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Volume 2 Maritime Indonesia Moving Into The Next Century

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'Martime Indonesia moving into the next century'

Delft University of Technology

Faculty of Mechanical Engineering and Marine Technology

Department of Marine Technology

Conference held at the Rotterdam World Trade Center, 30th March 1995

Editor: Prof.ir. S. Hengst

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1.

OPENING ADDRESS OF HIS EXCELLENCY MR. J.B. SOEDARMANTO KADARISMAN AMBASSADOR OF THE REPUBLIC OF INDONESIA TO THE KINGDOM OF THE NETHERLANDS AT THE OCCASION OF THE SEMINAR ON "MARITIME INDONESIA MOVING INTO THE NEXT CENTURY"

WORLD TRADE CENTER, ROTTERDAM, 30 MARCH 1995

Her Excellency Minister of Transport, Public Works and Water Management of the Kingdom of the Netherlands, Mrs. Jorritsma-Lebbink, His Excellency Minister of Communications of the Republic of Indonesia, Dr. Haryanto Dhanutirto, His Excellency Minister of Land, Mr. Soni Harsono, The Honourable Mayor of Rotterdam, Dr. Abraham Peper, Excellencies, Distinguished Audience, Ladies and Gentlemen,

It is indeed a privilege for me to be here amidst the distinguished audience at this Seminar. The presence of such prominent high government officials both from Indonesia and the Netherlands in this gathering reflects the significance of the Seminar and the importance they attached to our bilateral relations.

I am happy to witness the ever growing relationship between Indonesia and the Netherlands. A state visit to Indonesia will be conducted by Her Majesty Queen Beatrix and Prince Claus in the midst of our independence anniversary in August this year. I am confident that this visit will definitely ushered a new chapter in our bilateral relations, a constructive relationship on the basis of mutual respect and mutual understanding as an equal partners.

I am also pleased to note that the year of 1995 is the year of celebration for Indonesia, to mark the 50th Anniversary of its existence as an independent nation. In this occasion, Indonesia would like to present to the world the achievements of its development and the progress of its endeavours to respond to the future challenges. In this context, Indonesia directed its attention to Europe. This year Indonesia is given the challenging opportunity as a "country partner" of the Hannover Fair 1995 which will be officially opened jointly by President Soeharto and Chancellor Helmut Kohl on the 2nd of April 1995. Following the Fair, a series of activities will be held in major cities of Europe.

In the Netherlands, a number of noteworthy events will be conducted throughout the year.

In this regard, the Indonesian Embassy is entrusted to organize seminars, exhibitions, business meetings and cultural performances in close cooperation with our respective Dutch counterpart.

Excellencies, Ladies and Gentlemen,

Today Seminar is indeed a positive and constructive undertaking, a reflection of cordial and close cooperation between Indonesia and the Netherlands.

In this respect I would like to express my sincere thanks to the Organizing Committee for giving me a valuable opportunity to deliver an opening address to such an important Seminar. I am confident that the Seminar, organized in an excellent manner and accentuated by the appropriate theme, on "Maritime Indonesia Moving Into The Next Century" could generate intensive and extensive discussions as well as an exchange of views of common interests between Indonesia and the Netherlands.

There are several reasons, Excellencies, Ladies and Gentlemen, underlining the significance of the Seminar :

First of all, perhaps I would say that the Seminar is initiated by a distinguished organization of professions, HATMI/Himpunan Ahli Teknologi Maritim Indonesia (The Association of Indonesian Maritime Engineers) and jointly organized in close cooperation with prominent institutions, namely The Port of Rotterdam and the University of Technology Delft.

The Netherlands, a country below the sea-level, although small in size, has proven otherwise in many respects. The Netherlands is not only well-known as a trading nation, but also noted as a seafaring nation.

The Netherlands has also shown a mastery of art in hydraulic engineering and in shipbuilding. There are dikes that could stand against the strong wind and the powerful swells of the North Sea. Take a look at those vessels that have been build, not only in the early stages of the new era of history, but also of today where many Dutch flag vessels plying around the seven seas.

The Port of Rotterdam, for many years, has maintained its reputation as a gateway to Europe, due its role as a transit port and as a leading port in terms of cargo-flow which recently reached almost 300 millions tons.

The University of Technology Delft is a recognized "par excellence" institution which produces qualified engineers in hydraulic, shipbuilding and maritime field.

Excellencies, Ladies and Gentlemen,

Indonesia, the biggest archipelagic state in the world is a country of thousands of islands, therefore, a maritime country. In this respect, shipping as dominant factor, plays a vital role to the life-line of the country. On the other hand, there are abundant resources of the sea which have to be cultivated and developed.

In the international fora, we are observing the growing demand for trade liberalizations with the emergence of free trade areas. This phenomena which will markedly encourage the tremendous movements of commodities among nations, resulted in rapid and growing demands for transport services. In this regard, the expansion of the sea-transportation is imperative in the coming years.

Considering the above-mentioned reasons, I sincerely believe that the Seminar will be the best possible forum to find ways and means to develop further the mutually beneficial cooperation between Indonesia and the Netherlands, especially in the maritime field. Since the Seminar are participated by many prominent experts in their related profession, I am sure that it will bring a fruitful outcome.

Excellencies, Ladies and Gentlemen,

In concluding my address, I would like to once again extend our gratitude and appreciation to The Port of Rotterdam and The University of Technology Delft for their collaboration. I also wish to express our special thanks to the Ministry of Transport, Public Works and Water Management and the City of Rotterdam for their support, and special appreciation to all concerned parties for their contribution in making this Seminar a worthwhile forum.

Allow me now to declare the Seminar on "Maritime Indonesia Moving Into The Next Century" officially open !

I wish you every success !

2.

DEVELOPMENTS IN PORTS AND SHIPPING IN INDONESIA INTO THE NEXT CENTURY VIS-A-VIS FUTURE CO-OPERATION POSSIBILITIES

by

Dr. Haryanto Dhanutirto

Minister for Communications of the Republic of Indonesia

On the occasion of

**Seminar on Maritime Indonesia Moving into the 21st Century
Rotterdam, March 30, 1995**

Her Excellency Minister for Transport and Public Works Mrs. A. Jorritsma,
Distinguished Guests, Participants of the Seminar, Ladies and Gentlemen,

It is a great pleasure for me to have the opportunity to attend this seminar. As the Minister for Communications of the Republic of Indonesia, I would like to express my sincere appreciation and thanks to the Organizer of the Seminar on Maritime Indonesia Moving into the 21st Century for realizing this Seminar. I think that this Seminar is important, particularly in connection with our strategic efforts to expedite the development of Sea Transportation in Indonesia. It is our objective to have a strong, reliable, efficient and effective sea transportation system, which is supported by a close and mutually benefit co-operation with maritime powers from many countries including the Netherlands. In this occasion, I would like to say a few words about several important matters on the Developments in Ports and Shipping in Indonesia into the next century via-a-vis future co-operation possibilities.

Ladies and Gentlemen,

The development of sea transportation in Indonesia is an integral part of the National Development that is now entering the Sixth Five-year Development (Pelita VI), the first five-year stage of the Second Long Term Development Plan. Moreover, sea transportation development is part of the National Transportation System (Sistrannas) which is aimed at triggering and supporting the national development, national distribution pattern, regional development and development of international relationship in the fields of trade, tourism and et cetera.

In realizing the sea transportation development, many efforts have been made until now such as rehabilitation and improvement of existing sea ports, construction of new sea ports, construction and development of container terminals, improvement of cargo handling facilities, improvement and development of shipping safety facilities, development of shipping fleet that includes construction of new passenger vessels, semi container and container cargo vessels, and bulk cargo vessels.

Meanwhile, in the framework of creating a conducive climate for sea transport business, several steps of deregulation and "debueraucratization" have been taken through :

1. the Presidential instruction (Inpres) No. 5 of 1984 regarding the simplification of license procedure in sea transport business;
2. the Presidential Instruction (Inpres) No. 4 of 1985 regarding the ease of cargo flow at port to avoid high cost economy;
3. the Package of November 21st (Paknov 21) of 1988 especially the Government Regulation (PP) No. 17 of 1988 regarding the organization and business of sea transportation, and the Government Regulation (PP) No. 18 of 1988 regarding the provision of information on cargo and ship's space;
4. reorganization of port business institutions;
5. completion of the Government Regulation as the implementation of the Indonesian Shipping Law (Law No. 21 of 1992).

These efforts give significant impacts to the development of other sector activities such as the increase of non-oil export, the increase of international tourist flow, the ease of domestic distribution of people and goods, and the regional development including the breaking through of the remote areas. However, it seems to me that the results have not been optimum yet, even several essential problems have appeared such as the domination of foreign flag vessels in carrying export and import goods as well as carrying domestic cargo, that need brilliance thoughts to solve them.

Ladies and Gentlemen,

The national development of Indonesia in the Second Long Term

Development Plan will be spurred to a higher growth rate. This can be seen by the projected economic growth of 6.2 % per annum in average in Pelita VI and climbing up to 9% per annum in average in Pelita X. Industrial sector, that stimulates the economic growth is demanded to grow faster than other sectors. The growth rate of this sector is projected to increase from 9 % per annum in Pelita VI to 11 % per annum in Pelita X.

We are aware that it is not easy to realize the mentioned economic growth in the era of globalization, due to the more severe competition in the business fields and the condition of sea transportation in Indonesia nowadays. In sea transportation, for example, we are

facing to the tough competition in the fields of port and shipping businesses, the low efficiency and level of services, the limited government's budget can be provided, and the problems of Human Resources capability in port and shipping businesses.

In anticipating the mentioned conditions, and triggered by various economic and trade co-operations with ASEAN, Asia Pacific and European Union countries, we are demanded to speed up the port and shipping development. Concerning the matter, we have set up several port and shipping development programs in Pelita VI, among others:

1. Port Development, that consists of: development of sea port facilities such as construction of berth, stacking yard, and terminals both for passenger and cargo; improvement and construction of container ports of Belawan, Tanjung Priok and Tanjung Perak, Panjang, Tanjung Emas, Ujung Pandang and Batam; and improvement of semi container ports of Lhokseumawe, Dumai, Palembang, Teluk Bayur, Pontianak, Banjarmasin, Banten, Balikpapan, Samarinda, Tenau, Bitung, Ambon, Sorong and Biak.
2. Development of Shipping Safety Facilities, that consists of: development of navigation aid facilities, maritime telecommunication, maintenance of shipping channel depth, law enforcement and socialization of shipping regulations, improvement of human resource capability in port services, and improvement of port management and port information system.
3. Development of Sea Transportation Fleet, that consists of: development of shipping fleet for domestic (Nusantara) shipping, international shipping, traditional people shipping and pioneer shipping; development of an efficient shipping network system; improvement of human resource capability in shipping services, and regulation on sea transportation that meets the Indonesian Shipping Law and relevant international conventions.

Ladies and Gentlemen,

In spurring the implementation of the development programs on port and shipping, the Government continuously makes efforts to create opportunity and to encourage private sector investment. In Pelita VI, the amount of investment needed for sea transportation development is estimated about Rp. 10.5 trillion (equivalent to US\$ 5 billion), in which the contribution of private sector is about 60%.

Regarding that matter, several important policies have been carrying out are:

1. Promoting the expansion and improvement of the co-operation between State Owned Enterprises and Private Companies to optimally exploit the Enterprises' assets through Joint Management or Joint Operation in the schemes of BOT (Built-Operate-Transfer) and BOO (Built-Operate-Own).
2. Encouraging Foreign Investors to participate in port and shipping development through direct investment and private-to-private cooperations.

3. Implementation of tariff policy that is aimed at giving opportunity to gain realistic benefit for service provider.

The objective of the policy is to keep sea transport and port service businesses moving, besides considering the people's ability to afford the services and the impacts on the national economic stability.

Ladies and Gentlemen,

In connection with the implementation of Joint Operation Policy, as an information, recently there are 2 (two) committed joint operation projects between State Owned Enterprises and Private Companies. Those are Reclamation of East Ancol-Jakarta and Development of Container Terminal III Tanjung Priok-Jakarta, with estimated investment of about Rp. 3.4 trillion (equivalent to US\$ 1.7 billion).

Meanwhile, several such projects that are in process in the Ministry Of Finance, among others are: Development of Ciwandan, Cigading and Tanjung Priok Ports, Construction of Bojonegara Port, and Development of Ferry Vessel Operation on the routes of Semarang-Ujung Pandang, Jakarta, Surabaya, and Belawan-Penang (Malaysia), with estimated investment of over Rp. 5 trillion (equivalent to US\$ 2.5 billion).

Besides of these projects, there are also potential opportunities opened for further co-operations, among others are: Development of Bulk Cargo Terminals at several ports, Development of Full and Semi Container Terminals at several ports, and Procurement and Operation of Cargo Handling Equipment for several ports.

Ladies and Gentlemen,

The Meeting of the Seventh Indonesia-The Netherlands Working Group on Transportation held in The Hague on 17-18 January 1995 underlined the importance of the co-operation between private sectors in the two countries (private-to-private), while the governments act as facilitators. Therefore, several co-operations have been identified in the Working Group should be clarified. These co-operations are:

1. Co-operation between the Dutch companies and PT. (Persero) Jakarta Lloyd, PT. (Persero) Varuna Tirta Prakasa and Shipowner Association;
2. Co-operation related to the implementation of Maritime Sector Training Program (MSTP);
3. Co-operation on Dredging between the Dutch Dredging Companies and PT. (Persero) Pengerukan Indonesia;
4. Co-operation on Port between Port Authority of Rotterdam and PT. (Persero) Pelabuhan Indonesia.

I hope that these cooperation activities can be realized as soon as possible and will be beneficial to both countries.

Ladies and Gentlemen,

Those are several important matters I could say in this seminar. I hope that this seminar could result in concrete ideas and recommendations for planning and developing ports and shipping which are reliable, efficient and effective in Indonesia moving into the 21st century. participants of the seminar, I wish success for us.

Thank you.

It is a common mistake to think of the world as a single entity and to see it as a whole. In fact, the world is a collection of many different parts, each with its own unique characteristics and needs.

The world is a complex and diverse place, and it is important to understand the different parts that make it up.

In this paper, I will discuss the different parts of the world and how they are interconnected. I will also discuss the challenges that the world faces and how we can work together to solve them. I hope that this paper will provide a better understanding of the world and its many different parts.

3.

Key-note address by the Minister of Transport and Public Works,

Ms A. Jorritsma-Labbink, at the congress 'Maritime Indonesia

moving into the next century', on Thursday 30 March 1995.

Your Excellency, Ladies and Gentlemen,

Cooperation between the Netherlands and Indonesia is intensifying. In 1993 the Netherlands imported goods to the value of 1.5 billion guilders from Indonesia. Exports amounted to 1.1 billion guilders. So, since 1992 exports have risen considerably on both sides, by about 30 per cent.

Apart from the growing volume of transport by sea, there are other developments, pointing to more intensive commercial links. A number of Dutch shipowners sail into Indonesian ports, have offices there and use Indonesian crews. For example, the Dutch company 'Ned-Lloyd Lijnen' employs 400 Indonesian seamen. So far at least 140 Dutch companies have invested in Indonesia; that is a total investment of 2.5 billion dollars.

The transport links between our two countries boast a long tradition. In eighties and nineties we started to intensify those links in the shipping area. These developments are now paying dividends, as you will have realized from the figures I just mentioned. Since 1985 the Indonesian and Dutch authorities held regular consultations in the Working Group on Communications. In 1991 that led to the Memorandum of Understanding concerning cooperation between the two countries in the field of communications.

I believe that Indonesia's choice of our country as the 'Gateway to Europe' is a very positive step. I am looking forward to receiving the many Indonesian ships which will be directed to Rotterdam with their goods for the whole of Europe. It is a sign that your country values the quality of our logistical services package, and that we have more to offer you than transport alone.

Both our governments share the task of ensuring that these commercial relationships develop further. As was agreed during meetings of Working Group of Communications, the possibilities of far-reaching commercial cooperation are now being studied, discussed or even implemented. This study is in the hands of the Dutch consultancy Dynamar. It is clear that even greater cooperation is possible that we have enjoyed so far.

There is a feeling in the Netherlands that the Indonesian government's more liberal market policy is beginning to pay off. I am thinking, for example, of the reduction in the number of documents needed for clearing ships. This increases both speed and efficiency.

Ladies and Gentlemen,

This congress was organized as the result of a visit by Indonesian ex-students to the Technical University in Delft. While talking to their former fellow-students, they came to the conclusion that Indonesia and the Netherlands could work together much more, especially in the commercial area. The success of this congress proved that there are more people who believe that the business opportunities between our two countries are not yet fully exploited.

Traffic and transport is one of the promising sectors for further cooperation. Planning and managing a good infrastructure, improving the traffic and transport sector and stimulating telecommunication and telematics have a high priority both in Indonesia, as well as in the Netherlands. During the visit of Minister Dhanutirto to the Netherlands in December last year, we discussed the promising prospects for cooperation. From the Indonesian side you have presented an excellent follow-up during the meeting of our Working Group in January.

Setting up a good commercial relationship between Indonesia and the Netherlands is an intensive and delicate process. But the relationship established last year between PTT Telecom and Indonesian private and public parties, proves that it is possible. The results: considerable investment. Cooperation between governments and trade and industry in both countries has also proved fruitful in the railway and airport sectors.

What else, apart from less bureaucracy, is required to make our commercial relationships thrive even better? Knowledge and Information. The transfer of knowledge and information is essential to the maintenance of good relationships. And you can view this congress, as well as the meetings of the Working Group of Communications, as a way of giving shape to this transfer of knowledge.

So I heartily support Minister Haryanto's proposal that we set up a joint Centre of Excellence in Jakarta, where a permanent exchange of knowledge and information can take place between our countries.

Ladies and Gentlemen,

I want to talk in more detail about the Netherlands as a 'Gateway to Europe'. The port of Rotterdam plays a significant role. In 1994 Rotterdam received 32,000 seagoing ships, 170,000 river craft and the transshipment of goods amounted to 300 million tons. Because there are no locks, very large oil tankers, bulk carriers and container ships can sail into the port of Rotterdam.

As we all know, Rotterdam provides excellent facilities for intermodal transport to and from the European hinterland. Goods move via a number of means of transport and

along different transportation channels, such as road, water, rail, air and pipelines. Good telephone connections are essential for proper communication and logistical planning. This network is a prerequisite for an effective, efficient and highly qualified distribution system.

Why am I emphasising this? To make it clear that, over the years, we have learned to understand the importance of the flow of information in order to control transport chains. We have systematically anticipated tendencies within traffic and transport. The strength of the Netherlands lies not much in the fact that we have skippers who can command our ships and engine-drivers who drive our trains.

No, our strength lies in the fact that we control these different forms of transportation in such a way that goods are moved rapidly and efficiently. Straight from the ships onto the train, and then on to Germany or France - or even deeper into Europe.

An important factor in maintaining a two-way flow of trade is tackling bottlenecks in the logistical chains. Therefore, I think it would be useful if the various hold-ups, which exist in the flow of trade between Indonesia and the Netherlands, were systematically examined in the various discussion groups of this congress. The solution that will be found can be presented to the Working Group and the Mixed Commission for our bilateral economic cooperation.

Ladies and Gentlemen,

The Netherlands has a variety of reasons for strengthening shipping links with Indonesia. Our historical relationship contributes to this. But we can also see that Indonesia is going to play an increasingly important economic role. We are already aware that Rotterdam is handling more and more goods from Indonesia every year. So I am very optimistic about the prospects for Maritime Indonesia moving into the next century.

Indonesia is geographically almost as big as Europe. The country faces many opportunities. Fine opportunities to improve its position in the international market. With the proper infrastructure, stock control systems, stronger links with the market and the control of transport chains, your country can thrust its way to the economic top in the next century.

I am convinced that Indonesia will play an important role in the world economy in the next century. The question is: what role? I believe that your country can become a mainport in its region. Indonesia, like the Netherlands, has been a maritime nation for centuries. As in the Netherlands, transport is a significant part of your economy. Just as in the Netherlands, shipping policy is being given an increasingly liberal and deregulated character.

In both our countries a number of problems stand in the way of a smooth operating of the economy, and, up to a point, they are comparable. Think, for example, of traffic problems: congestion, jams and the pressure on the environment.

The Netherlands has learned that a good flow of transport, by road, by rail, in the air and on the water, is vitally important. An excellent port is worthless if the goods cannot be transported inland. That is why we are continually improving our inland connections, for instance Betuwe-line and High Speed Rail. We are trying to find solutions to the traffic jams and congestion that interfere with the rapid transit of goods.

Indonesia is confronted with comparable problems. Jakarta is struggling with a difficult and persistent traffic problem. Many streams of traffic merge in this region. Traffic grinds to a halt because of the large population and its increasing mobility. The probability of foreign investors locating in Indonesia will undoubtedly increase as a result.

So, I am very pleased that Indonesia is preparing to implement 'Sustainable Transport Jakarta' project, through which the traffic and transport problem is being tackled in an integrated way.

This project, in which by international banks are interested, offers the opportunity to pursue a policy through which effective investments can be made in and for Indonesia.

In the Netherlands we approach our traffic and transport problems in a similar, integrated way. All parties, such as the central government, city councils and branch organizations, are involved in the planning and implementation. The results of such an integrated approach can be seen in Rotterdam every day. Transport in the Netherlands ports has been optimized. However, the dynamics of transport, with all its new technological developments, demand that we remain alert to ways of improving this sector.

Ladies and Gentlemen,

The realization of far-reaching commercial cooperation depends on a large number of factors. The exchange of knowledge and information is probably the most important. So I hope that this congress will lead to many new contacts, and that the cooperation we are hoping for will take shape here. It is my pleasure that I am in a position to facilitate as a co-sponsor a pilot-training project for the staff of five major ports in Indonesia, on system of port management and related topics, together with the Indonesian port authorities and the port authority of Rotterdam.

The Netherlands want to build up a relationship with Indonesia from which we can both profit. Working together to solve problems and create opportunities. Today's problems and the future's problems. And when I think about the future, I am filled with confidence.

Then I see before me an image of Indonesia and the Netherlands in the 21st century: both countries are Gateway to their part of the world. Both countries are logistical link for their region and the surrounding countries. And both countries are heading for a prosperous future in their region.

I wish you a fruitful conference.

4.

THE INDONESIAN VIEW-POINT WITH REGARDS TO THE NEEDS IN THE DEVELOPMENT OF HUMAN RESOURCES IN THE INDONESIAN MARITIME FIELD

**by
R Tabiat**

Commissioner, P.T. PAL, the State owned shipyard in Surabaya.

The paper begins with a brief outline of the geographical background of Indonesia, its human resources, the National Development Policy dedicated to improve the human resources quality, the communication that includes transportation to greatly support the economical growth.

A specific illustration is given of how the world shipping industry is implying the IBO Resolution A 680 (17), due to shipping catastrophes over the last 20 years and growing average age of the world fleet. The improvement processes necessary in company to obtain the required level of Safety and Quality Management need qualified maritime profession away from traditional maritime nations, but met with constantly reduced supply of qualified officers.

The conclusions are that modern education and training facilities of international standard are needed to meet the current demands of well trained seafarers among shipping industry in a world of steady technological advance.

INTRODUCTION

Indonesia is the largest maritime country in the world consisting of about thirty archipelagoes with 13,667 islands, 56 % of it have not been given names and only 7 % inhabited.

The territory covers a sea area of about 7.9 millions 5.7 kms, included the Exclusive Economic Zone and 1.9 millions sq.kms of land.

At a glance of a map of Indonesia, it stretches along the equator covering the distance from the western end of the country to the eastern end of about 5110 kms and from south to north about 1888 kms.

It covers the entire area of Europe. Indonesia lies between two oceans, the Indian Ocean and the Pacific, and two Continents, Asia and Australia. It is on the cross road.

Given a fair understanding of the Indonesia's setting, one will understand better about its problems and solutions.

Reflecting on the geographical characteristic of Indonesia, it is easy to conclude that transportations and communications is of utmost important, especially sea transportation. Ships are the essential element that unites all people into one dependent community, create the ties that bind the nation together and make interdependency a practical reality.

II. HUMAN RESOURCES

Population

Seen from the number of population, Indonesia is the fourth biggest country after China, India and Usa According to the population census held in 1990 the number of Indonesia's population was 179.4 million. The population's growth was 1.98% compared to the population number in 1980.

About 60% of the total population live in the island of Java where the area of Java represents about 7% of the country's land territory. On the other hand the island of Kalimantan which covers 28% of the total land territory is inhabited by 5% of the population. The population density varies substantially among the 27 provinces but the average density of Indonesia is 98.9 people/square kilometer When the density in Java amounted to 814 people per square kilometer there are only seven people per square kilometer in Kalimantan.

As a whole the number of female are more than male as indicated in the sex ratio less than 100, but this does not happen in every province. In Sumatra and Kalimantan for instance, the number of male are more.

In line with the population growth, the number of households during the last ten years period increased by more than nine million from 30.4 in 1980 to 40.0 million but the size of every household decreased from the average of 4.9 people to 4.5 during the same

period. Such a decrease happened in all provinces within the country as a result of the family planning policy introduced by the Government of Indonesia .

Migration

While the migration from/to foreign countries, the International migration can be seen in overhead 2.3; about 17.8 million people had ever migrated. Most of the migration expenses were financed by the Government of Indonesia as a follow-up of the general transmigration policy carried out by the government after the creation of employment's opportunity in other islands in the effort to spread out the population density more evenly.

The number of transmigrated people were relatively small but the trend was always increasing since the budget year 1988/1989.

During the budget year 1991/1992 there were 75.250 households or approximately 376.250 people transmigrated mostly from the islands of Java and Bali. They are mostly in the field of agricultural sector and provided with housing, equipment and land of 20.000 square meters per household, some are in the manufacturing or production in newly erected factories.

Compared to the internal migration figures, the number of International migration that the International migration in 1991 was negative. It means that more people were leaving than those entering Indonesia. Indonesia citizen staying abroad were about 251.000 people and foreigner staying in Indonesia were about 235.000 people in 1991.

Labor Force

The working age population is the population aged 10 years and over consisting of those who are economically active and those who are not.

The labor force participation rate which is the proportion of the economically active population, showed that it fluctuated about 57% during the year 1986.

It varies according to the provinces from 45.4% in Jakarta Municipal city to 67.8% in Bali island.

Most people worked in the agricultural sector except factoring industry, wholesale or retail trade, restaurants and public services. It can be observed that most of them worked 35-44 hours per week, but about 30% worked less then 10 hours/week

The education level of the population in general is still low.

Supply and demand of workers

Only 20% of the job applicants obtained placements. Civil servants in 1991 amounted to 3.9 million people, 1.6 million work with several ministries, 1.7 million work with the

autonomous regional offices or state owned companies and the rest are employed with the 27 provincial authorities.

Unemployment's reached 2.3% in Indonesia during the year 1985-1990 and the labor growth reached 11.9 million people while the available job could only absorb 11.5 million workers during the latest five years program of development. There were a surplus of 400.000 workers when added to the over supply of previous period of 2.2 million people it becomes 2.6 million unemployment in 1994, at the ginning of the VI-th five years program of development in 1994.

Minimum physical -requirements

The social welfare of the workers is reflected in the wages they obtained which in general are low. It can be mentioned that the wages they received are lower than the physical requirement needed.

III. NATIONAL POLICY

The Indonesian Second Grand Strategy of the National Guideline mentioning a.o. as follows:

"The second long Term Development plan is dedicated to improve and develop the human resource quality in whole Indonesian society to get more advance, self supported and prosperous"

In the other chapter, about services a.o. stating :

"The development of communication that includes transportation, post and telecommunication should be directed to greatly support economical growth, national stability for disseminating and spread up the results of the development by penetrating the isolated least developed and remote places to strengthen the archipelagoes unity and national resilience"

Education.

An increase in number of people attending school can be seen in the age group of 7-12 years and 13-15 years, as there is a compulsory education programme introduced by the Government of Indonesia.

In 1994, there are 48 state owned and 952 private universities I academies with 531.100 students enrolled at the state universities / academies with 43.000 lectures I teachers and 1.242.100 students at the private universities I academies with 92.000 lectures I teachers.

Illiterate above 10 years of age number to 15,9 % (average). Illiterate in urban area are about 8 % and in rural area about 19 percent.

I. FOCUSING ON MARITIME EDUCATION AND TRAINING

There is no part of the world where the sea predominates so markedly over the land as in the Indo-Pacific area including Indonesia, you have only to look at the map. Through proper management of the ocean, we can greatly increase our well-being on the land. When we come to farm the ocean, we can expect them to produce much greater quantities of desirable food substances, mineral, corals, beads etc.

We know that over 90 % of all wood trade is and must be carried by sea.

We have treated the sea as hunting grounds for fishermen and high ways for ships.

Alfred the Great, the King - of England over a thousand years ago, said "There is no advantage in living on an island unless you control the waters that wash its shores".

As a maritime nation Indonesia is handicapped by shortage of qualified trained maritime personnel, not only seafarers but also the administrators and executives who possess an adequate knowledge of ports, shipping, cargo and allied matters.

Background.

Like other field of business, the world shipping has also undergone an actual technological revolution.

This industry is now based on high technology. Automation and the use of computers in operation and management are far advanced.

The technical operation of vessels and the management of shipping enterprises have become very specialized.

Furthermore, what needs to be acknowledged is the international character of the mass of the world shipping.

Except for that part of shipping which is engaged solely in interinsular or coastal waters of individual countries. The rest is employed in international trades.

Thousands of ships of all types and sizes ply the ocean of the world and visit ports of different countries for loading and discharging operations. It is in the interest of all nation, develop and developing, that all these ships are operated safely so that they do not pose a danger to other ships, ports and the marine environment of their own country, or to the ships, ports and marine environments of other countries.

For ensuring maritime safety, highly trained technical maritime personnel is of utmost importance, both afloat and ashore.

Safety, Pollution Prevention and Quality Management for Safe Ship Operation.

The sea transportation industry has been focused upon after a number of serious accidents.

Certain accidents have triggered an increased public pressure and resulted in laws and requirements with impacts which are not totally foreseeable.

The shipping catastrophes reviewed over the last 20 years show a clear increasing trend.

The accident of "Herald of Free Enterprise" and "Scandinavian Star" has resulted in IBO-Resolution 647.(16) "Guidelines on Management for the Safe Operation of Ships and for Accident Prevention" and the succeeding IBO 680 (17) with the same title.

Investigation shows roughly that 20 % of all accidents can be traced back to technical failures controlled by operator and 80% to procedural reasons controlled by management.

Knowing that 80 % of all accidents are related to human acts, either direct or indirect we realize that the highest potential for improvement is on the human side.

Additionally, we have seen an undersupply of officers, due to the development in the land-based, industries. It is also a fact that the growing average age of the world fleet requires higher attention and need for better maintenance. (overhead 4)

One can see a scenario of a constantly ageing fleet combined with reduced supply of qualified seafarers.

The international shipping business cries for more qualified seafarers, officers and ratings.

Conscious of the above, there is an acute shortage in education and training facilities of international standard for seafarers.

Indonesia, a maritime country its fourth largest population in the world (est. 192 million in 1994) is endeavouring to build 'international qualified maritime seafarers and maritime infrastructure however, is handicapped still by a shortage of senior specialist, trained maritime profession and equipments.

V. SEAFARERS EDUCATION

There are two rating schools in Indonesia, both state owned, one state owned Merchant Marine Education and Training Agency, 24 private Middle Navigation School (SPM) and 21 Merchant Marine Academies, 4 of which are state owned and 17 private academies.

The Rating Schools in Barombong (Ujung Pandang).

This school was built in 1979 financed by the ministry of communication and grant aid from the Government of Japan amounting totally to Y 1.520.000.000,- for the establishment of infrastructure including facilities and training equipment including jetty, slipway and stimulator. An additional grant of Rp. 6.000.000.000 was received from Japan International Cooperation Agency (JICA). The school was inaugurated by the Minister of Communication in June 1980 and since 1988 JICA announced the Barombong Rating school was qualified to meet the International Convention of STCW-1978. (Standards of Training, Certification and Watchkeeping for Seafarer-1978).

THE MARITIME EDUCATION AND TRAINING SYSTEM (SISDIKLAT MARITIME)

The institute was established under the auspices of the Ministry of Communication with the aim to improve the quality and quantity of the manpower involved in sea transportation and port management.

The education system should cope With the development of Science and Technology that should earn respect world wide and the product recognized and accepted by the international shipping industry.

Up to now, the education system conducts the "monovalent" system, where the students can choose and join the nautical or engineering programme since the beginning of the study programme.

It has been put into consideration that the education system will be directed toward the "semi-semi integrated" system, allowing the students to study the general maritime profession but will keep their respective profession and skill.

The institute has prepared the curriculum for different purposes as follows :

- I. a. Academic education of 4 years period of time after graduation, the students will receive certificate, as will as a D I (diploma) academic degree.
- b. Professional education, where the students will obtain certificate as officer or engineer without any academic degree.
- II. Courses conducted for civil servant and seafarers in searade profession. safety management, ships and ports operator.

THE MERCHANT MARINE ACADEMY (AIP)

This academy will not be discussed as time is limited

CONCLUSIONS:

1. The world shipping has also undergone an actual technological revolution. Automation and the use of computers in operation and management are far advanced.
2. The world shipping industry has been focused upon after a number of serious accidents.
3. Knowing that 80 % of all accidents are related to human acts, the highest potential for improvement is on the human side.
4. The world shipping has experienced 15-17 years of very poor market conditions which have drained resources from almost all shipping companies with respect to both people and capital.
5. Assuming no drastic changes in world seaborne trade, we can see a scenario of a constantly ageing fleet from an average age of 17,9 years in 1991 to 20 years in 1999, combined with reduced supply of qualified seafarers.
6. The shipping Industry worldwide cries for more qualified people as we have seen an undersupply of seafarers, especially qualified officers. The required average annual supply of officers is 40.000 while the current production is 12.000 officers.
7. Indonesia's Grand Strategy in the Indonesian National Development Policy is a.o. dedicated to improve and develop the human resources quality and the development of communication that includes transportation.
8. Indonesia is a big maritime country with the fourth largest population in the world where unemployment reached 2,6 million people in 1994. Indonesia is endeavouring to improve and multiply the education and training of international. qualified seafarers, especially ratings or cadets, however is handicapped still by shortage of qualified instructors , lecturers, trained maritime profession and teaching equipments.

5.

Port and Terminal Management Training

A practical example

by

C. Bert Kruk

Director TEMPO

Rotterdam Municipal Port Management

1. Introduction

There is no discussion about the need for the training of management and staff of ports, both for managerial and operational levels.

In particular the recent changes such as:

- Globalization of trade and production
- Transport modes and logistics
- Appearance forms of cargoes
- The change from debt financing into equity financing
- Port Reform processes, including Port Privatisation
- Computerization and Electronic Data Interchange (EDI),

(to mention just a few major changes), requires a constant updating of skills and knowledge of all involved in the port and transport industry.

The various United Nations Organizations, such as UNCTAD, ESCAP, IMO and ILO have taken up this challenge and have, with assistance of major intergovernmental and bilateral donors, engaged in the development, execution and constant updating of curricula and teaching methods.

Also on a direct bilateral basis training and updating of skills are executed.

Many developed ports in the world, to a more or lesser extent supported by national governments or other donors, are now engaged in training and education of port and

transport experts from other countries.

2. Involvement of the Rotterdam Municipal Port Management in international port training activities

Also the Rotterdam Municipal Port Management is active in this field since more than 15 years.

To develop, execute and co-ordinate such activities, the City Council decided to establish a Special Staff Department of the Rotterdam Municipal Port management called TEMPO (Technical and managerial Office).

In the training activities, TEMPO collaborates with many partners in the Port of Rotterdam such as:

- The Rotterdam Shipping and Transport College (RSTC)
- The Navigation College
- Marine Safety Rotterdam
- Private stevedoring, warehousing, transport and distribution companies
- The Rotterdam Pilotage Association
- The Rotterdam Customs Department
- Private consultancy firms
- Colleagues of the RMPM, etc.

Over the last three years, for example, TEMPO trained (in Rotterdam and abroad) more than 400 staff members of ports and stevedoring companies from some 45 different countries.

The duration of the training programmes, the ones executed in Rotterdam as well as the ones executed abroad, varies according to subject(s) and possibilities such as time available and finance.

TEMPO executes training in three different ways:

- Once a year a regular course on multipurpose and container terminal operations
- Tailor-made training programmes in Rotterdam
- Tailor-made training programmes abroad.

For the execution of the training programmes, close collaboration with the private (stevedoring and consulting engineering) companies and training institutions is an absolute requirement.

The major advantage of training in Rotterdam is that it enables the participants 'to see things with their own eyes'. The 'disadvantage' of this type of training are that the

training costs per trainee are relatively high.

The number of experts per training group normally is limited to 15 participants per group.

Training in the countries/ports themselves allows large numbers of trainees to participate simultaneously. Modern training means such as overhead sheets, slides, videos and computers enable the lecturers to illustrate their presentations sufficiently.

The advantage of this type of training is that the cost of training per trainee are considerably lower than when the training is executed in Rotterdam.

3. Practical example of a training programme

To illustrate the strategy of TEMPO's involvement in training programmes, the following example may serve its purpose.

The example concerns the Five Years Training Programme for the Five Yangtze Delta Ports in China.

This training programme started in the mid-80's as a try-out of the combination of the RPM and a private Rotterdam stevedoring company with much business relations with China.

The result of the first training initiative was brought to the attention of the Directorate General for International Co-operation (DGIS) of the Ministry of Foreign Affairs of the Kingdom of the Netherlands.

DGIS showed interest in the programme and requested the combination to evaluate the results of the training programme.

When this was executed and the result showed a positive development in the sphere of career development of the Chinese Trainees, DGIS requested TEMPO to design a training programme for the five major ports in the Yangtze Delta with a duration of five years. This proposal was accepted by DGIS and (partial) funds were made available.

The major components of the programme were:

1. Execution of a training programme in (subsequently each year) one of the five ports in China, and
2. A yearly training programme in Rotterdam

The details are as follows:

- ad 1. The duration of the training programmes in China was approximately 10

days. The programme contents were principally determined by the Chinese counterpart, the Ministry of Communications, in close consultation with the five participating ports.

The number of participants ranged from 50 to 70, the larger part being representatives of the port where the training programme was executed that particular year.

The lecturers were selected by TEMPO in relation with the subjects requested. Next to one or two staff members of TEMPO (to act as Team Leader and lecturer), lecturers were also invited from private stevedoring companies and/or consultancy firms from Rotterdam.

In the course of the execution the lecturers became more and more familiar with the situation in China leading to the fact that comparisons between the circumstances in Western Europe and in China could be incorporated into the programmes. In this way the trainees could be provided with practical, rather than with hypothetical, solutions to their problems.

- ad 2. The Training programme in Rotterdam lasted from 8 to 10 weeks. It was intended for one representative of the higher management of each of the five participating ports, accompanied by an interpreter.

Also for this programme the contents were the result of negotiations between both partners and based on specific requests from the Chinese side, results of evaluations of previous programmes and possibilities in Rotterdam.

Next to class room lectures, time was devoted to visits to various types of terminals, distribution centres, inland ports, manufacturers of port equipment, other Netherlands and European ports, training institutions and research centres, and, very essential, an attachment to one or more private stevedoring companies.

This Five Years Training Programme was officially concluded at the end of 1994.

TEMPO, in close collaboration with its Chinese counterpart is now searching for new sponsors. There is no doubt that the Chinese Ministry of Communications is keen to continue and intends to extend the programme by including two Yangtze inland ports.

The example of the above mentioned training programme represents a training project executed by TEMPO of which the results can be considered positive. Of course, one will never be able to prove that through this training programme the ports concerned have improved their management and operations, leading to more cargo and an improved competitive positions of the ports.

However, certain is that many persons employed by these ports have been exposed to

new ideas and different concepts of port management and operations in another economic, social and technological environment.

All Chinese participants selected to participate in the training programmes (in particular the ones executed in Rotterdam) were obliged not to keep the knowledge acquired to themselves, but to distribute their increased know-how to their colleagues through publications and presentations. All basic material was translated into the Chinese language and distributed.

In this way, a much larger community than the happy few that physically participated, benefitted from the training.

A final word.

One thing is sure: without training there is no exposure. Training is investment for the future!

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6.

PORT DEVELOPMENT PLAN IN INDONESIA VIS - A - VIS, INDONESIA - NETHERLANDS COOPERATION

**by
A. HARBANI**

INDONESIA PORT CORPORATION II

PORT DEVELOPMENT PLAN IN INDONESIA VIS - A - VIS, INDONESIA - NETHERLANDS COOPERATION

Distinguished Participants, Ladies and Gentlemen

To participate on this discussion is a great pleasure for me on behalf of Indonesian Port Corporations.

We consider that the discussion for formulating further cooperation between Indonesian Port Corporations and Netherlands Port Authorities is very important

Ladies and Gentlemen,

in this occasion, I am going to rise the indication concerning :

- * National macro economic growth.
- * Trend in Indonesia investment.
- * Review of Indonesia Traffic patterns.
- * The overall condition of Indonesian ports,
- * Formulation of cooperation program

1. NATIONAL ECONOMIC GROWTH AND STRUCTURE

Gross Domestic Product (GDP) growth trends for the national economy in recent years include :

- a. An overall growth rate in total GDP of 6.7 percent a year between 1987 and 1993, with annual year-over-year increases from 5.8 percent to 7.5 percent.
- b. An overall growth rate in GDP excluding oil and gas (non-migas) of 7.65 percent a year, almost one percentage point above the GDP growth rate that includes oil and gas
- c. The changing structure of the economy, with higher-than-average growth rates in manufacturing, utilities, construction and banking
- d. Growth in manufacturing from 17 percent of the national economy in 1987 to almost 21 percent in 1993 (average growth rate of about ten percent a year)
- e. A high level of gross domestic capital formation as a percentage of total GDP in all years, with a peak of 28 percent in 1990 to 1992.

The World Bank, in their recent annual report on Indonesia, has used growth rates in non-migas GDP of about 7 percent a year between 1995 and 2000.

2. TRENDS IN INDONESIAN INVESTMENT

Planned levels of investment are leading indicator of the industrial development that in turn creates port cargo growth. Data assembled by National Investment Coordinating Board as part of their approval process provides a guide to future investment levels and patterns.

Figure 2-1 shows statistics on the long-term trend in government approvals of foreign and domestic investment projects between 1980 and 1994.

Domestic investment amounts on the graph are stated in billions of nominal Rupiahs and foreign investment projects are in millions of nominal U.S. dollars.

- a. Domestic investment approvals began to increase rapidly in 1987 to reach a peak in 1990.. The 1994 level is only slightly below that of 1990,
- b. Both kinds of approvals fell strongly to reach through in 1992 (domestic projects) and 1993 (foreign projects),

- c. There was a strong upsurge in foreign investment in 1994 to reach a level of more than twice the previous peak,
- d. Total investment reached a new peak in 1994,
- e. Secondary manufacturing projects have dominated investment in recent years,
- f. The sectors receiving significant investment are textiles, paper and chemicals,
- g. The portion of investment in the western Java hinterland of Tanjung Priok Main Port was about 50 percent of all investment over 1990 to 1993, but fell to 34 percent in 1994,

These trends in investment approval indicate that industrial expansion in the Tanjung Priok hinterland was lower in the past two years than it has been in recent but previous years. The 1994 upsurge in investment implies that investment will continue at a high level and that traffic growth will follow.

3. REVIEW OF NATIONAL INDONESIAN PORT TRAFFIC PATTERNS

a. Relationship Between Economic and International Port Traffic Growth

There is usually a broad relationship between national economic and international port traffic growth. To examine this relationship in Indonesia, several measures of international port traffic were examined: imports, exports and total international traffic for individual ports, groups of major ports, and international trade in nominal and real dollar terms. The time trends of trade and GDP, and the apparent correlations between traffic and non oil-gas GDP (GDP excluding the oil and gas sector) were reviewed for these groups over several periods since 1981.

The total international traffic through the Javanese ports of Tanjung Priok and Tanjung Perak, as a sample for the 1985 to 1993 period were selected for the following analyses, for several reasons :

- 1) These ports serve the hinterland of Java with its rapid expansion in the areas of manufacturing, the principal generators of industrial container traffic, as well as much of the population of Indonesia,
- 2) The traffic showed a consistent pattern over time with the aggregation of the imports and exports of the two ports,
- 3) The traffic patterns of these two ports were consistent with broader

measures of international trade such as total Indonesian non oil-gas trade expressed in nominal and real dollars,

- 4) The years 1985 to 1993 pick up the period of structural change in Indonesia in which manufacturing began to replace the oil and gas sector as the engine of the country's growth,
- 5) The data for this period was analyzed to depict the time trends in GDP and traffic growth and the relationship between traffic growth and GDP, and the implications of these patterns for future traffic growth. The results are presented as a series of graphs.

The time trends of non oil-gas GDP and international traffic through the ports of Tanjung Priok and Surabaya and the tonnage/GDP relationship for the years 1985 to 1993. shows as follows:

- The GDP as a time function result an exponential growth rate of 7.06 percent a year (equivalent to an annually-compounded rate of about 7.3 percent a year).
- The port tonnage as a time function result an exponential growth rate of 11.60 percent a year (equivalent to an annually-compounded rate of about 12.3 percent a year)

The results of analysis show that for international port traffic on Java. There has been a highly consistent and non oil-gas stable relationship between traffic and non-migas real GDP. The relationship should continue to apply in at least the short-term future: international traffic growth will be well above national GDP growth. **International traffic port growth rates should be about 1.6 times GDP growth.**

b. Structure of Indonesian Exports

The structure of Indonesia's economy began to change from raw materials to manufactured goods in the mid 1980's. The impact of this change on selected national exports between 1981 and 1993 include:

- Agricultural exports have increase steadily over the period, often at double-digit rates.
- Exports of industrial goods have increased more rapidly than the agricultural items and particularly between 1990 and 1993 when the growth rate was about 20 percent a year.
- Particular exports that have shown dramatic growth from an essentially zero base in 1981 include garments (220,000 tonnes in 1993), other textiles

(504,000 tonnes), electrical apparatus (171,000 tonnes), and paper (753,000 tonnes).

c. Container Traffic Forecast

The past record of container traffic via seven container ports of Indonesia (TG. Priok, Surabaya, Belawan, Semarang, Palembang, Ujung Pandang dan Panjang) show the annual growth rate in 1989 to 1993 was above 20%. It is estimated that with in 10 years horizon will continue to grow with the annual growth rate of 18% to 8%.

From the Bojonegara Port feasibility study the container traffic was analyzed and the forecasting results show that the container traffic for West Java will reach 2.5 million TEU's by the year 2000.

4. THE OVERALL EXISTING SITUATION OF INDONESIAN PORTS

Four port corporation, (called PT. (Persero) Pelabuhan Indonesia I to IV or Indonesia Port Corporation I to IV) operates the public ports of Indonesia and administer the waters within their jurisdiction.

a. Port Traffic

The maritime trade of Indonesia through public ports totalled general cargo was about a third. Cargo tonnages increase at 10 percent a year between 1986 and 1991 with international traffic growing by 12 percent a year.

Container traffic began seriously in Indonesia when container Terminal I in the port of Tanjung Priok opened around 1980. Containers appeared in the other large port in the 1980, and in small ports in this decade. Figure 4.1 summarises the throughput between 1989 and 1993 in the country's seven container ports, the annual growth rate was above 20% in all ports.

b. Port Facilities and Equipment

In Indonesia there are two type of ports, river ports and sea ports most river ports have limited number of wharves or jetties and sheds the water depth mostly below-7 m LWS. Due to the extensive development of road networks most of river port show very low utilization of facilities and small throughput.

Most sea ports have large number of wharves or jetties and sheds, water depth vary from 4 m LWS to 12 m LWS. Sea ports with location very close to the capital of the provinces show high utilization and high throughput.

c. Port Operation Management

There are two type of port namely special dedicated port and public port. The special dedicated port was provided to support an industry at adjacent area to port and usually with single operator and single user. Therefore this kind of port characterized by non complicated operation management system as compare to the public ports which characterized by complicated cross instantional operation management system with multi operators, multi clients, multi type of goods and multi document formalities that some time can create very low service performance.

In order to achieve high quality of port service performance The Ministry of Communications is very keen to find solution especially for the port of Tanjung Priok, Various measures that have been taken are as follows :

- 1) Implementation of Terminal operator system, with private participation
- 2) Application of QCD concept (Quality-Cost-Delivery Concept)
- 3) Formulation of the real one roof service and simple cross instantional system
- 4) Formulation of cooperation between PT. Indosat and Indonesia Port Corporation 11 for EDI service provider to support port operation, especially for container terminal.

5. FORMULATION OF COOPERATION PROGRAMS

From the discussion of the above section it was shown that the demand of port services will continue to increase.

In order to cope with the increased demand various measures for improving port service performance are required to support to the on going government efforts.

Transfer of knowhow from experienced foreign countries especially in the field of port management system, training, port traffic control system, Port Development and Application of modern Technology are essential.

Fortunately efforts in the field of sea ports has been discussed in the occasion of The seventh meeting of the working group on communications of the Indonesia - Netherlands mixed commission on economic cooperation, held in the Hague, 17 - 18 January 1995.

The proposal which has been discussed in The Hague comprises::

- Technical Assistance Port Operation (TAPO), port training program,
- Port System Study (PSS), and
- Vessel Traffic Management Study (VTMS)

It was concluded that, the cooperation in this field will be done in three phases :

- Phase-1. An umbrella MOU to the private to private cooperation between Europe Container Terminal (ECT) and/or Port Authorities of Rotterdam and Indonesian Counterpart, Port Corporation 1, 11, 111 and IV on port training program and technical assistance,
- Phase-2. Preparation of a pilot project (Port of Belawan) and the terms of reference of a detailed plan,
- Phase-3. Increasing the cooperation between Indonesia and Dutch ports in relation to the distribution of Indonesian Export goods on the European market and the export from Europe to Indonesia via the Port of Rotterdam.

In addition to the above proposals, the human resource development application of Telematic Technology, Maritime Sector Training Program (MSTP) and possible cooperation between Netherlands Dredging companies and PT. Rukindo are also necessary to be discussed further as a continuation of The Hague meeting.

The implementation of Port co-operation programme could be done **via** private to private basis between Dutch Companies with Indonesia Companies and/or Indonesia Port Corporations, while the governments act as facilitators.

To finalize this section and this contribution I would like to propose the program and schedules of activities to be discussed in the next meeting as follows :

Distinguished participants, ladies and gentlemen, thank you for your attention.

7.

AN OVERALL VIEW ON SHIPPING INDUSTRY IN INDONESIA

INSA - PAPER

1. THE CHANGE OF SHIPPING PATTERN

At August 17th this year Indonesia will be celebrating her 50th anniversary of being an independent country. As an archipelago consists of more than 13.700 islands with a sea area two times the land area with a coastal length of more than 80.000 km. Shipping plays a very important role for the national economic development as well as for the socio - political and defence and security for the country. The importance of the role of the Shipping Industry, has also been proven by the Netherlands-Indies Government during their government rule taking the benefit of KPM (Koninklijke Paketvaart Maatschappij) as the only single shipping company connecting the thousands of islands for economic as well as administrative and political goals. Since the withdrawal of KPM in 1957 from Indonesia, the Indonesian National Shipping has emerged, starting with the establishment of Pelayaran Nasional Indonesia (PELNI) by operating second hand vessels, some of them were ex S.P.M ships and some new vessels being ordered abroad (especially in the Netherlands, Germany and Japan).

To participate in the foreign trade the ocean going shipping company "Djakarta Lloyd" was established. In the early 60's other shipping companies like Trikora Lloyd. PT Samudera Indonesia and Gesuri Lloyd together with Djakarta Lloyd joined the Indonesia - Europe Liner Conference using general cargo vessel of 10.000 - 20.000 DWT.

The national share in the Conference was reasonable, although it never has reached 50%. In the interinsular and coastal trade 3 domestic shipping was booming, carrying almost 100% of the cargo by national shipping lines included the share of the sailing and motor ships.

A dramatic change happened in the mid 1960's, especially in ocean liner shipping when "a new type" of cargo, the "unitized" cargo appeared. namely the Container, mainly, -20 foot and 40 foot containers. These circumstances have led to the development of increasingly efficient containerships or combination vessels such as con-ros and con-bulkers. Containerization is a common global Phenomenon. This rapid change in unitized cargo and the rapid growth in the

global trade has in turn its impact in a changing Shipping Pattern all over the world, including in Indonesia. Today "round the world services" are introduced by key Container Operators. These services are provided by high capacity dedicated containerships which limit their calls to "regional load centres", from where a system of "regional feeder services" is emerging. As one of such regional load centre is the role of the Port of Singapore which now has a capacity of 7 million TEU's/year. Continuous expansion taking place to home a 12 million TEU/year. As a consequence of this change in Shipping Pattern, the share of the Indonesian Ocean Liners now remain only 4% and only two liner companies: Djakarta Lloyd and Trikora Lloyd maintain liner services front and to Europe, while several Indonesian companies participate in the Japan, Hongkong, Taiwan, Korea and Australia services.

The remaining share is the "regional feeder services" between Singapore and Indonesian export - import harbours.

For Indonesia it does also mean that the concept of establishing 4 (four) Gateway - Ports with full operated container terminals, namely in Tanjung Priok (Jakarta), Surabaya Belawan and Makassar, will have to be reconsidered. As a consequence of this change and the fact that Indonesia must still promote her non-oil exports, the government anticipates it by declaring the opening of a number of 130 ports for the export and import of goods by announcing the so called "deregulation policy" in November 1988. Since many foreign shipping companies are participating in the regional feeder services with Singapore. Hongkong and Taiwan, its resulting in the decrease of the freight share of Indonesian national lines in the interinsular trade drastically until almost 50%, included the share of the sailing ships. One of the main cause of the decreasing of the share of the national shipping was the consequence of the compulsory "scrapping policy" of the government, where all steel vessels of over 25 years old had to be scrapped despite that many of them were technically still in good condition. The announcement of Inpres (Presidential Instruction) Nr.4 in 1985, by which the government allows the participation of foreign flag vessels to carry import-export cargo from 130 harbours which are open for the foreign trade, were aimed to overcome the undertonnage situation with a view to boosting the non oil & gas exports of Indonesia. But as a consequence, it is also difficult for the government authority to control those foreign flag vessels carrying interinsular cargo between those ports, which according to the "cabotage policy" which is still valid, should be reserved only for the national shipping.

2 THE GROWING TRADE AND PRESENT CONDITION OF THE NATIONAL FLEET

One of the consequences of the "deregulation policy" is that the requirements or restriction for establishing a shipping company has been relaxed and it resulted an increase in the number of shipping operators. If in 1988 there were 343 shipping companies for general cargo and 200 shipping operators or industrial carriers for

special cargo like fuel, logs, minerals, etc, in 1994 it has been increased to 1175 shipping companies and 454 industrial carriers.

But in fact the fleet tonnage did not increased proportionally.

SOURCE : SEA COMMUNICATION

One of the reason for the drastic increase in number of shipping companies is that the requirements for establishing a chipping company has been relaxed. Under the new regulation, by owning or controlling one vessel of 100 m³ size or one tug of 125 HP and barge of 100 m³ space, one is legitimate to have a shipping license. In the meantime, cargo volume of domestic as well as export-import trade and its carriage has developed in the direction.

As mentioned before as a result of the rapid change of the global shipping pattern and the "deregulation policy", the share of the national shipping has been rapidly decreased.

The total volume of cargo in the domestic as well as in the foreign trade (export-import) has been rapidly increased, but the cargo share . national shipping has been dramatically decreased. The impact of the decreasing share of national carrier in the foreign trade resulted in a widening deficit of Foreign Exchange Earning of the services sector, especially the shipping services, in the National Balance of Payment. The magnitude figure of deficit has reached the mark of US \$ 3.5 billion lately.

3. FACTORS OF CONSTRAINTS

The rapid change in the shipping pattern and the consequence of the "deregulation policy" as a step to boost the export of non-oil products, has been successfully brought the export of non oil & gas products to replace the position of oil and gas as national main source of foreign exchange. But at the same time, the Indonesian national fleet is being put in a very difficult situation. In the domestic trade the following factors a.o. caused of the decreasing share :

- a) There are too many shipping companies being allowed to operate in the domestic trade;
- b) Possibilities for national operators to charter foreign flag vessel without gov'l approval and without limitation in number of vessels;
- c) As a consequence of the many vessel's supply, it is difficult for the national shipping to raise the freight rate while on the other hand they are facing with increasing operating costs;
- d) Those increasing operating costs are caused a.o. by :
 - 1) paying sales tax, (or value added tax) on chartering and procurement of

- ship (10%). docking & repair costs and port fees;
- 2) time consuming due to bureaucratic procedures for purchasing vessel from abroad (allowed only 5000 dwt and up) and the high financial costs involved;
- 3) high domestic bank interest rate (+/- 21% / year)
- 4) high debt-equity ratio of the capital structure as required by the gov't (DER = 35% : 65%);
- 5) inefficiency of port services which affects low and slow productivity, resulted in high operating costs.

In the foreign trade sector, the following are the main cause of the decreasing share of the national ocean going fleet :

- a) The full competition among carriers as a result of the change in the global trade and the "deregulation policy" by direct opening of +/- 130 Indonesian ports for import-export of goods :
- b) The use of full container vessels of bigger sizes of the 3th and 4th generation with relatively high speeds (22-24 knots) which are exceeding the vessels capacity of the national fleet (PT Djakarta Lloyd's biggest container vessel has a capacity of +/- 1200 TEU);
- c) There is in Indonesia not any harbour yet with- 15.0 m depth for accommodating vessels of the 3th or 4th generation; the existing harbour of Tg.Priok and Surabaya have a maximum depth of -12 until -13.
- d) The less competitive condition of the national shipping are a.o. caused by :
 - 1) Limited funds raising capability;
 - 2) Limited market coverage in compare to foreign operators;
 - 3) Terms of trade which are not favourable for the Indonesian shipping/exporter-importer, f.a. : CIF for import goods and FOB for export goods, so that the choice of the carrier are in hand of the foreign buyer;
 - 4) High costs of owning Indonesian Ships, compared to foreign flags
- e) As a result of the strong competition many Indonesian ocean going companies switch their activities to the Regional Feeder Services, but also in competition with foreign feeder ships of "big mother container services" LIKE EVER GREEN, MAERSK LINE, SEA LAND, NYK, MOL, etc.

4. THE SHIPPING ACT AND THE PROSPECT OF THE INDUSTRY.

In 50 years of its independence, Indonesia as a maritime country enforce its new Shipping Act at 17th September 1994. (Enforcement of the Shipping Act no 21 of Sept.1992). It sounds a bit ironically that a maritime nation like Indonesia which bears her political life philosophy on an "Archipelago Concept" or "Wawasan Nusantara", seems that her policy on shipping and sea communications was on a backseat for so many years, even after the enforcement of the Shipping Act. Fortunately since November 1994 the enforcement of the Convention on Maritime

Law 1982 was also effected by the United Nations after being undersigned by 60 countries. It does mean that as a maritime country Indonesia has full sovereignty over the whole Archipelago included the inland sea area between the thousands of islands scattered between the Indian and the Pacific oceans. This mean that the Principles of sovereignty of the interinsular and coastal shipping belongs to the sovereign nation, usually called cabotage principle, could be applied.

Starting from this point of view, it is evident that the government's policy on "deregulation in shipping" as has been launched in 1988 should be reviewed and from now on more attractive national treatments should be given to national shipping industry to be able to consolidate herself and develop and grow until they could reach their "sovereignty" again over the whole Archipelago.

First of all based on this Shipping Act of Sept. 1992, gov't regulation should be executed to reduce the number of export-import harbours which are till now allowed being called by foreign flag ships, say reducing from 130 until 30 - 40 harbours spread out over the archipelago, which could represent also the 27 provinces of the country from Sabang in the west (in Aceh province) until Merauke in the east (in West-Irian province). By doing this first step the national shipping companies should consolidate their ability to raise their share in carrying export-import commodities by intensifying their participation in the Regional Feeder Service with Singapore and other Asian countries like Penang, Port Kelang, Manila, Bangkok, Hongkong and Taiwan. After consolidation on the regional feeder service the Liner Services to Korea, China and Japan should be intensified again, since both countries are still good partners in foreign trade by which the volume and value of export-import products to and from both countries are increasing year by year. After consolidation and strengthening on the domestic shipping and the regional feeder services with Asian countries, then the ocean going continent to continent liner-services especially to Europe, Australia and the USA should be recovered gain. Here close cooperation with internationally known shipping companies and freight forwarders is highly required.

A new container fleet of prospective size and speed should be acquired, say of the 3th or 4th or even 5th generation (in the range of 3000 to 5000 TEU's class with 22 - 24 knots).

By that time it is worth to consider of deepening the depths of Tg.Priok and Surabaya harbours from -12/-13 m until -15 m. since Java will still be the most industrialised island of the country. An alternative could be: one of the harbours at Batam island or another island nearby in Riau province, which could utilize its favourable geographical location like Singapore, as a "regional load centre" from the "round the world liner services". Of course many things has to be done to build a large container terminal with say 4 till 5 million TEU's/year capacity and to create a good and well organized logistics' system of such that the linkage with Asia harbours and the own national export-import harbours could be well managed. To achieve these goals, Indonesian Shipping Companies could make joint ventures with foreign shipping companies especially from the ocean going liner services.

For the regional feeder services, the most suitable type and size of vessel will be a

full-container or semi-container of 500 till 1000 TEU's capacity with a maximum draft of 9,5 till 10 m; recommendable with cargo years. For the interinsular and coastal trade, the national shipping companies should operate semi-container-ships (like the type of Carica Java) with a capacity of 350 till 500 TEU' or 3000 - 5000 dwt and it is advisable to be equipped with adequate cranes or derricks with capacity of 25 - 40 tons.

5. IMPROVEMENT OF HARBOUR INFRASTRUCTURE

As could be expected improvement of the shipping industry without improving the harbour facility, for a maritime country like Indonesia, will not make sense. Since investment on harbour facilities is very expensive while on the other hand, the government has limited funds for funding harbour development through the annual budget, so it is obvious that foreign investment should be welcome especially after the enforcement of the Government Regulation on Infrastructure Investment as announced by PP nr. 20. 1994. (Government Regulation 20/94).

Prospective full container harbours are: Tanjung Priok, Surabaya, Semarang (Centr. Java), Belawan (North-Sumatera) and Makassar (Celebes) and eventually Batam. Investment could be in building of container keys, container handling equipment like gantry cranes, straddle carries or truck-trailers, transtainer, top and side loaders, etc. Since all public harbours in Indonesia are supervised by the Port Authority on behalf the government, so foreign investment could be treated on a BOT (built Operation and transfer) basis for a certain years period. Also for remaining 30 to 40 export-import harbours, foreign investment could be welcome.

At these ports investments on general cargo and specialised cargo handling equipments as well as container handling equipments are highly recommended, although not as intensively as Tg. Priok and Surabaya harbours which will have a yearly container handling capacity of 2.5 million and 1 million TEU's respectively within the next coming years. Other ports for the interinsular and local trade totally around 600 could be developed and improved through the governmental annual budget or domestic private investment.

6. CONCLUSION

According to government sources. Indonesia's export in 1993 has exceed US\$ 40 billion, a growth of more than 10%, compared to previous year which mostly consists of industrial goods (non-oil products). On the other hands, imports goods for manufacturing industry, capital goods and consumer goods has reached about US\$ 35 billion. If we may assume that the freight costs for carrying import-export goods is about 10% of its value, or approximately US\$ 7.5 billion, then it is worthwhile to make efforts to develop the national fleet, for the domestic as well

as for the foreign trade.

In turn, an increasing development and a potential shipping industry will be also a potential for docking and repair and new building at the national shipyards and the industry, which also needs a continuous and steady development for both purposes, financially as well as human resources's development.

In conclusion, shipping industry for Indonesia, is not only the pride of the past, but a hopeful service industry of tomorrow once the present difficulties is over.

8.

SEMINAR "MARITIME INDONESIA MOVING INTO THE NEXT CENTURY"

"INDONESIAN DUTCH COOPERATION IN SHIPPING BASED ON THE CARGO FLOWS BETWEEN SOUTH EAST ASIA AND EUROPE"

The title of this presentation is a mouth full, the subject itself even more so. Hence, I shall primarily discuss the transportation of general cargo in containers, and the roles indonesia and the netherlands play in that sector.

Recent years have witnessed important changes in the world of container shipping. Whereas volumes have shown significant growth, the number of participants in the movement of containers over the world's oceans has steadily dropped. Several household names have disappeared from the scene, and only very large operators seem to be able to hold on to a place in the world of leading container carriers. Scale is the keyword in the modern development of liner shipping. Why has that come about?

After the comparatively healthy eighties, the container shipping industry is going through difficult times with a constant search for equilibrium between capacity and price, an almost impossible balance to achieve.

Nowadays the situation exists that, from day one, lines try to fill enlarged capacities, usually a result of retonnaging with newbuildings. This development does not seem very logic, since certainly newbuildings tonnage should be employed to absorb growth and thus remain on the berth for a number of years. To fill it immediately makes such enlarged capacity seem to defeat the purpose of its introduction. The result of the desire to fill capacity so soon, is that lines fight for sufficient volume to compensate for the resultant low freight rate levels.

Generally speaking, the essential economy of scale factor realized by larger, investment-intensive ships, is judged the only option to aim for an acceptable return on capital. This a hard goal to achieve.

In the years of growing competition, the exporting and importing world has been pampered by the lines. It has learned to demand, and obtain, reliable and frequent services from the operators at highly competitive prices. This has lead operators increasingly to go for joint operations, the so-called alliances. Only such cooperations offer the lines a way to berth a sufficient number of sufficiently large ships to meet the demands for capacity, frequency, and transit times. The finances required to mount the services asked for nowadays, are of such magnitude, that no operator alone can afford

them. Even traditional 'loners' like Maersk, SeaLand and evergreen, the three largest operators in the world, have succumbed to seeking partners.

In particular on the east/west trunk routes alliances have become a popular phenomenon. A recent example is Nedlloyd Lines' decision to team up with american president lines of the u.s.a., Mitsui Osk Lines of Japan and orient overseas container line of Hong Kong to form the "global alliance". This grouping of four major container lines serving the main world trades, is typical for the need to combine strengths so as to be able to weather the strongly competitive environment in liner shipping.

The sheer size of ships nowadays employed by these alliances - a 5000 teu ship is no longer an exception - has as unavoidable effect that the ports of call are restricted to a number of major hubs. Typically, a far east/europe service will now call at a maximum of only four to five ports in the far east and three or four in europe. As a consequence non-direct ports are served by a dedicated feeder concept.

A well-known example of the latter development is, of course, the way south east asia is increasingly served by the hub and feeder concept. Intercontinental containerized cargo flows, coming from or going to the various parts in the region, are shipped via a single main port.

If any place in the world, singapore is the prime example of the meaning of the main port concept. Singapore has managed, helped by its uniquely attractive geographical location, to develop its role as the paramount pivotal point of the area. It is a fact of life, and certainly no shame at all, that most other ports in the area neither offer the location nor do they possess the facilities to accommodate the modern mega-size containerships. As a natural consequence, they have adopted their role as feeder port.

What remains of considerable importance, however, is that the countries in the region ensure that they can properly function in that role. Ports must be developed into efficient feeder ports, and served by suitable feeder services, i.e. both capacity and performance must be of levels commensurate with the quality of service the trade demands. Failure to comply with the appropriate requirements can have a direct effect on the economy of a country: poor port facilities and badly connecting feeder services cause delays; delays cause higher handling cost, and the latter in turn leads to higher export prices. Congestion - that ominous word - in any sector of the infrastructure has a destructive economic effect and results in deterioration of general trading conditions.

Competition dictates that proper attention is paid to ensure that products reach their markets against:

- the lowest cost,
- Competitive transittimes versus other supplying nations, and
- In good condition.

It goes without saying that non-compliance with these basic conditions can dramatically disturb the economy of a country. Therefore, concentrating on all aspects of the logistics chain is essential. A service is as weak as its weakest shackle.

A quality-port does not only mean the port area itself. Of equal importance is that the infrastructure linked with the ports is well-developed. Good road, rail and water connections are a prerequisite for smooth and quick delivery of containers to and from the ports. Delays caused by slow inland transport, result in undesirable demurrage-cost for truck and container. Similarly, the need for careful and efficient cargo handling, e.g. when stuffing containers, is not to be neglected. Neither should one lose sight of the importance to ensure a smooth handling of documentation by quality agency-organizations. These should be well versed in shipping procedures, and use modern systems and telecommunications to support them.

Last, but not least, the productivity of a port has a major impact on the level of investment required. An inadequate performance means slow throughput, which in turn leads to increased demands on wharf and crane capacity. Matters like how well labour is trained, and how much - properly maintained - equipment is needed, and all other related facilities, are to receive strong and permanent attention.

On the score of infrastructure development, one should not lose sight of trade growth. What may seem right for today, will not be right for tomorrow. The growth in the south east asia region is enormous, and thus the planning of infrastructure capacity should keep in step with projected developments. Only too often does it happen that economic growth overtakes expectations, with the well-known dramatic undercapacity problems as a result. It makes real sense to be a little generous, and have a comfortable growth potential built into any infrastructural plans. Forward thinking is vital to the future position of indonesia as maritime nation.

The current roles of indonesia and the netherlands in container shipping are somewhat different. Due to its sheer size indonesia's strength should lie in realizing, either alone or in cooperation with other countries in the region, an effective feeder network between a number of quality-ports. Concentration on these two aspects is a formidable task, requiring a lot of attention and dedication.

The netherlands, not anymore the major maritime nation of the past, had to accept that it can no longer play the part of ocean carrier on its own. Cooperating with other lines has become a must, and is actively pursued nowadays. On the ports front, fortunately, the main dutch port, Rotterdam, is well placed to act as one of the principal hubs in europe.

Especially in the ports and feeder sector there should be numerous opportunities for link-ups between indonesian and dutch activities. An effective network of indonesian feeder operations offering dedicated services to alliances in which the dutch are active, is but one opportunity.

Unfortunately, on the container trunk routes the cake seems to have been carved up, with the dutch having had no choice but to join a number of alliances. Wisely so, indonesia has opted to reduce its position on the main east/west routes. Its future now lies in concentrating on how to develop its role of major regional feeder operator.

Efficiency is a word I have used a number of times already. Indeed, it is tremendously important that this becomes a keyword in all port operations. Congestion is a killer of growth. Major attention should therefore be paid to ensure that the quality and reliability of indonesia's ports matches the quality of feeder operations being aimed at.

This area of activities offers ample opportunity for cooperation between our two countries, both in the development and the operative stages. In general, the sharing of know-how in the maritime transportation sector can be a major source to boost this cooperation. The dutch and indonesians should work side by side to enhance the progress of the container shipping industry in indonesia. To realize this, would be a very welcome challenge indeed.

T.E. Henkemans (Nedlloyd Lines)

9.

AN INDONESIAN VIEW ON EUROPE-INDONESIA TRADE AND

THE POSSIBILITIES OF MUTUAL COOPERATION ON SHIPPING SERVICES

By
Soedarpo Sastrosatomo

1. INTRODUCTION.

If one closely examines the topic, there are two key subjects - **Europe-Indonesia Trade** and the **Shipping Services**. Let us approach this topic from the simple frame work of:

- (a) What was it in earlier period ?
- (b) What changed it ?
- (c) What is happening now ?
- (d) How will it be in future ?, and finally
- (e) Is there a scope of mutual co-operation ?

In the context of our discussion, the period from early 70's to middle of 80's refer to "earlier period". From middle 80's to late 80's is the "period of change". From early 90's onwards is the "current period".

For each of these periods we shall attempt to examine the trade and the shipping services supporting the trade.

2. BREAK-BULK ERA -Early 70's to Mid 80's .

2.1 The Trade.

The main export commodities were :

- Rubber
- Coffee

- Tea
- Tobacco
- Palm Oil
- Cattle Fodder
- Sawn Timber and Wood Products
- Spices

The main **imported goods** were :

- Manufactured Goods
- Canned Food Stuff
- Machineries

Starting from early eighties, project cargo was added to the list of imported goods.

One would notice that, export commodities are all raw materials. As is true with all the colonized countries, in the earlier days after independence the trade still followed the pattern of the colonized period, i.e. export of raw materials and import of manufactured goods. With the onset of industrialization, a lot of machineries and project cargo were imported from Europe.

2.2 Shipping Services :

The trade was supported by Break-bulk shipping services. It was dominated by Indonesia-Europe Conference. The conference members were:

Indonesian National Line (INL) members :

- Samudera Indonesia
- Trikora Lloyd
- Djakarta Lloyd
- Gesuri Lloyd

European Line members:

- Hapag Lloyd
- Ned Lloyd
- Blue Funnel Line
- Lloyd Triestino
- Messesier Maritime

Apart from the conference members, there were non-conference players, mainly French and Scandinavian shipping companies.

The following tables show the approximate cargo movement east-bound and west bound, the average freight level, by the conference and non-conference members.

Conference Members

	'70 - '75	'75 - '80	'80 - '85
Cargo (in Million Ton) :			
To Indonesia	1.5 - 2.0	2.0 - 2.5	2.5 - 2.7
To Europe	1	1.0 - 1.5	1.5
Freight (in NLF) :			
To Indonesia	300	250	200
To Europe	250	250	200

Non-Conference Members

	'70 - '75	'75 - '80	'80 - '85
Cargo (in Million Ton) :			
To Indonesia	.375 - .500	.500 - .625	1.0 - 1.15
To Europe	.250	.250 - .375	1.0
Freight (in NLF) :			
To Indonesia	225	187	150
To Europe	187	187	150

Total	'70 - '75	'75 - '80	'80 - '85
Cargo (in Million Ton) :			
To Indonesia	1.87 - 2.50	2.50 - 3.12	3.5 - 3.8
To Europe	1.25	1.25 - 1.87	2.15

Typically, in Europe the ships used to discharge in Amsterdam, Bremen and Hamburg in that order. Amsterdam was the major discharging port for spices, palm oil, coffee ; Bremen was primarily for Tobacco, and Hamburg was mainly for commodities destined for Germany and Eastern Europe. Loading used to take place in the reverse order, i.e. Hamburg, Bremen and Amsterdam, loading a variety of manufactured goods, including electrical products, chemicals & medicines in Hamburg, and machineries from Amsterdam. Later, in Antwerp, various steel products used to be loaded.

In Indonesia, the discharging used to take place in Belawan, Jakarta, Semarang,

Surabaya - in that order. In Belawan various supplies for the plantations used to be discharged. Jakarta used to account for about 70 % of the import. Loading used to take place in the reverse order, i.e. Surabaya, Semarang, Jakarta, with topping-off the palm oil and loading Deli tobacco in Belawan. Twice a month, in the middle and at the end of the month, the ships used to call Padang for loading cassiavera, coffee, and rattan. . Occasionally, the ships used to call Probolinggo in East Java for loading tobacco.

The east-bound cargo was more than the west-bound cargo. Even the east-bound freight was more than the west-bound freight. From mid 70's more machineries were imported. From early SO's, more project cargo started to come in.

Although volume continued to increase, for both east-bound and west-bound cargo, the freight started to decline. This was due to the continuing competitive pressures from the non-conference members, who maintained freight level, on the average about 75 % of the conference freight.

The trade was heavily dominated by the conference members, who carried about 80 % of the total cargo until the late 70's. Beginning from early 80's, the non-conference members' lifting increased to about 70 % of the total cargo movement.

The four Indonesian National Line (INL) members each provided about 9 sailings per year, with turn-round-voyage duration between 105 to 120 days. Each operated 3 ships. Hapag Lloyd provided 22 sailings per year, with turn-round-voyage duration of about 90 days. They operated 6 ships. The average ship size was about 12,000 dwt.

The number of non-conference member ships amounted to about 50 % of the conference member ships. As their load factor was relatively lower, they had to reduce the freight level to attract more cargo.

Throughout this period, the number of sailings remained stable. As the volume increased, so did the load factor. On the whole, in spite of the declining freight rates, the business was very profitable, particularly for the conference members.

3. ERA OF CHANGE - Mid 80's to late 80's

During this period, changes took place in both Trade and Shipping Services.

3.1. The Trade.

From mid 80's, the project cargo started to decline. This was for two reasons. First, more and more projects were financed with Japanese support, resulting in a shift of origin of project cargo to Japan, instead of Europe.



The Leonardo da Vinci at work in Rotterdam.

Accessibility to ports, port development and navigable rivers are a part of the maritime development of Indonesia and crucial for the economy.



Hopper dredger Cornelia Overveen.



Offshore production platform, flaring gas.

Will Indonesia continue to be an energy exporter ?

Huge amounts of coal are making this possible. Whether offshore operations will continue on the longer term is another question.



Gravel dredger Arco Dart, with ancilliary equipment such as gravel screens and crane for discharging.

Secondly, during the late 80's, when the oil prices slumped, Indonesian export revenue plunged, causing a rescheduling or postponement of some of the projects.

3.2. Shipping Services - Containerization and Indonesian Response.

Simultaneously, during this period, the world witnessed the first major revolution in the shipping and transportation industry - the Containerization. While more and more cargo were shipped in containers, the Indonesian government and conference members were undecided about its future course of action. A study team was established through the cooperation of Hapag Lloyd and Djakarta Lloyd, to analyze the impact of this new phenomena, and to prepare action plans to cope with it. Unfortunately, the team was disbanded mid way through, without any conclusion. This indecision proved fatal for Indonesian industry.

3.3. The Result.

By late 80's, the west-bound cargo remained stable at 2.15 Million Ton, same as at mid 80's. The west-bound conference freight rate per ton reduced to 150 NLF compared to 200 NLF at mid 80's.

However, the most damaging was the decrease of east-bound cargo and freight. The cargo volume reduced to about 2.15 Million Ton from 3.8 Million Ton at mid 80's. The conference freight rate per ton nose-dived to 130 NLF compared to 200 NLF at mid 80's.

As one would infer, the east-bound cargo and freight were subsidizing the service, until mid 80's. As for the first time, the east-bound cargo and freight level went below the west-bound level, the profitability of the service plunged forcing the end of IndonesiaEurope Conference and Break-bulk service.

4. NEW ERA OF CONTAINERIZATION - Early 90's onwards

4.1. Discharging Productivity & Related Benefits.

Containerization revolutionized the transportation industry in general and shipping industry in particular. While, the basic carriage by sea remained similar, except for the new design of cellular ships, the discharging activities changed dramatically. For breakbulk service discharging activities had primarily been manpower-intensive. Productivity, depending on various local factors, averaged around 18 tons/gang-hour. Containerization required the discharging activities to be equipment-intensive. With about 13 movements per hour per

crane (in Indonesia), and assuming 14 ton homogeneous TEU's, the productivity soared to 182 tons/hour, about 10 times that of break-bulk era.

The increase of productivity resulted in a shorter port stay and a faster turn-round voyage duration. In addition, the delivery to the final destination (godown, warehouse, factory etc.) from the discharging port was faster, as the containers are discharged straight on to the chassis. All of this, resulted in a smaller inventory build-up for buyers as well as sellers, benefiting both of them.

4.2. Cargo Safety.

Containerization also increased cargo safety, for two reasons. First, the sturdy surface of containers protected the cargo from damage during transportation. Secondly, pilferage reduced significantly. This again, benefited both the buyers and sellers.

4.3. Partial Delivery & Its Effect - Need for More Frequent Calling.

Containerization introduced the concept of modular shipments. It opened new areas of opportunities. Forwarders started to provide consolidation services for less-than-container-load (LCL) cargoes. This enabled the shippers to execute partial deliveries, enhancing their cash flow situation.

The concept of modular shipments, the possibilities of partial delivery coupled with the advantages of better cash flow and smaller inventory build-up created a new need. Shippers wanted the ships to call more frequently.

4.4. Industry's Response To New Need - "Hub-to-Hub" Service.

Shipping being a capital-intensive business, economies of scale play a significant role in determining profitability. As bigger ships are employed, the unit cost decreases. This basic business principle is now in conflict with the shippers' needs. As they required more frequent calling, it was not possible to employ bigger vessels, because the cargo volume would not justify that. Effectively, this resulted in an end of direct call from the port of origin in Indonesia or Europe to the port of destination in Europe or in Indonesia.

This conflict created another new development - the concept of hub to hub service. A few key ports, with strategic geographical location, e.g. Rotterdam in Europe, Singapore in Asia, acted as the hubs. Big mother vessels, operated by so called Main Line Operators (MLO's), would operate frequently between these major ports. This is then supported by

the regional feeder services between the neighbouring ports and the hub port, acting as the "spokes". The feeder operators, by definition, would employ relatively smaller vessels, with frequency of calling matching the same of the MLO's.

4.5. Future Direction.

At present, no major revolution in transportation sector is foreseen. Therefore, it is believed that, the present pattern of cargo transportation shall continue.

However, with the growth of regional economies, there will be increasing pressures on the "spoke" ports to upgrade their discharging facilities, improve the draught conditions and to apply more efficient management. It remains to be seen, how these ports cope with the changing needs.

5. TRADE & SHIPPING SERVICES IN THE CONTAINERIZED ERA

After the general discussion on containerization let us focus back on the specific issues on trade and shipping services for Indonesia-Europe trade.

5.1. The Trade.

As it would be evident from the export statistics, Japan accounts for the bulk of Indonesia's exports of Crude Petroleum and its products, Gas and Coal. Therefore, in the context of our discussion on Europe-Indonesia trade, we can limit ourselves to traditional commodities, manufactured goods, machineries etc.

After the oil crisis, Indonesia had changed its industrialization policy, focusing more on export of non-oil & gas products. As a result, manufactured and semi-processed goods were added to the list of the export goods & commodities. Some of the new items, worth mentioning are the following:

- Textile & its Products
- Garment
- Furniture
- Shoes & Other Footwear
- Toys

5.2. Shipping Services:

Between Europe-Indonesia, the break-bulk service is virtually non-existent. The service is provided by Rickmers Line only. It brings only east-bound cargo, discharging in Indonesia, and then proceeding to China. All of the west-bound cargo is loaded in China, and the ship does not call Indonesian ports for loading. Present east-bound cargo to Indonesia amount to about 6,000 to 8,000 Tons (or equivalently about 14,000 to 16,000 freight tons) per sailing, with an average freight rate per ton of 125 NLF.

In line with the worldwide cargo transportation pattern, majority of the cargo is shipped through containers. It would be evident from the container movement statistics, that the **intra-Asia movement accounts for about 30.7 % of export, and about 37.3 % of import compared to European movement which accounts for only 12.2 % of export and 10.5 % of import.**

Hub-to-Hub Service :

For hub-to-hub service for Europe trade, there are conference members and nonconference members. Following is the break-down of operators in each category :

Conference Members :

MLO's	Market Share(%)
• Hapag Lloyd	22.2
• P & OCL	18.0
• Maersk Line	17.3
• Neptune Orient Line	11.9
• NYK	7.1
• Ned Lloyd	7.1
• OOCL	5.8
• MOSK	3.9
• MISC	3.4
• K Line	2.3
• CGM	1.0

Non-Conference Members :

MLO's	Market Share (%)
• DSR	14.1
• EMC	14.0
• Sea Land	11.6
• CMA	9.8
• Yang Ming Line	9.3

• Norasia	9.0
• Hanjin	7.5
• UASC	7.3
• Hyundai	5.5
• Cho Yang	4.9
• COSCO	3.9
• POL	3.1

The conference members account for about 60 % of the total cargo. The export movement shows an average growth of 10 % and import movement shows a growth of 9 %. The import-export movements are fairly balanced.

It would be interesting to note that, for specific routes the MLO's formed **consortia**. Taking advantage of their relative strengths in certain routes, 2 or more MLO's agree to cooperate rather than compete. The consortium as a whole provide the service to the shippers. Typically, each consortium members contribute one or more vessels. The responsibility of filling the ship is with the consortium as a whole, not only the contributor of a specific ship. By pooling their resources, they reduce over supply of space. In this way, they serve the trade better and more efficiently by providing more frequent service.

Following are some of the consortia for the Europe trade:

- NYK and Hapag Lloyd
- P & O and Maersk Line
- NOL, OOCL and K Line
- Nedlloyd and MISC

Feeder Service :

For Indonesia-Singapore Feeder service, there are four major players :

Feeder Operators	Market Share (%)
• Samudera Indonesia	30.8
• RCL	14.3
• PUL	13.4
• PIL	10.6
• Others	30.9

In 1994, Samudera Indonesia carried about 370,000 TEU'S. On this basis, the equivalent figures for other players can easily be calculated.

6. CONCLUSION.

We have started our discussion by examining the cargo movement pattern in the breakbulk era. Following which we studied the change brought about by containerization. We have then described the present situation, in terms of MLO's in the hub-to-hub service and Feeder Operators for spokes-to-hub service.

One would notice that, both sectors are well established and are subject to competitive pressures. We presume that, this pattern of cargo transportation shall continue in future. Based on this analysis, I conclude that there is no further scope of mutual cooperation in shipping services between Indonesian Lines and European Lines.

However, to end this discussion, in a positive note, I believe there are other areas in the transportation related services where possibilities of mutual cooperation should be explored. To mention a few, Port Development, Ship Yard Development, Technical Services, are some of the areas which could be taken up for further studies by joint teams.

10.

INDONESIAN-DUTCH CO-OPERATION IN SHIPBUILDING CHANCES AND OPPORTUNITIES

by
Ir. Arief Aini Sutjahjono

ABSTRACT

There have been recently great chances and opportunities in developing maritime Industries in order to explore sea resources in the form of co-operation between countries. Indonesian Government represented by PT PAL Indonesia, a state of the art shipbuilding company owned by the state, has identified these opportunities and is recently examining possibilities to co-operate with other countries. This paper illustrates capabilities of PT PAL Indonesia as a centre of excellence in Maritime Technology with the aim of attracting concerned parties and identifying areas for such a co-operation.

1. INTRODUCTION

INDONESIA is the largest archipelago in the world consisting of 13,667 island which are situated between two continents, Asia and Australia, and between two Oceans, the Indian Ocean and Pacific Ocean.

For century Indonesian seas have been great contribution to the welfare and prosperity of Indonesian people and at the same time, they become strategic issues for national security and defense. Therefore, it is necessary to have reliable inter-island transportation as a mean to establish the country unity. To develop a solid sea transportation system it is a must to have a strong shipbuilding industry in Indonesia.

Currently, Indonesian has 10 big shipyards with capacity ranging from 3,000 DWT. up to 40,000 DWT. and 20 shipyard with capacity from 500 DWT. up to 1,000 DWT. General description illustrating overall capabilities of PT PAL Indonesia, a state owned shipbuilding company, will be presented in following sections.

In order to achieve the national goals in sea-transportation, Indonesian Government has established industrial development program in the field of maritime industry. Within this framework, PT PAL has been designated as the centre of excellence for shipbuilding

industry with responsibility to develop state of the art technology and then distribute to the whole industries as part of Indonesian industrialization process. The following is a general description of PT PAL INDONESIA, a modern state--ed company and its activities as a major player in Indonesia shipbuilding industry.

2. PT PAL INDONESIA'S.

2.1. HISTORY OF PT PAL

The idea for the establishment of the shipbuilding industry was initiated by Governor General VD Capellen in 1822 to support the Royal Navy of Netherlands in Asia.

The idea was realized in 1894 by construction of facilities for ship repair & maintenance in Ujung (Surabaya). Those facilities were congregated under Netherlands government and, which so-named Marine Establishment (ME) in 1939.

When Japanese colonised Indonesia, ME was taken over by KAIGUN-SE 21-24 BUTAI and it continued to serve as ship repair and maintenance facilities but for the Japanese naval ship. When the Indonesian independent war broke up, following the surrender of Japan to the Allied Forces, the ME was taken over back by the Netherlands army, and since the 27th of December 1949 the MF was handed back to the Indonesia Government which then called the "PENATARAN ANGKATAN LAUT" (PAL). The duty of PAL was to support repair & maintenance of the Indonesian Navy and also became the Naval base of Republic of Indonesia.

By the government regulations No. 4, 1980 and the "Establishment Certificate" dated 15th & April 1980, PAL was changed to become PT PAL INDONESIA (PERSERO) under the leadership of Prof. DR- Ing B.J. HABIBIE.

Under his leadership and in line with the national development plan, the facilities of PT PAL INDONESIA have been considerably expanded and become one of the most modern shipyard in the world.

2.2. PT. PAL'S MISSION.

In running its business, PT PAL has the mission to :

- Become a centre of excellence in shipbuilding industry both for combat & merchant ships.
- Perform ship repair & maintenance for Indonesian N" an ' d other ships.
- Become a centre of excellence in national maritime industry.

2.3. THE ORGANIZATION.

In order to manage and coordinate its activities, PT PAL INDONESIA is organized into seven directorates and six divisions, with the following organization elements are adopted:

- Commissionery Council.
- President.
- Senior Executive Vice President.
- 7 Executive Vice President.
- Merchant Ship Division.
- Naval Ship Division.
- Ship Repair & Maintenance Division.
- Electronics & Weapon Division.
- Material Division.
- General Engineering Division.

3. CAPABILITY.

3.1. DESIGN & ENGINEERING.

To support its operation, PT PAL INDONESIA has developed design and engineering capability required to implement state of the art technology. The design office and the production floor are integrated by a CAD/CAM system to ensure high quality product and production speed.

The system has already been in place since 1983, initially utilized to enhance the ship architectural design and hull construction. Currently, the capability of the system is upgraded by the acquisition of the 3D interactive graphic system, so that the engineer can perform graphical data manipulation.

Among the software and hardware available in **PT PAL INDONESIA** are of the following:

- FORAN version 10, using the DECIVAX 11-750 mini computer with 4 graphic terminals and 6 Alpha numeric terminals
- CADAM system *Host CADAM (main frame).
 *ProCADAM / Professional CADAM (workstation).
- Possy system:
As a complement to the FORAN system in calculating ship characteristic equations for example : - Naval Architecture calculations for special ships, steel construction plans, independent tank, AC capacity of ship, etc.

- Lloyd's Register Plan Appraisal system for ships.
- MSC/NASTRAN & MSC JXL, this program has a capability to analyze a design at all stages whether partially or completely for any kind of finite difference or finite element causation method.

Improvement on the CAD/CAM system is continuously programmed, be it done in-house or subcontracted out, to keep up with the pace of the technology and to gain market advantages.

3.2. MERCHANT SHIP DIVISION.

The Merchant Ship Division, has steadily developed its activities in the manufacturing and construction of ships of all classes and capacities, including offshore units.

AS a total, the division has a capacity of producing annually 3 ships of 40,000 DWT. each.

This division has a wide range of products such as tanker, bulkcarrier, general cargo carrier, container carrier, passenger ship, etc.

3.3. NAVAL SHIP DIVISION.

The Naval Ship Division, has capability constructs naval surface vessels and makes available all support services for the navy.

All these are developed to be a naval facility from the technical knowledge, human insight and traditions developed from beginning of the century. These facilities have capabilities to produce 4 ships/year of FPB-57 type and 5 ships/year of FPB-28 type.

3.4. GENERAL ENGINEERING DIVISION.

This division has a mission to develop the manufacturing capability of Power Generation Plant such as Balance of Plant, Turbine Assembly, Diesel Assembly, Steel Structure, etc.

3.5. SHIP REPAIR & MAINTENANCE DIVISION.

This division is mainly involved in ship repair & maintenance activities utilizing floating docks and graving dock. Floating repair is also undertaken by this division. It is also

active and predominant in the ship conversion area.

3.6. ELECTRONIC AND WEAPON DIVISION.

This division is highly reliable and entrusted by Indonesian Navy, for its electronic and weapon repair facilities, which is uncommon to most ship yard.

3.7. PRODUCTION FACILITIES.

PT PAL INDONESIA production facilities cover an area of approximately 150 ha. These facilities also consist of:

- Docks : *Graving Dock : - capacity 40,000 T : 1 unit
 - capacity 20,000 T : 1 unit.
 - capacity 1,000 T : 2 units.
- *Floating Dock : - capacity 5,000 T : 2 units.
- *Ship Lift : - capacity 2,000 TLC : 1 unit.
- Shops.
- Ware houses.
- Handling equipment.
- And supporting building and office.

3.8. TRAINING & EDUCATION.

PT PAL believe that quality products originate from quality people. Therefore, to develop and improve the quality of skilled manpower, PAL has established the facilities and developed vocational training programs. These programs consist of : shipbuilding, welding, boat building, electrical, mechanical and carpenter training. E@ training program is designed to meet the shipbuilding requirements.

To carry out these programs, PT PAL is provided with a training facilities with the capacity to train 1000 students simultaneously

In line with its mission as the centre of excellence in shipbuilding industry, to fulfil the need of shipbuilding related skilled man power for nation wide scope, PT PAL has been developing both the training program and facial in the form of cooperation with Indonesian Ministry of Education and Culture since 1990.

Up to this time, the number of student graduated from PT PAL's Training Centre are eight hundred and thirty seven (837).

Following up the above mentioned program, cooperation with various Universities both domestic and abroad are also carried out to obtain higher degree of education, i.e., undergraduate and postgraduate studies.

For these purpose, scholarships are provided by various government institutions. This has presently resulted in two students awarded Ph.D./doctoral program, twenty one student awarded Master degree, and eighteen students are in final stage of their postgraduate studies, as well as fourteen students are in final stage of their undergraduate studies.

3.9. HYDRODYNAMICS LABORATORY.

To develop fundamental understanding of both theory and physical model testing in the field of hydrodynamic, PT PAL Indonesia and BAPT jointly have been developing hydrodynamics laboratory in Indonesia.

The facility is intended not only to help optimize ship design but also to perform researches, so that it can contribute to science and technology.

In 1994 the construction of the hydrodynamic laboratory in Surabaya has been completed. This year the commissioning and official operation will be executed.

The basic design of this facilities was done by the cooperation between BAPT/Indonesia and MARIN/Netherlands. These hydrodynamic facilities constitutes the most advance and modern laboratory in the South East Asia,

Facilities :

1. Towing Tank: Length: 234.5 m.
Width: 11 m.
Depth: 515 m, wave maker installed.
2. Cavitation Tunnel, L = 18 m, H = 12 m, provided with one measuring section of 0.35 x 0.35 m and total length of section 4 meter.
3. Manoeuvring/Ocean Engineering Basic.
4. Data Acquisition and analyses system.
5. Model of workshops.
6. Photo, film and video laboratory.
7. Library.

3.10. QUALITY ASSURANCE.

To guarantee the quality of products and services of PT PAL, the company has established the quality assurance system for shipbuilding and General Engineering,

executed and managed by Assistant to the President Director for Quality Assurance, who report directly to the President Director.

The quality assurance executors are given full authority to asses, bases on a strict quality standard, each and every products which are about to be delivered.

The result of this system has been acknowledged by the fait that PT PAL in 1994 was awarded an ISO 9001 Certificate by Germanischer Lloyd for new shipbuilding (merchant ship, naval ship) and General Engineering. The certificate process that PT PAL is capable of producing high quality products comparable to those made in other part of the world.

4. THE PRODUCTS.

Since its establishment in 1980, PT PAL has been producing a wide ranging products from 6,500 T DWT Tankers to small specialist vessels. A contract has currently been awarded by a Stephonson and Clarke Shipping LTD to build an 18,500 T DWT. Bulk Carrier, which will be followed by other contracts for three 17,500 T DWT. Tanker product carriers awarded by the State 011 Company (PERTAMINA) this year.

Some of the products which have been produced are as follows:

1 Naval Ships:

- Fast Patrol Boat 28 m: 1 7 units.
- Fast Patrol Boat 57 m, 7 units.
- L C M 30 T. 1 unit.

2. Merchant Ships:

- Container/Semi Container Vessel, Caraka Jaya program phase I & 11 (3,000 - 3,650 DWT.) : 1 5 units.
- Tanker (3,500 - 6,500 DWT.) : 3 units.
- Tug Boat (200 - 2,400 HP). 8 units.
- Utility Vessel : 1 unit.
- Tuna Long Liner 60 GT. 7 units.
- Shrimp Trawler 150 GT, 1 unit.
- Sailing Boat (up to 900 DWT.) : 2 units.
- Floating Dock 5,000 TLC: 1 unit.
- Passenger 500 PAX: 1 unit (delivery August 1995).
- Container Vessel Caraka Jaya phase IV program: 4 units.

3. General Engineering:

- Balance of Plant Steam Turbine.
- By Pass Stack.
- Assembly Diesel Engine.
- Level Luffing Crane 15 T.
- Over Head Crane.
- Steel Marking Equipment.
- Steam Turbine 189 MW,

- Coal Silo.
- Air Preheater.
- Low Pressure Drum.

5. CONCLUSIONS.

The brief description above has tried to overview the activities and capabilities of PT PAL INDONESIA, a shipbuilding industry determined to be one of the best in the world. Sailing along the wave of shipbuilding world, PT PAL is convinced that people are the key element to achieve its ambition. Therefore, PT PAL will keep its effort in training and retraining program. However, this effort requires relatively g~ amounts of money, so that PT PAL opens up an opportunity for cooperation in this field. The cooperation will share the fund required for the program and more importantly will share the experience and expertise among parties.

The cooperation is possibly expanded into material procurement management with respect to material procurement, some obstacles still exist in the yard due to necessary imported materials required during the construction of a ship, Eventhough various efforts have been placed to overcome these problems, optimum result has not yet been achieved, This has raised serious attention for external parties to cooperate with the yard to obtain the best solution.

Another commercial matter which is a common phenomenon for ships owners to finance contracts using credit facilities also requires serious attention.

There are also other commercial matters which call for special attention in the current shipbuilding business, i.e. financing scheme. PT PAL is looking forward to potential opportunities arising from ever growing Pacific Rim market. The opportunities will be realized by the availability of financial support. To improve its market position, PT PAL is also interested to form a partnership to develop this financial capability. it is hope that the partnership can speed up maturing the untouched market and benefit from it.

From the above mentioned scheme it is ex~ed that chances are widely opened for cooperation in the area of:

1. Shipbuilding and ship repair business for mutual benefit of both parties.
2. Utilization of Hydrodynamic Laboratories in Surabaya whether for testing or research and development activities.
3. Logistic and infrastructure such as material and equipment that still need to be developed.
4. Exchange scholarship and job training for human resource development,
5. Design & Engineering that still need to be developed.
6. Financial scheme for supporting a project.

11.

INVESTING IN INDONESIA A particular case : The Maritime Subsector

by
SUGIHONO KADARISMAN

1. General

The economic development in Indonesia has been progressing remarkably since 1984 when the Government first launched its economic reform policies. This can be observed by the following indicators :

- Gross Domestic Product (GDP) reached ca. US\$ 145 billion in 1994 making Indonesia's income per capita US\$ 767,- in that year, which is more than ten times of that in 1969 when the systematic development planning (Repelita's) was just started.
- Continuous growth of the middle income group, indicated by the fact that only less than 15% of the people now living under poverty line.
- Greater role of the manufacturing sector to the economy (22.3% in 1993), which has surpassed that of the agriculture sector (18.4% in 1993), implying that industrialization has gained its momentum. With the current pace of industrialization, contribution of the manufacturing sector is expected to continue growing in the coming years, hopefully until it reaches and settles at a comfortable level of 30%.
- Economic growth persisting in the vicinity of 6-7% annually during the last 5 years, while inflation managed to be kept at one digit level.
- Increase of exports with surplus against imports. In 1993 exports reached a value of US\$ 36.823 billion, while imports were US\$ 28.324 billion. Encouragingly, oil & gas exports are now contributing only 26.5% (in 1993). This means that non-oil & gas commodities (manufactured goods in general), have taken over command in our exports, signifying Indonesian economy's more independence from the unpredictable oil & gas sector.

These accomplishments have been made possible thanks to the ongoing deregulation and debureaucratization measures taken by the government, with an "outward looking" orientation, aimed at boosting market driven/trade related investments.

In doing so, it was necessary that a conducive monetary environment be provided. In this respect, the government has been adopting these policies :

- Free foreign currency exchange.
- Controlled inflation, which is to be kept at one digit level rate.
- Controlled current deficit account (not more than 3% of the GDP).
- Debt Service Ratio (DSR) not to exceed 30%.
- Due payments of foreign debts (interests as well as principles).

These prudent macro-economic policies are really the pillars of Indonesia's economic development. They have been consistently in place, and will be maintained that way in the future. The basic idea of these policies is to provide a generally business environment without ever overheating the economy.

In such a monetary environment the government is determined to continue enhancing investments. In line with that, the kind of projects and the way their investment will be financed, become major considerations in deregulating the sectoral policies, and investment policies in general.

Therefore, further pro-business environment continues to be created by the government, intended to stimulate investments in the real (productive) sectors. This include taking measures such as :

- Relaxing the investment regulations to promote Foreign Direct Investment (FDI) in form of direct and larger capital placements (equities) , giving no overheating effect of the economy.
- Introducing portfolio investment as an alternate investment financing source through stocks and bonds by listing at the domestic and foreign stock exchanges, and secondary markets. To provide more viable capital market operations the domestic stock exchanges are privatized and improved from time to time in terms of their legal aspects and automation.
- Privatizing the banking system, but with strict lending and borrowing guidelines, in an effort to make the banking industry as a source of commercial loan more efficient.
- Improving the corporate business and taxation climate. The Parliament has just approved the new Corporate Law to make business in Indonesia compatible with the eminent GATT/WTO era. The Tax Law was also revised and just enacted in January 1995. It now offers a much better fiscal environment for business concerning tax rates, depreciation of capital goods, share and stock exchange, deductables, and provisions for further relaxation of taxes in certain regional and sectoral business activities.

Sectoral wise, more attention are given to promote investments in the area of :

- Agribusiness, aggro-based industry and tourism sectors, since these are sectors that are

potential as foreign currency earners, while requiring relatively less imported raw materials.

- Selected import substitution industries, which have real competitiveness and good medium prospects in the domestic market and also potential for export, such as components and intermediate goods needed by the growing industry and infrastructure development. on very selected basis the production of major items which have good comparative advantage in terms of their mixed character of labour and technology intensiveness (eg. shipbuilding) may also start to be promoted. However in doing these, licensing and multi sourcing approaches should be strongly taken into account.
- Energy and infrastructure developments to ensure sustainable growth, through more privatization and using larger equities.

In the mean time, the government fully realizes the need to continuously develop the market access for Indonesian products. Indonesia believes in the merits of global free trade and investment, since they would not only enlarge market opportunities but also generate better productivity, thus competitiveness in the global market, and eventually better quality of people to ensure sustainable progress.

Indonesia has been pro-active in making the Uruguay Round come into a conclusion, and further quickly ratified the new GATT/WTO multilateral agreement. Even before that, realizing that global free trade is an inevitable course of history, Indonesia took the initiative to speed up the completion of AFTA (ASEAN Free Trade Area) by the year 2003, instead of 2008 as previously agreed by ASEAN member countries. Indonesia was also very much involved in making APEC a progress. Last November 1994 Indonesia hosted the APEC Leaders Meeting in Bogor, and Indonesia actively took part in conceiving the "Bogor Declaration", which is a political commitment of APEC Leaders to set the year 2010 as a deadline for developed members of APEC to liberalize their trade system, and the year 2020 for the developing members. Although Bogor Declaration is not legally binding, but for sure every member of APEC is now committed to do its best in the pursuit of these goals.

Both AFTA and APEC are of course consistent with the GATT/WTO. In effect, the Bogor Declaration and its subsequent developments will constitute a certain/concrete format in implementing the GATT/WTO. And AFTA may be deemed as an interim step (building block) towards APEC, and eventually the GATT/WTO.

2. Investment Policies and Regulations

In the context of Indonesia's national development, basically investment has the purpose of transforming economic potentials into real economic strength. Indonesia's rich natural resources endowment, large population number, climate and geography really comprise a national asset with an enormous potential to be transformed into real economic terms to achieve progress.

The way this transformation (added value process) takes place is guided by the Constitution (UUD-1945) and its implementation guidelines (GBHN) set every 5 years by the People's Assembly. Consequently the Policies and Regulations reflected in all legislation levels (sectoral laws and their operational guidelines in form of Government Regulations, Presidential Decrees and Ministerial Decrees) must refer and be derived from these two highest guiding instruments.

The business of investment in Indonesia is governed by the Laws No.1 of 1967 (for Foreign Direct Investment) and No. 6 of 1968 (for Domestic Direct Investment). However, investment in the oil & gas exploration, production and the development of its downstream industries are also subject to the "Pertamina" Law, while investment in the financial services sector another law is also applicable. A separate law also governs investment in the general mining activities.

In principle, investments in Indonesia must take place in a balanced manner and aimed at achieving a sustainable progress. To do that, the approach adopted is the so called "Trilogies of Development", where the pursuit of growth shall go hand in hand with the pursuit of equitability, and at all times providing the necessary stability as a reliable platform to make the two interact dynamically.

In reality, the deregulation and debureaucratization measures refer to the relaxation of the implementation policies and regulations of these investment laws and their related sectoral laws, with the purpose of associating to the prevailing global & open economy environment in order to gain easier access to markets, productivity and competitiveness. Nevertheless, all are to be still within the boundaries of the pertinent laws themselves. If somehow the relaxation requirements really need to overstep these law boundaries, the government would not hesitate to take initiative together with the legislative body to modify the concerned laws; however they are still to be consistent with the highest law namely the constitution (UUD1945) and the State Guidelines (GBHN).

To illustrate the current investment climate in Indonesia, several salient features of the recent investment policies and regulations may be presented, as follows :

- **Government Regulation on FDI.** This new regulation (No.20/1994) which was just issued last June 1994 is considered to be, the most liberal manifest in implementing Law No.1/1967 (as compared to the proceeding ones). Highlights of the regulation are tabulated in Table-1. To cope with GATT/WTO and APEC, revision of Law No.1/1967 is currently in the drafting stage, with possible integration with the domestic investment law No.6/1968 foreseen.
- **Deregulation Package of October 1993**, which is more popularly referred to as the "October-1993 Deregulation Package", which gives county level officials more licensing authority related to investment projects, in an effort to cut bureaucratic red tape.

- **Presidential Decree No.54 /1993 on the shortening of the "Negative Investment List"**. Instead of 51 project items previously listed, now only 33 are listed where 20 are regulated and 13 are closed for foreign investment. To comply with Government Regulation No.20/1994 on investment, of further shortening of the list is being prepared by the government.
- **Tax Law No.10/1994** with implementation regulation contained in Regulation No.34/1995, which is a modification of the previous Law No.7/1983 and No.8/1983.
 - * This new tax law reduces tax rate to maximum 30%, with higher progressive ceilings aimed at enhancing small businesses.

IMPORTANT FEATURES OF THE NEW GOVERNMENT REGULATION ON FDI

(Government Regulation No. 20/1994 & Minister/BKPM Chairman Decision No. 15/1994)

- * More deductibles before tax are now granted such as costs in training, R&D and fringe-benefits in pioneer projects.
- * Government Regulation No.34/1994 allows further granting of tax deductibles through Finance Ministerial Decree related to the promotion of certain sectoral and/or regional developments. Likewise is the loss carry forward facility, which may be granted up to 10 years.
- * More flexible account on depreciation and amortization to suit the investor's needs, namely through free choice of calculation based on straight line method, fast declining method or a mix of both.
- * More favourable taxation climate for share transactions in an effort to make Indonesia a capital "sanctuary". Share sales through stock exchanges are only taxed 0.1%, with additional 5% if they are founder's shares. The tax is directly withheld by the stock exchange management and it is final assessment.
- * Withheld taxes on profit/fee/royalty/dividend, transfers are accounted through tax treaties with foreign countries.
- * Tax exempt on foreign shareholder's dividends intended for reinvestment.
- * Tax exempt on capital gains earned through share listing in stock exchanges intended for reinvestment in the real sector (included in retained earnings).

- **Income Corporate Tax calculations** are carried out on self assessment principle.
- **Tax Incentives.** Through investments which are approved by BKPM, import duty exemption is granted on imported capital goods. Two years need for imported raw material are also granted import duty exemption or significant reduction. Through regular deregulation packages, import tariff on most imported raw material needed by the industry keeps to be cut to as low as 510%. If the products are exported, import duties on raw material previously paid will be reimbursed. In and out free movement of goods and exemption from import duties are applicable for bonded zones and export entrepots (EPTEs). Value Added Taxes (VAT) are also exempt on subcontracting by industries located in bonded zones and export entrepots to industries in the customs area.
- **Labour.** Labour factor continues to be Indonesia's comparative advantage. Although minimum wage level are increased periodically, for long Indonesian labour will still constitute an attractive proposition for investment.
- **Expatriates.** To fill the scarcity gap of middle level skilled managers and specialized technicians, employment of expatriates are welcome. Regulations on expatriate visa and work-permits are reviewed and relaxed from time to time.
- **Intellectual Property Right (IPR).** The trademark and copyright laws have been improved to be compatible with international standards. Even revision of the newly enacted patent law is now under way to align with the GATT/WTO.
- **Investment Guarantee and Dispute Settlement.** Indonesia actively establishes Investment Guarantee Agreements (IGA) with foreign countries. Indonesia is also a signatory member of the International Centre for the Settlement of Investment Disputes (ICSID) and Multinational Investment Guarantee Agency (MIGA).
- **Tax Treaties.** Indonesia makes tax treaties with foreign countries to avoid double taxations.
- **Infrastructure.** Industrial Infrastructure keeps to be improved including by the private sector. Infrastructure privatization also serves as an attractive investment opportunity.
- **Approval & Licensing Procedures.** BKPM is the only agency to issue the approval and licensing of FDI investment projects and their operation. It acts as the first gate for FDI entry by evaluating and approving the FDI project applications, and the last gate by licensing the completed projects before they are ready for operation. In between, a number of prerequisite licenses are processed and granted in the concerned regions where the project is located. The "October 1993 Package" was intended to chop down the long bureaucratic chain in this respect, and further simplification and synchronization of approval & licensing procedures at BKPM level regional level will continue to take place.

3. Prospects in the Maritime Subsector

It is understood that in the context of this paper, the maritime subsector should cover the shipping industry, shipyards, port facilities, offshore platforms and the related supporting industries including services.

To explore investment prospects in the maritime subsector, perhaps one could start by analysing Indonesia's balance of payments performance. Although overall balance has been positive from year to year (+US\$ 1.121 billion for FY-1994/1995), it always shows a deficit in its current account (-US\$ 3.19 billion for FY-1994/1995). The deficit is however within the tolerable percentage level against the GDP, namely less than 3%.

Evidently this deficit current account is largely caused by large expenditures on foreign services such as in shipping. In FY-1994/1995 for instance, the expenditure on foreign services amounted to US\$ 5.508 billion.

Deficit current account does not necessarily mean a bad thing. On the contrary, it signifies a "bullish" economy is going on in Indonesia and investing here is indeed attractive. The challenge is however, how to make this deficit level under control (not to exceed 3% of the GDP for instance). It is therefore important for Indonesia to cut spending on these services or take measures to generate revenue, added value, employment in the important element (s) which cause the deficit, such as in the shipping subsector.

It is for this reason that since 1991, with its famous "November Package", Indonesia has been liberalizing its shipping industry and allowed FDI in the passenger and cargo shipping services. But there are several performance requirements attached to this, e.g. the FDI is to be a joint venture with existing licensed Indonesian shipping company as a partner, and that the FDI company shall possess at least one vessel of 2500 DWT size (or larger) bearing Indonesian flag. Consequently, the Indonesian crew requirements for the vessel would be applicable. Of course, the company in its operation may lease or charter additional vessels with foreign flag. The company may choose freely its vessel operation routes in the territorial as well as ocean waters and with very simple permit procedures. Indonesian navigation and operation regulations to the vessels movements are applicable.

Approval on FDI in shipping industry is issued by BKPM after evaluating its investment aspects and correlating with the sectoral regulations. This approval includes granting the investor with exemption on the vessel and other capital goods import duties. Tax on the vessels flag registration is also exempted.

The deficit current account is also largely caused by foreign expenditures in ship-repair and maintenance. It is therefore, that Indonesia promotes investment in shipyard projects. In fact, the past few years had been relatively good years for the Indonesian maritime industry. Backlog orders combined with new domestic as well as foreign ships and offshore construction orders, contributed to the increased works at the shipyards, and marine offshore fabrication plants. The ship repair and maintenance activities also experienced

fairly good business with almost full occupation of existing capacity. With the growth of activities in the shipbuilding, ship repair/maintenance and marine construction sectors, the ship related material, machinery and equipment industry also recorded a sound and satisfactory development.

Development of shipyards is particularly encouraged in the Eastern Region of the country, since economic activities have started to intensify there and will be more driven in that direction. By locating shipyards in that region, considerable time and cost in providing shipping services will be saved, as vessels while going in and out of the shipyards can be readily utilized to fill the scarcity of ship's calls that still present a problem for the region until now. Unlike in the FDI approval in shipping industry, there is no special performance requirements attached in approving FDI in shipyard industries. To obtain FDI approval in this respect the same treatment as in approving other trivial industries will be given.

Shipyards industry has a characteristic of balanced mix between labour and capital intensiveness. That is one important reason why opening a shipyard facility in Indonesia has considerable comparative advantage in terms of labour cost. Indonesian based shipyards will also be advantageous because of the proximity to the fast growing Indonesian economy and its surrounding dynamic economies of ASEAN (AFTA) and the AsiaPacific. Shipyards industries in Indonesia is prospective not only for ship repair and maintenance, but certainly also for shipbuilding.

In the coming years the fishery subsector will play a growing role in the Indonesian economy, and FDI in fishery, particularly in the fishing activities, is welcome. However, presently it is required that the fishing vessel(s) that are to be invested must be built in Indonesian shipyards. This should be an attractive investment opportunity for shipbuilders. To obtain a competitive Indonesian made fishing vessel, its hull as a part of the invested capital goods can be made locally, and the vessels engine, equipments and fishing accessories as the remaining invested capital goods can be imported with import duty exemption granted. In fact this scheme can be generally applied to FDI in shipping business where local shipyards can build the compulsory Indonesian flag vessel(s).

Another maritime project attractive for private FDI is in the dredging of rivers and port waterfronts. The fast growing economy would need greater role of river and sea transportation systems. The fact that most rivers and port waterfronts in Indonesia have fast rate of shallowing of their waterbeds really offers a good and perpetual business, thus investment opportunities. The government is now privatizing more activities in this area. The dredging vessel(s) are considered as the invested capital goods which will be granted exemption on import duty and free tax on change of flag of the vessel. Certainly if these vessels are built at the local shipyards, it is very much welcome. The important specialized equipments of the vessel may be imported with import duty exemptions.

In Indonesia's booming need for sea cargo transportation, port facilities such as warehouses and container terminals are equally prospective targets for private FDI.

It is to be noted however that the related business such as freight-forwarding and stewardoring are still prevented from FDI by the prevailing sectoral regulations.

Offshore platforms construction and other & gas exploration/production installation activities and their related supporting industries also offer good investment opportunities. The Natuna and Madura Natural Gas Projects for instance, are really worth for investors to consider.

4. Conclusion

Indonesia is presently an attractive place for FDI. Particularly, the maritime subsector offers a very prospective returns, profits and medium/long term benefits.

STATUS OF THE INDONESIAN MARITIME INDUSTRY

As per December 1994

Source : Department of Industry

a. Potentials

There are 248 shipyard industries in Indonesia which are active in the shipbuilding & repair with a capacity of 110,000 BRT/year (shipbuilding) and 2,600,000 BRT/year (shiprepair). They are spread in the country :

- 27.54% in Java island
- 27.12% in Sumatera island
- 26.27% in Kalimantan island
- 19.07% in the Eastern Regions

The largest ship that can be built at a single shipyard is 50,000 DWT and the largest dockyard for ship maintenance and repair is 20,000 TLC.

There are also 20 industries in the fabrication of offshore platforms. These industries are mostly located in Java island, and several in Batam island and East Kalimantan. Installed capacity has reached 35,000 steel ton/year.

b. Experience

The type and size of largest vessel made in Indonesia so far :

- Semi-container, "Caraka Jayall type-4, 180 DWT
- Ferry, "Ro-roll type - 5,000 BRT
- Oil Tanker - 16,000 DWT (export)
- Fishing vessels (trawlers) - 165 GT.

Those industries in the fabrication of offshore platforms can meet the needs of oil & gas projects with various specifications. They have also been exporting and installing these platforms.

c. Engineering & Developments

The Indonesian maritime industry has gained experience in the engineering & design and development of various vessels and offshore platforms, such as :

- | | |
|---|----------------|
| - Log carrier ships | - 8,000 DWT |
| - Oil tankers | - 6,500 DWT |
| - Semi-container ships | - 4,180 DWT |
| - Dredging vessels | - 12,000 ton |
| - Various fishing vessels | - up to 250 GT |
| - Floating Dock | - 6,000 TLC |
| - Tugboat of all sizes | |
| - Offshore installations (jacket, platform/deck, single point mooring buoy and living quarter). | |

d. Business Cooperation prospects

Joint-venture possibilities with these industries can be explored.

INDONESIA MARINE INDUSTRY 1993 (APPENDIX)

by
SUGIHONO KADARISMAN

THE DEVELOPMENT OF INDONESIAN MARINE INDUSTRY 1992 .

1. GENERAL SITUATION.

The past few years had been relatively good years for the Indonesian Marine Industry.

Backlog orders combined with new domestic as well as foreign ships and offshore construction orders, contributed to the increased works at the shipyards and marine offshore fabrication plants.

The ship repair and maintenance activities also experienced fairly good business with almost full occupation of existing capacity.

With the growth of activities in the shipbuilding, ship repair/maintenance and marine construction sectors, the ship's related material, machinery and equipment industry also recorded a sound and satisfactory development.

2. YARDS & FACILITIES.

The Marine Industry in Indonesia is under the guidance of the Ministry of Industry and consists of:

- Ship Construction/Building Industry.
- Ship Repair & Maintenance Industry.
- Marine Offshore/Rig building Industry.
- Marine/Ship Related Machinery, Equipment, Material and Component Industry.
- Shipbreaking Industry.

At the end of 1992, shipyards & dockyards registered by the Ministry of Industry are :

2.1. Steel Ship/Dock Yard.

- State-owned limited companies5
- Private-owned limited companies123
- Owned by Government Departments for own use (Sea Communication, Fisheries, Customs, Mining, Marine Police etc)22

2.2. FRP Boat building Yards.

- Private-owned limited companies13

2.3. Wooden Shipyards.

- Private-owned limited companies, cooperatives and owned by individuals.

According to location of the yards, the distribution is as follows :

- on Java island36%
- on Sumatra island.....27%
- on Kalimantan island.....17%
- on Sulawesi, Maluku, Irian Jaya islands.....20%

The steel shipyards have the following facilities and capacities :

Newbuilding

- Facilities (building berths)
 - up to - 1.000 GT 108 units
 - 1.001 - 4.000 GT 22 units
 - 4.000 - 8.000 GT 8 units
 - 8.001 - 40.000 GT 4 units
- Total annual newbuilding capacity : \pm 150.000 GT
- Largest building berth/dock 40.000 GT
- Largest ship ever built 12.000 T Dredger.
- Largest ship under construction :
 - 18.900 GT Ro-ro Passenger-Trailer Carrier and
 - 16.000 DWT Chemical Tankers.

Repair/Docking

- Facilities
 - Slipways up to 1.000 GT : 165 units
 - Graving docks 1.000-30.000 GT : 18 units
 - Floating docks 1.000-20.000 GT : 19 units
- Total annual docking capacity 2.000.00 GT
- Largest docks :
 - Floating dock : 20.000 GT
 - Graving dock : 30.000 GT

3. SHIPBUILDING

New ships orders, ships delivered and ships under construction during the years 1990 - 1992 include :

- (32) 3650 DWT General Cargo and Semi Container Cargo Ships
- (12) 1500 DWT General Cargo and Semi Container Cargo Ships.
- (1) 1000 DWT Prototype Combination Motorized-Sail Steel Cargo Ship.
- (2) 16000 DWT Chemical Tankers
- (4) 6500 DWT Product Oil Tankers
- (7) 3500 DWT Product Oil Tankers
- (9) 1500 DWT Product Oil Tankers
- (1) 18900 GT Roro Passenger &, Trailer Carrier
- (1) 5000 GT Roro Passenger & Car Carrier
- (35) 200-600 GT Roro Passenger & Car Carrier
- (2) 5000 Tlc Floating Docks
- (7) 8000 HP/57m/56 knots Fast Patrol Boats
- (12) 2440 HP/28m/30 knots Fast Patrol Boats
- (8) 150 GT. Fishing & Fishing-Training Vessels
- Tugboats (800 HP - 4200 HP)
- Tuna Long-line Fishing Boats
- Tuna Pool & line Fishing Boats
- Offshore Supply Boats (3000 HP)
- FRP Passenger Cruises etc.

As a result of active sales promotion by Indonesian Shipyards and also due to the favourable situation of the international shipbuilding market, the Indonesian Shipbuilding Industry had been able to enter the international shipbuilding market by securing orders from foreign shipowner (18.900 GT Passenger & Trailer Carrier, 16.000 DWT Tankers, Tugboats, Barges etc). This encouraging situation will further enhance the development of the Indonesian Shipbuilding Industry.

It is expected that more ships for export will be built in the near future.

In the domestic side, the third phase of scrap & build program of the inter-island fleet is planned to be implemented in 1993, which calls for the building of about 30 ships of 4.000 DWT Semi Container ships.

Due to age condition of Indonesian ocean-going fleet and increased demand of container trade, the Government is mapping out plan to build ocean-going Cargo and Container Ships of about 10.000 - 40.000 DWT in size. With the growing capacity and capability of Indonesian shipyards, the plan envisages

the maximum participation of the domestic yards.

The state oil company Pertamina, owns and operates inter-island tankers for oil distribution throughout the Indonesian archipelago. This fleet has a total tonnage of almost half of the Indonesian fleet of about 5 million tons.

The replacement of this tanker fleet is carried out by direct purchase of ships to domestic yards and through long term time charter program (LTTC). Through this LTTC Program Indonesian Shipping companies will build the required ships and then chartered the ships to Pertamina on a long term time charter contract. With this arrangement, the Indonesian shipyards will get the opportunity to be involved in the building of the ships.

During the past few years, Pertamina Oil Company had ordered more than 50 ships to local shipyards, consisting of Oil Tankers, Tugboats, Supply Boats etc. Through the LTTC program, there are at present 8 Product Oil Tankers being constructed at local shipyards (1.500 DWT/3.500 DWT/6.500 DWT)

4. SHIPREPAIRING.

The shiprepairing and docking sector showed good activities during the past 5 years.

Beside the ordinary annual and special docking works there were also orders from shipping lines for extensive refitting, rehabilitation and overhaul jobs in the framework of life-extension programs of their ships.

A new 60.000 GT repair dock is also planned for construction to serve the need for maintenance of Indonesian fleet of Oil Tankers, Bulk Carriers and Passenger Ships.

During 1991, a total of about 38 unit of foreign ships were docked and repaired at several Indonesian dockyards. In this field of repair and docking of ships, the Indonesian dockyards have improved its capability and its competitive standing, in price, quality as well as delivery time.

5. MARINE OFFSHORE CONSTRUCTION & RIG BUILDING

At the end of 1991, there are 18 Marine Offshore Construction & Rig building companies registered by the Ministry of Industry.

Total capacity is 35.000 T steel fabrication/year.

This industry had been developed to support the rapid expanding Indonesian oil and gas industry, since 1970, especially in the offshore exploration, exploitation and production activities.

As is well-known, these industries are hi-tech industries, which must comply to meet the highest requirements of international standards. Consequently they must employ highly qualified and skilled personnel, engineers, technicians and

workers.

Until now, this industry had built various kind of products a.o. jackets, platform, accommodation modules, single point mooring buoys, crane barges, oil & gas process equipment such as separators heat exchangers, pressure vessels, well manifolds, christmas trees etc.

Many of those products were exported to foreign countries and regions (Taiwan, India, Malaysia, Singapore, Australia, the Middle-east countries, etc).

6. SHIPBUILDING -RELATED INDUSTRIES.

As more and more new ships were and are being built at Indonesian shipyards, a favourable situation existed for investment to establish shipbuilding-related industries, producing shipbuilding material, ship machinery & equipment.

An important factor supporting the development of the shipbuilding-related industries is the construction of standard-type ships of the inter-island fleet with almost the same capacity, characteristics and operational requirements of their shipbuilding material, machineries and equipment. These standard ships are :

- 32 units of 3.650 DWT General Cargo and Semi Container ships.
- 20 units of 6.500 DWT, 3500 DWT, 1500 DWT Product Oil tankers.
- 35 units of 200-600 GT Passenger-Car Ferry Boats.
- Tugboats of 800 HP, 1.600 HP, 2.400 HP, 3.600 HP, 4.200 HP.

These conditions will serve as a basis to stimulate production on an economic scale. The Government promotes investment for the establishment of marine related factories and plants in cooperation with foreign makers and manufacturers, not only to supply the domestic market, but also for export. This is already realized for certain marine-use products like steel ship plates, ship chains, marine diesel engines, marine paints, pressure vessels, heat exchangers etc.

Assembling and shop-testing of diesel engines for power plants (up to 12.000 HP) and marine engines (up to 4.000 HP) had been performed at diesel assembling/ manufacturing plants in Indonesia. The Government had issued approval for assembling/manufacturing of marine- diesel engines of 500 HP and up to 9 foreign marine engine builders in cooperation local companies.

Deck machineries, telecommunication and navigation equipments, marine pumps, marine generators and motors, propellers, marine panels and switchboards are at present also being manufactured/assembled by Indonesian or joint venture companies.

7. DEVELOPMENT OF SHIPBUILDING TECHNOLOGY.

Modern steel ship technology was introduced to Indonesia at the end of the 19 th century when a steel shiprepairing yard was established in Indonesia.

In 1969, Indonesia launched its 1st Five Year Development Plan and at present, Indonesian is in the final complementation stage of its 5 th Five Year Development Plan.

During the 25 - 30 years period of time, hundreds of ships had been built by Indonesian yards consisting of merchant ships, special-purpose ships and defence ships.

From the practical point of view, the present level of shipbuilding technology development in a developing country such as Indonesia, can be observed from the deliveries of newly built ships and ships which are now under construction. From the record of ship deliveries, the following ships are worth to be mentioned :

- 1.500 DWT - 3.500 DWT - 6.500 DWT Product Oil Tankers
- 3.650 DWT Semi-Container/General Cargo Ships
- 1.500 DWT landing Craft-type Cargo Ships
- 1.000 DWT Combination Motorized-Sail Steel Cargo Ship (computerized control)
- 12.000 T Tin Bucket Dredger
- 1.600 DWT Trailing Hopper Suction Dredgers
- 1.100 DWT Split Hopper Dredgers.
- 5.000 GT Passenger-Car Ferry Boats
- 200 Passengers/25 knots FRP Passenger Cruisers
- 400 T/8.000 HP/300 knots Fast Patrol Boats
- 60 T/2.440 HP/30 knots Fast Patrol Boat
- 3.000 HP Offshore Supply Boats
- 4.200 HP Tugboats
- 6.000 TLC Floating Docks
- 180 GT Shrimp Trawlers
- 200 GT Multipurpose Fishing Training Ships
- Various types of Laminated Wooden Boats and FRP Boats
- From the Marine Offshore Construction Industry, the deliveries included Jackets, Platforms, Accommodation Modules, etc.

Indonesia will advance a step forward in shipbuilding technology when the construction of the following ships at Indonesian yards will be finished in 1993 -1994 :

- 18.900 GT Roro Passenger & Trailer Carrier (1 unit)
- 16.000 DWT Chemical Tankers (2 units)
- 3.650 DWT Semi Container/General Cargo Ships (24 units)
- 300 GT Tuna Long liner Fishing Boats (6 units)

The Indonesian Shipbuilding Industry anticipates further development in the field of shipbuilding technology, when the present ships being planned at the design board will be built in the near future a.o. 7.000 T LST - 8000 T Log Carrier, 6.500 GT Passenger Ships, 20.000 DWT Container Carriers, 35.000 DWT Oil Tankers & Coal Carriers, 4.000 DWT Semi Container Carriers, Fishing Vessels etc.

In Indonesia, the development and advancement of shipbuilding technology is supported by government and private institutions e.g.

- 1) 8 Faculties and 3 Polytechnics of Naval Architecture, Marine Engineering and Ocean Engineering of 6 State and 5 Private

Universities. The Institute Technology Surabaya (ITS) has a Ship Experimental Tank, established under the aid program of the German Government.

- 2) The Agency for Assessment and Application of Technology (BPPT) under the Ministry of Research & Technology.
- 3) BKI (Biro Klasifikasi Indonesia - the Indonesia Ship Classification Bureau), the only ship classification society founded in South-East Asia since 1964, which at present employs about 300 naval architects, marine/ship engineers and staff personnel and has ships under its class totalling about 4.860 units of 4.000.000 GT.
- 4) 2 Major shipyards which possess CAD/CAM capacities. (Dok Kodja Bahari & PAL Shipyard).

The support for shipbuilding technology development in Indonesia will be strengthened when the construction of the Hydrodynamic Centre in Surabaya (East Java), consisting of experimental tanks, cavitation tank and related facilities is completed and become operational in 1993/1994.

Then Indonesia will be in a position to contribute to the research and development of shipbuilding and marine technology.

8. SHIPBUILDING POLICIES & DEVELOPMENT PLAN.

Since the implementation of the 1st Five Year Development Plan in 1969, the Government had issued various regulations and policies to support the development of the Shipbuilding Industry, a.o.

- a. The establishment of a state-owned ship leasing company, the Fleet Development Multi finance Corporation. This corporation ordered new ships to local shipyards and then leased the ships to Shipping Companies at a lower interest rate and on a long term repayment period.
- b. The implementation of the Government-sponsored Ship Scrap & Build Program of inter-island fleet, whereby the Government extends low interest and long term credit to Shipping Companies, on condition that the ships must be built at domestic shipyards and follow the ship standardization program of the Government.
- c. Exemption of import duties on material, machineries, equipment and components to be used for building/repairing of ships at Indonesian yards. The list of the exempted goods is reviewed every year and take into account the development of the local shipbuilding-related industries.

- d. The Government is promoting foreign investment in Shipbuilding and Shipbuilding-related industries for establishment of new facilities, expansion of existing capacities, modernization of technology and elevation of efficiency and productivity.
- e. Upgrading of shipyards technical and managerial skills through Government-sponsored cooperation programs between Indonesian yards and foreign yards (inviting foreign Shipyards Advisory Teams and sending Indonesian experts abroad).
- f. The Government also promotes the development of the domestic Shipbreaking Industry to produce scrap iron for the Steel Industry. At Present a large amount of scrap iron must still be imported to meet the demand of the domestic Steel Industry.
- g. Measures to assist the development of the national Ship Classification Bureau (BKI) and thus contributing to the elevation of "safety of ships and quality of ships" built in Indonesia.
- h. In the educational field of shipbuilding technology, the Government promotes the cooperation between Indonesian Universities and foreign Universities through aid programs of foreign Governments.
- i. To enhance R & D activities in shipbuilding technology, a Hydrodynamic Research Centre (Towing tank, Manoeuvring & Ocean engineering basin, Cavitation tunnel) is now being constructed and financed by state budget (Ministry of Research & Technology).
- j. In the framework of export drive of non-oil products, the Government encourages the Shipbuilding Industry to enter the international market and export ships.
- k. Efforts for the localization of ship material, machineries, equipment and components will be continued and expanded through Government-sponsored shipbuilding programs.

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12.

The Dutch Point of view with regard to investments and financing in the Indonesian Maritime Industry

(From KPM to Indonesian Parcel System "IPS")

**by
H. Zwarts
Member Executive Board ING Nederland**

Ladies and Gentlemen,

I represent the ING Bank, which is part of the ING Group, a combination of a bank and an insurance group. ING Group focuses on "Emerging markets". Emerging Markets is a brief description of the rapidly growing economies of countries outside the OECD. One of ING Banks strengths is the trade finance. Through our extensive network of Trade and Commodity Finance Units, we play a leading role in the financing of imports and exports of countries. Of course, trade finance is not the instrument of investment and finance in my opinion in maritime infrastructure in a country, but we believe this aspect is also important. In my opinion without a proper trade finance, the transport of goods will be very much curtailed with the result that the need for transport will also drop considerably. Therefore this aspect is also important for a country like Indonesia.

In addition ING Bank is well known as a "Transport Bank" focusing on coastal and on oceangoing shipping. The bank has a worldwide diversified shipping portfolio and combined with our strong position in the domestic transport and port industries we feel we can speak with some authority in this field.

Looking at the development of world trade and seagoing transport, we are moderate optimistic. A general growth in the coming years of 2 and 3% seems feasible. When we single out the container traffic between Europe and the Far East, along which route Indonesia is situated, we believe that growth rates of 6 to 7% can be obtained in the coming years. Analysts consider that intra Asia growth in container traffic can even reach touch double digit figures. This means that the demand for transport will increase considerably in the coming years both on a regional and an intercontinental level. The actual percentage of growth is of course, dependent upon the actual development of the economy in the various regions, but we are optimistic about the growth of transport.

In the transport of goods by sea we will see an ever increasing shift away from the break

bulk cargo to the container, such with the exception of reefer vessels. This trend will have an vast impact on the maritime industry in Indonesia. The dominating presence of the container means however, that even smaller ports must be capable to cope with this mode of transport. The same applies of course for the ships, which must be able to handle containers. If containers have to be stripped and the cargo moved on a break bulk mode to the final destination, this will add to the inefficiency of the total transport column.

Indonesia is an archipelago of 13.000 islands spread over a total area of more than 5 million square kilometres. This geography means that sea transport of both cargo and passengers are of prime importance. There are navigable rivers in Eastern Sumatra and in Kalimantan and river shipping services therefore play an important role in communication and transport.

When considering the main international shipping lanes, Indonesia is situated along the Europe - Far East trunk routes, which all have a fixed call at Singapore, but not in Indonesia. This route is more and more dominated by the large alliances of container carriers, which increasingly offer shippers a round the world service. The pattern of this route is further changing by the scale involved. The consequence is that a very limited number of ports are visited on the route. Therefore a distinct division between trunklines and the feederlines has emerged on the route North - South Indonesia, is in between Australia - New Zealand and Korea/Japan. This traffic concerns mainly of transporting raw materials from South to North. By nature Indonesia hardly benefits from this flow of goods. In the North-South traffic there are direct calls at Jakarta in the container traffic and on a breakbulk basis. We can say that Indonesia is located at the crossroad in the East-West and North-South lanes. Of course the presence of Singapore in the region is an important factor which have both a positive and negative effect, but we feel that for Indonesia this geographical location offers opportunities to the maritime industry.

We have now dealt in short with the cargo flows around Indonesia and let us focus more on the cargo movements in Indonesia itself. Although it is a very interesting subject I will exclude the transportation of passengers. I will limit myself to the transportation of cargo.

The generation of cargo is very much a result of the development of the economic situation. Therefore we will look in more detail at the Indonesian economy. Indonesia is a large economic entity with a population of 190 min. and a GNP of US\$ 140 billion. Poverty has been strongly reduced in the last decade. Indonesia has many natural resources. The share of agriculture in GDP has fallen steadily from 25% in 1980 to 19% in 1992, mainly due to strong growth in the manufacturing industries. Agriculture is still a very important factor, with a share in employment of 50%.

Since 1983, extensive structural economic reforms and liberalization measures have been implemented. These included lowering trade barriers, easing restrictions on domestic and foreign investment and financial sector reforms. Although the reforms have not yet been fully completed, they have resulted in high export-led economic growth and an expanded role for the private sector. While growth was previously based on the oil sector, since the reforms it has been fuelled by the manufacturing industry.

Strong sectors are the textile and electronic industries and tourism.

In 1991, the economy showed signs of overheating, reflected by accelerating inflation, energy shortages, and infrastructure problems both on land and at sea. A restrictive monetary and fiscal policy helped to stabilize the macro economic situation. Despite the fact that debt servicing and amortization increasingly draws on the government's annual budget, the fiscal deficit fell from 4.6% of GDP in 1991 to about 3% in 1993. Inflation decreased from 10% in 1991 to 5% (year-end basis) in 1992, but increased again in the following years (8% in 1994).

The deregulation efforts have successfully diversified Indonesia's export base. The share of oil and gas in total exports has fallen from 70% in the early 1980's to 25% in 1993, which makes the Indonesian export position less vulnerable to external shocks. The current account has been structurally in deficit during the past few years, mainly due to high debt payments and a strong import growth. However, the current account deficit has declined slightly in recent years, mainly because of a strong growth of non-oil manufactured exports. Given increasing foreign investments and continuing foreign aid (\$ 5.2 billion 1994), financing of the deficit is not a problem.

The external debt has risen sharply during the last decade, also because of the appreciation of the yen (40% of the foreign debt is denominated in yen). The absolute amount of the debt is at \$ 1 00 billion, is one of the highest in the developing world. To temper the sharp increase in external debt, at the end of 1991 the Indonesian government set a ceiling on total foreign commercial borrowing, which will remain in force at least until the end of 1995. The debt ratios are still above the critical level but have fallen slightly in recent years thanks to the high export growth. There have never been payment arrears or debt rescheduling. Foreign exchange reserves have steadily increased over the years. Indonesia has therefore accumulated healthy reserves.

Since President Suharto assumed office in 1966 the political situation has been stable. Although Indonesia has a complex diverse geographical, ethnic, linguistic and religious structure, a serious erosion of political stability seems unlikely in the coming years. Although the debt level is high but manageable, Indonesia can be proud of what it has achieved in the last decades.

As a result of the economic growth, the volume of transport in Indonesia has steadily grown and has reached a level of 31 3 million tons of cargo (1992). Of this amount 118 million tons were export goods and 58 million tons were imported goods. The inter island domestic trade accounted for 1 38 million tons, or nearly 40 % of the total.

Although the export flows also include containerized cargoes, such as textiles and plywood, the larger part concerns bulk cargoes, such as coal, chemicals, oil, gas and edible oils. Imported cargo is to a great extent containerized. The inter island transport is mainly a breakbulk cargo operation.

When we look at the destination of the export cargo and the origin of the import cargo, we see that about 66% of the export cargo goes to countries within Eastern Asia. More than 55% of the import cargo originates from the Asian countries. If we include the USA and Australia in the Pacific rim, the figures increase to 85 % and 80 % respectively.

That means that the cargo flows in and out of Indonesia are first and foremost regional flows. This conclusion is important, because it influences very much the future needs of the Indonesian maritime industry.

I have mentioned that the interisland cargo flow was 138 min. tons in 1992. The pattern in this trade is a distribution of cargo to and from the large ports on Java to destinations at the smaller ports on the other islands.

Who carries the cargo transported in Indonesia? Statistics covering for 1992, show that from the export cargo 10 % is transported in Indonesian flag vessels. The share in the import trades is even lower with 1.5 %. These percentages have been stable over the last years. Although we believe that part of the Indonesian fleet is operated under flags of convenience, we feel the share of Indonesia in the import/export trades is too small in the domestic trades the situation is better ; Indonesian flag vessels carry 85 % of the cargo.

One of the causes for the limited share of Indonesian ships are the import/export systems adopted by traders in Indonesia. There is a regulation that all imports must be done on CIF basis, which gives the importer no right to choose the vessel he wants. The exports are on FOB basis, a system which gives the exporter no right to select the kind of transport.

Another important cause is the lack of substantial growth of and the lack of renewal in the Indonesian merchant fleets. Indonesian vessels tend to be less efficient than foreign vessels because the vessels are older and not properly equipped for the modern transport modes. In 1985 127 seaports in Indonesia were opened to facilitate international transport allowing foreign ships to load and discharge. This helped the export sector very much but it was a blow to the Indonesian shipping companies. In 1988 it became possible for Indonesian shipping companies to operate chartered vessels. This measure improved the efficiency.

Fleet renewal is always a problem for developing countries : the capital needed is enormous and the business is slow yielding. Indonesia doesn't have the protection of subsidies. In 1984 a fleet renewal program was launched when the Caraka Jaya type of standard vessels was introduced. These ships should replace vessels older than 30 years and in a later stage vessels older than 25 years, which had to be scrapped. Although older vessels were taken out of service the building program fell well behind schedule and was later abandoned.

As a result, according to Lloyds Register, the Indonesian fleet stood at the end of 1993 at 2041 vessels with a total tonnage of 3.1 min tons of dead weight. Out of this fleet 1249 ships are cargo carrying vessels. The actual fleet is bigger because there are vessels owned under beneficial flag and there are still many smaller traditional craft.

The average age of the Indonesian fleet registered in Lloyds Register is 21 years. For the cargo vessels this number is 22 years. The average age of the world fleet is 16 years which is already considered as being too old.

The size of the fleet and the average age of that fleet must be seen against the background of the projected economic growth in Indonesia for the coming years. This will generate

more cargo which will be shipped in more and more sophisticated vessels. Projections made in Indonesia show a yearly increase of the volumes transported of about 5% per year to a level of 427 million tons in 1998

At the moment Indonesian shipowners have 30 vessels on order with a total capacity of 200,000 dead weight ton. The majority of those vessels are coastal tankers. Only 5 general cargo vessels of the 3000 ton type are in order. We feel the present orderbook will not be sufficient to cope with the need of renewal.

The limited orderbook is not because Indonesia doesn't have the shipbuilding capacity. Yards like Kodja Bahari, P.T. Pal, Surabaya and Iki Udjong have modern building facilities and the technical skill is such that these yards can build sophisticated vessels. This is shown by the fact that respected North European owners have placed orders in these yards for complicated vessels. We are proud to say that ING Bank knows these owners and other potential owners very well.

If the Indonesian shipping companies want to hold their too modest share in the import and export trades, part of their fleets must be renewed. The same goes for the interisland traffic. A complete renewal of the existing cargo vessels will cost at least US\$ 5 billion, and will have a considerable lead time. Owners can renew the fleet also by buying modern second hand vessels of say 10 years old. Two remarks: are those ships available in the numbers needed and it still needs an investment of say US\$ 2.5 billion. Most probably it will be a mix of newbuilding and buying second hand vessels.

With the fleet renewal the question arises what kind of tonnage is needed. The Indonesian fleet still transports the largest part of the domestic interisland cargo. In my view it is very important that Indonesia keep that position. Therefore the emphasis must be put on the renewal of the "interisland fleet".

Because of the ongoing penetration of the container in the transport systems I believe that ships must be of a multi purpose type's container friendly but also equipped with tweendecks to handle break bulk cargo. These vessels must still have their own gear although that need becomes less apparent with the upgrading of the port system. I feel that when these opportunities will be used the Indonesian fleet can maintain her position in the interisland distribution system. Without referring too much to the past we can say that the old KPM-system has changed into IPS, the Indonesian Parcel System.

We have seen that the international transport needs of Indonesia are of a regional nature. Therefore we consider it a wise decision of the deep sea shipping companies to either withdraw from the international liner services or to cooperate with larger liner companies. We are encouraged that one of the largest liner companies has entered into a joint venture under the PMA system.

Up to now I have talked about the shipping industry and to a lesser extent about the shipbuilding industry. I have said that quite a few harbours have been upgraded. With the

coming spread of the container I feel that further investment in also the smaller harbours has to be done to make an efficient distribution network possible. This will also need a large sum of money, which is also low yielding like in the shipping business. In this respect we don't talk about the harbour facilities located next to the export projects.

They are part of the project and treated accordingly.

ING Bank is a strong player in the transport industry and we know that among our clients and also with other Dutch companies there are quite a few who are willing to cooperate with Indonesian companies in the maritime sector. We want to mention our clients in the coastal shipping, in the shipbuilding, in the oil and gas sector, of course in the dredging sector and the stevedoring companies. All of these companies have a wide experience in their respective fields and have also experience in cooperation with companies in Indonesia and no doubt they will tell you much more in the working lunches tomorrow. The other specialist on this seminar have told you already much more about the available possibilities.

Speaking about investment and finance, we talk mainly about the necessary finance for capital goods investments in ships, harbours, dredging vessels or dredging works, harbour cranes, harbour traffic control systems and other capital intensive infrastructural equipment. Then we talk about medium to long term financing with terms up to 10 years.

To be honest I have to say that the appetite of international commercial banks for long term finance to the Indonesian maritime industry is still limited. All banks have long term country limits and are restricted in taking the vast amounts necessary for the investments I have referred to. I am aware that this sounds rather negative and I would have preferred to avoid the subject if at all possible if there is no way to get around this problem.

The solution here is to finance these capital goods investments and works by making use of the facilities of the various Export Credit Agencies of this world. For instance, you will be aware that most of maritime capital goods that I previously mentioned, such as ships, dredging vessels or dredging works, harbour cranes and traffic control systems can be supplied from the Netherlands. ING Bank would be very interested to support the exports of these capital goods by providing export finance under the insurance of the Dutch Export Credit Agency (NCM), which has sufficient lines available in Indonesia.

Typical of these transactions is a 15% down payment and that 85% of the export contract can be financed for periods of 5, alternatively 8½ or 10 years after delivery, depending upon the sort of capital good. ING Bank is one of the leading, if not the leading export finance bank in the Netherlands and as such we have a considerable experience, with export finance. In this way we have among others financed the building of tugs for Indonesia which were built on Dutch yards. Through our export finance units in most of the other OECD exporting countries we can provide export finance by making use of the schemes of the other Export Credit Agencies.

Another possibility is our experience in extending loans together with the multilateral Agencies, such as IFC (part of the Worldbank) or, for instance, the Asian Development Bank.

ING Bank has extensive relationships with these Multilateral Agencies. For instance, we are the number one bank in the world with regard to co-financings conducted with IFC. The word here is Project Finance, which requires the bank has to dig really deep into the details of a project. The feasibility studies for these projects (including, completion risk issues and cash flow studies and sensitivities) are often very time consuming. Most deals done by our projectfinance departments are in the field of energy, power, telecommunications and mining. Project finance for the construction of harbours is not often encountered, probably because cash flows are often very difficult to forecast. I feel that in this stage of the development of Indonesia the project finance for harbours and other infrastructural projects will most probably be done by public funds. I wanted to mention the spectrum in order of possibilities to give you a complete picture of what might be possible, and who knows what the possibilities will be in the future.

Finally I would like to touch upon another speciality of our bank, which is ship finance. ING Bank is one of the largest banks in this field and we have built up a large experience in ship finance.

ING Bank is very much willing to look into the possibilities to create a structure on the renewal of the fleet, both from the newbuilding perspective and the buying of second hand vessels. We feel that there is not a blueprint how to come to such a structure but we want to invest our know how in trying to find one.

Ladies and gentlemen,

In the last 50 years the Republic of Indonesia has developed quite considerable and the need for transportation has grown accordingly. The one thing which did not change is the geographical situation. Therefore transport by sea is by far the cheapest and most efficient form of transport. The economic outlook is positive.

The country has to decide how it will organise the future of the maritime industries. Dutch companies are willing to invest into a closer cooperation a sack of money on this table. I can play an important role in with Indonesian companies. Without laying hope that ING Bank with its knowledge creating the financial possibilities.

13.

INDONESIA BUSINESS CLIMATE: TODAY AND LOOKING FORWARD

by
Kemal A. Stamboel

I am very pleased to have the opportunity to speak to you on the subject of "the Indonesian Business Climate - Today and Looking Forward". With the transformation of the Indonesian economy that I will be talking about later, we have, of necessity, had to spend quite a lot of time as a Consultant looking at what the next fifteen years will bring. Today offers me an opportunity to share some of this analysis with you. Your understanding is required as I am not a maritime specialist, hence I will mostly give a general perspective of things that I am sure will also be of value.

My talk will cover two major areas:

- (1) present economic condition
- (2) changes that are occurring in Indonesia, in terms of regulatory framework, capital and fund raising, and abilities to deal with foreign investors and investments, and lastly the changes in human capital.

Let's begin with the economic condition.

You should all have experienced the ripple of recent global circumstances that led to tremendous expansion in the developing countries, such as Indonesia. Those countries begin to head the charge, and combined they will average an estimated 6% of annual GDP growth in the next couple of years. This means more than double the rate of mature economies of Europe, North America and Japan.

Dramatic business development in Indonesia stands as a testimony to these current changes. Cited as a country that performs an economic miracle by the World Bank, Indonesia experienced a dramatic economic turnaround from an inflation-ridden, badly managed economy in the 60's to investment driven, expanding economy.

With a combination of ingenuity, timing and luck, within the last 25 years we opened foreign funds and investments, reduce dependence from oil exports, and free-floating our currency long before it becomes a trend in the developing economies.

The country is steadily becoming more market oriented as the Government is consistently reducing its grip on the economies out of necessity and circumstances.

The result is the emerging of a new business attitude that reflects more of an open economy.

When Mexico experienced its little difficulties a few weeks ago, a frisson ran down the backs of Indonesia's investment community, and, I might say, the investment communities of Thailand, Philippines, most of the North Asian region, all of Africa and most of South America.

I can't speak for those countries, but what has emerged is that Indonesia is not Mexico. We have a low inflation rate, a central bank that is aware of the relationship between economic policy and national development, forward looking debt managers, a relatively low debt ratio and strong debt service capacity. The rupiah is certainly being depreciated, but at a rate of about 4% per annum.

Even more significantly, the contribution to the economy from oil has fallen from over 60% some 10 years ago to about 20% now: Indonesia's economy is not just stable and well managed, but also extremely diversified. *(Much as I would like to be an oil sheik, I have the feeling our country is better off, at least in the long term, from diversifying its economy.)*

The Government is committed to this policy, and I personally would be astonished if there was any significant deviation from what has been a conservative, prudent, transparent, and, I have to say, successful, management program for Indonesia's domestic and foreign financial position.

So, what we have is an environment where the investment climate is being consciously improved for you, and the economic base is steady, reliable and strengthening continuously.

Let's now look at what you can expect when you get to Indonesia, as dramatic changes have taken place in contemporary Indonesia that surely will shape the path of our future economy and the way we relate with the world market.

Let's start with changes in the regulatory framework.

You will all be aware of the recent APEC meeting in Bogor, where the countries bordering the Pacific agreed that they should move, at varying speeds and with varying exemptions, towards complete free trade by the year 2010.

Without any prejudice intended, the Western press treated this agreement as "just another day in the free trade business". But, from the point of view of countries in the Asia Pacific area, this agreement was much more than that. It signalled unambiguously that the region accepts not just free trade, but the linking of our economies into the world economy.

The meeting that took place in Bogor showed clearly our intention to be part of those global community, and this serves as an official stamp to all efforts we have build up the last three decades to become an open economy proponent. We are right in the heart of the change. When you bear in mind that one of the strongest advocates of what took place in Bogor was our own President, you can see that Indonesia has, to use a nautical expression, *"pinned its colours fair and square to the mast of free trade."*

And the Government of Indonesia, unlike, it would appear, some other Asian Governments,

realises that this is not just free trade in goods.

The agreement, and this country's commitment, extends to services, to access to markets, to deregulation of large areas of the economy that have become the "commanding heights" of the Indonesian economy.

And where is the evidence to support this. It's all around us in Indonesia. Indosat, the long distance state-owned telecommunications company has been privatised and floated in both Jakarta Stock Exchange and the New York Stock Exchange, and at least nine more state-owned companies will follow in the coming months. Invitations have gone out to foreign companies to establish joint operations, joint ventures for specific business areas in Indonesia, and so on.

Other areas now open to foreign investment include ports (Freeport, a copper mining company in Irian Jaya, has just sold their port facilities in Irian Jaya to a foreign owned company), power generation, water supply, shipping and air transport and railways.

Following through this attitude and this determination, the Government has passed two series of decrees, which have (a) opened up very large areas of the Indonesian economy which were previously closed to investors. (b) significantly increased the level of foreign participation in other previously closed industrial sectors. Direct foreign investments will be given 30 year business permit with possible extension if the business proved to give positive impacts for the national economy. Quoted from a speech of the Minister of Investment and Chairman of The Investment Planning Board,

"100% foreign ownership is now possible for the first fifteen years of operation with more relaxed and flexible requirements"

Afterwards the company should divest as little as 5% of its shares to local shareholders through private divestiture or through going public.

I venture to suggest that a great many other countries that compete with Indonesia for investment capital would have much stronger protection regimes than this for many years to come.

The Indonesian government has also tried to eliminate some of the well known bureaucratic problems of investing in Indonesia.

A government statement I quote:

"The new licensing procedures are simpler and more decentralised, removing many time consuming steps... Our goals are to lower productions costs, ease bureaucratic difficulties and reduce risks, making the firms which invest in Indonesia stronger and more competitive in the global market place."

It would be foolish of me to try to convince you that Indonesia is as easy to invest in as the advanced Western countries - arguably it is not, and won't be for some years to come.

You will all be aware that the art of the possible is a long way from the science of the probable, and bureaucratic regulations seem to have a life of their own.

Nevertheless, it is clear that the will is there, that the regulations are being progressively removed, that the empires of the regulators are, in most areas, being wound back, and that Indonesia, to use a well worn phrase, is "open for business".

Following the saga of Barings over the past few weeks, it is appropriate that, in turning now to the capital markets, we make some reference to regulation. One of the ironies of life in the latter half of the 1990's is that politicians, journalists and others call daily for less regulation and more freedom in their personal and business lives, but more regulation and protection in their financial affairs.

Indonesia is aware of the relationship between efficient, transparent, low cost and effectively regulated financial markets and the funding of growth.

Indonesia has tried to give new form to its financial sector. A series of deregulatory decrees over the past 5 to 6 years has resulted in an explosion in the numbers of banks in Indonesia. To give you an idea, and I have excluded from these figures the rural lending banks and a variety of non bank financial intermediaries, licensed non public sector banks grew in number from 90 in 1988 to 200 in 1993. *(Speaking as the Director of a firm that consults to banks, I think this is a wonderful statistical).*

More importantly, the private banks (including foreign banks) are capturing market share: their share of loans has gone from 26.4% in 1988 to 44.5% in 1993, and I expect the number to be past 50% by the end of 1995. This is important, because, without disrespect to our friends in the State banks, it has been shown in country after country that private sector banks, and banks with foreign investors, have consistently been the ones that introduce new products, new capital raising techniques, new risk analysis methods and new ideas.

Turning from debt to equity, the Jakarta Stock Exchange was established in 1991 as a limited liability company, and given its independence from the Capital Market Supervisory Agency (BAPEPAM). The number of listed companies has grown from 24 in 1988 to 280 recently, and, again, I would expect a significant increase again by the end of 1995. You would be aware that, allowing for the occasional hiccup, the Jakarta Stock exchange has been one of the better performers over the past few years amongst Emerging Markets bourses. The market capitalization increased dramatically, from US\$ 7.3 billion in 1990 to US\$ 60 billion in 1994.

The Futures Regulatory agency, called BAPEPTI is in the process of reform as we speak, and this should again stimulate the deepening and widening of the financial markets.

Probably even more importantly, there is a new Companies Law scheduled within a few months, a reform which has been long overdue. We have all heard horror stories about the difficulty of enforcement of legal agreements in Indonesia - that is true. all i can say is, it's

getting better daily, and I have full confidence that investors who may have been frightened away by the echoes of old Dutch law will be pleasantly surprised when the new law is in place.

Another interesting trend is that private sectors are now more aggressive in establishing financing schemes from the international market. If you doubt me, all you have to do is look at the Indonesian companies that are raising debt and equity on the world's markets: Smart Corporation (part of the Sinar Mas group), leaders in agribusiness technology, two or three world class pulp and paper companies, First Pacific (part of the Salim group), operators of one of the more successful large scale venture capital investment businesses in Asia, and so on.

A significant change in the attitude of foreign investors in looking for joint venture partners are taken place. Gone are the days of seeking for "briefcase directors", or dummy partners, which are local joint venture directors that are easily located and could usually be relied upon not to do anything that disrupted the smooth running of the business, making little or no contribution to the business (*apart from co-signing the cheques* !)

This was certainly the case of developing countries, including Indonesia for many years. What I can assure you is that nothing could be farther from the truth in Indonesia in the 1990's. Our corporations have grown up, and are, in their own rights, taking on the world. Investors in Indonesia can now confidently expect to meet a sophisticated organisation, with an outward looking (*Dare I say "Westernised"?*) management style, a diversity of skills, contacts and experiences to contribute, and, above all, a domestic marketing base to offer the investors.

A joint venture with an Indonesian company therefore can offer the best of both worlds. It offers access to a country with a competitive cost advantage, located within the fastest growing region in the world, but with joint venture partners who are prepared to do a fair deal: our local position in exchange for your technology.

Now I am not saying that Indonesian companies are the equal of the organisations that you in my audience represent. We are still a long way from that stage, albeit several conglomerates have started the path by growing globally. But what I am saying is that you can expect your Indonesian joint venture partner to contribute equally to the success of your project, to fund their share of the project off their own capital base and domestic funding sources, and derive equal benefit from the success of the venture.

My firm has the largest Human Resources consulting business in Indonesia. We have gained significant experience in encountering, time and again, a major problem in Indonesia's business world: that there is a shortage of skilled middle and senior managers. I have been at presentation after presentation where a senior Government minister has (a) stressed the importance of training and management development in Indonesia, (b) invited foreign companies to share in the financial benefits of helping to meet the training needs, and (c) committed the Government to continued financial support of training and development.

To give you an idea of the importance of training and development, banks are now required by Bank Indonesia, the central bank, to expend an amount equal to at least 5% of their personnel costs per annum on training and development.

The results of this attention are already becoming visible. Good management is available in Indonesia, good staff are available, good supervisors are available in Indonesia and good workers are available in Indonesia. Certainly, there numbers are not as high as all of us would like, but we are working on it. Investors are going to have to spend money on training staff and some executives - I would dearly like to invest in a country where that is not the case! But the days where you either ran the business on expatriates or start with a "blank sheet", and trained every single person in the organisation, at great expense and time delays, are well past us.

The Government has a strong commitment to alleviate the remaining problem of poverty amidst the economic success. Currently it embarks on a program to reduce poverty that still remains in about 14% of the population, or 25.9 million people. This figure, however, is remarkably down from 70 million people in 1970.

The economic growth and better education have also lead to the emergence of new middle class, affluent people in the economic centres of the country such as Jakarta, Surabaya, Medan and Semarang.

This emerging middle class that aspires to achieve a better economic status will continue to drive the Indonesian economy as they become more influential in the future. This growth has also spurred by the new breed of business executives returning from overseas education that slowly becomes a common sight. They, too, will play a significant role in the betterment of Indonesian human capital and shaping the country's economies in the future.

Another issue is environmental protection. Growth without environmental responsibility is increasingly understood to be economically unsustainable. Moreover, much of that growth will probably turn out to be illusory, once we can solve the problem of including the social costs of environmental degradation in the statistical base.

Environment standards are the subject of increasingly close monitoring by the Indonesian government. Moreover, it is apparent that there is a growing awareness of environment standards among Indonesians, particularly among the growing middle class. It is even explicitly stated in the Government deregulation for foreign investment I explained earlier, that one of the condition of business extension for foreign companies is adherence of the preservation of the environment.

A local environmental protection agency has also shown its awareness by making a list of companies that pollutes the environment recently. Albeit controversial, it raised concern to the community and prosecution are likely to follow.

In 1990 the government constituted the Environment Impact Management Agency (BAPEDAL).

The main function of BAPEDAL, among others, is to implement Environment Impact Analysis

(AMDAL) as a tool for sustainable development, minimisation and management of hazardous material.

Seven priority areas that have been identified as in need of aggressive monitoring are surface water pollution, air pollution, urban sanitation, control of environmental destruction, the application of the AMDAL process, hazardous waste management and "small scale activities."

To mangle a metaphor, the government is constantly walking a tight rope. That rope is the goals of national development and social and economic redistribution. Making the process tricky is the need to encourage foreign investment without losing or being seen to lose control over Indonesia's destiny, maintain Indonesia's cultural traditions, but allow significant modernisation, improvement in the welfare of the population, and personal freedom. Sometimes the tight rope walker wobbles a little, but he is definitely making strong progress across the rope!

We are making progress in Indonesia, we are "open for business", and we welcome productive foreign investment.

The way forward for our country has been identified, the pieces are gradually being put into place, and Indonesia will achieve its aim of being formally recognised as a Newly Industrialised Country by the year 2000, and of opening its borders almost completely within a decade of that date.

As Indonesians often proudly say about their beloved country: "Indonesia is a strand of rubies on the equator", a long term investment in Indonesia will pay off in the long run, bringing not only economical rewards but also more understanding and fascination of this country of wonders, a country that has attracted international traders for more than fifteen centuries.

Thank you for your kind attention.

