INTERMODAL INTEGRATION IN INDONESIA

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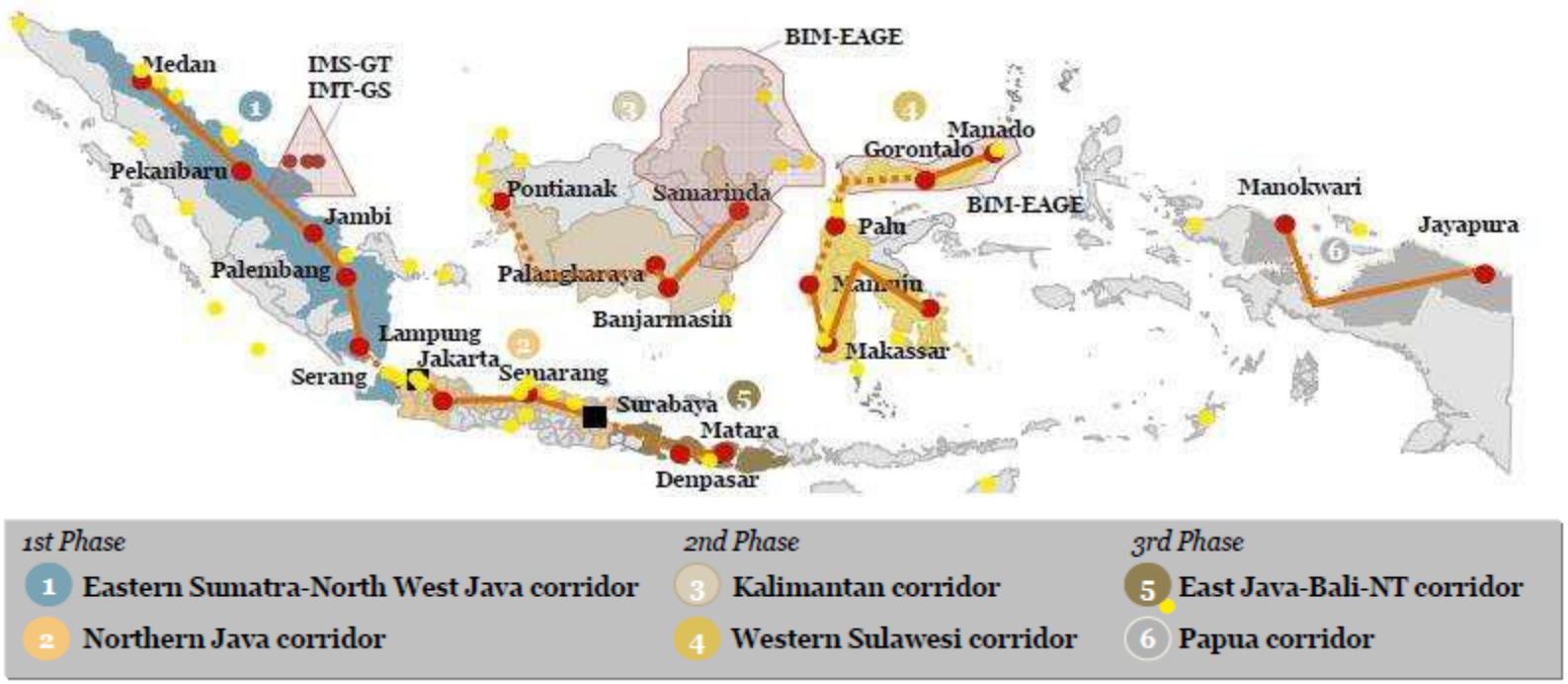
MINISTRY OF TRANSPORTATION

INTRODUCTION

Province	Area (km2)	%	Population	%
Sumatera	446,687	24	47,995,300	21
Java	129,306	7	131,527,500	58
Bali, Nusa Tenggara	71,296	4	12,211,200	6
Kalimantan	50,7413	27	12,628,300	6
Sulawesi	193,847	10	16,291,800	7
Maluku & Papua	511,811	28	497,700	2
Total Indonesia	1,860,360	100	225,642,000	100

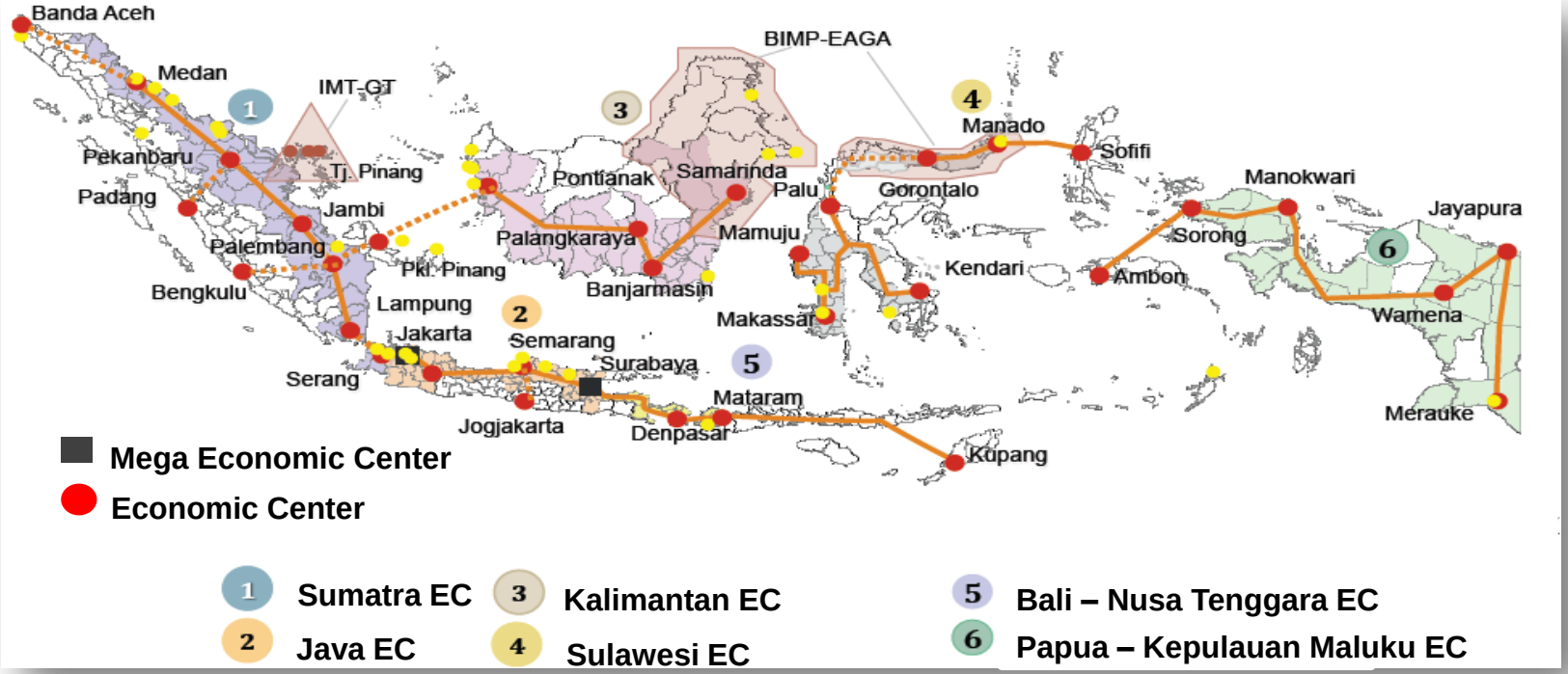
- Archipelago comprising of more than 17,480 islands, with the 5 (five) the largest islands, Sumatra, Java, Kalimantan, Sulawesi and Papua.
- Population is more than 225 million, and the population density is 121 inhabitants per km2. Population is uneven distributed over islands. Java has 58% of the population with only 7% of total area, as shown in the table below.
- Transportation is one of a network chain in the distribution of goods and passengers movement.

Indonesia Economic Development Corridors and Transportation



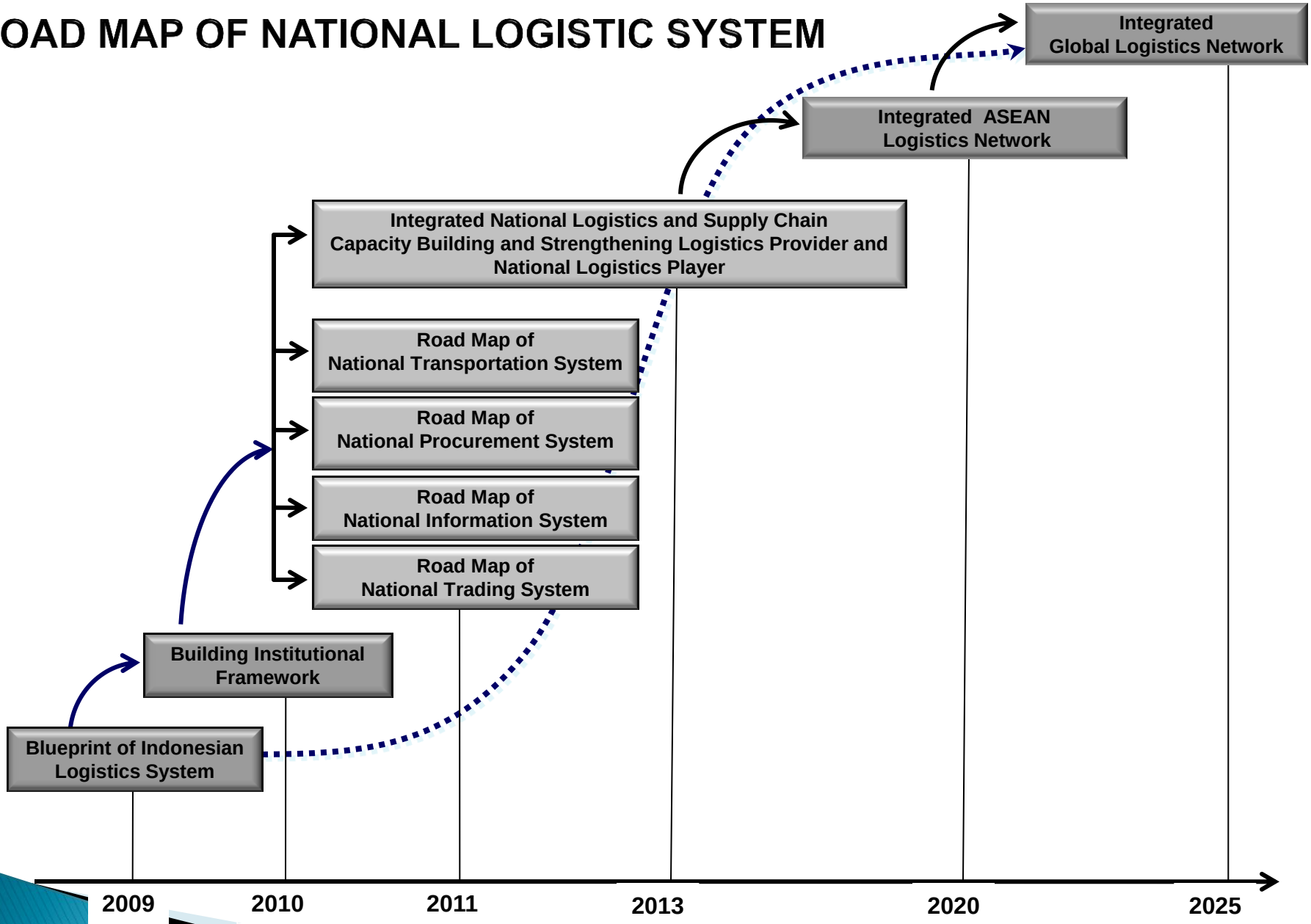
- To create an effective and efficient national transportation system to support and drive the dynamic of development, human mobility, goods and services and to simulate economic growth in 6 (six) corridors creating national connectivity and to support the improvement of international relations in strengthen the national and state living development in an effort embodiment archipelago insight.
- Efforts to improve performance of transport infrastructures done through some approaches, like capacity improving and repairing which previously caused long backlog, and also operation and management approach that guarantee the smoothness of movement accessibility.

INDONESIA ECONOMIC DEVELOPMENT CORIDORS



1. **Sumatera Economic Corridor** as a "Center for Production and Processing of Natural Resources and as Nation's Energy Reserves"
2. **Java Economic Corridor** as a "Driver for National Industry and Service Provision"
3. **Kalimantan Economic Corridor** as a "Center for Production and Processing of Natural Resources and Energy Reserves"
4. **Sulawesi Economic Corridor** as a "Center for Production and Processing of National Agricultural, Plantation, Fishery, Oil & Gas, and Mining"
5. **Bali – Nusa Tenggara Economic Corridor** as a "Gateway for Tourism and National Food Support"
6. **Papua – Kepulauan Maluku Economic Corridor** as a "Center for Development of Food, Fisheries, Energy and Mining"

ROAD MAP OF NATIONAL LOGISTIC SYSTEM



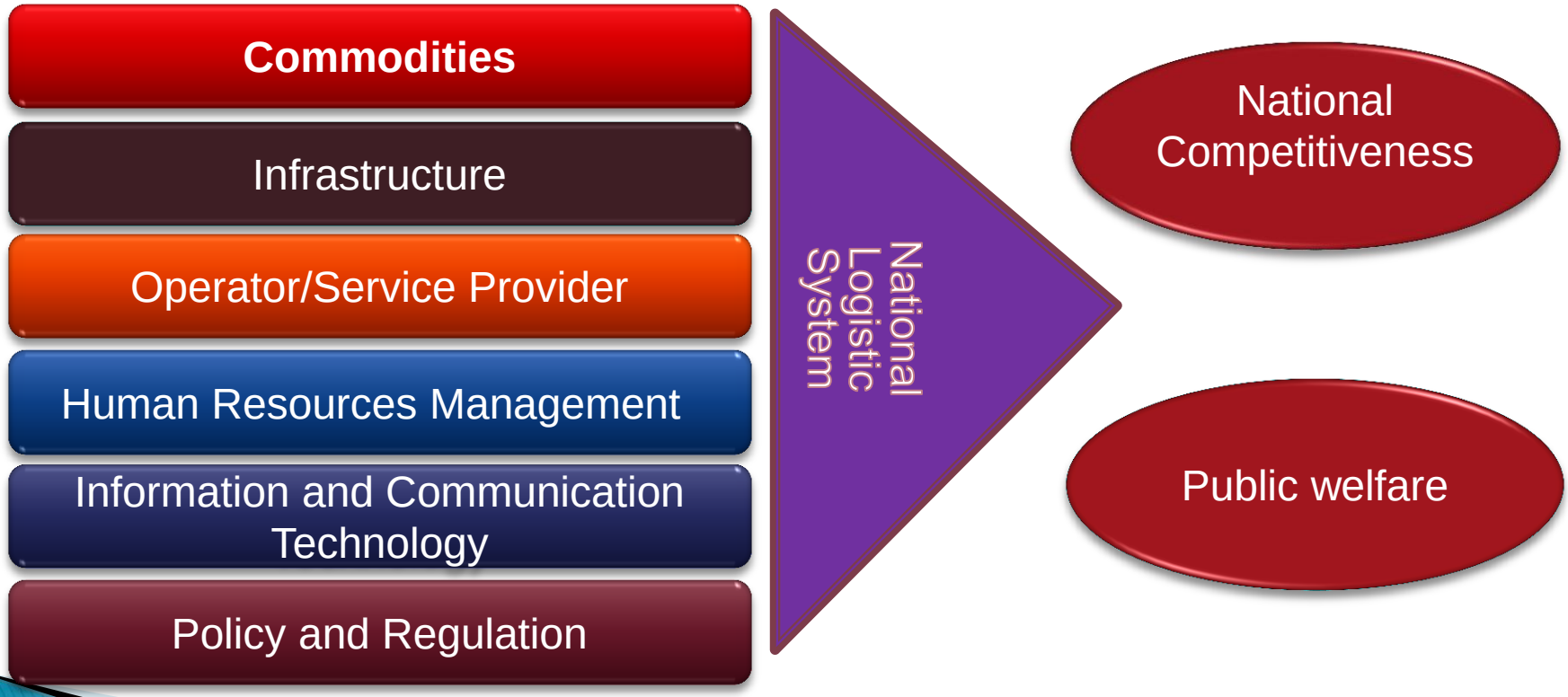
INDONESIA LOGISTIC VISION

Vision 2025 :

Locally Integrated and Globally Connected Logiastic for National Competitiveness.

By year 2025,
Indonesia Logistics, that domestically interated across archipelago and internationally connected to major global econimies, effectively and efficiently, would improve national competitiveness to succeed in the global competition era.

Six Prime Mover of National Logistic System (NLC)



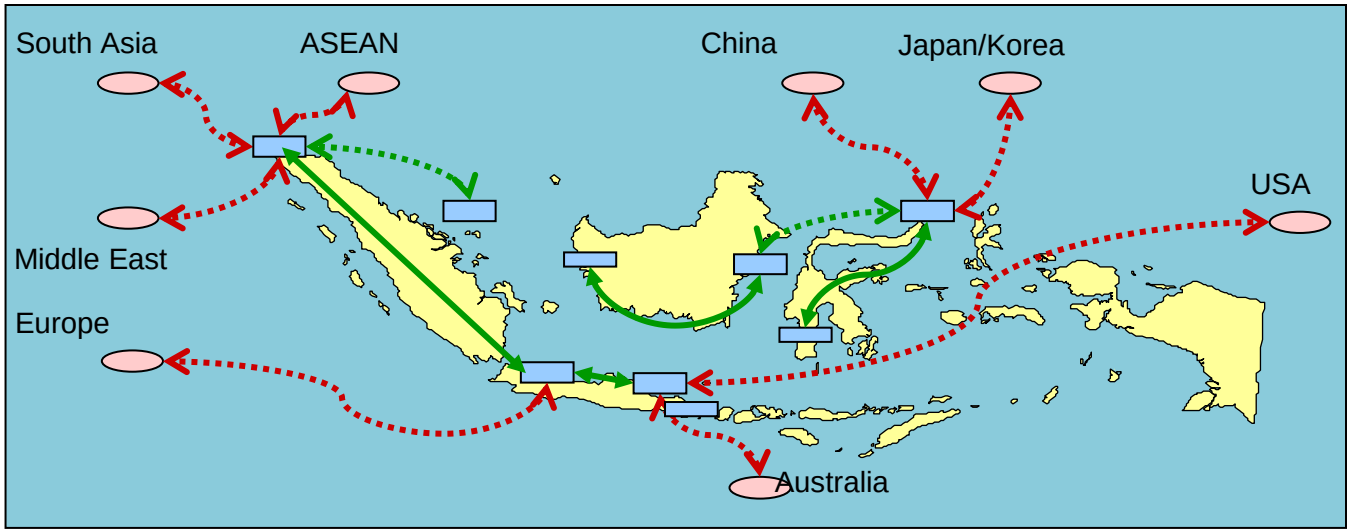
Blue print of National Logistic System

DIRECTION OF NATIONAL LOGISTIC 2025

To have an effective and efficient of national and international logistic system supported with the following condition :

- Integrated transportation system (port, terminal, station, depo, distribution center, warehouse, etc) connected through road, railway, sea, river and lake that facilitate the operational of transportation and logistic.
- ICT network that facilitate trade of domestic good and competitive international trade.
- Enforcement of law ad regulation.
- Strong LSP (Logistic Service Provider).
- Strong institution.
- Professional of human resources.
- Transparant procurement system and considerable trade facilitation.

Purpose of National Logistic System in 2025



To realize national and international logistic routes supported by:

- ❑Transportation nodes (i.e. port, terminal, rail station, depots, distribution center, etc.) integrated and connected with road, sea, inland waterways, warehouses, etc, for facilitation of operational transportation and logistic (national and international) and controlled by custom and quarantine.
- ❑Information and communication networking to facilitate domestic cargo trade efficiently and competitive international trade.
- ❑Networking of logistic provider and player.
- ❑Rules and regulation for business certainty
- ❑Strengthening of the institutional capacity
- ❑Professional logistic human resources.
- ❑Procurement system and trade facilitation.

Production of Freight Transport in each Island Year 2006

Freight		Sumatera	Jawa	Bali,NTB,NTT	Kalimantan	Sulawesi	Maluku, Papua	Indonesia
Road	ton/year	807.972.356	7.605.578.381	75.773.395	4.146.351	85.691.648	10.565	8.579.172.695
	%	90,73%	95,70%	93,50%	10,98%	39,53%	0,37%	**93,49%**
Rail	ton/year	1.635.790	19.022.580	14.678	2.458	227.058	-	20.902.564
	%	0,18%	0,24%	0,02%	0,01%	0,10%	0,00%	0,23%
Inland Waterway and Ferry	ton/year	-	-	-	109.107	-	-	109.107
	%	0,00%	0,00%	0,00%	0,29%	0,00%	0,00%	0,00%
Sea	ton/year	80.776.146	321.860.541	5.146.785	33.444.114	130.091.252	2.859.327	574.178.165
	%	9,07%	4,05%	6,35%	88,53%	60,02%	98,87%	6,26%
Air	ton/year	160.485	1.029.057	102.259	73.307	745.683	22.209	2.133.000
	%	0,02%	0,01%	0,13%	0,19%	0,34%	0,77%	0,02%
Combination	ton/year	890.544.778	7.947.490.559	81.037.117	37.775.336	216.755.640	2.892.101	9.176.495.531

Source : Survey of Origin Destination of National Transportation, MOT

Study on the role of sea transport development to Reduce load of Road and Ferry transportation (2012):

Origin	Destination	Road		Sea	
		Time (days)	Cost (Rp)	Time (days)	Cost (Rp)
Bandung	Medan	5	5.130.723	2,48	8.362.048
Jakarta	Palembang	1,5	1.734.885	0,87	2.957.772
Jakarta	Medan	4,7	4.373.885	1,94	7.018.047
Lampung	Surabaya	2,3	2.433.135	1,18	4.078.196
Surabaya	Palembang	3,2	3.131.385	1,42	5.182.557
Surabaya	Medan	6,3	5.770.385	2,49	9.142.148

Significant differences occurred, where road freight cost lower than sea cost, but road travel time higher than sea travel time

FLOW OF CARGO BY TRUCK (ROAD TRANSPORTATION)

Origin / Destination		Jakarta			Sumatera			
		Surabaya	Semarang	Jakarta	Lampung	Palembang	Pekanbaru	Medan
Jawa	Surabaya		3,459,373	6,034,230				
	Semarang	2,469,487		2,549,563				
	Jakarta	**7,199,636**	4,130,329		**3,908,847**	1,025,230	282,383	630,487
Sumatera	Lampung			42,524		**2,787,356**	65,877	23,487
	Palembang			144,160	979,451		109,538	8,597
	Pekanbaru			295,103	19,766	109,538		24,822
	Medan			**1,422,393**	2,595	2,579	303,133	

Source : Directorate of Land Transportation (2007)

Flow of Cargoes

Jawa-Jawa	25,842,618	68%
Jawa-Sumatera	5,846,947	15%
Sumatera-Jawa	1,904,180	5%
Sumatera-Sumatera	4,436,999	12%
	38,030,744	**100%**

Policy of land transportation in the sector of freight transport

1. Utilization of intermodal freight transport;
2. Shifting of domestic freight to containerization;
3. To promote the implementation of on truck on board concept (cargo inspection could be handled in dry port);
4. To push the development of short sea shipping or coastal shipping;
5. Development of high way in northern part of Java (Pantura).

Purpose of *coastal shipping*

- Reducing exhaust gas emissions
- Efficiency of fuel cost
- Pressing road accidents
- Reducing logistic time and cost
- Reducing high axle vehicle load
- Efficiency of road maintenance
- Reducing vehicle maintenance cost

Role of Short Sea Shipping for national economy

Backbone of national cargo transport (national logistic system)

To reduce load in land transportation

To increase efficiency of national transportation system

Integration of national distribution centers

As a bridge of production center and consumer center in Indonesian economic corridors

Short Sea Shipping will support not only cabotage principle but also national economy security.

Bigwin of National Logistic System achievement Stage I (2011-2015)

President Regulation No. 26 / 2012

- Establishment and development of International Hub Sea Port in Kuala Tanjung and Bitung, dan Hub Air Port in Jakarta, Kuala Namu, and Makasar.
- Development of Port of Kalibaru as an expansion of Tanjung Priok port
- Operation of Short Sea Shipping in the northern coast of Java and road in eastern part of Sumatera
- Increasing the Role of Freight train in Java and Sumatra.
- Development of automation systems and national logistic information which electronically integrated.
- Increasing load capacity of pioneer and national fleets for passenger and freight transportation in eastern part of Indonesia.
- Increasing the availability, quality and capacity of inter-island sea transport through the empowerment of the national and a traditional shipping.
- Development of logistic centers to serve consolidated LCL container for exporters of small and micro business.

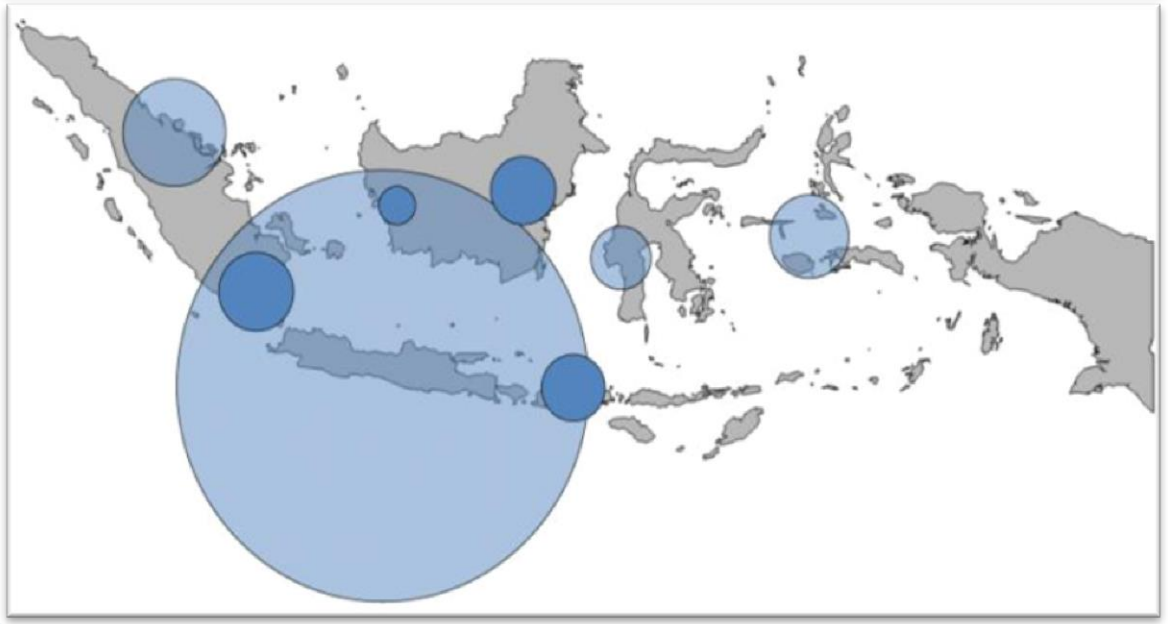
PROJECTION AND DISTRIBUTION OF CONTAINER THROUGHPUT IN INDONESIA by 2030

DISTRIBUTION AREA	CONTAINER (Million TEUs)
North Sumatera	5.6
West Kalimantan	0.7
South Sumatera	3.0
Java	22.7
Bali and Eastwards	2.2
Kalimantan	2.3
West Sulawesi	1.9
East Region	3.4
Total	42.0
Total 2010	8.0

Source: Directorate of Port and Dredging




Indonesian container throughput increasing from 8 million TEUs in 2010 become more than 40 million TEUs in 2030



SEA CONTAINER ROUTE NETWORKS IN INDONESIA

ROUTE NETWORK :

- TG. PRIOK – PONTIANAK, PP
- TG. PRIOK – BELAWAN, PP
- TG. PRIOK – (TG. PERAK) – BELAWAN, PP
- TG. PRIOK – BELAWAN – BUATAN – TG. PRIOK
- TG. PRIOK – PANJANG, PP
- TG. PRIOK – TELUK BAYUR, PP
- TG. PRIOK- PEKANBARU, PP
- TG. PRIOK – BANJARMASIN, PP
- TG. PRIOK – BALIKPAPAN, PP
- TG. PRIOK – SAMARINDA, PP
- TG. PRIOK – TG. PERAK – BITUNG, PP
- TG. PRIK - TG. PERAK - TARAKAN, PP
- TG. PRIOK - MAKASSAR, PP
- TG. PRIOK – TG. PERAK (Makassar) - BITUNG, PP
- TG. PRIOK – TG. PERAK – MAKASSAR, PP
- TG. PRIOK – TG. PERAK – SORONG, PP
- TG. PRIOK – TG. PERAK – MANOKWARI, PP
- TG. PRIOK – TG. PERAK – MERAUKE, PP
- TG. PRIOK – TG. PERAK – AMAMAPARE, PP
- TG. PRIOK – TG. PERAK – MAKASSAR – BITUNG – PANTOLOAN – TG. PERAK – TG. PRIOK, PP
- TG. PRIOK – PANJANG - TG. PRIOK – SEMARANG – TG. PERAK – TG. PRIOK, PP

ROUTE NETWORK :

- TG. PERAK – BELAWAN, PP
- TG. PERAK - TG. PRIOK – BELAWAN, PP
- TG. PERAK - (TG. PRIOK) – BELAWAN, PP
- TG. PERAK – BANJARMASIN, PP
- TG. PERAK – BALIKPAPAN, PP
- TG. PERAK – SAMARINDA, PP
- TG. PERAK- TARAKAN, PP
- TG. PERAK – SORONG, PP
- TG. PERAK – MANOKWARI, PP
- TG. PERAK – MAKASSAR, PP
- TG. PERAK – MAKASSAR – BITUNG, PP
- TG. PERAK – (MAKASSAR) - AMBON, PP
- TG. PRIOK – (MAKASSAR) – KWANDANG – (BITUNG), PP
- TG. PERAK – KENDARI, PP
- TG. PERAK – MAKASSAR – KENDARI, PP
- TG. PERAK – PANTOLOAN, PP
- TG. PERAK – (MAKASSAR) – SAMARINDA, PP
- TG. PERAK – JAYAPURA, PP
- TG. PERAK – SAMPIT, PP
- TG. PERAK – BENOA, PP
- TG. PERAK – (MAKASSAR) – AMBON – (KWANDANG), PP
- TG. PERAK – SAMARINDA – BONTANG, PP
- TG. PERAK – (MAKASSAR) – TERNATE DSK – (AMBON), PP

ROUTES OF PASSENGERSHIP AND FEERY

PT. PRIMA VISTA : _ _ _ _

1. KM. MABUHAY NUSANTARA	:	TG. PRIOK-PONTIANAK PP
2. KM. MADANI NUSANTARA	:	SURABAYA-BALIKPAPAN-PARE-PARE-BALKPAPAN-BATULICIN-MAKASAR PP
3. KM. MARINA NUSANTARA	:	SURABAYA-BANJARMASIN-PP
4. KM. TITIAN NUSANTARA	:	SURABAYA-BALIKPAPAN PP SURABAYA-ENDE-KUPANG PP
5. KM. SENOPATI NUSANTARA	:	PKL BALAM-TG. PRIOK PP TG. PRIOK-PONTIANAK PP

PT. PRIMA VISTA (LANJUTAN) :

6. KM. MANDIRI NUSANTARA	:	SURABAYA-BALIKPAPAN PP
7. KM. MARISA NUSANTARA	:	TG. PRIOK-PONTIANAK PP PONTIANAK-TG. EMAS PP PONTIANAK-TG. PERAK PP TG. EMAS-KUMAI PP
8. KM. FARINA NUSANTARA	:	TG. EMAS-KUMAI PP KUMAI-TG. PERAK PP TG. EMAS-SAMPIT PP
9. KM. SAFIRA NUSANTARA	:	TG. PERAK-BALIKPAPAN PP
10.KM. MENTARI NUSANTARA	:	TRAYEK DALAM RENCANA (TG. PERAK-ENDE-KUPANG PP)

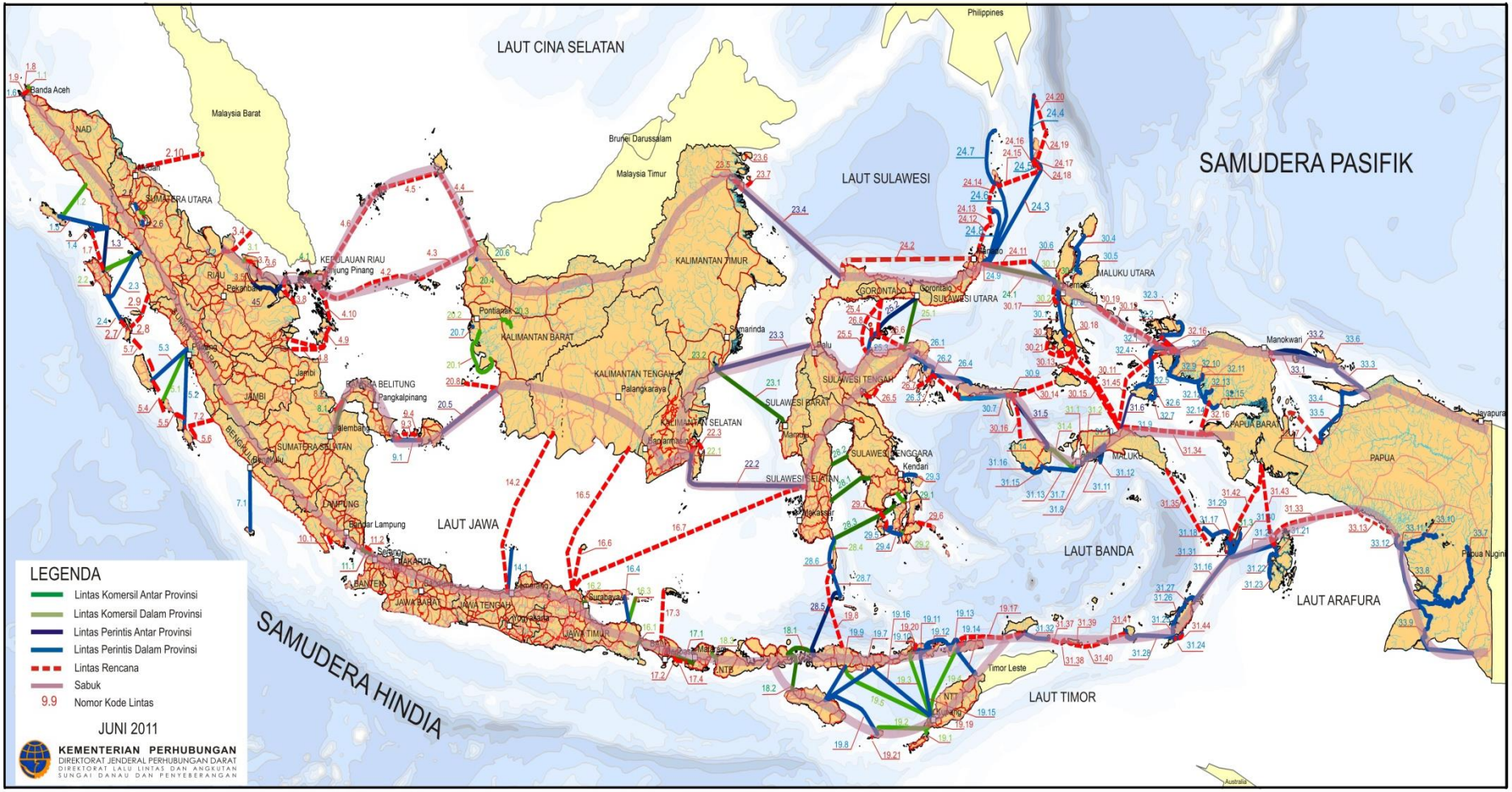
PT. ASDP : — . . —

1. KC. BARITO	:	SURABAYA-BENOA-BIMA-MAUMERE-LARANTUKA-KUPANG PP
2. KC. AMBULU	:	SURABAYA-BANJARMASIN-BATULICIN-BALIKPAPAN PP
3. KC. SERAYU	:	GRESIK-BAWEAN-SURABAYA PP
4. KC. MAHAKAM	:	JAKARTA-BANGKA-JAKARTA-BELITUNG-JAKARTA-PONTIANAK-JAKARTA-SEMARANG-KENDAWANGAN-PONTIANAK-KENDAWANGAN-SEMARANG-JAKARTA
5. KC. CISADANE	:	JAKARTA-BANGKA-JAKARTA-BELITUNG-JAKARTA-PONTIANAK-JAKARTA-SEMARANG-KENDAWANGAN-PONTIANAK-KENDAWANGAN-SEMARANG-JAKARTA

PT. DHARMA LAUTAN UTAMA : ——

1. KM. MUTYARA	:	SURABAYA-KUMAI-SURABAYA-RAHA-BAU-BAU-MAKASSAR-BAU-BAU-RAHA-SURABAYA
2. KM. KUMALA	:	SURABAYA-BANJARMASIN PP
3. KM. KIRANA II	:	SURABAYA-ENDE-KUPANG PP
4. KM. DHARMA KENCANA II	:	SURABAYA-KUMAI-SURABAYA-SAMPIT-SEMARANG-SAMPIT SEMARANG-KUMAI-SURABAYA
5. KM. KIRANA	:	SURABAYA-BATULICIN-BALIKPAPAN-BATULICIN-SURABAYA-MAKASSAR-SURABAYA
6. KM. DHARMA KENCANA:		SURABAYA-MAUMERE-SURABAYA-KUMAI-SURABAYA-BATULICIN-SURABAYA-SAMPIT-SEMARANG-SAMPIT-SEMARANG-KUMAI-SURABAYA
7. KM. MUSTIKA KENCANA:		SURABAYA-MAKASSAR-BAU-BAU PP SURABAYA-SAMPIT PP

NETWORK OF FERRY ROUTES



- Sabuk utara merupakan lintas-lintas yang berfungsi menghubungkan jalur utara wilayah Indonesia seperti: lintas penyeberangan dari Sabang-Banda Aceh, Dumai- Batam-Pontianak, Nunukan-Tarakan-Tolitoli, Bitung-Ternate-Patani-Sorong, Manokwari-Biak-Jayapura.
- Sabuk tengah merupakan lintas-lintas yang berfungsi menghubungkan jalur tengah wilayah Indonesia seperti: lintas penyeberangan dari Palembang-Muntok, Pangkal Pinang-Tanjung Pandan, Manggar-Ketapang, Batulicin-Barru, Balikpapan-Taipa, Bajoe-Kolaka, Kendari-Luwuk-Sanana-Namlea-Ambon-Fakfak.
- Sabuk selatan merupakan lintaslintas yang berfungsi menghubungkan jalur selatan wilayah Indonesia seperti: Bakauheni-Merak, Banyuwangi-Gilimanuk, Padangbai-Lembar, [illegible]bok-Alas, Sape-Labuhan Bajo-Waingapu-Kupang-Ende-Larantuka-Kalabahi-Ilwaki-Saumlaki-Tual-Dobo-Merauke.

POLICY DIRECTIONS FOR INTENSIFIED INTERMODAL AND MARITIME TRANSPORT

1. Promoting efficient door-to-door cargo transport and cross-border transport facilitation, through the simplification/ harmonization of trade and transport documentation and procedures, establishing uniform and transparent transit and cargo clearance system. Developing an efficient and global/regional-minded freight forwarder industry, third party logistics services and haulage industry and utilizing ICT applications.
2. Improving land transport network infrastructure for better connections and linkages with the national, regional and international maritime (seaports and inland waterways) including land transport trade corridors.
3. Developing responsive regional maritime transport policies to address the growing containerization in the region, improvement of the efficiency and productivity in domestic ports, rationalization of shipping services and the opportunities for increased multimodal transport service.

POLICY DIRECTIONS FOR INTENSIFIED INTERMODAL AND MARITIME TRANSPORT

4. Enhancing transport security and safety in the regional supply chain networks, through capacity building initiatives, technical networking, and regular exchange of relevant technologies, best practices and information.
5. Pursuing environmentally sustainable regional transport strategies, including accession to the relevant international conventions and protocols, promotion of environmental-friendly transport technology and transportation modes.
6. Creating enabling policy towards conducive environment for the increased private sector involvement and public-private partnerships in the provision and operation of transport infrastructure and transport and logistics facilities and services.

CONCLUSION

1. Movement of people and goods especially in the northern coast of Java is still very dependent on road transport.
2. Road transport will not be able to bear load of goods and passengers movement that will increase in the future, along with the increasing number of population and the acceleration of economic growth with the implementation of MP3EI.
3. Rail and sea transportation could be optimized to reduce load of road transport and get efficient fuel consumption.
4. Concept of integrated intermodal transport still to be developed in order to reduce load of road transport and overcome the problems of over weight in road transport.


THANK YOU