial estate, and so on. For DOTC, the fact that no local leg exists will be detrimental in terms of attaining quick communications and better understanding between local institutions.

The Inter-Agency Technical Committee on Transport Planning was formed to mobilize the local project team for the NRTSDS in January 1989, to integrate the proposals by the different agencies of the government with the view to developing viable Ro/Ro transport systems focusing upon the effective utilization of existing and proposed transport facilities. Although the IATCTP