Volume 1

Development Scenarios for the Principal River Ports

Part 2

Present Conditions

Part 2 PRESENT CONDITIONS

2. SOCIO ECONOMIC CONDITIONS IN INDONESIA

2.1 Economic Indicators

2.1.1 Introduction

Economic indicators are important elements in this development study as they serve to underpin port transport developments with consideration of trends, fluctuations in cargo volumes, likely future traffic growth and future development needs.

The major socio-economic objectives of GBHN and Propenas are described in Section 2.2 below.

The socio-economic context or framework provides both a basis to plan transport investment and make investment decisions.

2.1.2 GDP

Until the economic crisis struck in 1997, the Indonesian economy had been growing by over 7 percent in real terms per year between 1993 and 1997.The rapid expansion was due mainly to rapid increases in the non-oil manufacturing, construction and financial/business sectors. Between 1983 and 1997 these three sectors increased from under 25 percent to over 40 percent of the total economy.

In 1997 growth fell back, but in 1998 the economy contracted by about 13 percent. In 1999 marginal growth re-emerged and by 2000 growth had returned to the relatively substantial level of between 4 and 5 percent.

Future prospects remain uncertain due to political and economic instability and the slow progress in restructuring the financial and banking sectors.

Table 2.1.1 shows historic growth in GDP by sector between 1993 and 2000.

Table 2.1.1 GDP Growth 1993 to 2000

	GDP in Rupiah trillion (Constant 1993 prices)							
	1993	1997	1998	1999	2000	% pa 93-97	% pa 97-98	% pa 99-2000
Agriculture	59	64	64	66	66	2.1	0.2	1.7
Mining/ Quarrying	32	38	37	38	37	4.9	-4.1	2.3
Manufacturing-oil	10	11	11	11	99	1.8	1.8	6.2
Manufacturing-non-oil	64	98	84	85		11.4	-14.5	
Utilities	3	6	6	6	7	13.7	4.0	8.8
Construction	23	35	21	21	24	11.4	-39.7	6.8
Trade	55	73	60	59	64	7.3	-18.9	5.7
Transport	23	32	28	27	29	8.2	-12.8	9.4
Finance /Business	28	39	28	26	27	8.4	-26.7	4.7
Government	22	24	22	23	38	1.3	-7.0	0.2
Other Services	10	14	14	15		8.2	-0.9	
Total GDP	330	434	375	377	398	7.1	-13.7	4.8

Source: Transport Sector Strategy Study, 2000

Table 2.1.2 Regional Economic Growth

Region	GRDP at 1993 constant prices					Annual Growth Rates		
	1993	1997	1998	1999		1993-1997	1997-98	1998-99
Sumatra	71,349	90,847	83,977	83,569		6.2%	-7.6%	-0.5%
Java	190,208	253,921	215,763	219,524		7.5%	-15.0%	1.7%
Kalimantan	28,470	38,478	36,841	35,713		7.8%	-4.3%	-3.1%
Sulawesi	13,361	17,623	16,397	16,057		7.2%	-7.0%	-2.1%
Other Islands	17,519	24,059	23,255	22,036		8.3%	-3.3%	-5.2%
Indonesia	320,907	426,925	378,231	378,898		7.4%	-11.4%	0.2%

Source: BPS

Table 2.1.3 Regional Distribution of GDP Growth

Region	1993	1997	1998	1999
Sumatra	22.2%	21.3%	22.2%	22.1%
Java	59.3%	59.5%	57.0%	57.9%
Kalimantan	8.9%	9.0%	9.7%	9.4%
Sulawesi	4.2%	4.1%	4.3%	4.2%
Other Islands	5.5%	5.6%	6.1%	5.8%
Indonesia	100.0%	100.0%	100.0%	100.0%

Source: BPS

Table 2.1.4 GRDP Growth 1993 to 2000

GRDP (Rp Billions) at 1993 constant prices-Including Oil and Gas						
	1993	1996	1997	1998	1999	2000
Riau	16,230	19,808	20,434	19,645	20,311	>4.8%
Jambi	2,463	3,145	3,268	3,092	3,181	<2.5%
South Sumatra	10,732	13,521	14,208	13,239	13,659	2.5-4.8%
West Kalimantan	5,150	6,714	7,220	6,879	7,066	2.5-4.8%
Central Kalimantan	3,068	4,036	4,290	3,993	3,987	<2.5
East Kalimantan	15,712	19,792	20,673	20,515	21,384	<2.5
Indonesia	320,908	407,314	425,614	375,949	380,763	
Annual Growth		26.9%	4.5%	-11.7%	1.3%	4.8%

Source : BPS; Preliminary figures for 1998 and especially 1999

2.1.3 Population

The population of Indonesia increased from 119 million in 1971 to 195 million in 1995. The long term growth rate was about 2.1 percent per year. The overall growth rate has been declining, however, and this trend is common to most Asian countries.

Table 2.1.5 Population Trends

Item	1971	1980	1990	1995	2000*
Population (m)	119.2	146.9	178.6	193.9	210.0
Annual Growth Rate (%)	-	2.35	1.97	1.66	1.5

Source: BPS *Estimate BPS and TSSS

On a regional basis, Sumatra and Kalimantan have grown faster than Java and this has been due both to regional variations in fertility and migration. Migration has been government stimulated because of agricultural and industrial development in these regions. Both factors have led to greater population growth in Sumatra and Kalimantan.

Table 2.1.6 Regional Population Growth

Region	Population (in Millions)		
	1980	1990 % pa	1995 %pa
Sumatra	28.0	36.5 2.3	40.8 2.5
Kalimantan	6.7	9.1 2.9	10.5 3.0
Java	91.3	107.6 1.3	114.7 1.5
Sulawesi	10.4	12.5 1.9	13.7 1.9
Other	10.5	12.9 1.8	14.1 2.0
Indonesia	146.9	178.6 1.7	193.9 1.9

Source: BPS

2.1.4 Macro Economic Trends

After performing very strongly for many years, the Indonesian economy was badly hit by the economic crisis which started in mid 1997.

After GDP growth reached over 8 percent in the first half of the 1990s, growth slowed in 1997 before contracting by about 13 percent in 1998 with a very modest recovery in 1999. 2000 saw an initial recovery, with growth between 4 and 5 percent, based largely on a bounce back in consumer spending.

Before the crisis, the engines of growth differed by region of Indonesia. Java was fuelled by manufacturing, construction and real estate. Kalimantan and Sumatra by oil and estate developments and Bali by tourism. Other, areas were fuelled by mining and/or infrastructure spending.

Exports grew by 13 percent in 1995 and by 10 percent in 1996 before falling back in 1997 to 7 percent. Exports in US dollar terms fell by 9 percent in 1998 before stabilising in 1999. Imports grew by 27 percent in 1996 and by 6 percent in 1997 but fell by 3, 34 and 13 percent in 1997, 1998 and 1999 respectively.

The socio economic impact of the crisis has various dimensions

1) The greatest sectoral impacts have been on construction, manufacturing and finance
2) Geographically the impact has been greatest on Java and Jakarta
3) Flexibility of labour has meant that agriculture has been forced to take up a lot of excess labour
4) The proportion of poor has increased substantially
5) Some areas have experienced a mini boom, especially those producing specific cash crops which have benefited from the large devaluation
6) Imports have been reduced substantially, but as many imported goods are raw materials for processing of one kind or another, exports have also declined.
7) Exports have not accelerated as fast as would be expected from the massive devaluation. The political and financial uncertainty has affected confidence and high interest rates have affected trade finance. However, export earnings in US$ terms have been affected, although export tonnages and earnings in Rupiah terms have reacted differently.

2.2 National Development Plan

2.2.1 GBHN/PROPENAS

GBHN (Broad State Guidelines) and PROPENAS (the 5Year Plan), together set out the basis for national development planning in Indonesia.

To accomplish its goals within Propenas, and based on GBHN, the GOI (Government of Indonesia) has developed several national priorities. One of the key priorities, is the need to accelerate economic recovery and strengthen sustainable development.

Specifically, the general objectives for 2004 of this priority policy includes:

1) Growth in GDP to reach 6-7 %
2) Inflation to be between 3-5 percent
3) Unemployment to fall to 5 percent
4) Poverty to fall to under 14 percent

These objectives cover seven key programme areas. These are:

1) Poverty Alleviation Programmes
2) Expanding micro, small, middle scale business co-operation opportunities
3) Creating macro-economic and financial stability
4) Maximising competitiveness in trade and tourism
5) Increasing investment especially equity based
6) Expanding the infrastructure base
7) Conservation of resources and environmental improvement

Other key priorities include developing a democratic political system, supremacy of law and good governance, developing people's non-economic welfare and increasing regional development.

Four items are listed as cross sector, immediate priorities and cover:

1) Poverty Alleviation
2) Democratic Economic Reform
3) Economic Stabilisation
4) Environmental aspects

2.2.2 Transportation Infrastructure Aspects of Propenas

Within PROPENAS, the review of infrastructure and especially transport elicited the following objectives, activities and implementation requirements:

(1) Objectives

1) Maintain and increase Transport Facilities and Infrastructure
2) Restructure and reform Transportation
3) Increase accessibility of Transport

(2) Activities
   1) Rehabilitate and Maintain Transport Facilities
   2) Increase Efficiency
   3) Overcome capacity constraints and bottlenecks
   4) Improve institutional support including management, standards, safety, information and data

(3) Implementation Requirements
   1) Introduce an effective regulatory framework
   2) Introduce tariff and funding reform
   3) Reform and restructure BUMNs
   4) Expand 'Pioneer' infrastructure, services and subsidies in remoter areas
   5) Increase participation of regional governments, society and business

2.2.3 Decentralisation

Indonesia is currently implementing major changes to its government administration. Laws 22/1999 and 25/1999 embody wide-ranging changes to the framework of local government and the distribution of responsibilities and finance between central and local government.

The aim of the legislation is to provide a far greater degree of responsibility and autonomy at the local level and reduce central government responsibilities in the regions.

Law 22 abandons the hierarchical system of government and local authority heads will now be responsible to DPRD (local parliaments) not to the Ministry of Home Affairs as previously.

In general, Central government will be responsible for:
1) Foreign affairs, National Security and Defence
2) Natural resources and Conservation
3) Technology
4) National Planning

Local Government will be responsible for the implementation of laws and:
1) Public works
2) Communications
3) Administration
4) Regional ports and airports (apparently all those not under IPC's and PAP's)
5) Environment
6) Estate Crops
7) Tourism
8) Fisheries

Although the laws were implemented at the start of fiscal 2001 (January 2001), there is still much to be finalised and worked out in practice, including the responsibilities (if any) of local government in commercial port activity and development. It will be years before the roles of each party are clarified and responsibilities are finalised.

2.3 Sector Development Planning

High GDP growth in Indonesia was partly associated with 'bubble-type' industries including construction, utilities and services. Moreover, non-oil manufacturing had concentrated in electronics, shoes, textiles and garments, all of which relied heavily on imports of raw materials or components.

Domestically owned firms that relied on domestic inputs fared relatively badly; for example palm oil and wood based industries were subject to quotas and export taxes.

Oil and gas made up less than 20 percent of exports by value and were subject to volatile world prices, although being priced in US$ gave substantial support to the national budget. Table 2.3.1 shows GDP by sector and recent growth rates. This shows the impact of the crisis on sectors such as trade, transport, construction and finance.

Table 2.3.1 Sectoral Growth in GDP

In 1993 Constant Prices-Trillion Rupiah

Sector	1988	1995	1996	1999	%1988-95	%1988-99
Agriculture	49.1	61.9	63.8	65.4	3%	3%
Mining	23.2	35.5	37.7	37.3	6%	4%
Manufacturing	43.5	91.6	102.3	96.9	11%	8%
Utiliities	1.9	4.3	4.9	6.0	12%	11%
Construction	11.5	29.2	32.9	21.2	14%	6%
Trade	34.0	64.2	69.5	59.6	10%	5%
Transport and Communications	15.3	27.3	29.7	26.8	9%	5%
Finance	15.5	34.3	36.4	25.8	12%	5%
Government	18.7	23.1	23.3	22.3	3%	2%
Others	9.0	12.4	13.3	15.3	5%	5%
GDP	221.7	383.8	413.8	376.6	8%	5%

Source: ADB

Events have moved rapidly in the last few years since the economic crisis started in 1997, so that sector development plans have been overtaken by short term concerns. Recent sector development policies, especially for the industrial sector, have been related to the broader macro economic and deregulation strategies such as banking sector reform and the need for private sector to recover, balanced by the need to also consider social spending and poverty reduction.

Bappenas predicts that manufacturing industry (non oil and gas) will return to 1988-1999 growth rates of over 8 % per year by 2004.

Nevertheless, the agricultural sector, including estate crops, remains an important sector for both economic development and continuing reform because of its large size. Removal of monopolies, freer international trade, removal of restrictions on internal trade are some of the policies, which if effected successfully will impact on both national / regional development and port traffic.

Forestry is planning to move from utilisation to forest management to provide sustainable development of this important resource.

2.4 Port Development Policy

Indonesia is currently in the process of policy reform including devolution and private sector participation. Accordingly, the government policy on the port sector is under review and some reforms are under way. The following laws/regulations and sector strategies need to be taken into account in studying the seven river ports.

2.4.1 National Transportation System (SISTRANAS, Ministerial Decree No. 15/1997)

In December 1996, Indonesian Government issued the National Transportation System (SISTRANAS) as the first step in formulating a nationwide master plan of transportation. SISTRANAS describes the objectives and functions of the national transportation system as well as the future structure of transportation network.

According to SISTRANAS, the function of the national transportation system is to support and stimulate the national and regional development, to strengthen the unity of the entire country and to promote international exchange. SISTRANAS emphasizes that a variety of aspects need to be taken into account in establishing a medium and long term transportation network. Areas to be considered include the following: present transportation network, medium and long term space arrangement, hierarchy of city, consumption and production system as well as geography.

The National Spatial Plan, which includes the national transportation network, requests that transportation development should support the development of the mainstay area and activity centers. Sufficient transportation network will provide smooth access among the above areas, markets and natural resources. If hierarchy of cities is properly considered, smooth flow of goods and people is ensured. Geographical features also need attention in formulating a transportation network.

Taking Eastern Sumatra and Southern Kalimantan as examples, river and sea transportation should be given priority over land transportation, as these areas are swampy. The national transportation system is expected to secure basic human needs (BHN) especially in undeveloped and remote areas.

SISTRANAS stresses that the character of each transportation mode should be taken into consideration in formulating the national transportation network.
In this regard, sea transportation can transport a large amount of goods and a large number of passengers over a long distance at a relatively low cost. Consequently, efficient sea transportation network can play a crucial role in integrating the national economy.

The sea transportation network is made up of ports as nodes, shipping routes as links, and their hinterlands. Functions, facilities, operational activities and management organizations greatly differ depending on the port. SISTRANAS categorizes ports into two groups, trunk port and feeder port (Table 2.4.1).

Table 2.4.1 Port Hierarchy proposed by SISTRANAS

Classification	Definition
Trunk Port	Port handling large traffic volume with extensive hinterland and serving as a key node of the national sea transportation network.
Primary Trunk Ports	Key node in the international sea transportation network
Secondary Trunk Ports	Key node in the international/domestic sea transportation network
Tertiary Trunk Ports	Key node mainly in the domestic sea transportation network.
Feeder Port	Port handling medium traffic volume with medium size of hinterland and serving as a node of the local sea transportation network.
Regional Feeder Ports	Node of the sea transportation network in provincial level
Local Feeder Ports	Node of the sea transportation network in local level

Table 2.4.2 Port Classification according to Ministerial Decree No. 15/1997

	Number	Name of Main Ports
Trunk Port		
Primary Trunk Ports	1	Batam
Secondary Trunk Ports	8	Belawan, Panjang, Bojonegara, Tg. Priok, Tg. Emas, Tg. Perak, Bitung, Ujung Pandang
Tertiary Trunk Ports	22	
Feeder Port		
Regional Feeder Port	26	
Local Feeder Port	67	
Total	124	

2.4.2 Regional Transportation System (SISTRAREG)

SISTRAREG was prepared to elaborate on SISTRANAS and to establish a detailed transportation system at the regional level. SISTRAREG is developed for the following five regions: Sumatra, Java-Bali, Kalimantan, Sulawesi, and Nusatimi (including Irian Jaya and Maluku). Its main goal is to support and stimulate regional development with effective transportation service. It also serves to improve access to isolated areas and develop left behind areas. SISTRAREG suggests that a close relationship between economic activity and port development be established.

Since SISTRAREG deals with the regional transportation system, it needs some revision in line with the decentralization process.

2.4.3 Shipping Law (Law No. 21/1992)

Shipping Law No.21/1992 categorizes the ports in Indonesia into two groups, public ports and special ports. Public ports are developed to serve public/common users, while special ports are developed and used by specific industries such as manufacturing, forestry, fishery, mining and tourism.

Currently, Indonesia has 656 public ports and 1,233 special ports. In order to improve effectiveness and efficiency of public port management, the government decided that four Indonesian Port Corporation (IPC) should manage 110 public ports on a commercial basis. The remaining 546 public ports are managed non-commercially by the government.

Shipping Law stipulates that 131 ports are open to international trade in order to achieve the national and regional economic development.

Table 2.4.3 Ports in Indonesia (based on the Shipping Law)

Type	Operator	Number	Classification	
			International	Local
Public Ports				
Commercial Port	Indonesian Port Corporation	112	72	40
Non-commercial Port	Government	544	8	536
Special Ports	Private Sector	1,233	51	1,182
Total		1,889	131	1,758

Source: DGSC

2.4.4 Port Regulation (Government Decree No. 70/1996)

Port Regulation identifies basic roles of the nation's ports and classifies them into several categories. Its main items are the following:

National port structure, functions of ports, capacity of the government relative to port development and operation, area of public ports, development and operation of ports, cooperation with the private entities, and relationship between public ports and special ports.

This regulation stresses the need of establishing the national port structure and development of the ports in line with the structure. It allows special ports to handle public cargo only in limited conditions. DGSC is revising this regulation to make it compatible with the current government policy of decentralization and privatization.

2.4.5 Revised Port Regulation (Government Decree No. 69/2001)

DGSC has revised the Port Regulation in line with the Law for Autonomy and Law for Fiscal Balance. DGSC consulted the parties concerned including local governments and port users. The local governments requested that they be involved in the management of ports and be

given some profits out of port operation. The private sector requested a greater role in port management. This Regulation is expected to serve as a guideline for the decentralization process in the port sector. Details will need to be elaborated in implementing the Regulation.

2.4.6 Cooperation between the Government and Private Sector for the development and /or management of Infrastructure (Presidential Decree No. 7/1998)

Presidential Decree No.7/1998 is concerned about private sector participation in the infrastructure sector including transportation, telecommunication, power supply, and water supply. Steps to be taken for private sector participation are as follows:

1) A public entity prepares a pre-feasibility study and forwards it to BAPPENAS.
2) BAPPENAS identifies and prioritizes prospective infrastructure projects.
3) The government invites private parties interested in a project for an open bidding.
4) The Procurement Evaluation team reviews the bidding process and determines the successful bidder.
5) A public entity enters into a cooperation agreement with the winner on the project.

In addition to the central government, provincial governments and state-owned corporations are also allowed to enter into this process. In short, this presidential decree is prepared in line with the basic policy of decentralization and privatization. It stipulates basic contents to be included in the cooperation agreement and details are left open to negotiation between the parties concerned.

2.4.7 Network Development Plan of Port Infrastructure in the National Port Arrangement

DGSC and IPCs are jointly preparing the Network Development Plan of Port Infrastructure in the National Port Arrangement. This effort started inspired by the JICA Study on the Port Development Strategy (March 1999). A draft plan was made available to the Study Team. The study identified three important areas regarding the port sector and proposed a strategy for each of them. The areas taken up in the study were port development, port finance and private sector participation, as well as port administration and operation. The Draft Network Development Plan basically follows the study and elaborates on the port development strategy. It identifies criteria for classifying the nation’s ports. These criteria are determined according to the cargo throughput in a port. The seven river ports are classified in the Draft Network Development Plan as shown in Table 2.4.4.

Table 2.4.4 Roles and Functions of the Seven River Ports

Functions / Port	Container	Conventional	Passenger	Liquid bulk	Dry bulk
Pekanbaru	C	C	C	B	C
Jambi (Talang Duku/M. Sabak)	C	B	-	C	C
Palembang/Tg. Api-api	B	B	B	B	A
Pontianak	B	B	B	B	-
Kumai	D	C	C	C	D
Sampit	C	B	B	B	C
Samarinda	C	B	C	C	B

Legend: A / Primary trunk port
B / Secondary trunk port
C / Tertiary trunk port
D / Regional feeder port

The Network Development Plan, after it is finalized, will be quite useful to prioritize port development projects and concentrate the national resources into urgently needed projects. In order to make the plan fully effective, a series of consultation with the maritime sector and local governments would be needed before it is finalized.

2.4.8 Strategic Plan of Sea Transportation Structure 2001-2005 (RENSTRA)

DGSC issued the Strategic Plan of Sea Transportation Structure 2001-2005 (RENSTRA) in June 2000. This plan covers the entire marine transportation sector. It identifies the problem areas experienced in the maritime sector, examines the basic policy direction of the national development, and proposes a set of action plans for the next five years accordingly.

RENSTRA identifies the following seven items as the main pillars of policy for the maritime transportation sector:

1) to improve business sustainability and competitiveness
2) to improve quality and safety of services
3) to arrange institutions, regulations, and local autonomy
4) to utilize technology, to conserve energy, and to manage marine environment
5) to improve human resources and sea transportation management
6) to improve small businesses in the sea transportation sector
7) to develop infrastructure and a transportation network

These goals are prepared in line with the policy agenda proposed in PROPENAS (Table 2.4.5).

Table 2.4.5 PROPENAS and RENSTRA

PROPENAS	RENSTRA
Maintaining national unity and improvement of democracy	- Development of facilities and a sea transportation network to help maintain national unity
Materializing supremacy of law and a clean government	- Restructuring organization and regulations relative to sea transport management - Human resources development for sea transport management - Improvement of safety and services of sea transport
Accelerating economic recovery and strengthening the base of sustainable economic development	
- Maintaining the level of infrastructure services	- Rehabilitation of sea transport facilities - Development of sea transport facilities and a networking system
- Restructuring and reforms of the sectors in the infrastructure area	- Reorganizing organization law and administration of sea transport - Utilization of technology, energy conservation, and marine environment management
- Enhancing the accessibility of the public to infrastructure services	- Improved availability of sea transport facilities
- Enhancing the participating role of the private sector and the community in infrastructure development	- Improvement in small businesses in the sea transportation sector - Improvement in business sustainability and competitiveness
Enhancing regional capacity and empowering the public	
- Development of regional economy and area	- Improved availability of sea transport facilities - Revitalization and development of the facilities and network system in special areas

2.5 Port Administration Policy

2.5.1 Government Organizations related to Transportation

(1) Government of Indonesia

Indonesia is a constitutional republic created by the 1945 constitution. The president is the head of state. Sovereign power lies with the people, while the National Conference (MPR) wields it. MPR is the supreme institution of Indonesia; it revises the constitution, elects the president and the vice president, and decides Indonesia's national policy.

Figure 2.5.1 shows the organizational structure of the nation.

(2) National Government

Indonesia's National Government formed the "Gotong Royong" (mutual help) and is comprised of the National secretariats, thirty-one (31) ministries, eight (8) governmental agencies, and various ministers. It is headed by the president and the vice president (Presidential Decree No. 228/M/2001).
Ms. Megawati Soekanoputri became the President on August 9/2001.

Figure 2.5.2 shows the organization chart of the government.

(3) Government Organizations regarding Transportation

The Ministry of Communications(MOC) administrates land, sea, and air transportation, port, seamen, maritime safety and meteorology (Presidential Decree No.168/2000).
It also administrates posts and telecommunications. On the other hand, the Ministry of Culture and Tourism is responsible for tourism and the Ministry of Industry and Trade is responsible for shipbuilding. MOC comprises the following institutions: the department of the secretariats which is called the ministry proper of transport, the department of posts and telecommunications and the department of sea, land, and air transportation. MOC is also responsible for the investigations, promotion, training, and education with regard to transportation. MOC has local offices, KANWIL, in each province of Indonesia. However, these KANWIL started to be integrated to the provincial governments in 2001 as a part of the decentralization process.

Figure 2.5.3 shows the organization chart of MOC.

(4) National Development Planning Agency (BAPPENAS)

Since 1869, the national development policy of Indonesia had been carried out based on the National Five-year Development Plan (REPELITA I-VI). BAPPENAS formulated the REPELITA and allocated the annual year accordingly. Therefore, long-term port development policies had been decided by the discussions between the

Directorate General of Sea Communication (DGSC) of MOC and BAPPENAS. In 2000 the President and the national assembly (DPR) jointly established a new Five-year Development Plan for 2000- 2004 (PRO PENAS).
BAPPENAS has branch offices, the First Level Provincial Development and Planning Board (BAPPEDA) in the Provinces, and the Second Level BAPPEDA in the districts and cities.

Figure 2.5.4 shows the organization chart of BAPPENAS.

2.5.2 Port Management in Indonesia

The Indonesian government has often revised its decrees regarding port administration; for example, the Decree No.19/1960, No.1 and No.18/1969, No.11 and No.15/1983, and No.57/1991. Currently, port administration is carried out according to the Shipping Law No.21/1992 and the Government Regulation No. 69 /2001.
Indonesian ports can be classified into two groups: 656 public ports which are under the jurisdiction of MOC, and 1,484 special ports (including special wharves) which are operated by the private sectors. Within the 656 public ports, 110 commercial ports are managed by four Indonesian Port Corporations (IPC), which are responsible for the different areas in the country. The remaining 546 non-commercial ports are directly managed by MOC. Within 110 commercial ports and 546 non-commercial ports managed by MOC, 24 commercial ports and 19 non-commercial ports are river ports.
I PC (I to IV) were established as state enterprises (PERUMPEL) in 1983. In order to make them more flexible and business-oriented, they were reorganized into PT.PELINDO (IPC) in 1992. However, the government still holds their entire equity. I PC has a branch office in each port under their control.

PT. PELINDO	Headquarter	Jurisdiction (Provinces)	Ports
I P C **I**	Medan/ Belawan	D.I.Aceh, North Sumatra, Riau (3 provinces)	24
I P C **II**	Jakarta/ Tanjung Priok	West Sumatra, Jambi, South Sumatra, Bengkulu, Lampung, West Jawa, D.K.I Jakarta, West Kalimantan, (8 provinces)	29
I P C **III**	Surabaya/ Tanjung Perak	Central Java, East Java, Bali, Yogyakarta, West Nusa Tenggara, East Nusa Tenggara, Central Kalimantan, South Kalimantan (8 provinces)	33
I P C **IV**	Ujung Pandang/ Makassar	East Kalimantan, South Sulawesi, Central Sulawesi, South East Sulawesi, North Sulawesi, Maluk, Irian Jaya (7 provinces)	24
	Total	26 provinces	110

2.5.3 The Marine Safety Administration

Directorate of Maritime Safety Crew and Directorate of Guard Rescue of DGSC are responsible for planning and managing of the maritime affairs safety policy according to the Shipping Law (No.21/1992) and the Government Regulation (No.81/2000). The office has been installed as follows by port class. The Port Administrator Office (ADPEL) is the regional office of MOC and established in the first-class ports. The second to fourth-class ports also have ADPEL, though it is under the control of DGSC. MOC manages the 546 non-commercial ports (fifth-class), though the Port Administration Office (KANPEL) is established in each port as a sub-branch of DGSC (Table 2.5.1).

Table 2.5.1 ADPEL and KANPEL Office in Indonesia

Class	ADPEL (MOC direct control)	ADPEL (DGSC control)	KANPEL (DGSC control)
Class I	4 (Belawan, Tanjung Priok, Surabaya, Makassar)	-	-
Class II		5	1
Class III		14	8
Class IV		21	20
Class V		44	160
Total	4	84	189

Apart from these ports, the Directorate General of Land Communication (DGLC) of MOC manages ferry ports. DGLC and the Ferry Corporation (ASDP) manage ferry terminals.
Also, the Ministry of Sea and Fishery (MOSF), the Directorate General of Food (DGF) and provincial governments manage some of the fishing ports.

2.5.4 Port Management Organizations and their Services

(1) Directorate General of Sea Communication (DGSC)

DGSC is in charge of the passenger vessel transportation, both passengers and cargo, with the exception of ferry transportation handled by DGLC. DGSC is made up of the Secretary General with 5 Divisions and 5 Directorate. DGSC has all the responsibility regarding the shipping sector of Indonesia.

The organization and the services of DGSC are regulated under ministerial decree 164 / OT02 / PHB80.

Its services are as follows:

1) To promote and coordinate the maritime transportation, both domestic and international.

2) To implement maritime safety regulations.
3) To maintain maritime safety through the coastal guards.
4) To register large ships, investigate ships' seaworthiness and to issue certificates.
5) To execute dredging work of the channels and basins
6) To do planning of navigational aids

Figure 2.5.5 shows the organization chart of DGSC.

(2) Port Administration Office (ADPEL) in the First-class Ports

ADPEL is a sub-organization of the MOC and established in all first-class ports (Belawan Port, Tanjung Priok Port, Tanjung Perak Port, Makassar Port).

According to the port types, ADPEL has five different sectors. The main work of ADPEL is to arrange and execute the government policies regarding the ports. Its organizations and services are determined by the MOC decree KM 89/85.

Its services are as follows:

1) To organize the port services with other government agencies.
2) To secure safe navigation.
3) To secure order in and around the port areas.
4) To act as the port management office.

(3) Port Administration Office (ADPEL) and Port Administration Office (KANPEL) in Non-commercial Ports

ADPEL is established in the second to fourth-class commercial ports. In total, there are 84 ADPEL in Indonesia. KANPEL is established in the non-commercial ports (fifth class). There are 189 KANPEL in Indonesia. Before the decentralization process started, ADPEL and KANPEL had been controlled by MOC through its regional office, KANWIL. However, provincial governments started to take over KANWIL in May 2001.

Its services are as follows:

1) To approve the use of channel and port facilities.
2) To provide the general port service.
3) To execute the administration/management of the ports.

Figure 2.5.6 exemplifies the organization chart of ADPEL.

(4) IPC I, II, III and IV (PT. PELINDO)

IPC I to IV have their headquarters in Medan, Jakarta, Surabaya and Ujung Pandang, and manage 110 commercial ports. Until 1982, they were a sub-organization of DGSC, but in order to simplify, rationalize and to make them able to compete with ports

overseas, they were reorganized as State Enterprises (PERUMPEL) in 1983. In 1992, they were again reorganized into IPC (PT.PELINDO) in order to make them more flexible and let them seek profits as private and cooperated enterprises. I PC manages commercial ports through these branch offices.

Its services are as follows:

1) Construction, maintenance and operation of commercial ports.
2) Port service/business.
3) Port promotion.

Figure 2.5.7 shows the organization chart of I PC I-IV.

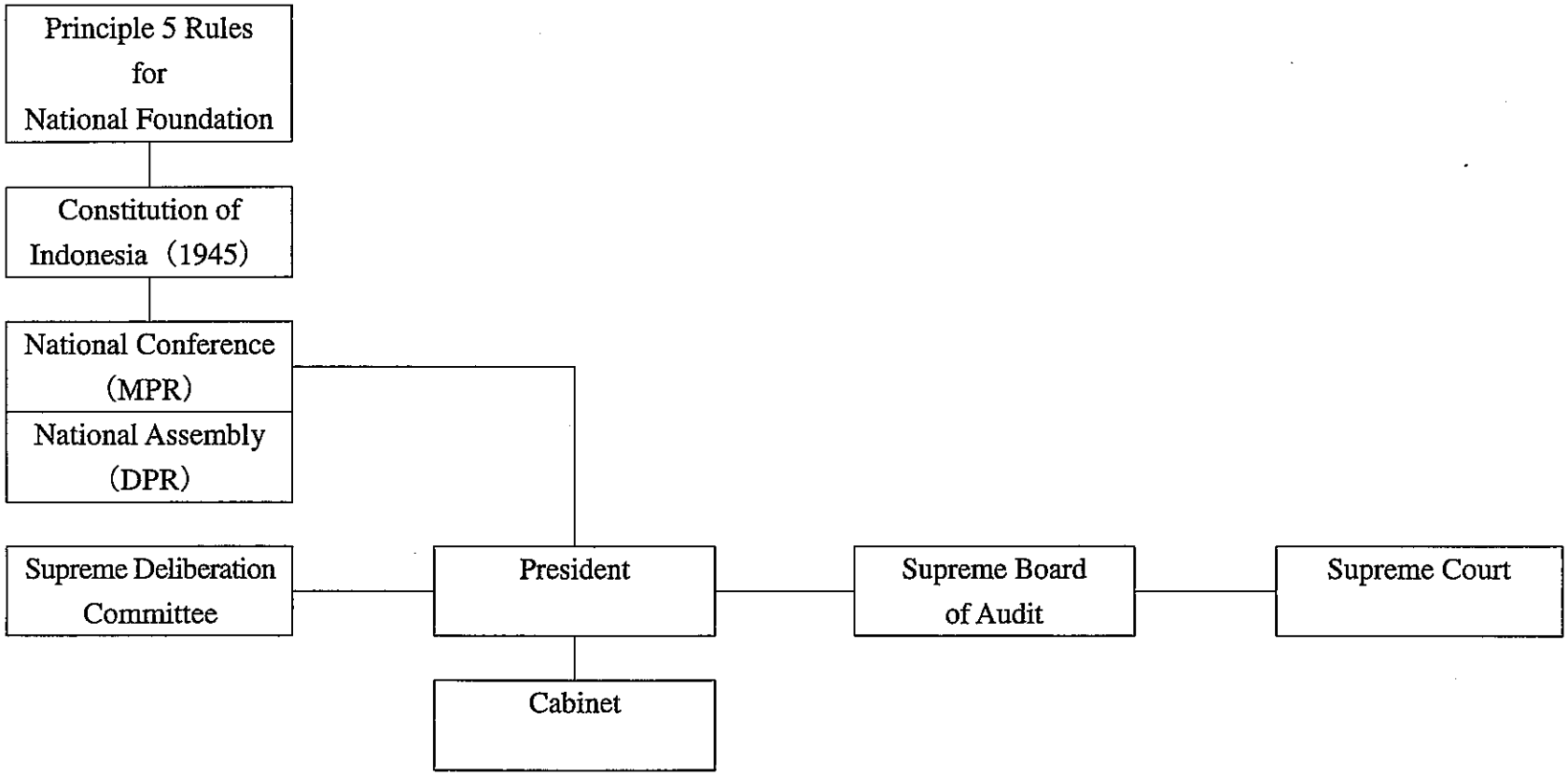
(5) Indonesia Dredging State Limited Company (PT.RUKINDO)

PT.RUKINDO possess drag-suction dredgers, grab dredgers, and pump dredgers. PT. RUKINDO including its branch offices carries out dredging works following the instructions from DGSC. The maintenance dredging of the navigation channels in the public port has been virtually monopolized by RUKINDO (PT. Persero) Pengerukan Indonesia). In the early 1960s, dredging activity in Indonesia was done by a government agency named Dredging Department (Dinas Pengerukan), a part of the Directorate General of Sea Communications. Then, in 1964, the Dredging Department became one of the State Harbor Enterprise (P N Pelabuhan - BPP / ADPEL).

On 30 April 1983, all divisions of Dredging under BPP were transformed into PERUM PENDERUKAN (Public Corporation of Dredging), a part of the Ministry of Communications. Its legal status was again changed in October 1991, when it became a limited company, PT (Persero) PENGERUKAN INDONESIA.

(6) Bureau of Waterways

The bureau of waterways, a sub-organization of the Directorate of Navigation, is established in 24 ports to manage navigational aids such as buoys, beacons and sign towers.



Source : Asia Economic Institute [Asian Year Book]

Figure 2.5.1 Organization Structure of the Nation

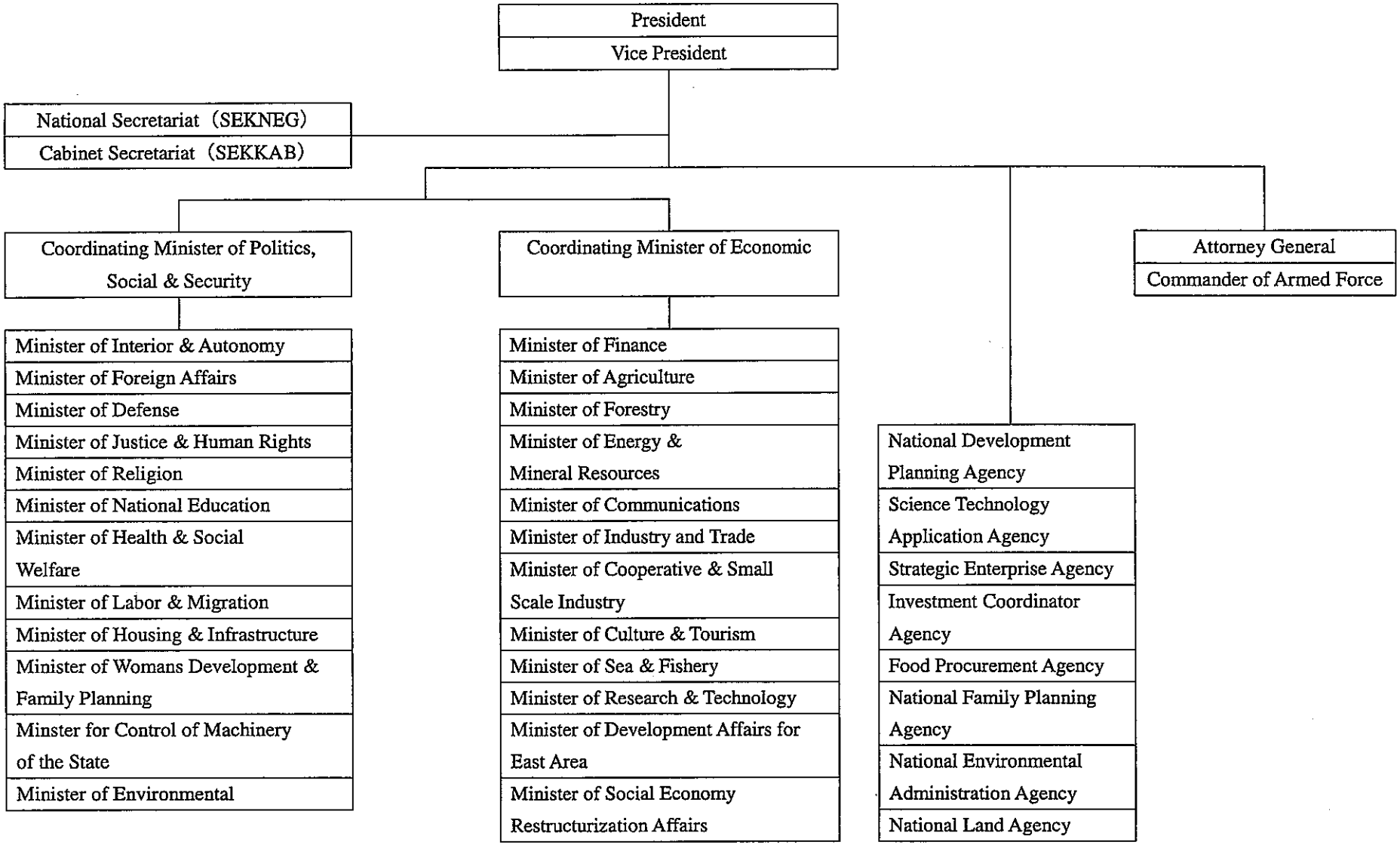


Figure 2.5.2 Organization Chart of the Government

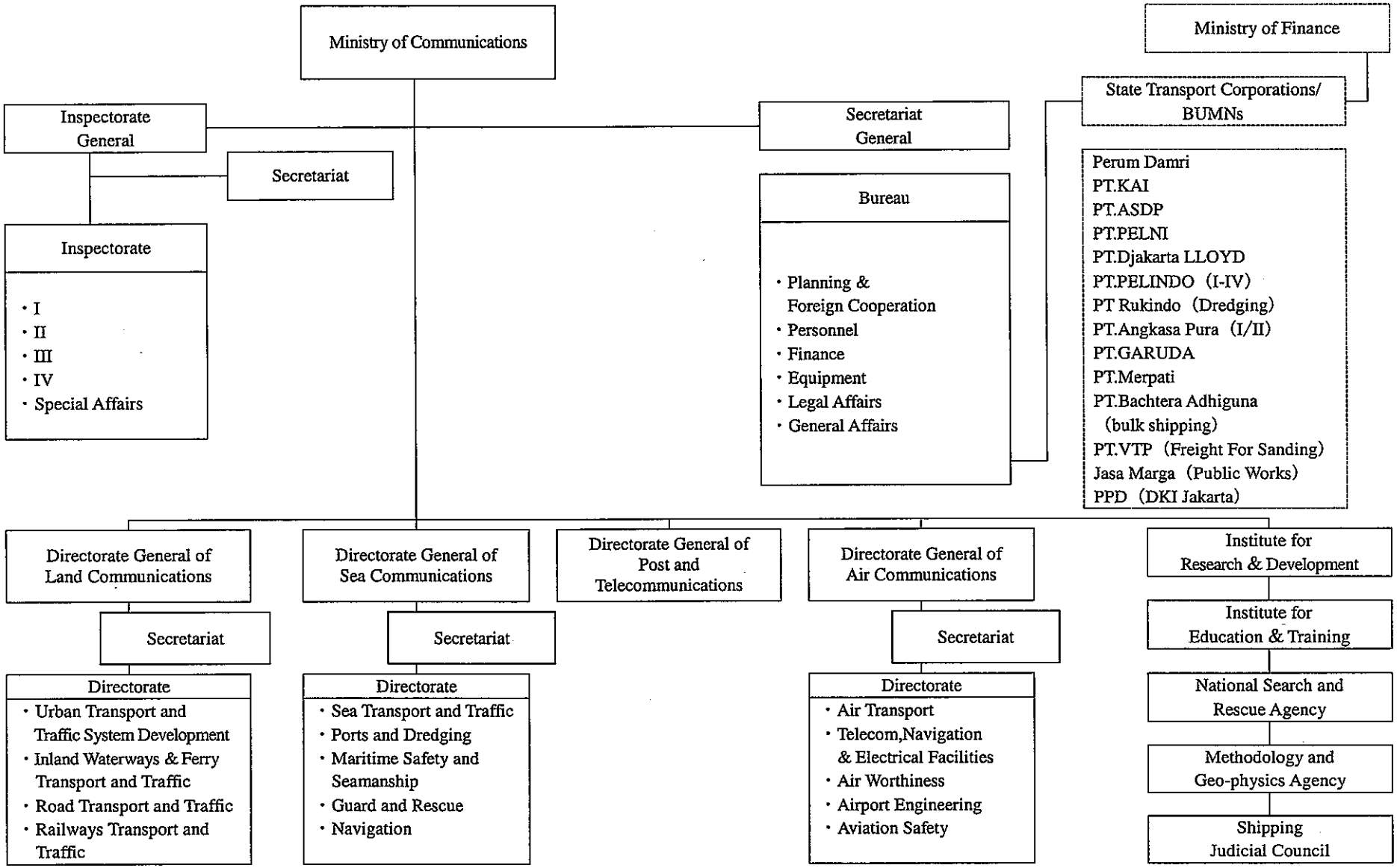


Figure 2.5.3 Organization Chart of the Ministry of Communications

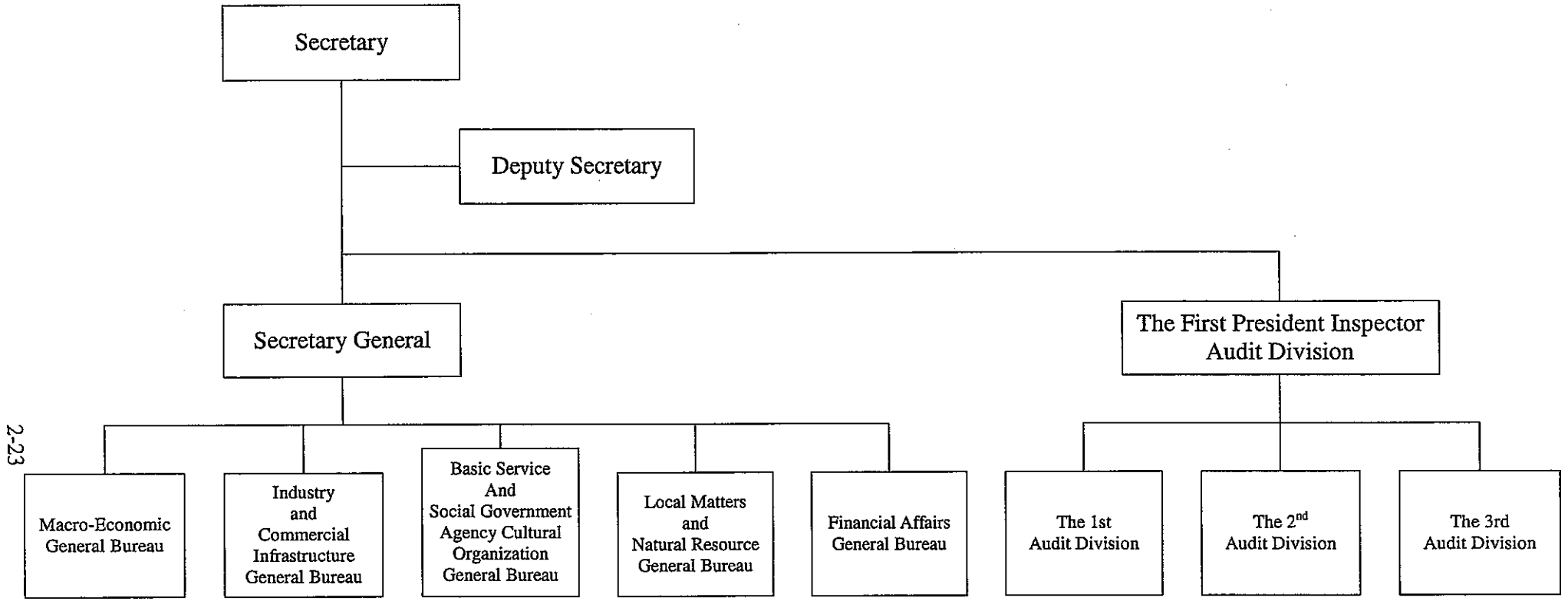


Figure 2.5.4 Organization Chart of BAPPENAS

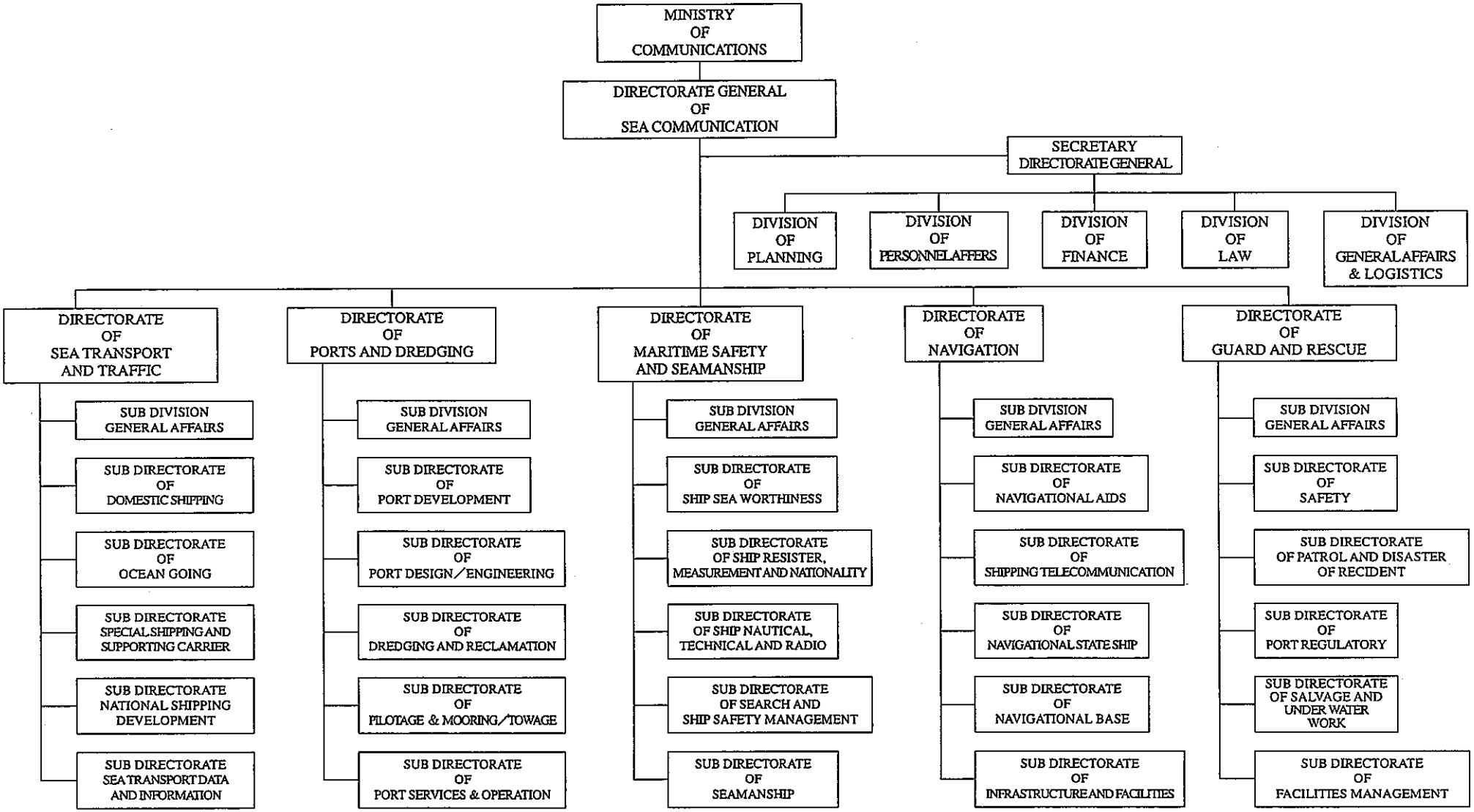


Figure 2.5.5 Organization Chart of DGSC

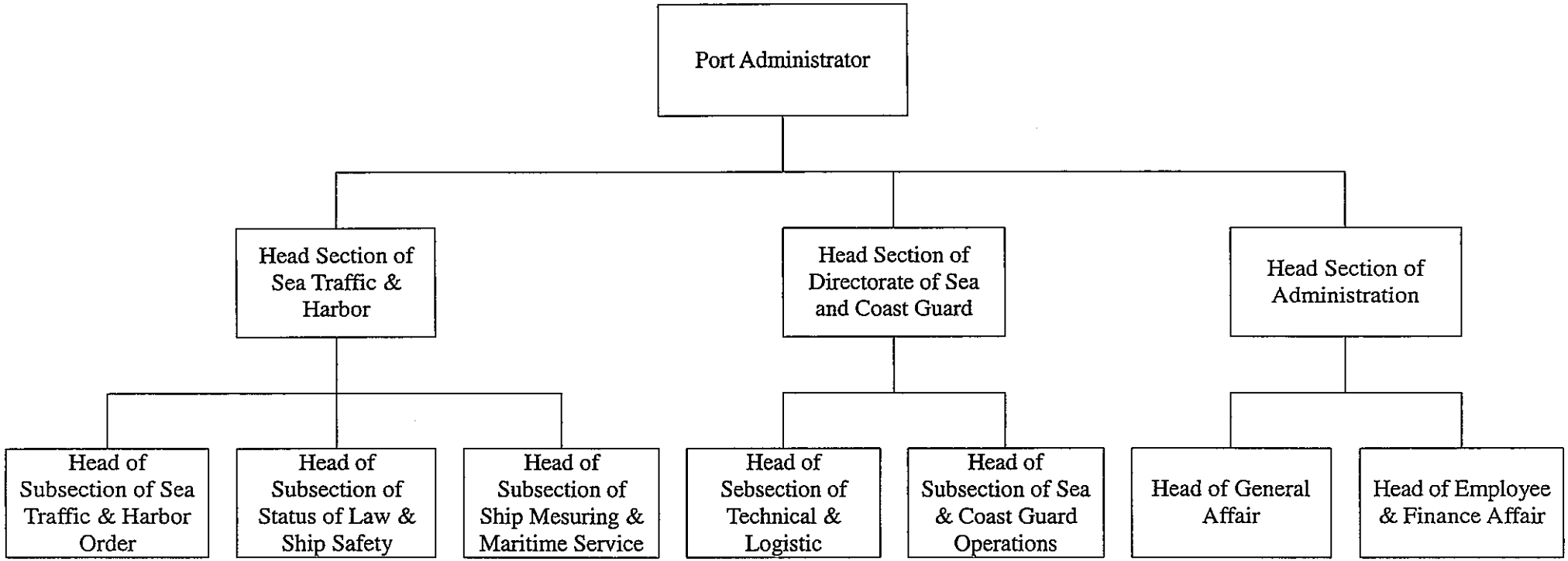


Figure 2.5.6 Exemplifies on Organization Chart of ADPEL

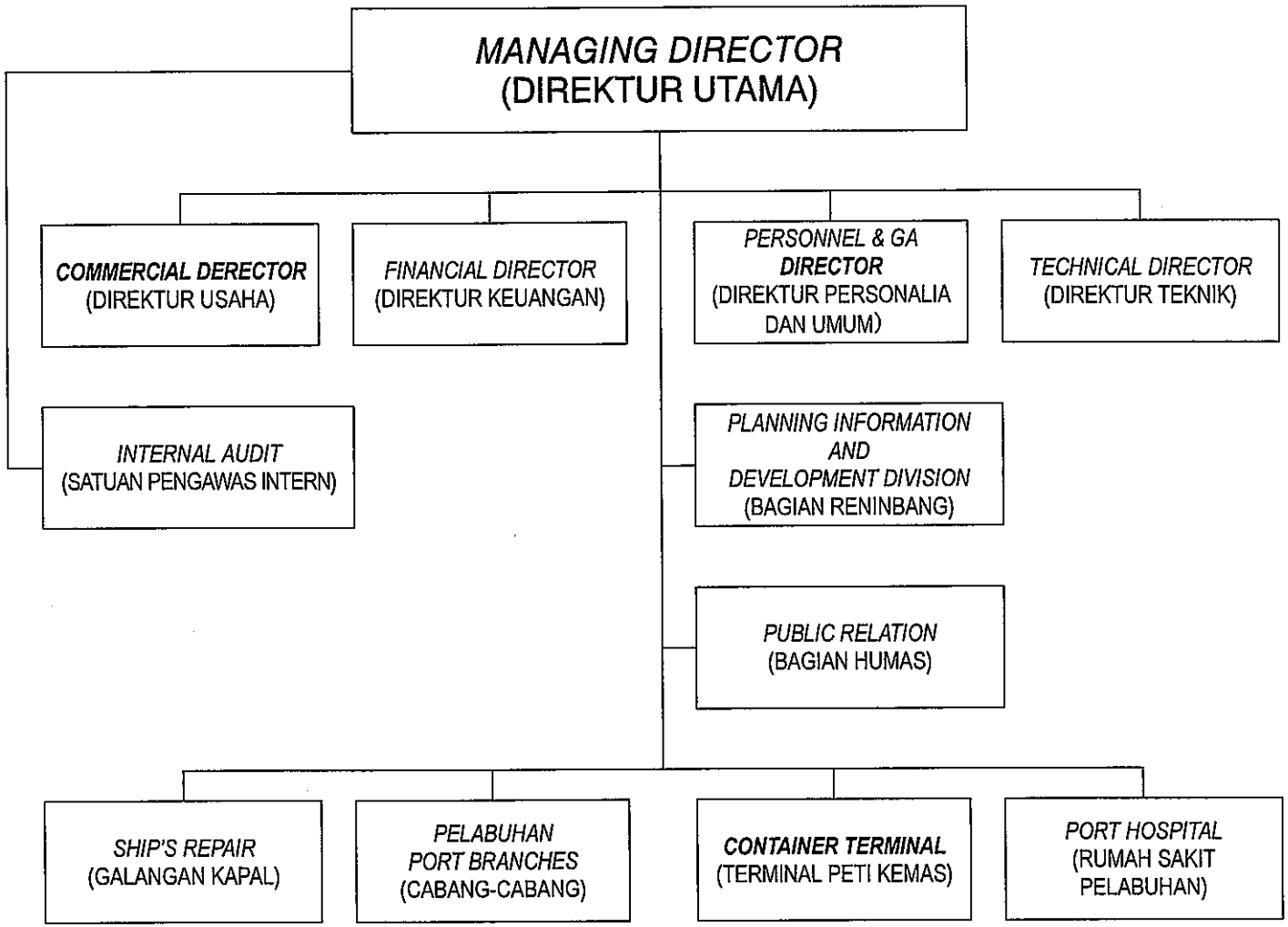


Figure 2.5.7-1 Organization Chart of IPC I Head Office

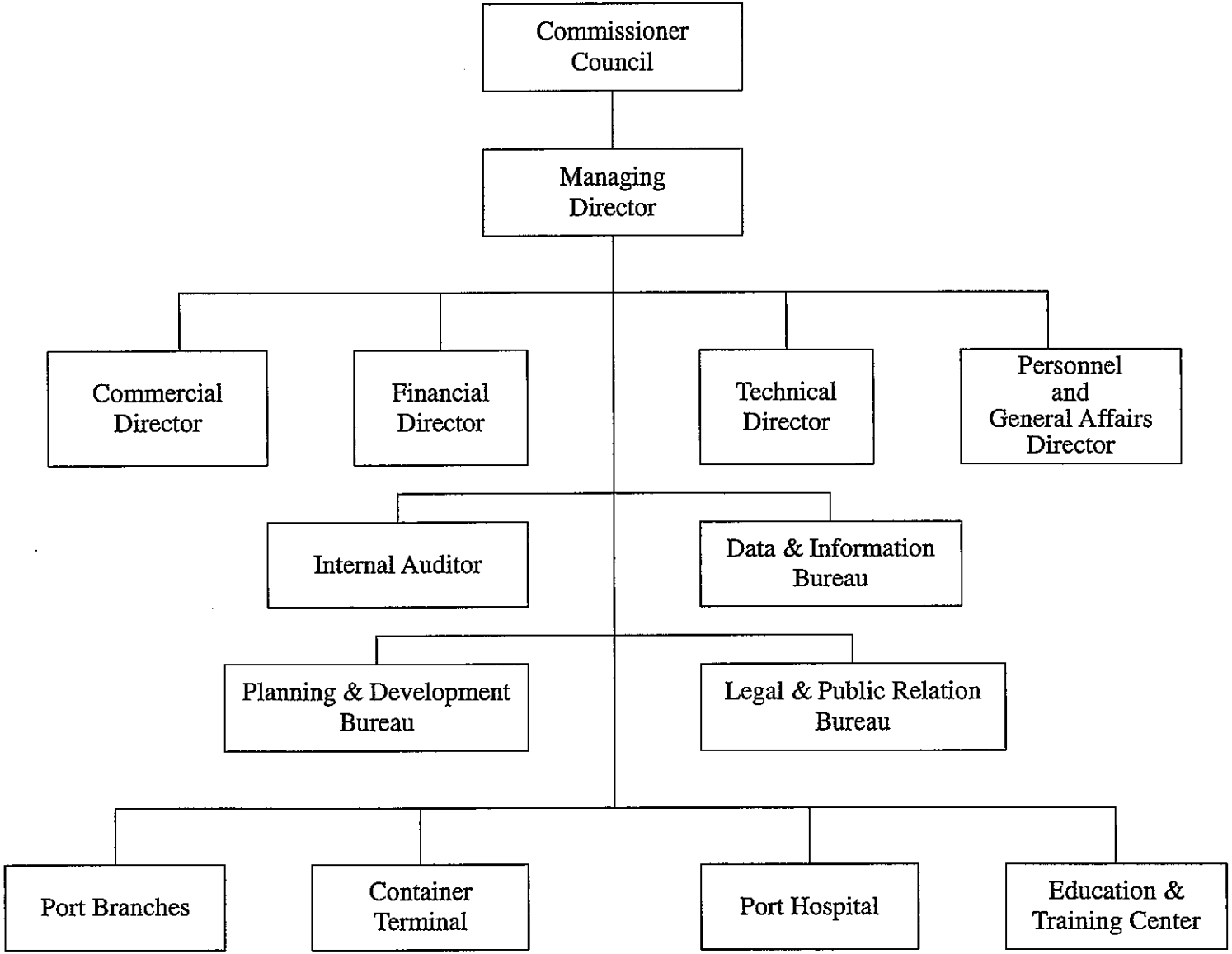


Figure 2.5.7-2 Organization Chart of IPC II Head Office

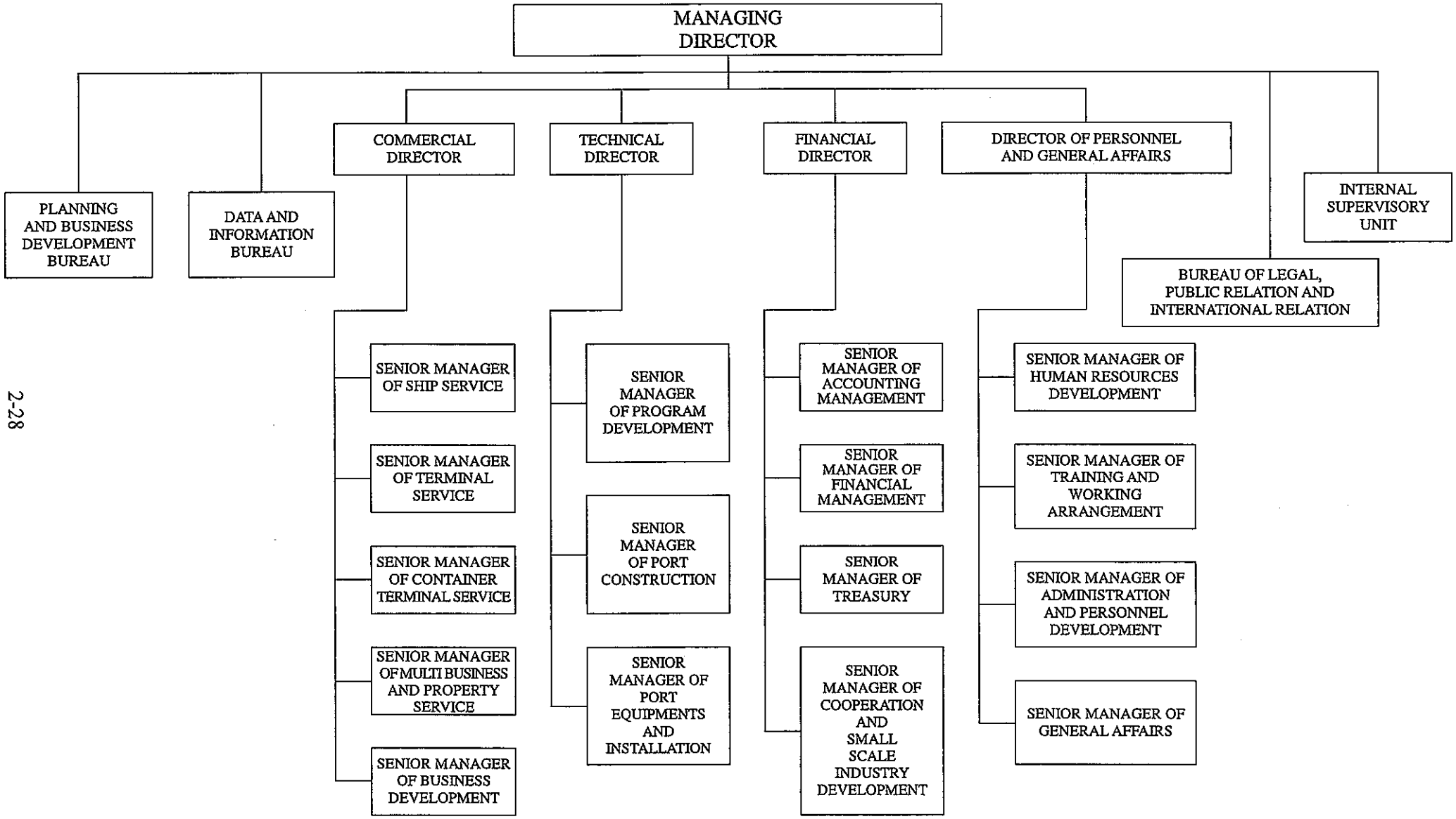


Figure 2.5.7-3 Organization Chart of IPC III Head Office

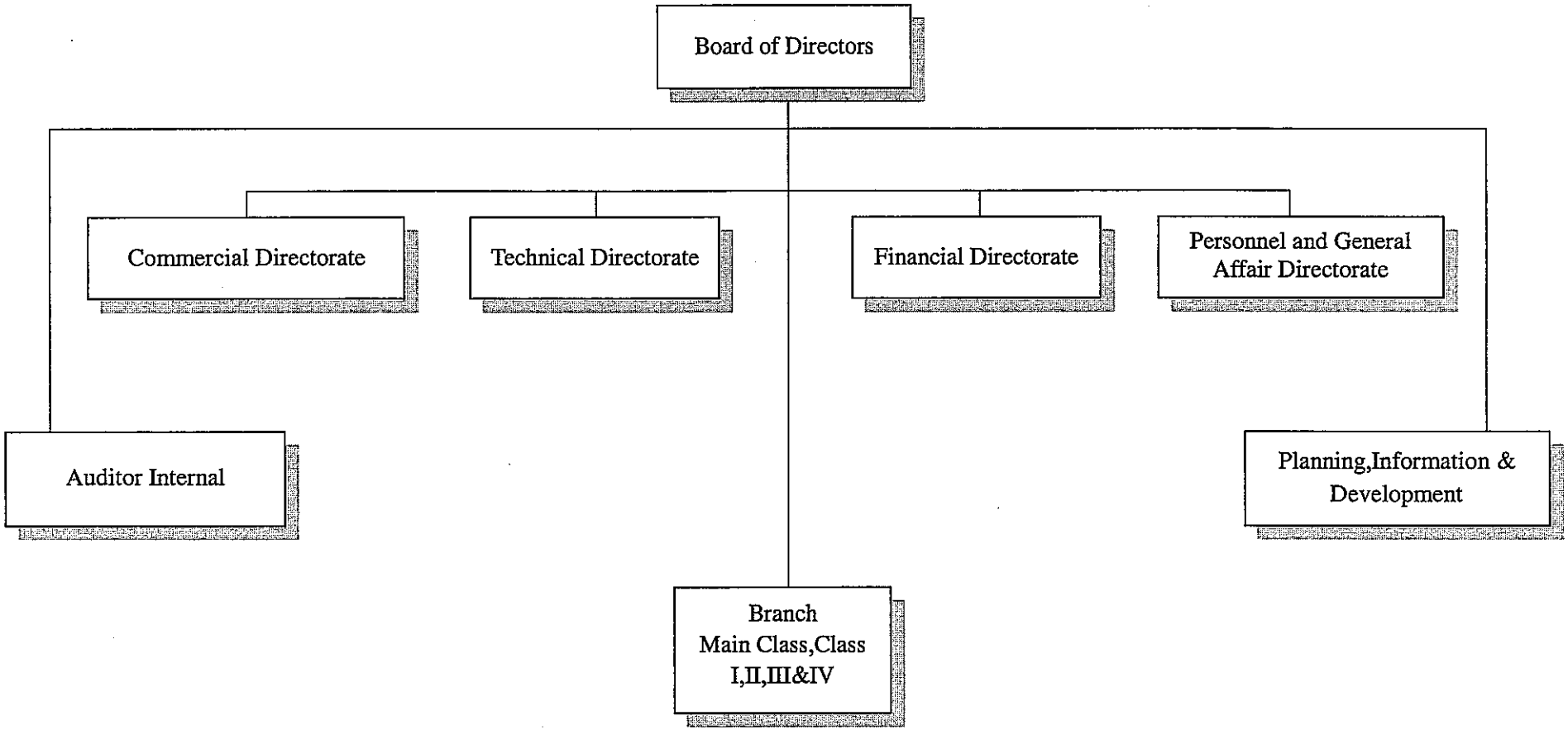


Figure 2.5.7-4 Organization Chart of IPC IV Head Office

2.6 Decentralization and Privatization

2.6.1 The Government's New Policy on Decentralization

(1) Decentralization

In accordance with the Regional Government Law (Law No. 22/1999) and the Financial Balance Between Central and Regional Government Law (Law No.25/1999), the Indonesian government just took a step forwards to enforcing the decentralization policy. In the past, regional administration was executed by the Law of Regional Basic Administration (Law No.5/1979) and the Law of Village Administration (Law No.5/1979) which were enacted in the era of President Suharto.

The new laws had a transition period (by the end of March 2001) of two years before full enforcement. The central government explained the laws to the relevant provinces in order to increase the awareness on this matter. The central government is also preparing necessary laws and regulations to achieve this aim. The new laws clearly define the financial roles of the central government. In the past, regional development was conducted only by the central government. The new policy is more democratic, allowing the provincial governments to participate in the regional development. On the other hand, this new policy might cause financial problems for the local governments in the future.

The problem is, rich provinces will realize their development plans, while poor provinces will be left behind. According to the previous laws, the relationship between the central government and the local governments was considered as a hierarchy. (Figure 2.6.1, Figure 2.6.2)

The importance of decentralization has been widely recognized in Indonesia. Decentralization policies were put into practice as an experiment in 26 regencies and municipalities during 1995 - 97. But the result has not been reported yet.

The new laws also require that the provincial administration and legislation be independent of Governors and are accountable only to the local assembly. The election system has been revised, too.

Figure. 2.6.1 shows the relationship between central government and local governments before /after decentralization.

Figure 2.6.2 shoes the process of the regional development plan before /after decentralization.

(2) Financial Balance between Central Government and Local Governments

Local governments of Indonesia used to receive a wide range of subsidies earmarked for specific objectives. The Law of Financial Balance between Central Government and Local Government determines the distribution of the natural resources revenue between the central government and local governments. It regulates how a local government should balance its budget with the transfer of funds from the central government.

Related laws are as follows.

① Constitution (1945)

② Law of Land and Building Tax (Law No.12./1985)
③ Law of Non-Tax National Income (Law No.20/1997)
④ Law of Land and Building Right Acquisition Commission (Law No.21/1997)
⑤ Regional Government Law (Law No.22/1999)
⑥ Financial Balance between the Central Government and Regional Government Law (Law No.25/1999)
⑦ Government Regulation on Distribution) (G. R. No.16/2000)
⑧ Government Regulation on Financial Balance between the Central Government and Regional Government (G. R. No.104/2000)

Figure 2.6.3 shows the relation of central government budget and local government budget.
Table 2.6.1 shows the Indonesian national budget in 2000, 2001.
Table 2.6.2 shows the development fund distribution to the provinces in 1999/2000(April - March) and in 2000(April to December).

Fiscal Balance Law defines a "region" as a community with boundaries and a specified regulatory authority. The local governments of Indonesia comprise provinces, regencies and municipalities. The financial fund is made up of "balancing fund", "general grant", and "special grant".

1) The Balancing Fund

The Balancing fund from the central government revenue (APBN) is allocated to the local governments. It includes; ① land and building tax, ② land and building right acquisition commission, and ③ natural resources revenue. Distribution of the revenue is determined by the relevant Minister and the Minister of home affairs.

Table 2.6.1 The Indonesian National Budget in 2000, 2001

(Unit: billion Rp.)

Item	2000		2001	
	Budget	G DP %	Budget	G DP %
Annual Expenditure	197,030.3	21.6%	315,756.1	22.2%
1. Ordinary Expenditure	137,311.1	15.1%	190,092.2	13,4%
a. Personnel Costs	30,682.1	3.4%	39,968.7	2.8%
b. Procurement	9,440.5	1.0%	9,688.9	0.7%
c. Subsidy	30,828.4	3.4%	53,951.7	3.8%
d. Debt Interest Payment	54,623.4	6.0%	76,549.6	5.4%
e. Others	11,736.7	1.3%	9,933.3	0.7%
2. Development Expenditure	26,196.8	2.9%	43,987.4	3.1%
a. Sector	10,166.8	1.1%	21,722.4	1.5%
b. Project	16,030.0	1.8%	22,265.0	1.6%
3. Balancing Fund	33,522.4	3.7%	81,676.5	5.7%
Annual Revenue	152,896.5	16.8%	263,226.6	18.4%
1. Tax Revenue	101,436.8	11.1%	179,892.0	12.6%
a. Domestic Tax	95,538.0	10.5%	169,520.0	11.9%
b. Tariff	5,898.8	0.6%	10,372.0	0.7%
2. Non-tax Revenue	51,459.7	5.7%	83,334.6	5.8%
a. Natural Resource	40,082.4	4.4%	64,458.2	4.5%
b. Surplus of State Enterprise	5,281.3	0.6%	10,500.	0.7%
c. Others	6,096.0	0.7%	8,376.4	0.6%
3. The Gratuitous Capital	-	-	-	-
Loan	44,133.8	4.8%	52,529.5	3.7%
1. Domestic Finance	25,400.0	2.7%	33,500.0	2.4%
a. Privatization of State Enterprises	6,500.0	0.7%	6,500.0	0.5%
b. IBRA Asset Sales	18,900.0	2.0%	27,000.0	1.9%
2. Overseas Finance	18,733.8	2.1%	19,029.5	1.3%
a. Program Loan	11,299.8	1.2%	13,727.7	0.9%
b. Project Loan	16,030.0	1.8%	22,265.0	1.6%
External Debt Payment	▲8,696.0	▲0.9%	▲16,963.2	▲1.2%

(Note) Budget of 2000 is for nine months from April to December 2000.

Budget of 2001 year is for 12 months from January to December 2001.

Table 2.6.2 The Development Fund Distribution to the Provinces in 1999/2000（April-March） and in 2000 (April-December）

（unit：million Rupiah）

Provinces	Development Fund distribution to the Provinces		Development Fund distribution to the Prefecture and Municipality		Development Fund distribution to the Village		SSN and Fund for Poverty Alleviation		Total	
	1999/ 2000	2000	1999/ 2000	2000	1999/ 2000	2000	1999/ 2000	2000	1999/ 2000	2000
Aceh	136,490	148,556	192,142	470,677	65,107	53,190	89,547	67,458	483,286	739,881
North Sumatra	125,984	132,155	203,415	257,467	62,406	51,392	164,678	107,837	646,483	540,051
West Sumatra	88,296	93,304	210,461	164,824	25,500	21,052	64,868	50,358	389,223	320,538
Reau	246,520	224,834	150,406	504,500	16,072	14,181	77,196	47,709	490,404	821,254
Jambi	78,553	80,424	111,815	08,121	10,406	11,244	46,191	32,585	250,025	222,374
South Sumatra	136,822	128,124	216,104	170,852	33,618	27,818	105,267	60,078	491,811	386,072
Penkuru	70,560	67,488	77,699	59,775	13,568	11,385	27,778	20,050	189,605	158,698
Lampung	96,424	00,945	169,581	137,582	23,609	19,784	107,677	49,462	397,291	305,873
DKI. Jakarta	42,172	52,920	113,681	107,154	3,114	2,731	135,334	26,038	294,001	100,843
West Jawa	231,158	214,653	707,210	542,959	84,565	69,387	601,831	306,691	1,624,764	1,223,690
Central Jawa	170,998	163,455	549,444	453,522	100,239	81,991	484,400	395,129	1,306,081	1,094,097
DKI.Jogu Jakarta	45,043	50,896	74,701	71,592	5,146	4,408	46,022	35,105	170,912	162,001
East Jawa	186,293	175,417	606,113	502,559	98,923	80,890	478,362	350,772	1,369,691	1,109,638
Bali	51,081	57,707	66	79,082	7,731	6,635	23,072	21,697	172,450	165,121
West Karimantan	11,4196	122,712	166,468	124,951	16,564	10,922	74,760	81,567	371,991	343,152
Central Karimantan	103,013	111,123	130,984	123,666	14,417	12,084	44,194	36,985	292,608	280,858
South Karimantan	89,420	91,540	143,421	120,660	26,193	21,592	60,373	50,524	319,407	284,316
East Karimantan	192,171	187,585	137,468	359,103	14,527	12,250	2,7312	38,594	391,478	597,532
North Sulawesi	90,552	68,738	120,100	91,527	18,010	14,802	59,527	49,816	288,219	244,883
Central Sulawesi	100,611	93,019	100,660	88,268	16,708	10,843	55,716	46,627	273,695	241,757
South Sulawesi	111,687	117,877	289,584	237,355	35,119	29,266	128,095	107,199	564,485	491,697
South East Sulawesi	83,849	79,885	98,004	75,277	17,233	14,875	44,768	64,465	240,854	234,502
West Nusa Tenggara	94,350	87,395	133,098	101,397	7,674	6,780	80,715	70,058	31,8837	265,630
East Nusa Tenggara	108,565	97,554	214,664	252,188	27,099	24,641	125,668	127,516	475,996	501,899
Maliku	102,887	154,838	117,800	98,494	18,542	15,494	78,117	60,374	317,376	329,200
Pabua(Irian Jaya)	191,770	177,044	283,266	4,32741	33,332	32,723	73,749	61,718	582,117	704,226
East Timur	70,497	0	135,362	0	5,305	0	38,654	0	249,818	0
Total to Development fund distribution to the provinces	3,159,962	3,098,288	564,3277	5,756,293	804,185	668,360	3,366,874	2,456,442	12,974,298	11,979,383
Costs for planning, monitoring, evaluation, and report	22,738	12,912	131,753	95,859	6,594	2,022	91,719	79,420	252,804	190,213
Subsidiary costs to foreign project loans	—	—	—	87,848	—	—	—	181,238	—	269,086
Fund to respond to disasters and riots	—	—	—	—	—	—	—	108,000	—	108,000
Total	3,182,700	3111,200	5,775,030	5,940,000	810,779	670,382	3,458,593	2,825,100	13,227,102	12,546,682

Table 2.6.3 System of the Balancing Fund before / after Decentralization

Tax	Former System (%)		New System (%)					Note
	C. G.	R. G.	C. G.	P. G.	Producing R. G.	Surrounding R. G.	R. G. and M. G.	
Land and Building Tax (PBB)	100		10	16.2		64.8		Note : 4
Land and Building Right Transfer Tax (BPHTB)	100		20	16		64		
Forestry (Rent)	30	70	20	16	64			
Forestry (Land Rent)	55	45	20	16	32	32		
Afforestation Fund	100		60		40			
Oil	100		85	3	6	6		
Gas	100		70	6	12	12		
Non-oil and Gas Mining: Rent	20	80	20	16	64			
Non-oil and Gas Mining: Concession	20	80	20	16	32	32		
Fishery	100		20				80	

Note 1: C.G.: Central Government, P.G.: Provincial Government, R.G.: Regency Government, M.G.: Municipality Government.

Note 2: Surrounding regency is non producing regency in the province.

Note 3: 40% of the afforestation fund is distributed to the producing regency as a special grant.

Note 4: 9% of their revenue is reserved as tax collection cost.

2) General Grant

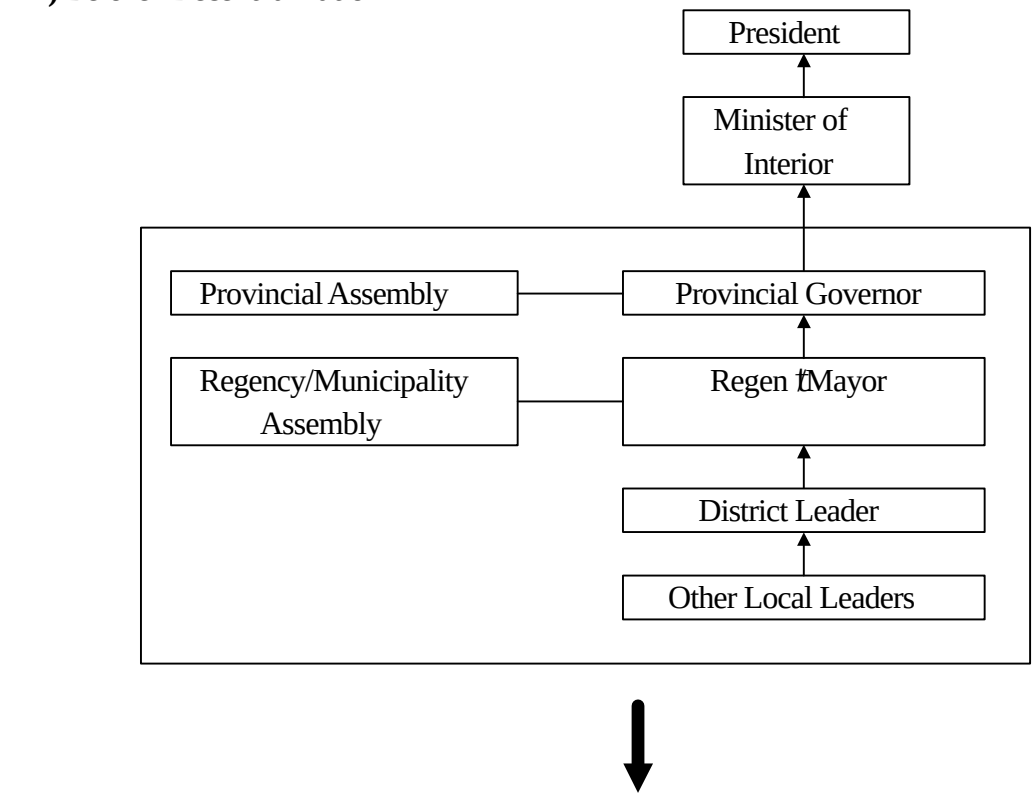
This grant is aimed at balancing the financial capability of the provinces. Local governments can determine the use of the fund. A part of this fund is for provinces and the rest is for regencies and municipalities. Local governments receive the grant, equivalent to 25% of the central government's revenue excluding income collected by local government.

① 10 % of the fund is allocated to provinces, while regencies and municipalities receive 90 % of the total.

3) Special Grant

Special grant is aimed at supporting specific needs of the region. These needs should have high priority and need to be approved by the relevant Ministers. 40 % of the national revenue coming from the Afforestation Fund is allocated to the producing region to support reforestation of the area.

1) Before Decentralization



2) After Decentralization

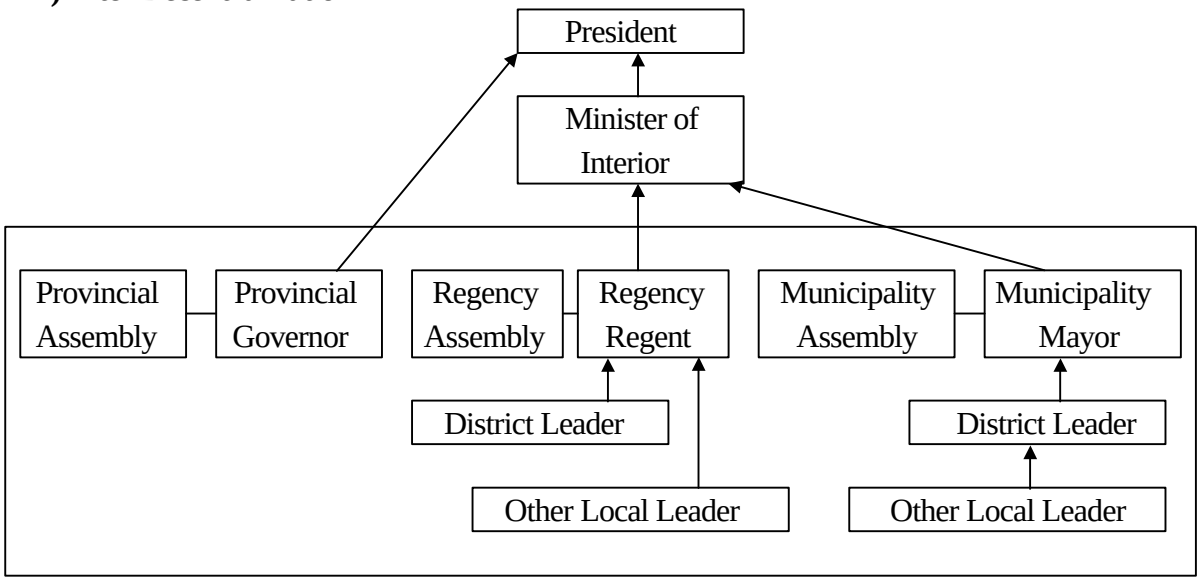
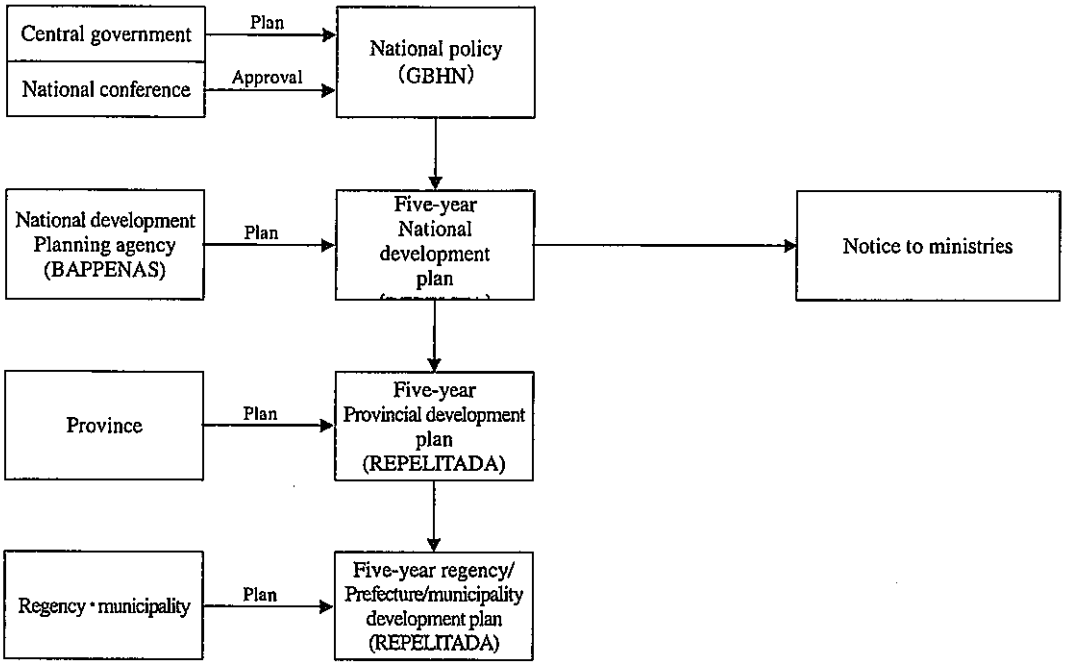


Figure 2.6.1 The Relationship between Central Government and Local Government before/after Decentralization

<Process of the Regional Development Plan before Decentralization>

(Five-Year Regional Development Plan)



<Process of the Regional Development Plan after Decentralization>

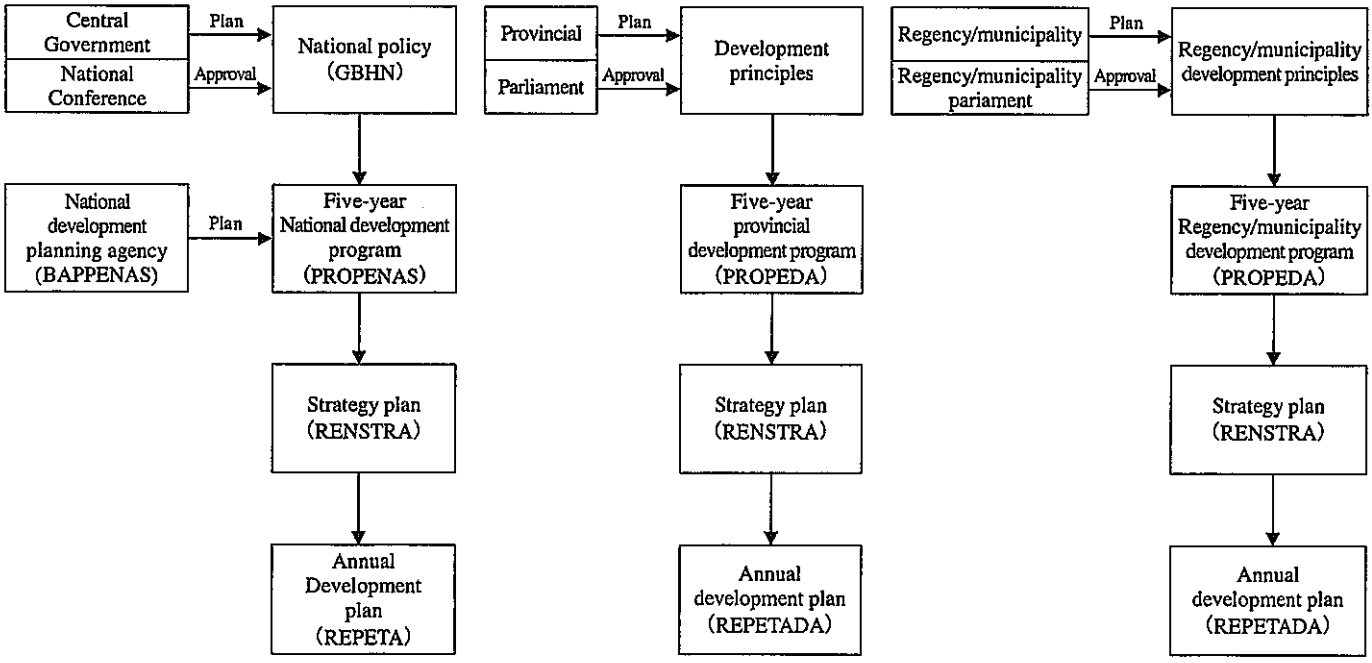
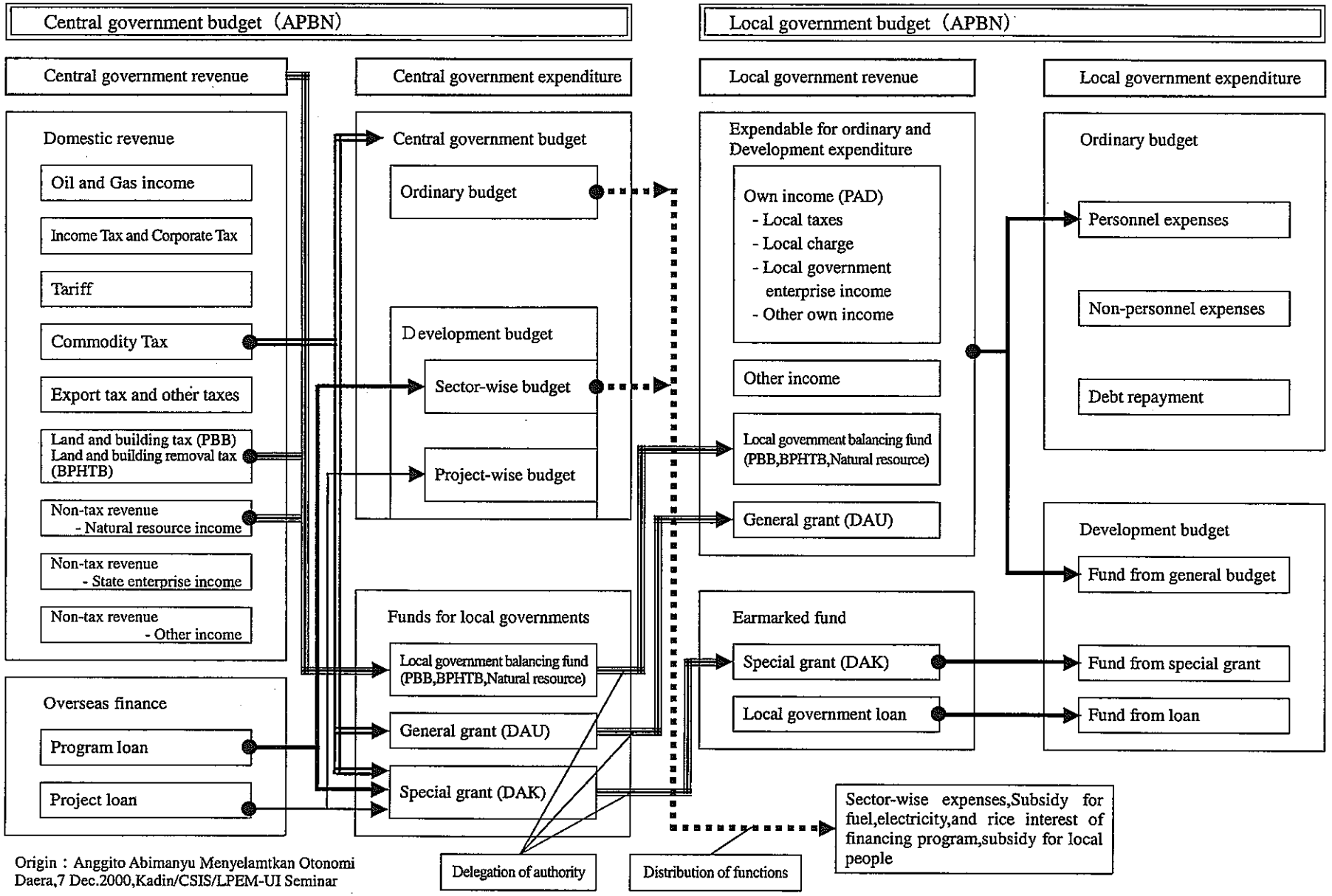


Figure 2.6.2 Process of the Regional Development Plan before/ after Decentralization



Origin : Anggito Abimanyu Menyelamtkan Otonomi Daera,7 Dec.2000,Kadin/CSIS/LPEM-UI Seminar

Figure 2.6.3 The Relation between Central Government Budget and Local Government Budget

2.6.2 Privatization Policy on Port Management

(1) Outline

Private sector participation in the development and management of infrastructure has become a global trend. Indonesia is no exception to this trend. It is becoming more and more common to introduce foreign capital and privatize government enterprises to increase efficiency. Electric power, road construction, railway, communication, and port construction/management are suitable for management by the private sector/fund and foreign capital.

Regarding the railway management, the Indonesian State Railways (PERUMKA) became a joint stock company in April 1998. Ministry of Communication (MOC) owns the railway facilities and structures such as railway trucks, bridges, tunnels and signal facilities, while PERUMKA owns the superstructures. The management is also divided into two parts.

As for the port management, four Indonesia Port Corporations (PT. PELINDO or IPC I, II, III and IV), in which the government holds 100 % of the stock, were established in 1992. PT.PELINDO manages all the major ports in Indonesia.

IPC II and Hutchison jointly operate and manage the container berths in the Tanjung Priok port. In I PC III container terminal of Tanjung Perak Port Surabaya was constructed by a private company in 1994 and have been operated since then. It is expected that this trend will be come more common in the field of transportation.

(2) Legal Aspects of Privatization and Foreign Investment

There are no laws and regulations exclusively established for the introduction of foreign investment to port development. However, Indonesia has some fundamental laws regarding privatization (including port development) and introduction of foreign investment as listed below (Table 2.6.4).

Table 2.6.4 Laws and Regulations regarding Privatization/Foreign Investment

Name of Laws/Regulations	Summary
1) Law No.1/1967 on Foreign Investment	General Regulation for Foreign Investment
2) Government Regulation No.56, 57, 58 & 59/1991	Establishment of IPC (I-IV), Transfer of Management of Some Public Ports from Government to IPC
3) Shipping Law No.21/1992	Cooperation between IPC and Private Sector on Port Related Business
4) Government Regulation No.20/1994 on Foreign Investment	New and Supplementary Regulation on/for Foreign Investment
5) Government Regulation No. 69/ 2001	Regulation for the Local Government and the Private Sector to manage Public Ports
6) Presidential Decree No.7/1998	New and General Regulation for the Private Sector to participate in Infrastructure Projects

Source: DGSC

Main/important points of each law and regulation are given as follows.

1) Law No.1/1967 on Foreign Investment

The principle of foreign investment is stipulated in this law. This law established general rules for foreign investment such as legal form, field of activity, manpower, concession, taxation and other levies, duration, right of transfer and repatriation.

2) Government Regulation No.56, 57, 58 & 59/1991

This regulation stipulates the establishment of IPC (I to IV) and management system of some public ports that are transferred to IPC.

3) Shipping Law No.21/1992

The Clause 26.2 ensures that the private sectors are allowed to cooperate with IPC for port-related businesses with exception of port basins, land property and water areas.

4) Government Regulation No.20/1994 on Foreign Investment

The regulation stipulates the ownership of a company established by foreign investment. The main points are summarized as follows.

a. Clause 1, Approval of foreign investment

An approval of foreign investment is granted to Foreign Investment (FDI) company that is established in the form of "Limited Liability Company" subject to Indonesian Law and domiciled in Indonesia.

b. Clause 2/Article 1, Two forms of FDI

The FDI company may be established in the form of:

a) A Joint Venture Company
Joint venture between foreign capital and domestic capital owned by Indonesian capital and domestic capital owned by Indonesian citizens, and/or Indonesian legal entities

or

b) A Direct Investment Company
Direct investment, in which the foreign citizens and/or foreign legal entities own the entire capital.

c. Clause 2/Article 2, Determination by Investors

The amount of investment shall be determined by the investor in accordance with the economic feasibility of the business activities concerned.

d. Clause 3, Duration of Business License

a) Business license is granted to the FDI company for the period of 30 years from the

commencement of the commercial operation.

b) The business license may be renewed by the Minister of Investment/Chairman of the Investment Coordinating Board, if the company carries out its business for the benefit of the national economy and development.

e. Clause 5, Scope of works carried out by FDI company

"A direct investment company" is not permitted to carry out business activities in the business sectors as referred above (see paragraph 1).

f. Clause 6, Partners' shares in the joint venture company

The Indonesian partners' shares in the joint venture company shall be at least 5 % of the total paid-up capital of the company upon its establishment.

4) Presidential Decree No.7/1998

In January of 1998, the government established a new cross-sector legal and regulatory framework for private sector participation. The Decree is composed of 15 clauses and a more detailed appendix made of 8 chapters. It mainly regulates the relationship between privatization-related government organizations and the private sector, the procedure of project implementation, and the bidding system. The Decree is highly effective in upgrading the quality of the whole system and enhancing the transparency of the bidding procedure.

2.7 Transportation Network

2.7.1 Outline of Transportation

Because Indonesia consists of archipelagoes, air and sea transportation are very important for inter island transportation. However, while the land transportation demand (road and railway) grew, the domestic air passenger/cargo decreased last five years. The sea freight transportation for inter island freight slightly increased and that for international freight demand shows practically no change while the sea passenger traffic grew.

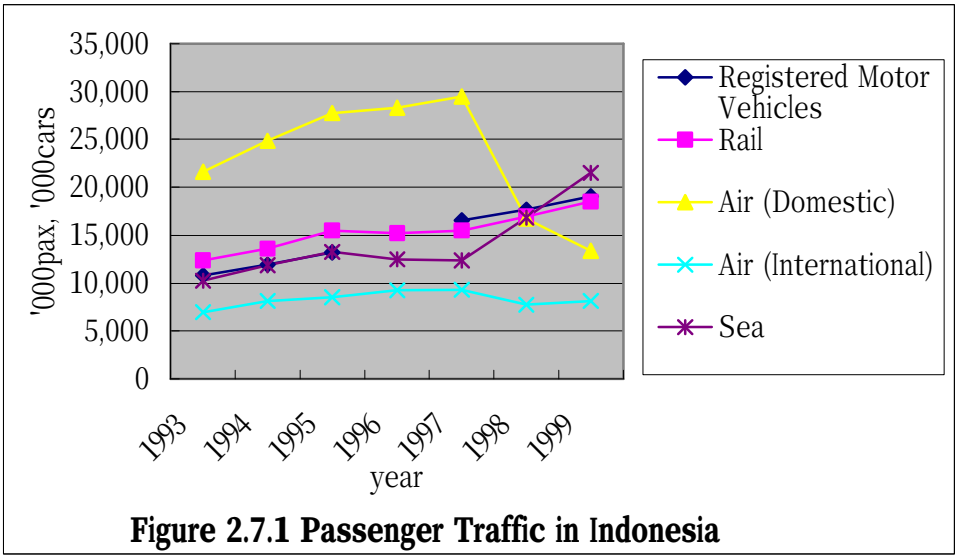


Figure 2.7.1 Passenger Traffic in Indonesia

Source: Statistic Indonesia 1995 & 1999, BPS

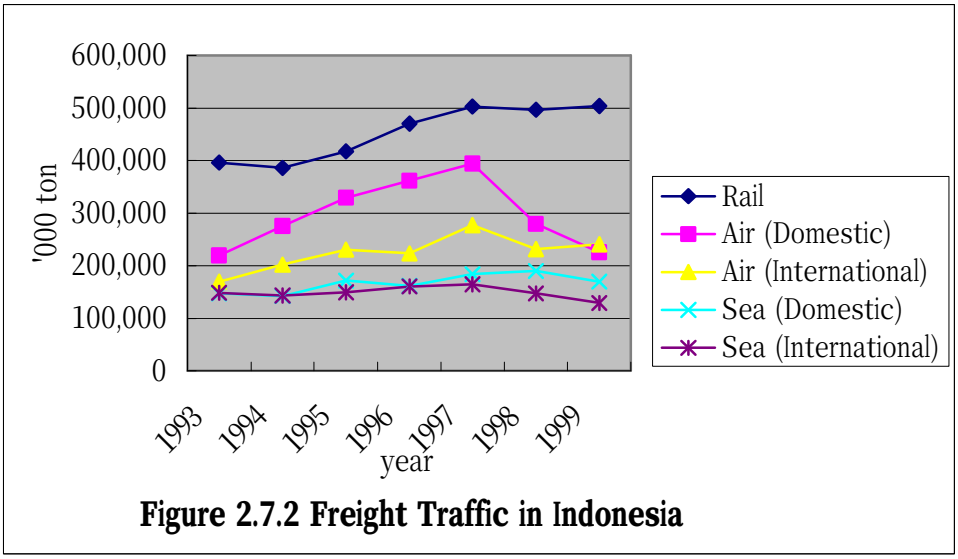


Figure 2.7.2 Freight Traffic in Indonesia

Source: Statistic Indonesia 1995 & 1999, BPS

2.7.2 Sea Transportation

(1) Ports

Ports in Indonesia consist of 656 public ports and more than 1000 special ports. The public ports can be further classified into 112 commercial ports, to which PELINDO I – IV are responsible, and 544 non-commercial ports. DGSC of MOC designate 25 strategic ports out of the commercial ports (Table 2.7.1). Furthermore, Ports of Belawan, Tg. Priok, Tg. Perak and Makassar are called the Four Main Ports in Indonesia. Figure 2.7.3 depicts location of main ports in Indonesia.

Table 2.7.1 Strategic Ports in Indonesia

Port		Province	Main Port
1	L.Seumawe	Aceh	
2	Belawan	North Sumatra	☆
3	Dumai	Riau	
4	Pekanbaru	Riau	
5	Batam	Riau	
6	Tg. Pinang	Riau	
7	Tlk. Bayur	West Sumatra	
8	Palembang	South Sumatra	
9	Panjang	Lampung	
10	Banten/Bojonegara	West Jawa	
11	Tg. Priok	Jakarta	☆
12	Tg. Emas	Central Jawa	
13	Tg. Perak	East Jawa	☆
14	Pontianak	West Kalimantan	
15	Banjarmasin	South Kalimantan	
16	Balikpapan	East Kalimantan	
17	Samarinda	East Kalimantan	
18	Benoa	Bali	
19	Tenau/Kupang	East Nusa Tenggara	
20	Bitung	North Sulawesi	
21	Makassar	South Sulawesi	☆
22	Ambon	Maluku	
23	Sorong	Irian Jaya	
24	Biak	Irian Jaya	
25	Jayapura	Irian Jaya	

Province: as of 1999

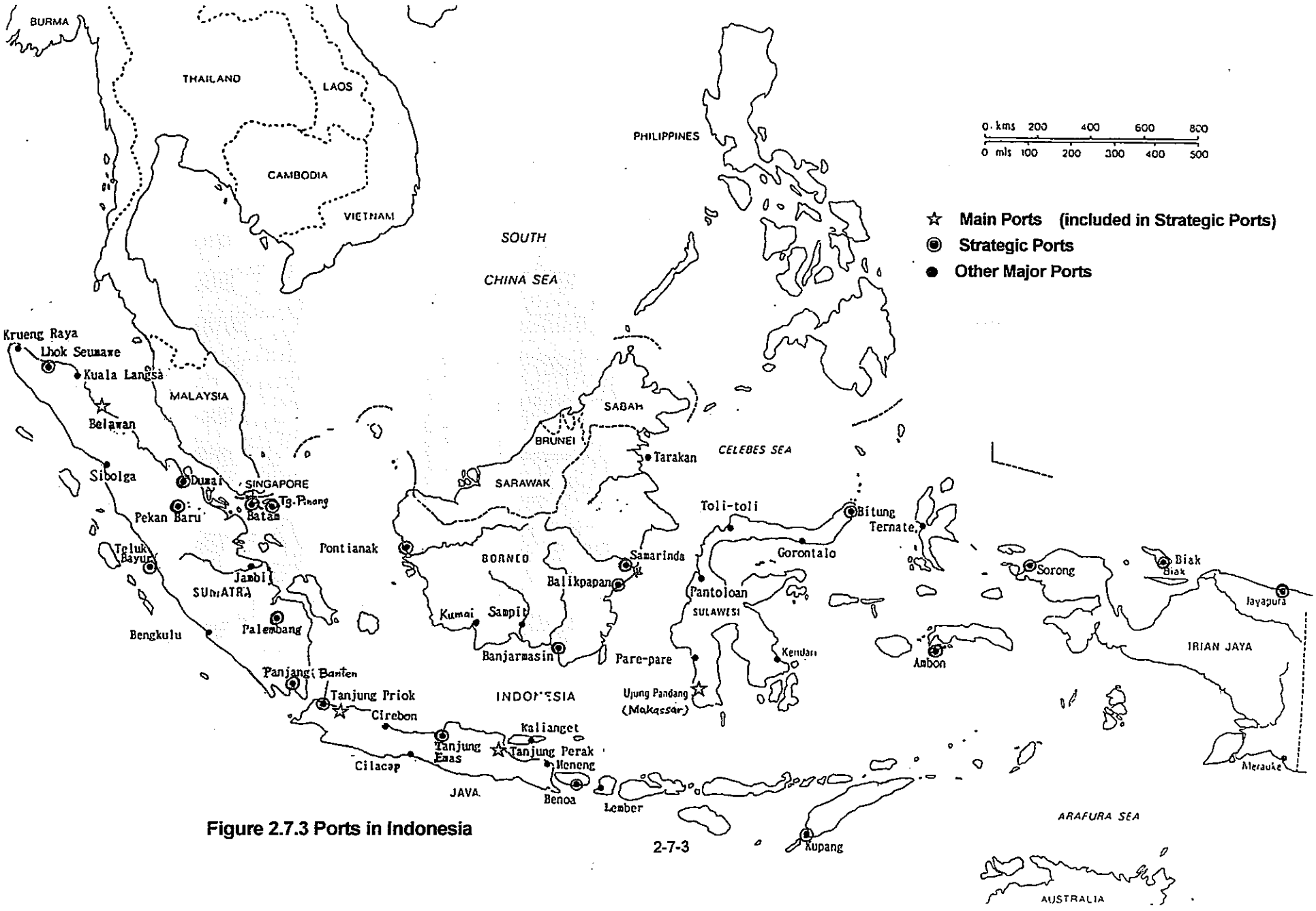


Figure 2.7.3 Ports in Indonesia

(2) Traffic

Annual throughput of ports in Indonesia had grown through 1997, then decreased in 1998 and 1999 as shown in Figure 2.7.4.

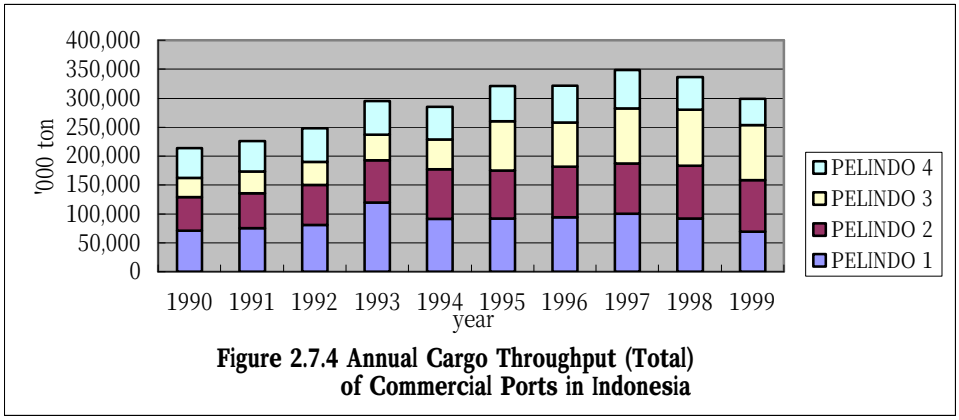


Figure 2.7.4 Annual Cargo Throughput (Total) of Commercial Ports in Indonesia

Source: PELINDO I, II, III & IV

After the economic recession, international cargo throughput at ports in Indonesia did not reach to the level of year 1995 whereas inter island cargo throughput decreased slightly and passenger embarkation/disembarkation have already exceeded the pre-recession level (see Figure 2.7.5-8).

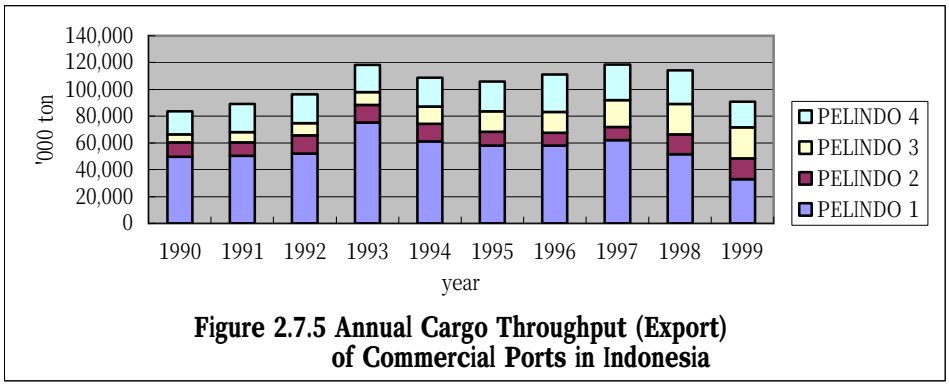


Figure 2.7.5 Annual Cargo Throughput (Export) of Commercial Ports in Indonesia

Source: PELINDO I, II, III & IV

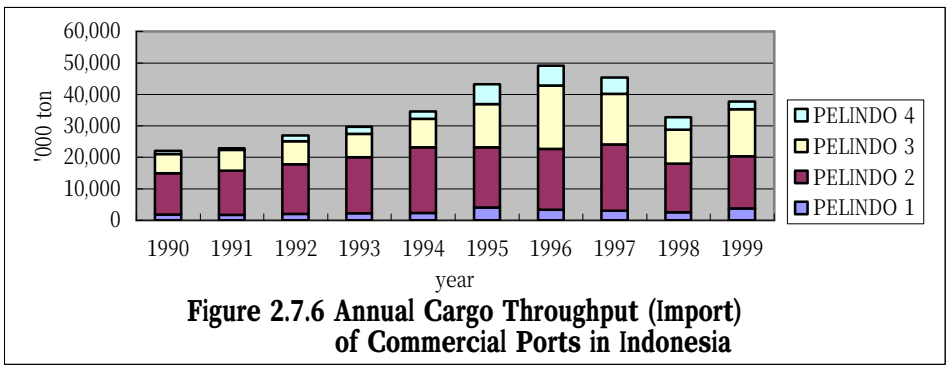


Figure 2.7.6 Annual Cargo Throughput (Import) of Commercial Ports in Indonesia

Source: PELINDO I, II, III & IV

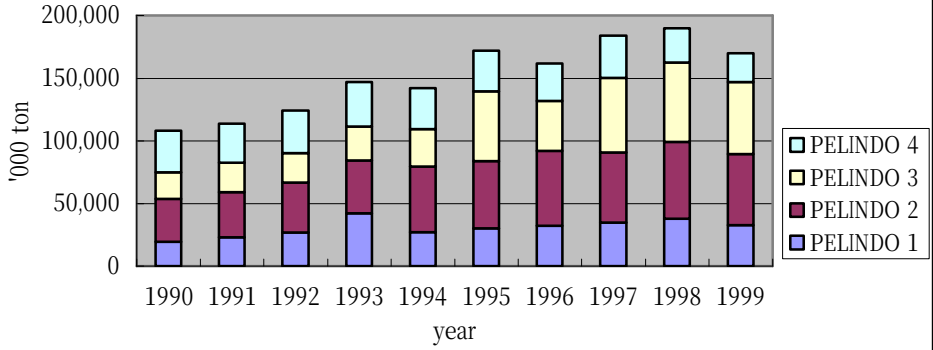


Figure 2.7.7 Annual Cargo Throughput (Inter Island) of Commercial Ports in Indonesia

Source: PELINDO I, II, III & IV

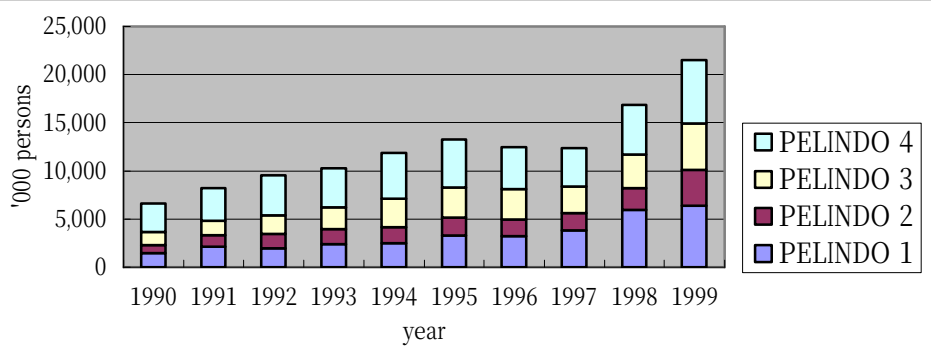


Figure 2.7.8 Annual Passengers of Commercial Ports in Indonesia

Source: PELINDO I, II, III & IV

Table 2.7.2 and 2.7.3 show domestic sea freight and sea passenger OD matrices. As for domestic sea freight, 40% and 25% of cargo originated from Sumatra and Java respectively, and Sumatra, Java and Kalimantan received about 30%, 30% and 21% of cargo respectively. As for domestic sea passenger, Sumatra and Kalimantan were main origins while Sumatra, Java and Kalimantan were main destination.

Table 2.7.2 Synthesized Domestic Sea Freight Matrix 1998 (1,000 tons/year)

Origin \ Destination		1	2	3	4	5	6	7	Total
Sumatra	1	3,100	1,500	3,300	-	500	-	-	8,400
DKI Jakarta	2	1,900	-	700	-	700	400	100	3,800
Java	3	1,000	500	1,100	300	2,000	400	100	5,400
Bali & Nusa Tenggaras	4	-	-	200	-	-	-	-	200
Kalimantan	5	100	500	800	-	1,300	200	-	2,900
Sulawesi	6	100	100	200	100	-	100	100	700
Maluku & Irian Jaya	7	100	-	-	-	-	100	100	300
Total		6,300	2,600	6,300	400	4,500	1,200	400	21,700

Source: Transport Sector Strategy Study for Indonesia 2000, DGSC

Table 2.7.3 Synthesized Domestic Sea Passenger Matrix 1998 (1,000 pax/year)

Origin \ Destination		1	2	3	4	5	6	7	Total
Sumatra	1	1,328	83	357	25	237	160	67	2,257
DKI Jakarta	2	83	-	6	3	51	47	40	230
Java	3	357	6	1	8	428	147	150	1,097
Bali & Nusa Tenggaras	4	25	3	8	58	34	75	32	235
Kalimantan	5	237	51	428	34	293	336	41	1,420
Sulawesi	6	160	47	147	75	336	204	210	1,179
Maluku & Irian Jaya	7	67	40	150	32	41	210	418	958
Total		2,257	230	1,097	235	1,420	1,179	958	7,376

Source: Transport Sector Strategy Study for Indonesia 2000, DGSC

2.7.3 Land Transportation

(1) Roads

The total length of Indonesia roads in 1998 reached 355 thousand km or 0.18 Km/Km2, an increase of 4.1% compared to the previous year. The proportion of road length was 47.3% of asphalted, 43.7% of non-asphalted and 9.0% of other type.

Main roads in Sumatra and Kalimantan are shown in Figures 2.7.9 and 2.7.10.

Our target ports, Ports of Pekanbaru, Jambi and Palembang in Sumatra, are connected with the Trans Sumatra Highway running midst low land on a parallel with the coasts. However, connection between these capital cities and the coast has not been well established except connection road between Pekanbaru and Dumai.

In Kalimantan, road development is limited. The Trans Kalimantan Highway has been partly developed connecting the capital cities of Central, South and East Kalimantan provinces. In West Kalimantan, the Highway only connects Pontianak with Singkawang, and Kuching, capital city of Sarawak, Malaysia. Connection between the coastal area and the inland is not developed.

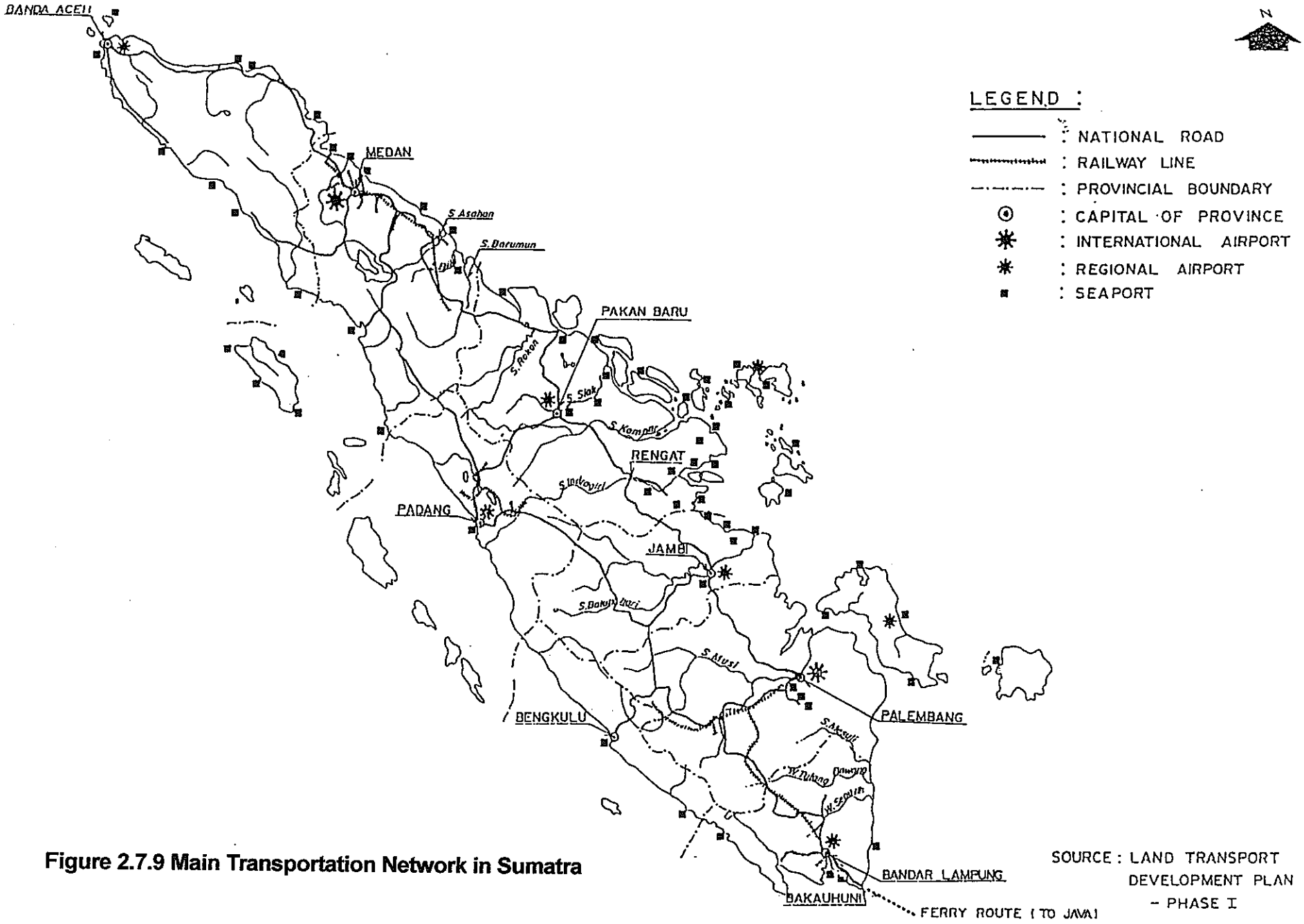


Figure 2.7.9 Main Transportation Network in Sumatra

SOURCE : LAND TRANSPORT DEVELOPMENT PLAN - PHASE I

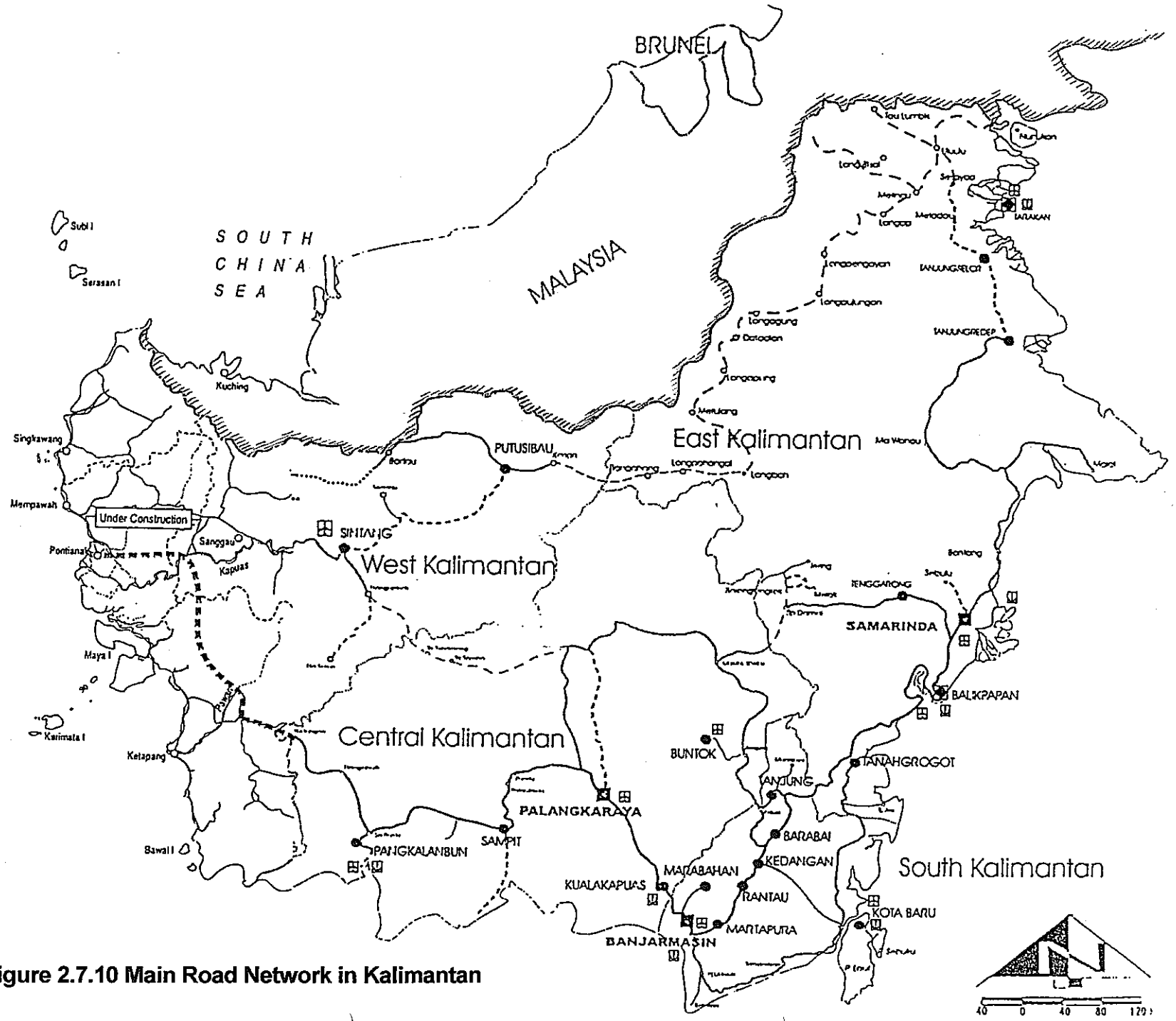


Figure 2.7.10 Main Road Network in Kalimantan

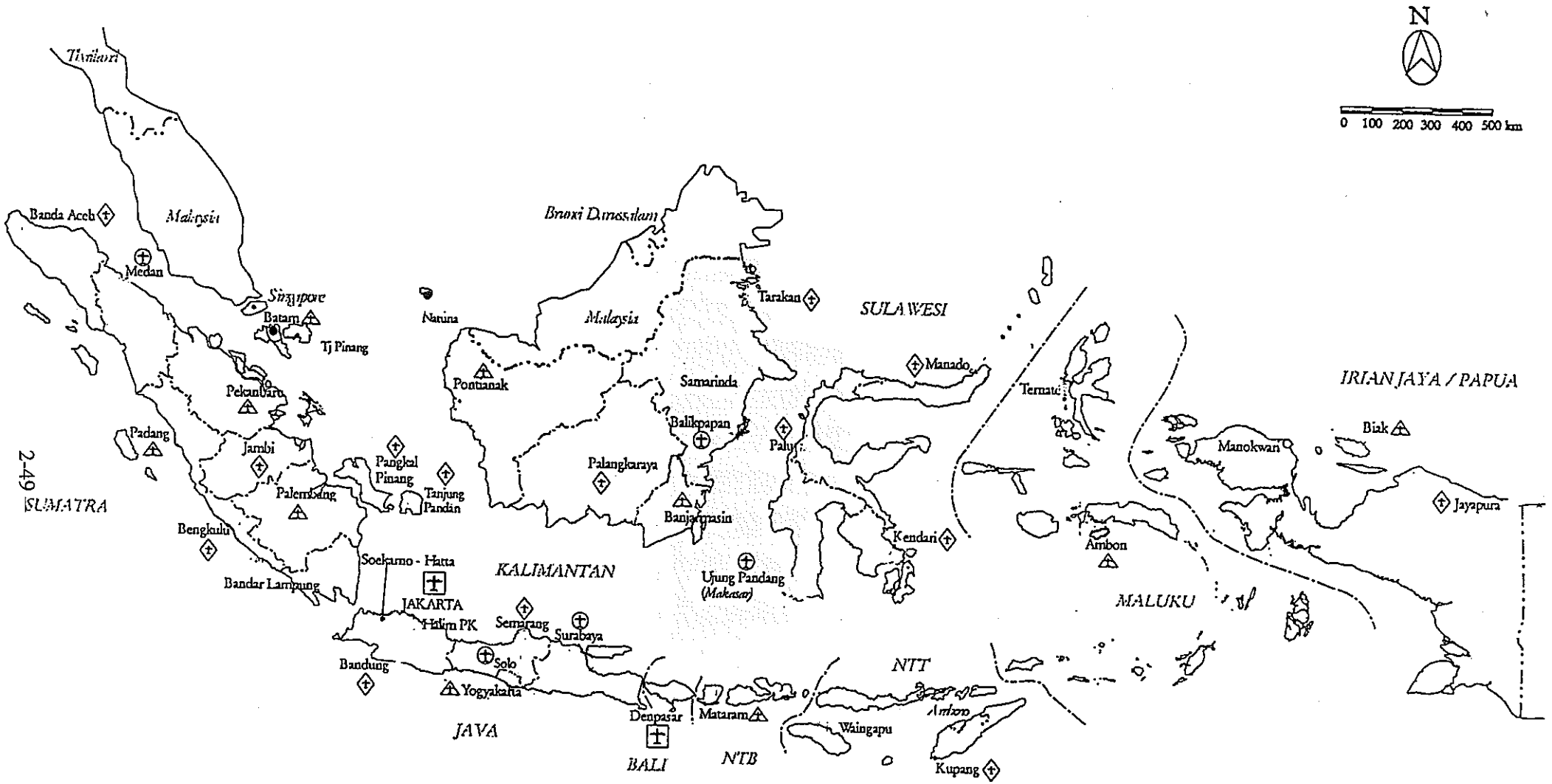


Figure 2.7.11 Strategic Airports in Indonesia

(2) Railway

Railway is operated in Java Island and in Banda Aceh, North Sumatra, West Sumatra, South Sumatra and Lampung of Sumatra Island. Only Port of Palembang has a railway connection out of our seven target ports at the moment. Railways in Indonesia play an important role for transportation of coal as well as agricultural products as well as passenger traffic and the freight volume increases year by year.

Main railways in Sumatra are shown in Figure 2.7.9.

2.7.4 Air Transportation

Indonesia has 123 airports (Class I-V) and 371 airstrips (non-Class). DGAC selected 31 strategic airports out of the Class airports as shown in Figure 2.7.11.

Numbers of domestic and international air passengers who departed, arrived and transferred from/at/through airports in Indonesia are shown in Figures 2.7.12 and 2.7.13. Both the domestic and international passengers decreased drastically in 1998, and the international demand started regaining from 1999 although the domestic demand continued to decrease.

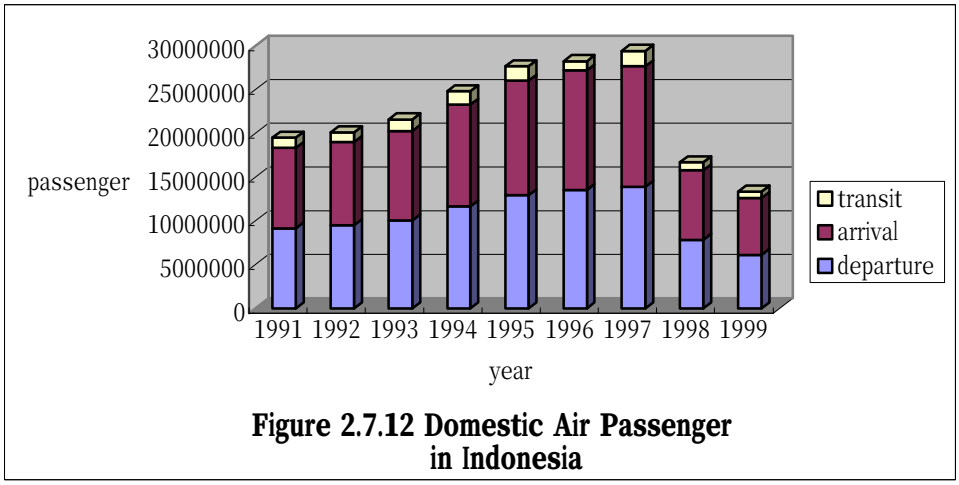


Figure 2.7.12 Domestic Air Passenger in Indonesia

Source: Statistic Indonesia 1995 & 1999, BPS

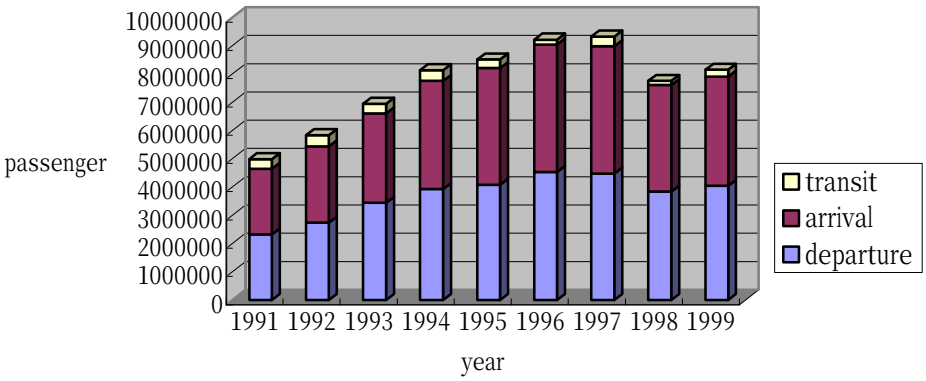


Figure 2.7.13 International Air Passenger in Indonesia

Source: Statistic Indonesia 1995 & 1999, BPS

Table 2.7.4 shows domestic air passenger OD matrix. These show that one third of domestic air passenger took off and landed at DKI Jakarta.

Table 2.7.4 Synthesized Domestic Air Passenger Matrix 1999 (1,000 pax/year)

Destination / Origin		1	2	3	4	5	6	7	Total
Sumatra	1	291	693	7	-	9	-	-	1,000
DKI Jakarta	2	693	-	617	313	318	147	34	2,122
Java	3	7	617	58	182	148	80	-	1,092
Bali & Nusa Tenggaras	4	-	313	182	235	-	33	2	765
Kalimantan	5	9	318	148	-	241	14	-	730
Sulawesi	6	-	147	80	33	14	205	44	523
Maluku & Irian Jaya	7	-	34	-	2	-	44	53	133
Total		1,000	2,122	1,092	765	730	523	133	6,365

Source: Transport Sector Strategy Study for Indonesia 2000, DGAC

2.8 Shipping

2.8.1 Present Situation of Indonesian Shipping

In Indonesian Shipping, foreign flag ships are predominant for export/import trade. Therefore for consideration the problem of Indonesian Shipping, the effort of foreign flag ships should be taken into account. Indonesian shipping companies number more than 1,300 and most are competitively small and weak.

Accordingly, if it is possible to consolidate these small and weak companies into a small number of large and strong companies, the cargo collecting ability of the consolidated companies will increase and cargo lots will become larger. The amount of topping cargo which is not related to the restriction of ship's allowable draft will decrease.

Table 2.8.1 Share of export / import cargo transport

	Indonesian flag ship (%)	Foreign flag ship (%)
1983	17.9	82.1
1985	16.1	83.9
1990	4.4	95.6
1995	3.3	96.7
1996	7.2	92.8
1997	3.9	96.1
1998	3.5	96.5
1999	4.8	95.2

Source: DGSC

Table 2.8.2 Share of domestic cargo transport

	Indonesian flag ship (%)	Foreign flag ship (%)
1983	65.3	34.7
1985	68.5	31.5
1990	56.9	43.1
1995	51.5	48.6
1996	53.3	46.7
1997	46.4	53.6
1998	46.9	53.1
1999	50.5	49.5

Source: DGSC

It stands to reason that the foreign flag ships are predominant because the largest part of export cargo is transported by FOB (free on board) contract, and therefore the amount of the transport of these cargo by Indonesian flag ships is very small.

On the other hand, the larger part of import cargo is transported by CIF (cost, insurance and freight) contract and therefore that the transport of these cargo by Indonesian flag ships is very rare. Under these circumstances, the balance of shipping trade of Indonesia

is consistently in red.

2.8.2 Indonesian Ships relating to Maritime Safety

Indonesian flag ships are not competitive with foreign flag ships in freight market in terms of ship safety. It is said that ratification of International Maritime Rules and Regulations is acceptable, but the preparation of relating domestic Maritime Rules and Regulations is lagging.

All the Indonesian flag ships, according to the Indonesian government policy, are registered and classified by BKI (Indonesian Classification Society who is also authorized to issue load line certificates) relating to ship safety.

BKI is the only ship classification society founded in South-East Asia, but BKI is not yet a member of International Association of Classification Societies (IACS).

Indonesian ship-owners, therefore have to class their ships in NK (Nippon Kaiji Kyokai) or other International Classification Societies who are members of IACS when they insure their ships.

2.8.3 River Transport by Barge, LCT and Wooden Sailing Ship

For the Principal River Ports in Indonesia, transport by barge, LCT (landing craft transport) and wooden sailing ship (KLM) should be considered. But wooden ships are not registered in BKI, because they are built by traditional method.

Also until 1994, BKI cancelled the registration of many barges because they do not follow to the BKI rules and regulations satisfactory. So they are less able to offer competitive lower freight rates in the market.

Shallow-draft barges and tug boats, etc. navigate freely outside of the channel. It seems that such barges and tugs, etc. are efficient to decrease the traffic demand for a dredged channel.

2.8.4 Modernization of Indonesian Fleet

Indonesia had fleet modernization programs such as Caraka Jaya Project and Scrap & Build Program of Pertamina. Caraka Jaya Project started in 1983 but this project has not made as much progress as had been expected due to the economical crisis of 1997.

If these projects well induced Indonesian shipping companies to build a standard ship, these projects would assist the modernization of Indonesian fleet.

2.9 Environmental Conservation Policy

2.9.1 Environmental Policy and relevant agency in Indonesia

Since a new environmental management law was established in 1997, the former environmental management law established in 1982 was repealed. The features of the new law are as follows:

(1) Strengthening environmental regulations for project activities.

- In order to prevent environmental pollution and negative impacts and to inspect compliance with the environmental regulations (Clause 22nd – 24th). Violations of the regulations shall be punished (Clause 25th – 27th). The regulation lays down the rules of investigation for government officers.

(2) Strengthening penalties for acts of violation of environmental regulations.

- In case of intentional violation, 500 million Rupiah or ten years imprisonment shall be fined.

(3) Strengthening environmental dispute settlement.

- The new law prescribes the right of filing suit in court for violation of the environmental regulations by organizations or communities (Clause 37th – 39th).

(4) Installation of the regulations of environmental information rights for the people of Indonesia.

- The new law prescribes that everybody has the right to know environmental information.
- Promoters must provide the environmental information about their projects to public.

Development projects in environmentally sensitive areas require Environmental Impact Assessment (EIA) according to the living environmental management law established in 1997. The rule known as “AMDAL” specifies that a project executing organization is required to submit the Environmental Impact Assessment Statement (ANDAL), Environmental Management Plan (RKL) and Environmental Monitoring Plan (RPL) to the government agency concerned.

There are two major environmental agencies in Indonesia. Ministry of Environment is in charge of Indonesian general environmental policy, such as establishment of law and regulation. Another is the Environmental Impact Management Agency (BAPEDAL: Badan Pengendalian Dampak Lingkungan). BAPEDAL functions as the examination organization of AMDAL (Analisis Mengenal Dampak Lingkungan; Analysis of Environmental Impacts).

Under BAPEDAL, there is an environmental monitoring center for environmental monitoring and information, which gathers the environmental data and information for examination of the EIA reports. Moreover, there are BAPEDAL branch offices in some provinces.

2.9.2 Environmental Impact Assessment Procedure

AMDAL is an integrated review process to coordinate the planning and the proposed development activities, particularly of their ecological, socio-economic and cultural components.

Indonesian environmental impact assessment law was amended in 1999, and the new EIA procedure took effect in November 2000.

Environmental Impact Management Agency (BAPEDAL) is responsible for the overall coordination of the EIA study.

According to the new procedure of EIA study, development projects over a certain scale (see Table 2.9.1) are required to follow a procedure for approval of their Environmental Impact Assessments (EIA). The procedure includes preparation of Terms of Reference (TOR) for EIA, EIA, Environmental Management Plan and Environmental Monitoring Plan. The procedure must include public participation in the process (see Figure 2.9.1).

The major difference in new law from the former one is public participation in the assessment procedure. In EIA procedure, the hearing from persons (parties) concerned with the project activities is required at certain steps.

Table 2.9.1 Criteria for EIA requirement (port development project)

Project type	Project description	Criteria of development project which requires EIA
Port development project	Berthing facility	Facility more than length 200m or area 6,000m^2
	Breakwater	More than length 200m
	Port facility	More than 5 ha
	Mooring buoy	More than 10,000DWT
Dredging	Initial dredging	Dredged soil volume more than 250,000m^3
	Maintenance dredging	Dredged soil volume more than 500,000m^3
Reclamation		More than area 25 ha or dredged soil volume 500,000.m^3
Soil dumping		Dumped soil volume more than 250,000m^3

(Source: Revised Environmental Impact Assessment Procedure in Indonesia)

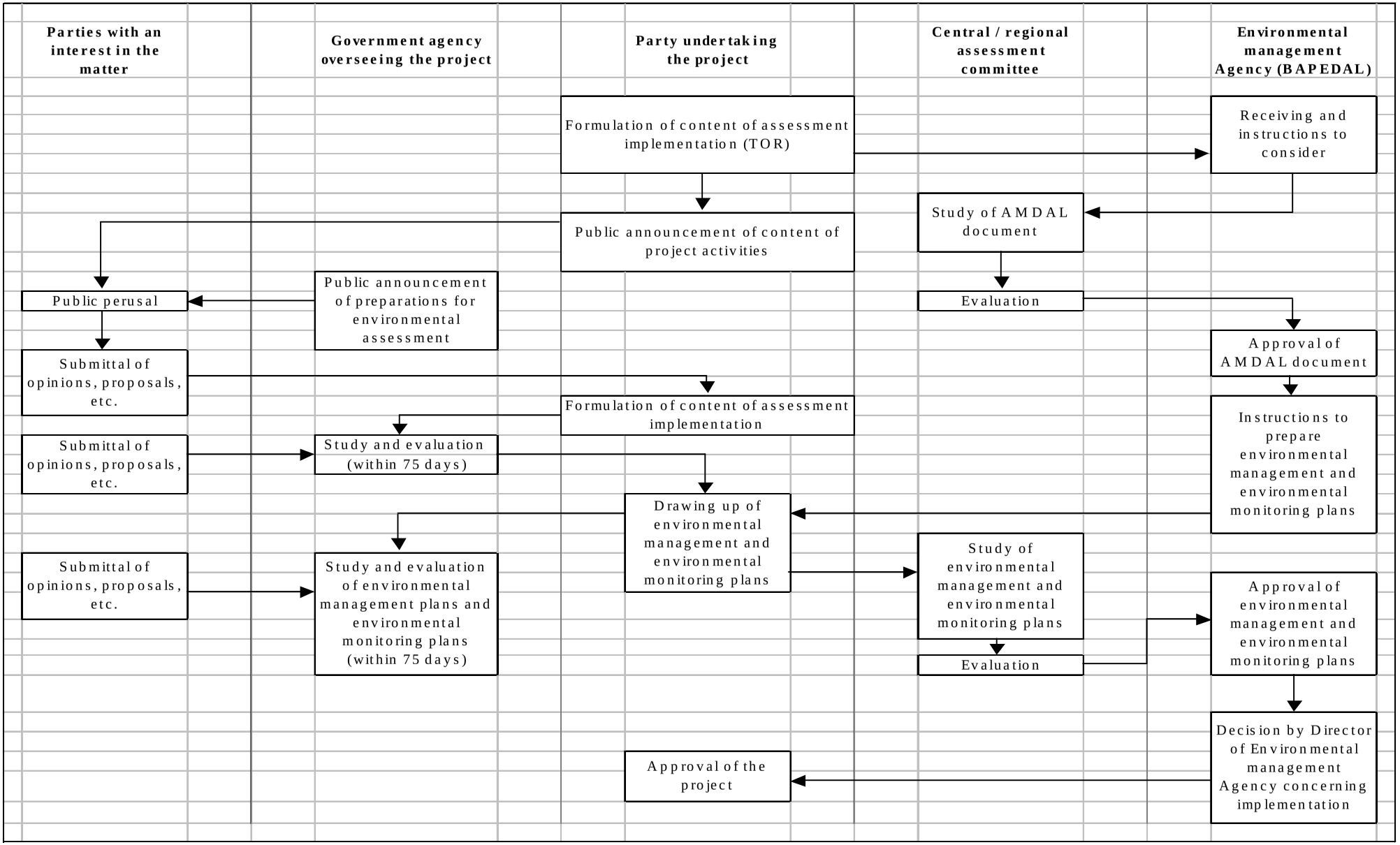


Figure 2.9.1 Procedure of Environmental Impact Assessment in Indonesia

2.10 Major Trade Partners and Outlook

2.10.1 Introduction

The assessment of trading partners is complicated by the recent economic crises which affected Asian economies the most. The use of Singapore as a transit port which is a very large destination for Indonesian goods far beyond its capacity to absorb such traffic itself is a further complicating factor as well as the difference of tonnage and US dollar values.

Asia remains among the world's fastest growing regions, although regional growth is predicted to slow to 5.3 % in 2001 from 7.1 % in 2000. This could rebound in 2002 to about 6.0 % but is dependent on various global factors and masks considerable variation according to Asian country. China, for example, is likely to continue its rapid growth of over 7 % in 2000 and 2001. India has also remained somewhat immune from the global crisis. The countries most affected by the financial crisis which started in 1997 (i.e., Thailand, the Philippines, Malaysia and Korea as well as Indonesia itself) all were subject to export constraints in 2000 and 2001 due to a variety of factors.

The following describes Indonesia's major trade partners and recent trends.

2.10.2 Developing Asia

ASEAN absorbed some 33 percent by weight and 17 percent by value of Indonesian exports in 1999. This includes Singapore.

In tonnage terms, ASEAN exports have been declining by 11 percent per year but increasing in US Dollar terms by 6 percent per year between 1995 and 1999.

2.10.3 Japan

Exports to Japan comprise mainly oil and gas and timber based products and amounted to 23 percent in tonnes and 21 percent in value in 1999. Both tonnage and value had been declining over the period perhaps reflecting stagnation in Japan's economy and fluctuating Yen / Dollar values.

2.10.4 HK and Rest of Asia

Hong Kong and rest of Asia absorbs about 29 percent by tonnage and 24 percent by value in 1999 with Hong Kong a relatively small amount of this. These markets have been growing consistently in both value and tonnage terms.

2.10.5 Europe

Exports to Europe have been growing and in 1999 made up 6 percent by tonnage but 15 percent by value of Indonesia's exports. The growth in tonnage has been strong but value growth has been small reflecting perhaps price sensitivity in this market for consumer goods and furniture.

2.10.6 North America

The USA market for Indonesian exports dominates the North American market. The N American market makes up about 3 percent by weight and 4 percent by value of Indonesian exports and has been growing steadily since 1995.

2.10.7 Total Exports

Since 1995, total exports by value have increased by 2 percent per year but in tonnage terms have been declining marginally, reflecting higher value goods.

Due to the depreciation of the Rupiah, the value of exports in Rupiah terms has increased by over 350 percent between 1995 and 1999.

2.11 Basic Figures Needed in the Economic Analysis

2.11.1 Introduction

This section deals with the direct economic aspects of the study.

Each port, its development alternatives and their key characteristics will be identified and are then subject to the economics-based selection process described below.

2.11.2 Bases of the Economic Analysis

Economic evaluation is a means to assess projects in economic terms by taking into account the resource costs of a project. By resource costs we mean the actual consumption of physical resources. Therefore, in economic evaluation, taxes and subsidies are excluded and allowance is made for market distortions through shadow pricing.

Economic evaluation is different from financial analysis, which seeks to measure financial rates of return and funding potential.

Economic evaluation in this study is a two-stage process. This is because two ports must be selected from the original seven ports. Therefore, the first stage involves a mainly qualitative process by which each main criteria (and economic is one of the main criteria) is used to assess each development alternative at each port. Each project is thereby ranked and two priority ports selected.

After the two priority ports are selected, the selected port will be studied in significantly more detail.

Detailed traffic forecasts and master plans will be prepared for each port and projects will be prepared for potential funding by the undertaking of feasibility studies. Such feasibility studies will evaluate each funding package in economic and financial terms. Projects will also be subject to social and environmental evaluation.

The period of evaluation is generally at least 20 years, and although infrastructure can have a 30 year life and more, and the impact of including discounted costs and benefits after 20 years becomes small.

In economic analysis, it is always the net benefit of investing that is important. That is to say, doing something has costs and benefits and doing nothing has (different) costs and benefits. For example, if we build a new port we incur large capital costs but generally, generate large benefits. If we do nothing, the capital costs are low (but some rehabilitation costs would be needed) and the additional costs (or disbenefits) of a congested port become more serious each year. In economic evaluation we compare the do nothing with the do something situation and it is the net result that indicates whether the country should invest in that project.

2.11.3 Undertaking the Economic Evaluation

Economic evaluation consists of several key aspects as follows:

(1) Project Capital Costs

The capital cost of each project will be prepared firstly in financial terms and then disaggregated to identify taxes, foreign costs and domestic costs. Domestic costs are then disaggregated further to identify skilled labour costs, unskilled labour costs, equipment costs and material costs.

Shadow pricing is then applied to those items as necessary, and usually including unskilled labour. The project costs are then estimated over the project implementation period.

Project costs would include additional infrastructure such as road or rail connections, taking account of other beneficiaries including taking into account whether highway tolls would offset some additional costs.

Annual operating and maintenance costs of the port would be assessed and shadow priced as appropriate.

(2) Benefits and Costs

Reduced transport costs provide the main net and quantifiable benefits from new port investment.

However, changes in transport costs may provide both benefits and costs. A new port will handle larger ships at lower unit costs and provide land-side benefits through higher productivity. Improved handling and storage will generate further benefits.

On the other hand, a new port may be some distance from the existing port hinterland and the origin and destination of cargoes. Therefore, the additional costs from relocation must be assessed.

It is also observed that in the do-nothing scenario, if a port reaches effective capacity, cargoes may be transferred to other ports or lightered to midstream thus incurring additional costs in the do-nothing scenario.

(3) Indirect Benefits And Costs

Other indirect benefits, but which are normally difficult to quantify in benefit cost terms include industrial and agricultural development and employment generation both directly and indirectly. The indirect benefits of port development can be large (i.e., new industries set up or relocate) but how employment will change over a twenty-year period for example is difficult to assess.

The likely change in production following a port development may be forecast as part of the traffic forecast, but care must be taken to attribute or allocate the correct benefits or value added to the port as opposed to the original investment in industry or agriculture.

(4) Intangible Benefits And Costs

Intangible costs and benefits include investment promotion in general as well as other indirect benefits such as encouragement of regional autonomy. By their nature, intangible benefits are not quantified.

(5) The Evaluation Process

The evaluation process begins by comparing the capital and annual economic costs with the annual economic benefits through an accepted economic evaluation procedure. The Economic Internal Rate of Return (EIRR) methodology is often used to do this because the methodology itself calculates the discount rate. Net Present Value (NPV) is also used but a discount rate must be specified. First year rate of return or NPV divided by Cost is also used depending on circumstances. Within this project, the EIRR and NPV will be calculated as well as other methods if appropriate.