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# TRANSPORTATION DEVELOPMENT AND INVESTMENT OPPORTUNITIES IN INDONESIA

By: DR. BAMBANG SUSANTONO

# The Nature Of Indonesia



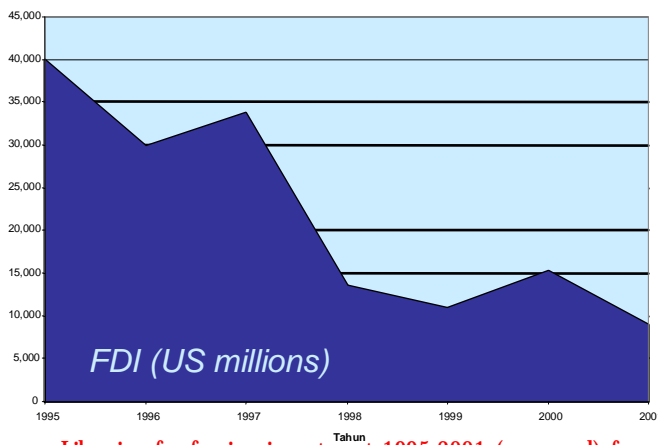
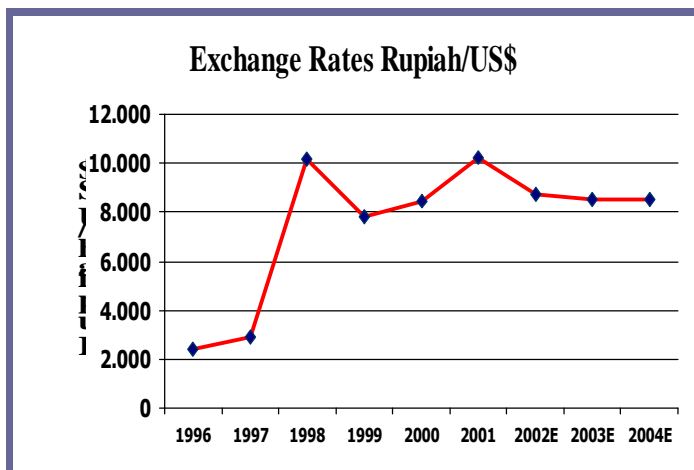
- Biggest Archipelago Country with 17.000 island
- Coastal line 81.000 km
- Population 220 million with 62% of population living in Java (7% area of the nation)
- Uneven population distribution and natural resources require regional approach in infrastructure development to ensure compatibility and compromise all sector and spatially.

# Macroeconomy

- Indonesia has made significant progress in strengthening macroeconomic policies and implementing key areas of the structural reform agenda, notably with regard to rehabilitating the banking sector. Indonesia's economic performance has improved correspondingly, and following an impressive fiscal consolidation and disinflation effort, and a significant reduction in external vulnerability, the authorities have laid a strong macroeconomic foundation for Indonesia's economic development.
- Nevertheless, Indonesia's economic performance has continued to lag behind other countries in the region, with GDP growth, investment, and exports, continuing to perform less favorably when compared to the experience of other Asian economies.

Source: IMF, 2004

Selected Economic Indicators					
	2000	2001	2002	2003	2004 (PROJECTED)
REAL GDP (% CHANGE)	4.9	3.5	3.7	4.1	4.8
CONSUMER PRICE	9.3	12.5	10.0	5.1	5.0
GROSS RESERVES (BILL.US\$)	29.4	28.0	32.0	36.2	35.2
EXTERNAL DEBT (% IN GDP)	94.3	91.6	74.9	63.6	55.9
EXCHANGE RATE	8,422	10,246	9,295	8,578	-
NOMINAL GDP (BILL.US\$)	150	142	173	208	229



Likewise for foreign investment 1995-2001 (approved) from USD 34 billion in 1997 to USD 14 billion in 1998. FDI in 2002 not better off

- Growth, however, cannot be sustained on the consumption of public sector and consumers only.
- 7% economic growth as planned in Proenas in 2004 is difficult to achieve without increasing exports and investments, including infrastructure investments.

# Transport Development

## Objective

1. SUPPORTS REGIONAL DEVELOPMENT;
2. THE REALIZATION OF AN EFFICIENT AND JUST ECONOMIC SYSTEM;
3. SUPPORTS THE EFFORT OF UNIFYING THE NATION;
4. TO MAINTAIN SUSTAINABLE DEVELOPMENT
5. PROVIDING EFFICIENT, RELIABLE, SAFE AND AFFORDABLE TRANSPORTATION SERVICES.

## Demand Trends

- Growth of Transport Demand significantly influenced by National GDP Growth
- History from last 15 years: Every 1% GDP growth results 1.5% transport demand growth
- GDP growth: 5%, Transport Demand growth projected: 7.5%
- Building construction growth 1%, Transport Demand growth by 0.5%

Source : Bambang PB, Pre-CGI Seminar, 2003

## The Role Of Transportation In Respect of GDP (*in billion rupiahs*)

Business Activities	1997		1998		1999		2000		2001	
	Value	Percent	Value	Percent	Value	Percent	Value	Percent	Value	Percent
1 Land Transport	14.730,4	3,4	10.988,2	2,9	10.001,4	2,6	10.485,4	2,6	11.058,4	2,7
2 Railway	303,9	0,1	326,8	0,1	363,5	0,1	371,1	0,1	360,4	0,1
3 Seatransport	2.624,3	0,6	2.54,1	0,7	2.776,4	0,7	3.162,7	0,8	3.341,5	0,8
4 Land & Waterways Transport	1.665,2	0,4	1.521,3	0,4	1.510,3	0,4	1.596,7	0,4	1.668,9	0,4
5 Air Transport	1.919,4	0,4	1.208,6	0,3	1.062,9	0,3	1.212,3	0,3	1.339,0	0,3
6 Supporting Service Transport	4.365,8	1,0	3.917,6	1,0	4.023,1	1,1	4.349,1	1,1	4.551,6	1,1

Source : Bappenas, 2003



# Road Sector Performance

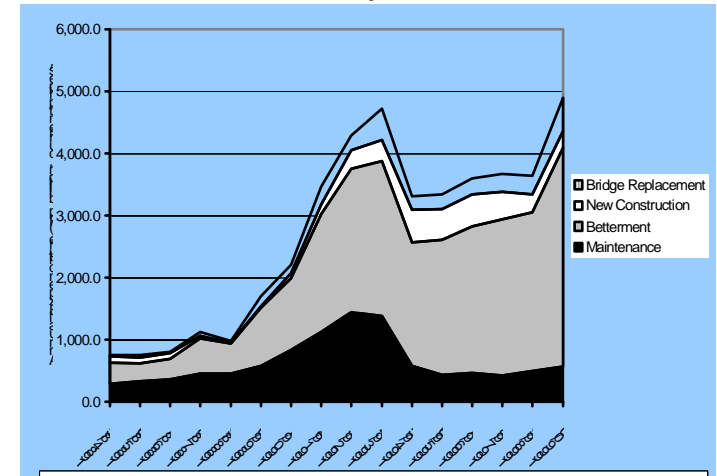
REGIONAL	Average Roughness Index, IRI m/km	TRAVEL DISTANCES Vehicle-Km/Per Day			AVERAGE SPEED (km/hr)	
		LIGHT VEH'S	HEAVY VEH'S	Total	LIGHT VEH'S	HEAVY VEH'S
Sumatra	4.13	34.63	21.28	55.91 (28%)	60.38	51.04
Jawa	3.86	69.39	27.51	96.90 (48%)	57.69	52.11
P.Lain	6.39	37.46	10.91	48.37 (24%)	59.09	52.41
NATIONAL	5.52	141.48	59.70	201.18	58.71	51.83

## Road Condition

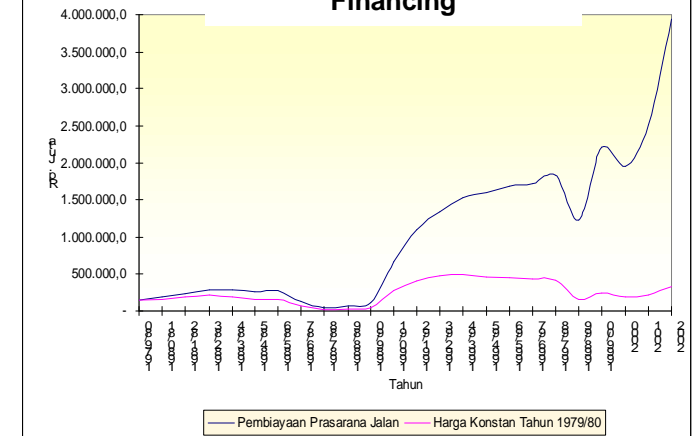
Administration	Length (Km)	Good	fair	Poor	Very Poor
National Road	26,866	64.3 %	24.0 %	6.9 %	4.8 %
Provincial Road	37,164	34.1 %	32.1 %	16.9 %	16.9 %
District Road	240,946	19.0 %	34.0 %	28.5 %	18.5 %
City Road	25,518	9.0 %	87.0 %	4.0 %	0.0 %

- Road maintenance budget declined significantly since 1993/94; even though in nominal term road funding gradually increased after the crisis, but in purchasing power term, it actually decreasing due to the shrinkage of rupiah value.
- Consequently, road condition has deteriorated to the extent that they will require a huge amount of funding to be rehabilitated.
- Road user costs of using damaged roads had risen dramatically both for urban and interurban networks.

## Road Expenditure



## Road Infrastructure Financing



In 2002, total length of national road network was 330,495 km, about 130,000 km (40%) of which was in poor condition, including about 15,700 km national and provincial roads and about 113,200 km district roads.

# Regional Road - Disparity Of Western And Eastern Part

STATUS	NATIONAL		WEST IND.		EAST IND.	
	V-Km (Mill/day)	RUC (Bill/day)	V-Km (Mill/day)	RUC (Bill/day)	V-Km (Mill/day)	RUC (Bill/day)
National Roads	125.35	919.19	94.40	722.48	30.95	196.71
Provincial Roads	52.69	450.14	38.27	322.89	14.42	127.25
National Strategic Roads	23.14	176.95	20.14	155.09	3.00	21.86
Total	201.18 (100%)	1,546.28 (100%)	152.81 (75.96)	1,200.46 (77.64)	48.37 (24.04)	345.82 (22.36)
Road Length	70,887.41 Km (100 %)		37,140.67 Km (52.39 %)		33,746.74 Km (47.61 %)	

## Jayapura-Sentani Road

Development (Papua) –  
- EIRTP-1 Package ,EIP-40



# Toll Roads Development

The first Toll road in Indonesia Started operating in 1978. This road was built by the government using G to G loan. To manage and operate this Toll road, PT. Jasa Marga (Persero), a State Owned Company, was established.

Presently, some 521 km of Toll roads are operated in Indonesia, 356 km by Jasa Marga and 165 km by private investor

The economic crisis that hit Indonesia since mid 1997, practically brought the Economy to a stand still in 1998 – 2000. Toll road projects were postponed because of no availability of funding and, if available, sky rocketing interest rates made it impossible to build a toll road within its budget limits.

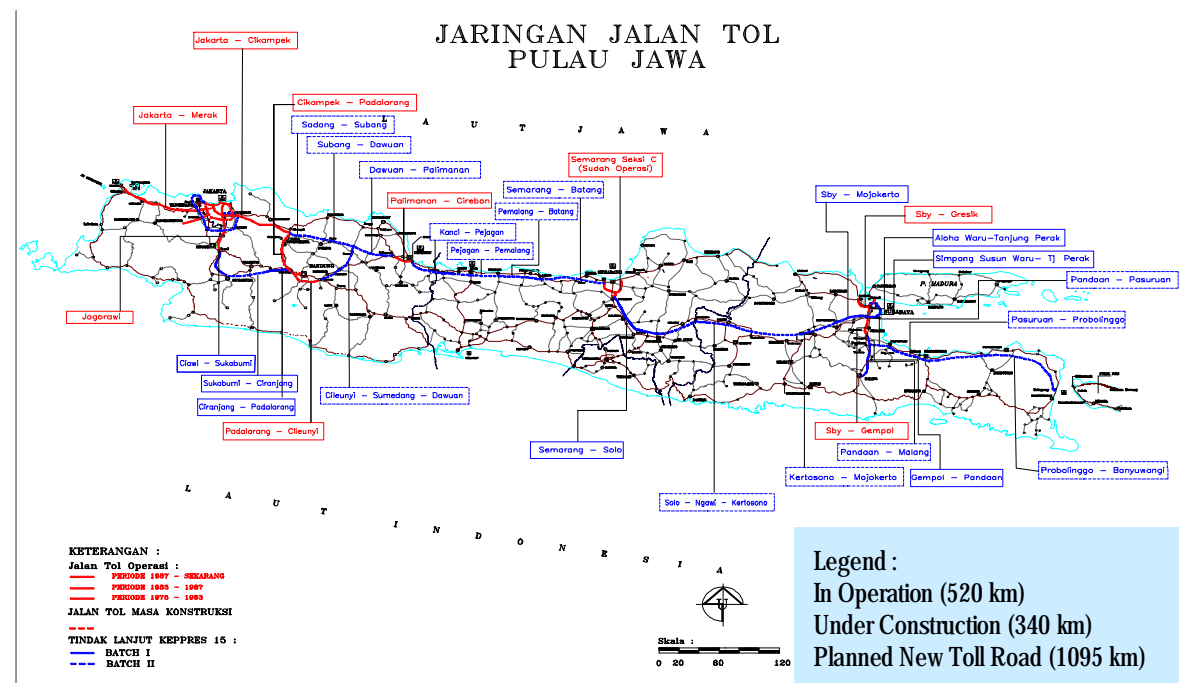
Since the economic situation becomes more stable and to urge industry of construction sector GOI resume toll road projects

Some of toll road projects of about 1200 km are being proposed to be constructed. Opportunity for strategic partnering with existing investor open to about 340 km.

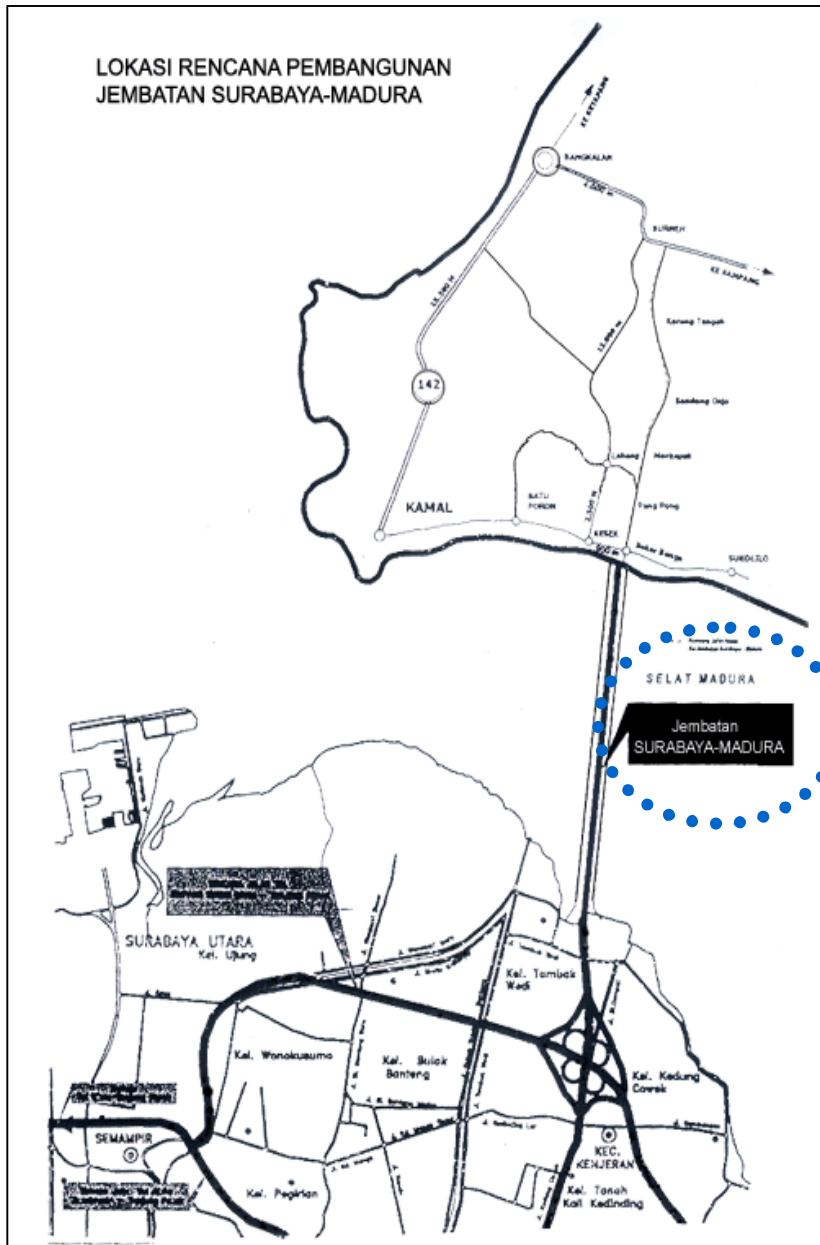
New toll road investments are also open for other routes that reach 3480 km. The issuance of the coming new Road Law will open up further opportunities for toll-road investment. For example, assurance of initial tariff and its adjustments, clear separation of regulator and operator as well as wider opportunity as operators.

**TOLL ROADS IN OPERATION**

MANAGEMENT	1998	1999	2000	2001	2002	March 2003
PT.Jasa Marga	354	354	354	354	383	383
With Private Partners	161	161	161	161	137	137
<b>Total (km)</b>	<b>515</b>	<b>515</b>	<b>515</b>	<b>515</b>	<b>520</b>	<b>520</b>

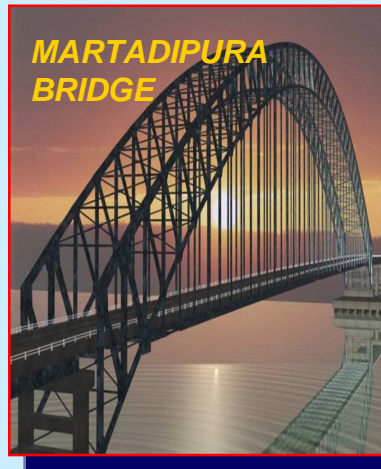


# Bridges Development



## ***SURAMADU - FIRST INTER ISLAND BRIDGE***

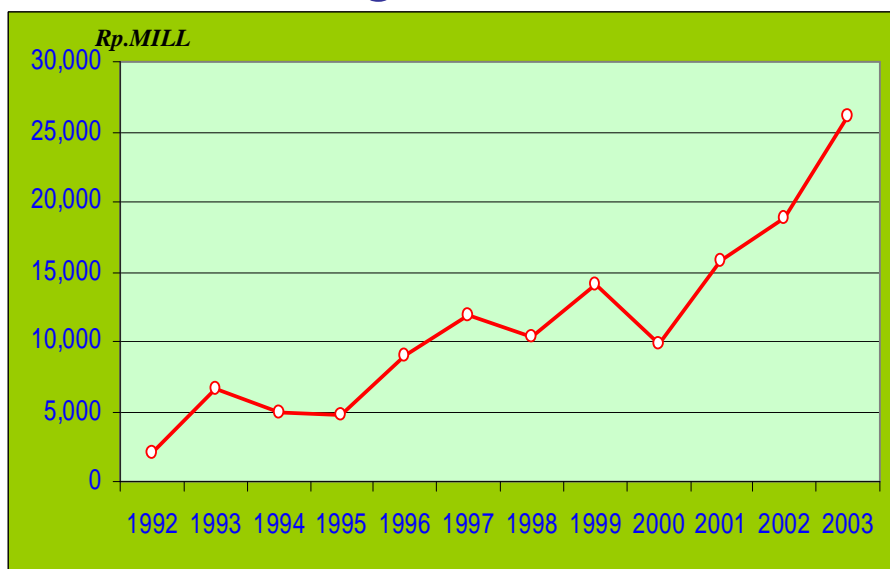
**Connected Java – Madura,  
5 km span with cable stayed, finish by 2007**



# Ferry Transport

■ Ferry Crossing Routes (Minister Decree)	:172
■ Routes in Operation (Active)	:132
■ Routes (Planned)	: 28
■ Routes (Inactive)	: 12
■ Commercial Routes	: 20
■ Subsidised	: 60
■ Non Subsidised	: 13

## Perintis Crossing



AGE	PT.ASDP (SOE)	Private-PT. ASDP	PRIVATE	TOTAL
0-5	10	0	6	17
6-10	36	0	15	52
11-15	10	1	15	26
16-20	10	1	27	38
21-25	8	1	13	22
26-30	3	0	12	15
>30	7	0	11	18
<b>TOTAL</b>	<b>84</b>	<b>3</b>	<b>99</b>	<b>186</b>

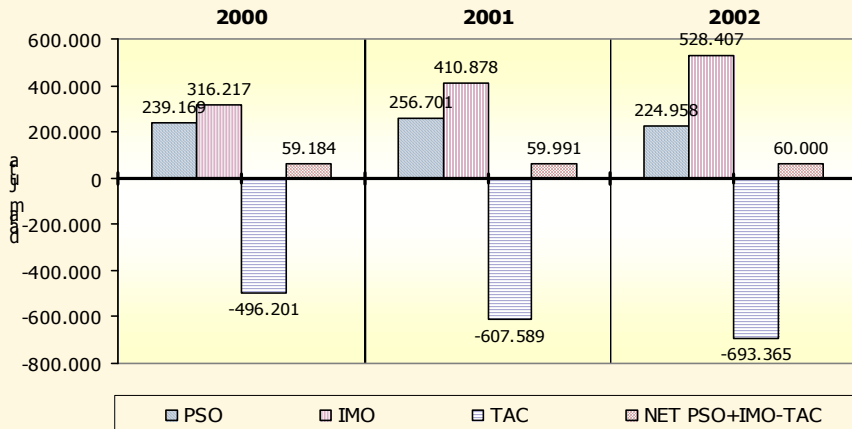
Sumber: Departemen Perhubungan

The organization of Perintis (Pioneer) crossings has the objective to open isolated regions, develop a more equitable economic growth and enhance the national resilience and security.



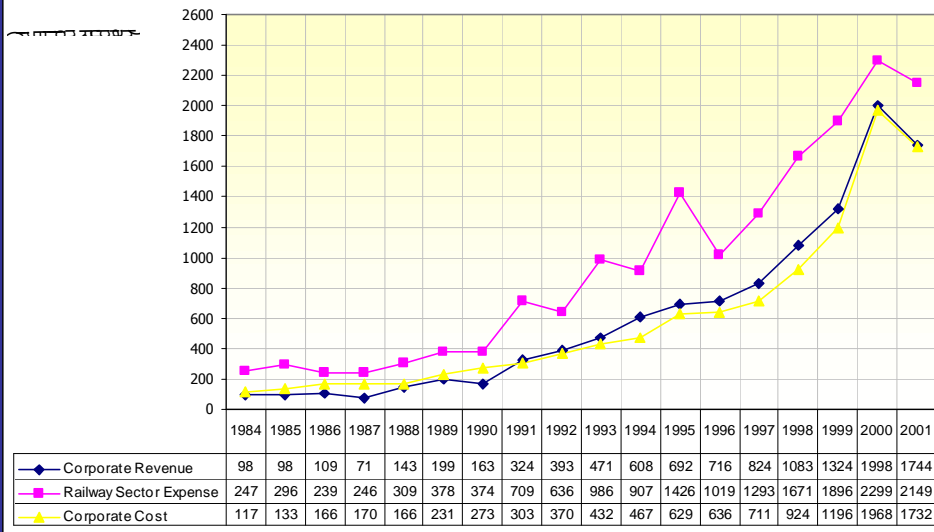
# Railway Development

Perkembangan Pendanaan PSO, IMO, TAC

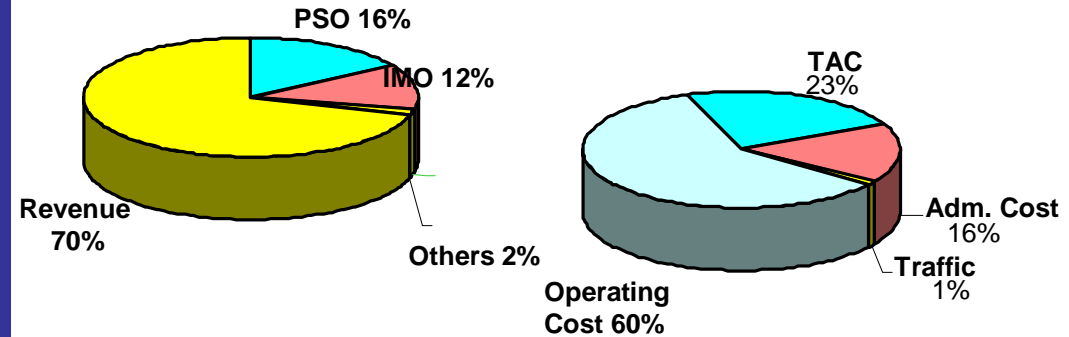


## Railway Maintenance

Railway Corporate Revenue versus Railway Sector Expense 1984-2001



## PSO-IMO-TAC Scheme : Lesson Learned



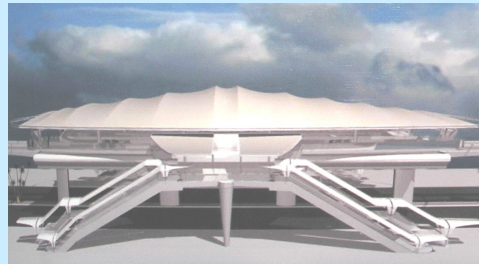
- Since 1999, under the World Bank's Railway Efficiency Project, railway funding by the government was done through PSO (*Public Service Obligation*), IMO (*Infrastructure Maintenance And Operation*), and TAC (*Track Access Charge*) Scheme. Net (PSO+IMO-TAC) is the amount of fund to be given to PT KAI, or theoretically, to be paid to the government by PT KAI.
- Despite of being a loan covenant, the scheme, however, has never been fully implemented by the government, i.e. the MOF, for several reasons such as legal and institutional constraints.
- In 2002 Fiscal Year, Net PSO-IMO-TAC was calculated to amount Rp. 161 billion, but only Rp. 60 billion was approved by MOF.
- KfW of Germany agreed to finance railway maintenance in Jawa for 1,000 km long with loan amount of 33.5 million Euro
- Ideally, the maintenance can produce rail speed to 120 km per hour from previously 80 km/hour, if all of conditions are in the prime condition.

## JAKARTA MONORAIL

2 Routes will be built and operate by 2006. Green Route 15 Km Loop Route connecting "Golden triangle". **BLUE ROUTE**: 13 KM radial route connecting 2 busiest bussiness centres (East & West)

INVESTORS FROM INDONESIA, JAPAN AND SINGAPORE

TOTAL INVESTMENT: US\$ 600 MILLION

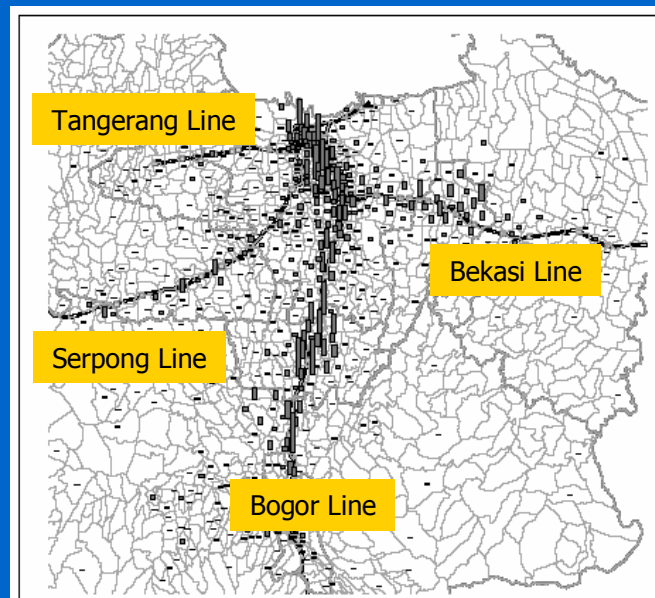
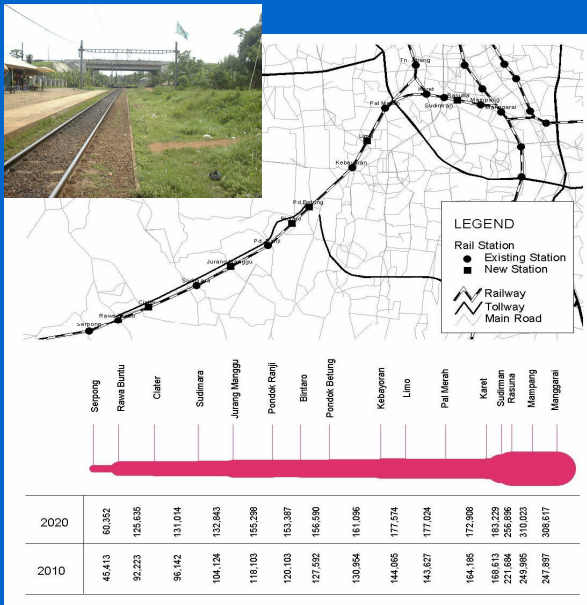


## RAILWAY DOUBLE TRACK: CIKAMPEK - BANDUNG

BUSIEST TRAFFIC: 12-18% RAIL PASSENGER DEMAND GROWTH/YR

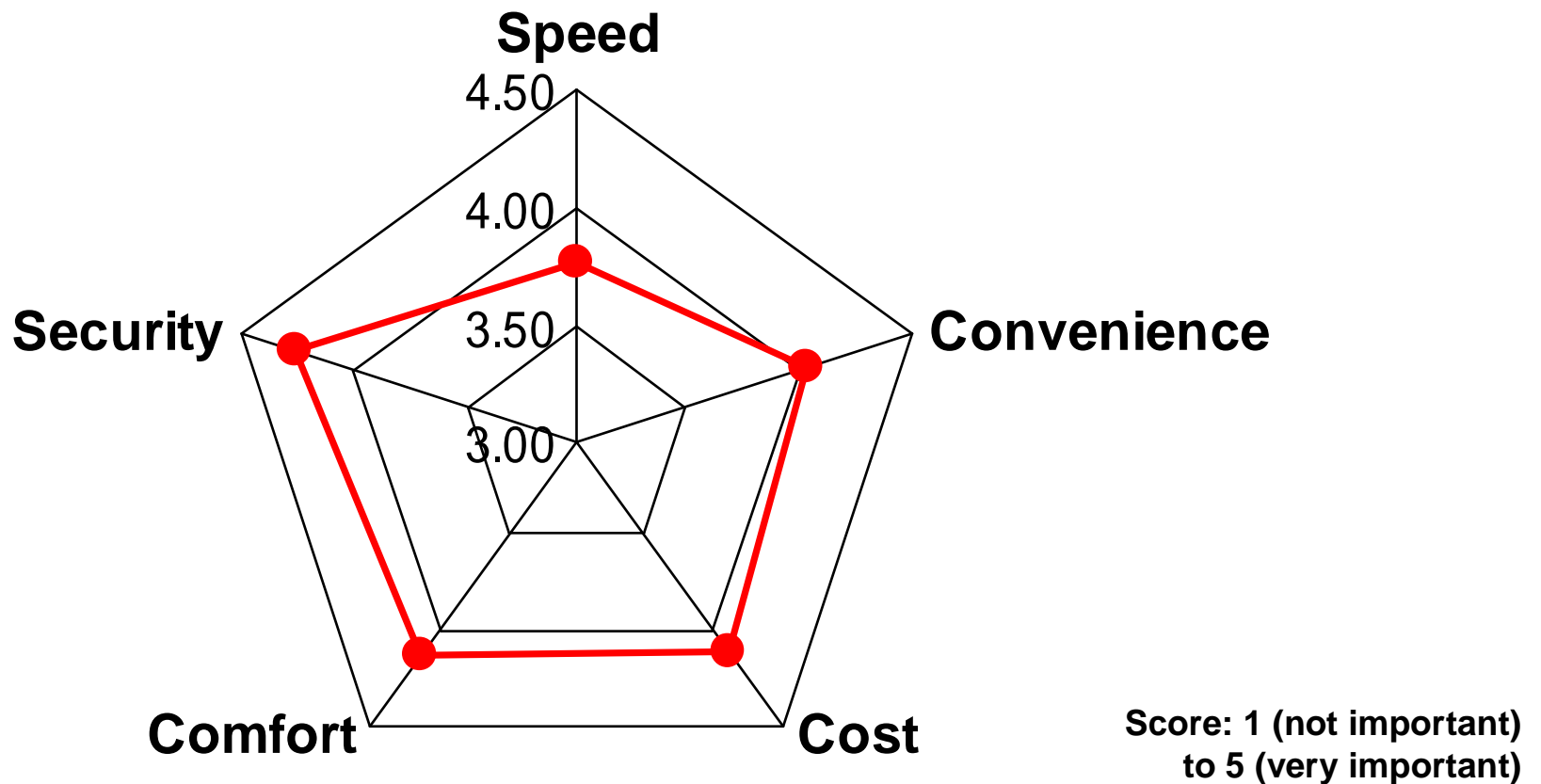


## JABOTABEK RAILWAY DOUBLE TRACK PROJECT



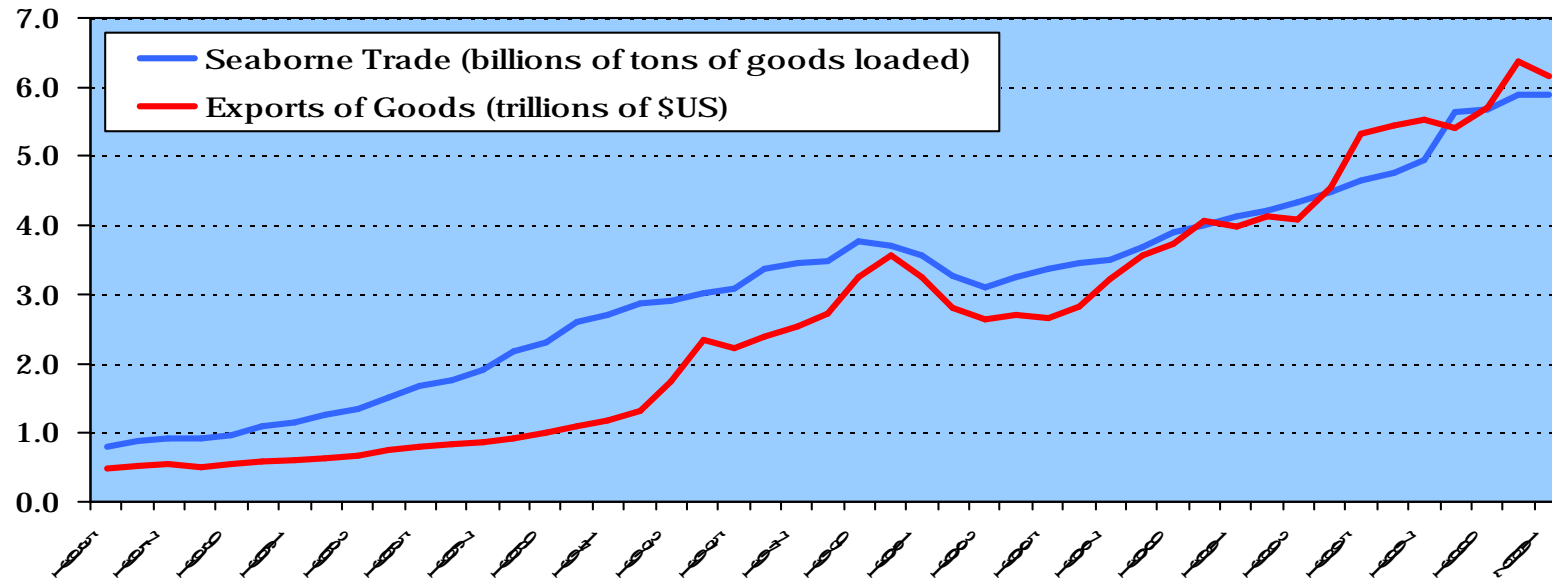


# Factors For Modal Choice



People are most concerned with Security for selecting mode of transport

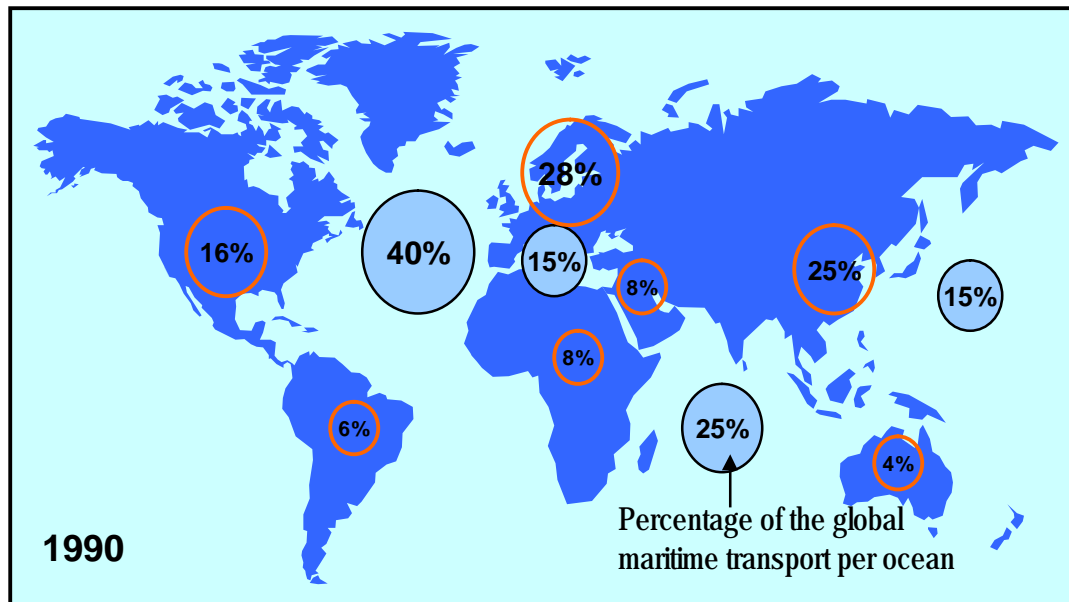
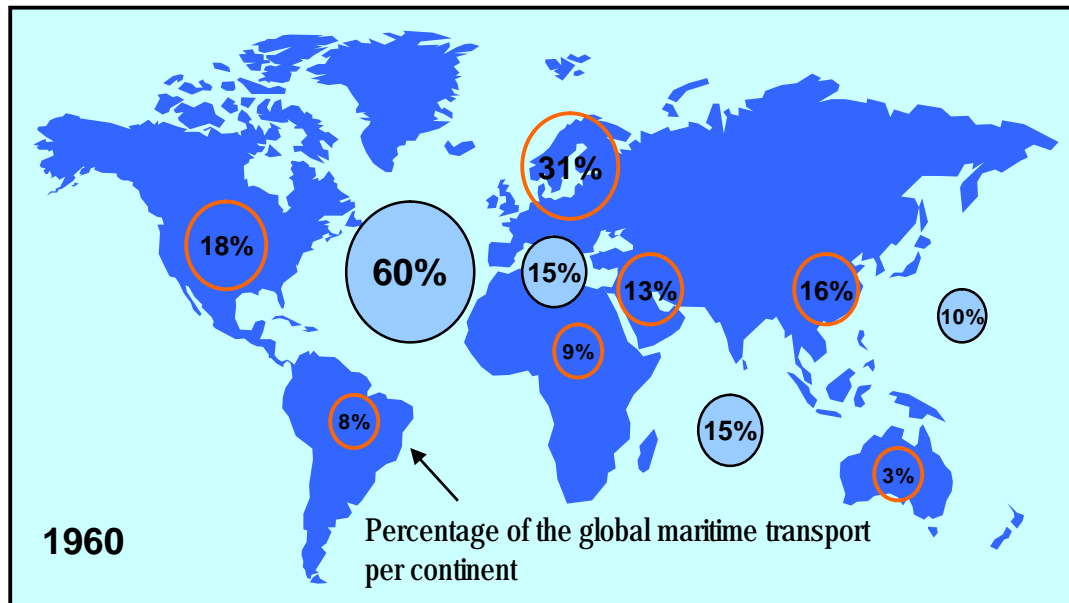
## International Seaborne Trade and Exports of Goods, 1955-2001



## Domains Maritime Circulation





## Maritime Traffic per Continent and Ocean, 1960-1990



## Five Generation Of Containership



### First Generation (1956-1970)

	Length	Draft	TEU
 Converted Cargo Vessel	135 m	< 9 m	500
 Converted Tanker	200 m		800


### Second Generation (1970-1980)

 Cellular Containership	215 m	10 m	1,000 – 2,500
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### Third Generation (1980-1988)

 Panamax Class	250 m	11-12 m	3,000
 Post Panamax	290 m		4,000

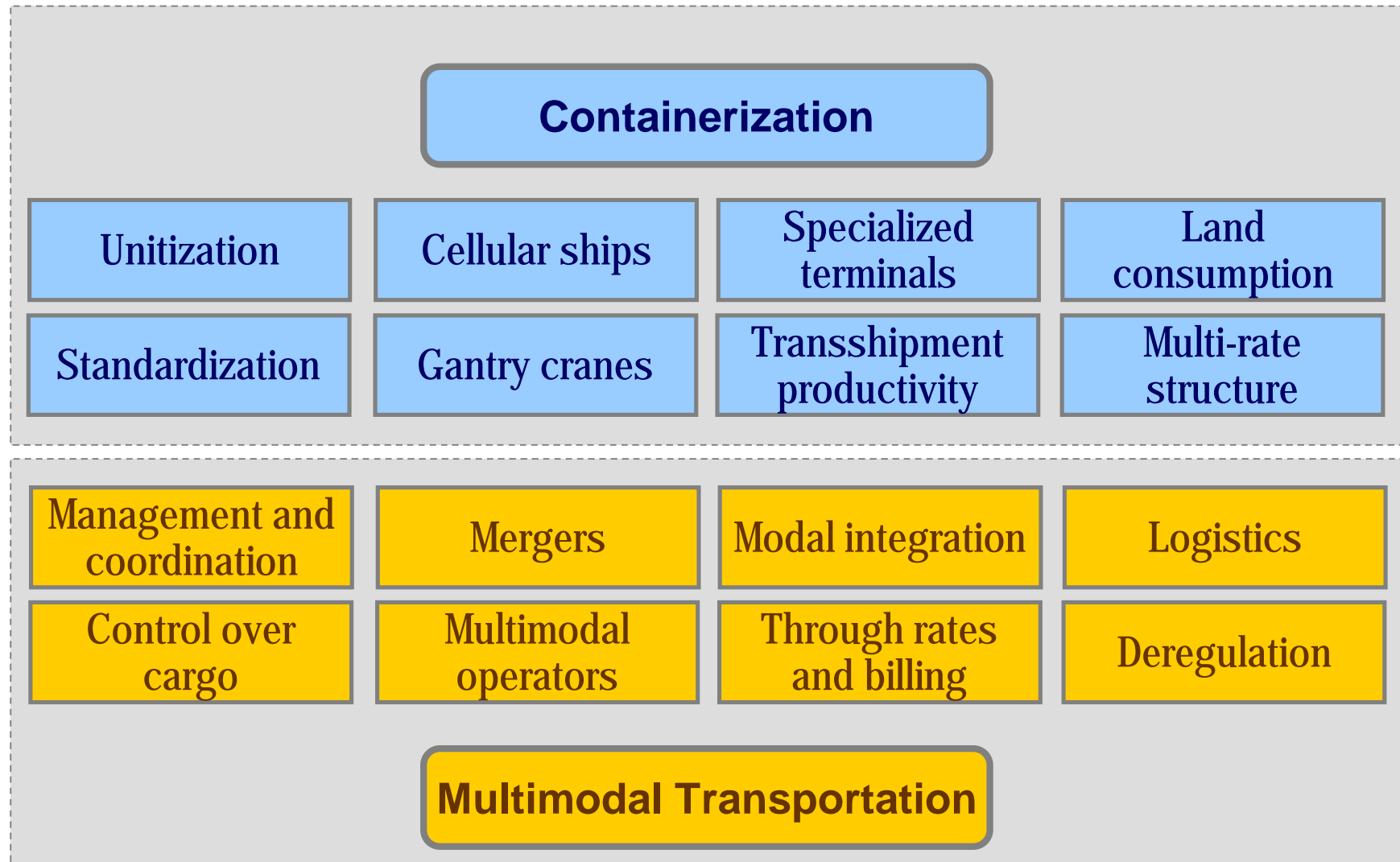
### Fourth Generation (1988-2000)

 Post Panamax	275 – 305 m	11-13 m	4,000 – 5,000
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### Fifth Generation (2000-?)

 Post Panamax Plus	335 m	13-14 m	5,000 – 8,000
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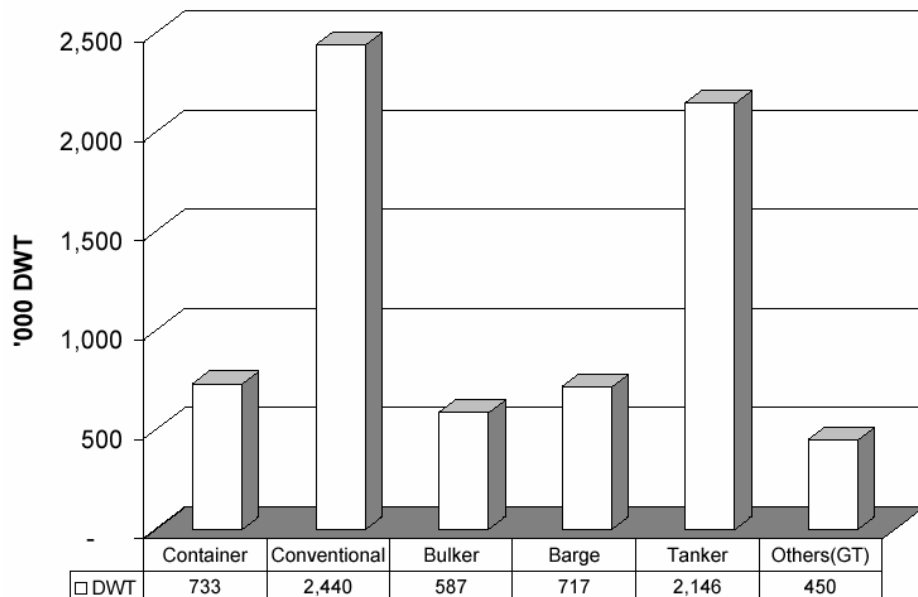
# Driving Forces of Containerization and Multimodal Transport



# Domestic Shipping Condition

- The current fleet is estimated to be 6,653 thousand DWT for freight fleet and 450 thousand GT for passenger fleet.
- Number of Indonesian shipping company is 3,078 in 2001 which represents an increase of 3.3 times since 1998, due to the deregulation of shipping companies in 1988. Number of owned vessels however increased by only 1.3 times during the same term.
- Companies with less than three vessels accounted for 82% of INSA members, while those with 10 or more ships accounted for a mere 4%.

**DOMESTIC FLEET BY TYPE**



**PRIORITY ISSUES AND IMPEDIMENTS**

Priority Issues	Number of cases	Impediments	Number of Cases
Revenue increase	46	Regulation & its implementation	44
Cost cutting	46	Old age of ships	43
Marketing	45	Lack of fund	35
Safety in operation	31	Poor port operations	32
Organizational strength	29	Invisible cost (High rate)	32
Human resource development	26	Lack of skills of seafarers	28
Fleet expansion	20	Shortage of vessel	18
Financial resources	15	Lack of manpower	14
Environmental consideration	10	Lack of information technology	14
New technology introduction	4	Others	1

## FORECAST DOMESTIC SHIPPING DEMAND

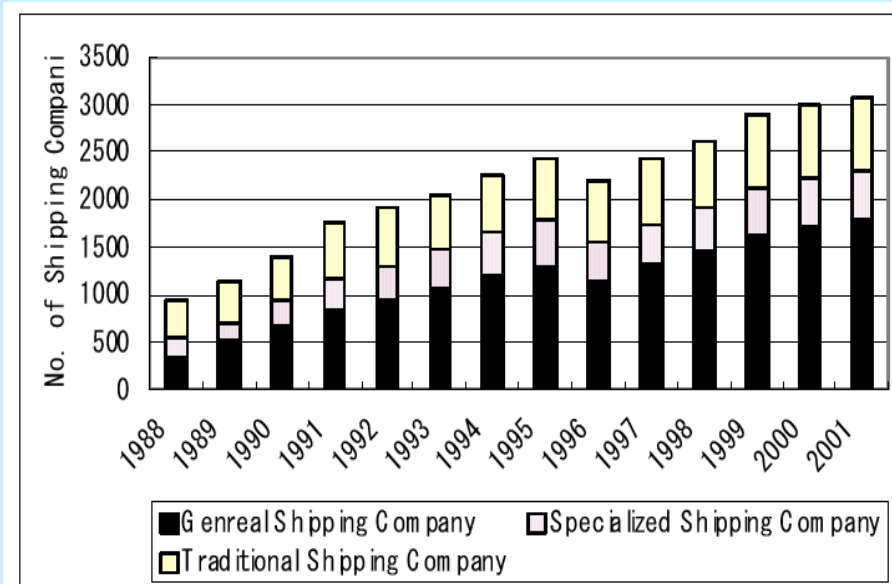
	2002	2014	2024
<b>Traffic Demand</b>			
Dry Cargo (MT, million)	70.1	129.7	196.1
Liquid Cargo (MT, million)	86.7	113.1	120.4
Passenger (pax, million)	12.5	18.7	18.8
<b>Fleet Tonnage</b>			
For Dry Cargo (DWT, million)	4.5	7.1	10.2
For Liquid Cargo (DWT, million)	2.1	2.9	3.0
For Passenger (GT, million) <sup>1/</sup>	0.4	0.5	0.5
Total (DWT/GT, million)	7.1	10.5	13.7
<b>Fleet Procurement</b>			
For Dry Cargo (Rp, trillion)	27.2		49.6
For Liquid Cargo (Rp, trillion)	17.0		19.6
For Passenger (Rp, trillion)	10.3		6.1
Total (Rp, trillion)	54.5		75.3
Cabotage Rate (%)	60 <sup>2/</sup>	86	100
Average Ship Age (Years)	22.5	18.1	14.4
Productivity of Dry Cargo Fleet (ton-miles/DWT)	7,649	8,451	9,112
Containerization Rate (%) <sup>3/</sup>	23	37	40

Note: 1/ Inclusive of passenger ships, Ro-Ro passenger ships and passenger-cum-cargo ships

2/ DGSC figure in 2001

3/ Containerizable cargo is assumed to include all dry cargo except coal and mining products

## SHIPPING COMPANIES



# ISPS CODE: IMPLEMENTATION OF SECURE AND SAFE SEA TRANSPORTATION

## NO.OF SEA ACCIDENT

	1998	1999	2000	2001	2002
Number of Accident	93	102	68	48	66
<i>Human Error</i>	35	40	26	17	34
<i>Ship related</i>	35	24	14	14	16
Death	150	843	657	58	46

## INSPECTIONS AND DETENTION

Flag	No. of Detentions/ Inspections			Average Detention
	2000	2001	2002	
Indonesia	47/123	47/148	31/144	30.12
Malaysia	46/302	36/419	35/364	10.78
Philippines	22/418	12/423	15/373	4.04
Singapore	34/693	19/763	30/807	3.67












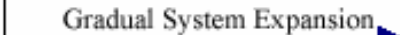
INDONESIA is seriously implement the international convention IMO for safe and secure sea transportation called ISPS Code.

Formally, it should be implemented totally by 1 of June 2004.

However from 141 international ports and hundreds of ships, some of them are ready to implement ISPS Code. Others to implement soon.

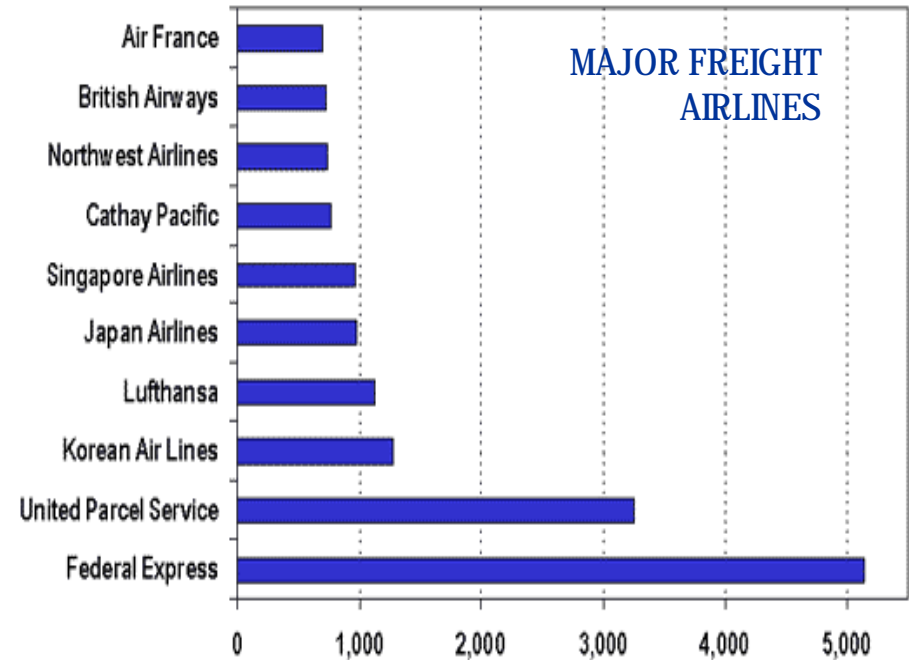
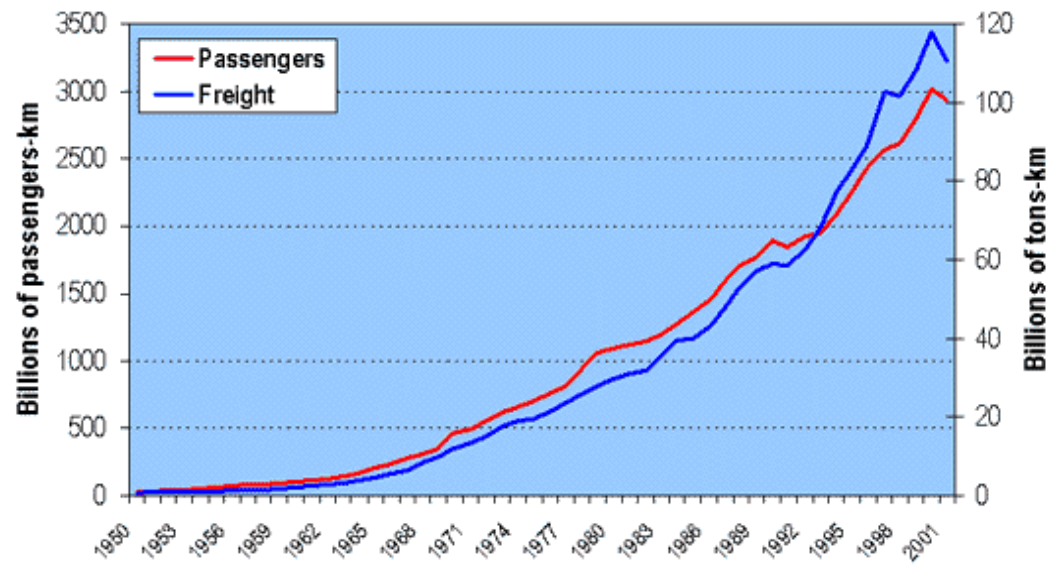


# Implementation Of Master Plan of Domestic Shipping Development

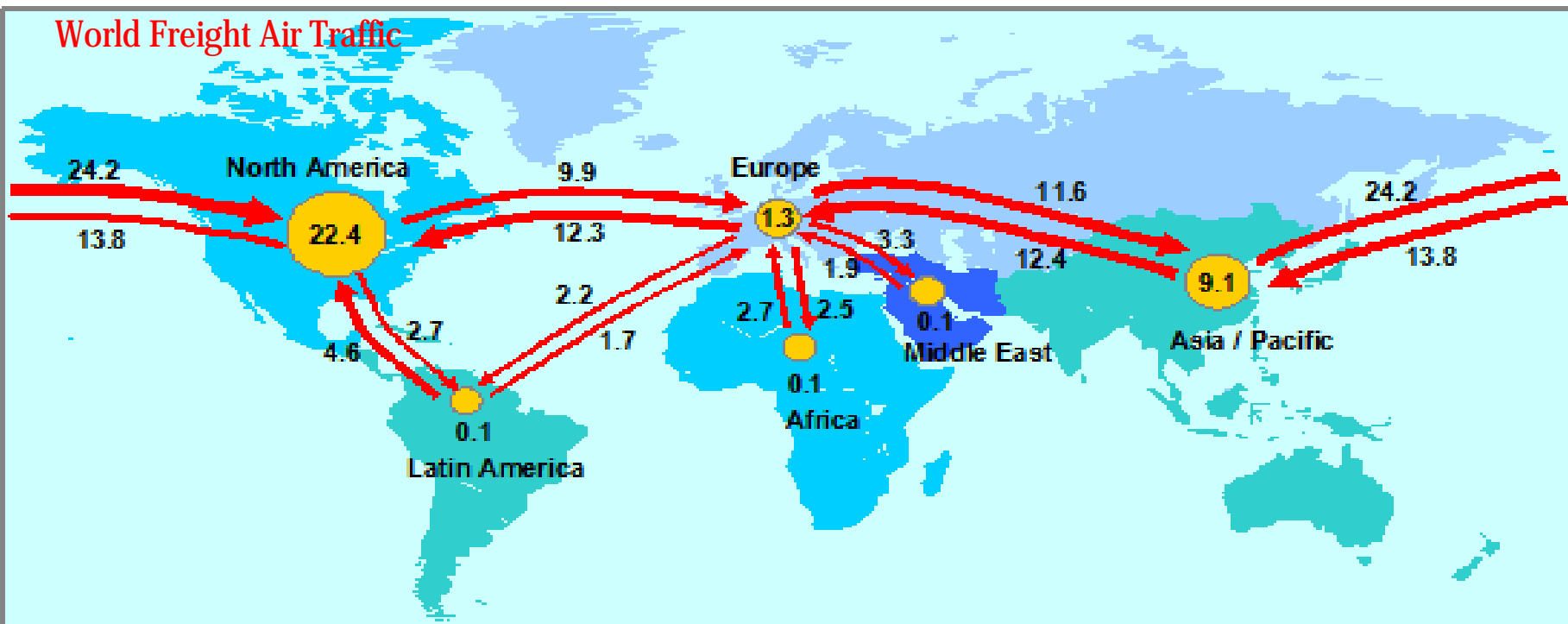
		2004	2005	2006	2007	2008	2009
STRAMINDO MASTER PLAN		Formulation of “New National Shipping Policy” and “New RENSTRA for Sea Communication 2005-09”	(Implementation including the Action Plan Components)				Formulation of the 3 <sup>rd</sup> RENSTRA for Sea Communication 2010-14”
ACTION PLAN							
(A) Improvement of Shipping Investment Environments		Institutionalization of Ship Mortgage / Hypothec and Arrest of Ship				Further institutionalization such as shipowner/carrier’s responsibility and liability	
(B) Strategic ODA Loan Package for Indonesian Inter-island Shipping Development		Resumption and expansion of OOF relating Vessel and Its Equipment	Conduct of F/S on ODA Loan Package	Request of ODA Arrangement and Preparation of Implementation Body, e.g., SMHC and Package Deal	<div>Disbursement of ODA Loan Package</div> <div>(1) Renewing and Conversion of Existing Fleet</div> <div>(2) Assignment of Most Suitable Vessels on Regular Inter-island Routes</div> <div>(3) Maintaining and Expanding Socially Indispensable Tertiary Shipping</div>		
(C) Most Suitable Vessels on Regular Inter-island Routes				Preparation of Detail Design	 <div>Vessel Construction on a Commercial Basis (if any creditor available)</div>		
(D) Introduction of Ship-management Company		Inclusion of “Ship-management Company” in the Revised Shipping Law	Preparation of License, Guidelines and Superintendent Certificate		<ul style="list-style-type: none"><li>• Provision of Ship-management Service within SMHC</li><li>• Support of Establishing Ship-management Companies over the Country</li></ul>		
(E) Advanced Education in Shipping Industry		Preparatory Works	Opening of Ship-management Expert Course		Enrichment and Upgrade of Courses as Master Degree		
(F) Maritime Administration Database Center		Phase 1 <ul style="list-style-type: none"><li>• Networking within DGSC and Shipping Company</li><li>• Better Usage of Database</li></ul>			 <div>Phase 2</div> <ul style="list-style-type: none"><li>• Network Expansion with Other Agencies</li></ul>		
(G) Daily Monitoring System for Subsidized Operation		System Development and Installation on Existing Pioneer Fleet	 <div>Gradual System Expansion</div>			Expansion and Renewal of the Monitoring System to Serve Tertiary Shipping Fleet	

SMHC = Ship Management and Holding Company

## INTERNATIONAL AIR TRANSPORT MOVEMENT



## World Freight Air Traffic



# Low Cost Airlines

- **CITILINK**, by Garuda Indonesia, flights within Indonesia
- **LION AIR**, by Lion, flights within Indonesia and flights to/from Indonesia
- **VALUAIR**, flights between Singapore and Hong Kong, Indonesia, Thailand
- **AIR ASIA**, flights within and from Malaysia

**Citilink** is a brand new service from Garuda Indonesia, that connects some cities point-to-point using Boeing B737 Aircraft. Citilink primarily serves some routes that have not been served by Garuda Indonesia. The nature of the service provided by Citilink is quite different if compared with regular Garuda Indonesia Flight, because it's intended to optimized the B737 operations and to perform a low cost operation system



**Lion Air** is an Indonesia low cost carrier, that connects some cities point-to-point to perform a low cost operation system

THANK YOU