

**COORDINATING MINISTRY OF ECONOMIC AFFAIRS
THE REPUBLIC OF INDONESIA**

**THE STUDY ON
EFFICIENT AND INTEGRATED
TRANSPORT/LOGISTICS
DEVELOPMENT IN EASTERN MPA**

**FINAL REPORT
BACKGROUND INFORMATION**

MARCH 2014

JAPAN INTERNATIONAL COOPERATION AGENCY

ORIENTAL CONSULTANTS CO., LTD.

NIPPON KOEI CO., LTD.

MITSUBISHI CORPORATION

SUMITOMO CORPORATION

TOYOTA TSUSHO CORPORATION

KAMIGUMI CO., LTD.

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BACKGROUND INFORMATION 1

BACKGROUND INFORMATION 1

SOCIO-ECONOMIC SITUATION IN THE EASTERN MPA

A.1.1 Related Plans and Policies of Central Government and Local Governments

A.1.1.1 Development Plans (National Level)

The development plans in Indonesia consist of the National Long-Term Development Plan for 20 years (RPJPN 2005-2025) and the National Middle-Term Development Plan for 5 years (RPJMN 2010-2014). The National Middle-Term Development Plan, having four terms dividing the 20-year term of the long-term plan, is positioned as an implementation plan for materializing the National Long-Term Development Plan.

(1) National Long-Term Development Plan (RPJPN 2005-2025)

The latest National Long-Term Development Plan (RPJPN 2005-2025) set the following eight pillars.

- 1) Society with high consciousness of ethics and culture
- 2) Developed Society with high competitiveness
- 3) Democratized society ruled by law, Reinforcement of civil society and decentralization
- 4) Peaceful and unified state
- 5) Society for the people: Security of employment, Reduction of poverty, Fullness of welfare, and Society without discrimination
- 6) Sustainable development and well-balanced society
- 7) Improvement of technology as a maritime nation and a nation strengthening resource conservation and defence capacity
- 8) Consciousness as a member of international society, International cooperation in the neighbouring region

(2) National Middle-Term Development Plan (RPJMN 2010-2014)

RPJMN (2010-2014) is recognized as the second term of RPJPN (2005-2025), and 11 national priority matters are defined as follows. 1) Reform of bureaucracy and public administration, 2) Education, 3) Health, 4) Reduction of poverty, 5) Safety of food, 6) Infrastructure, 7) Investment in business field, 8) Energy, 9) Tourism and natural disaster, 10) Isolated areas, remote areas, and conclusion of disputed areas, and 11) Culture, creation, and technical innovation.

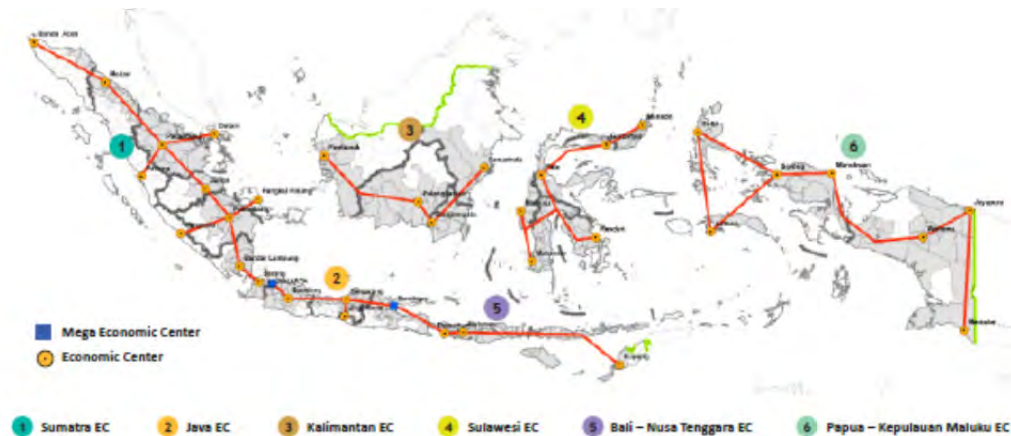
Table A.1.1.1 Positioning of national middle-term development strategy

RPJM 1 (2005 - 2009)	RPJM 2 (2010 - 2014)	RPJM 3 (2015 - 2019)	RPJM 4 (2020 - 2025)
Indonesian powerful growth which is safe, peaceful, and democratic	Strengthening of economic competitiveness by quality improvement of human resources in the field of science and technology	Practical use of natural resources and quality improvement of human resources, Security of predominance in international economic competitiveness by improvement of national technology	Independence based on predominance in competitiveness, Establishment of independent economic structure, Acceleration of growth in all the economic fields

Source: National Middle-Term Development Plan (RPJMN 2010-2014)

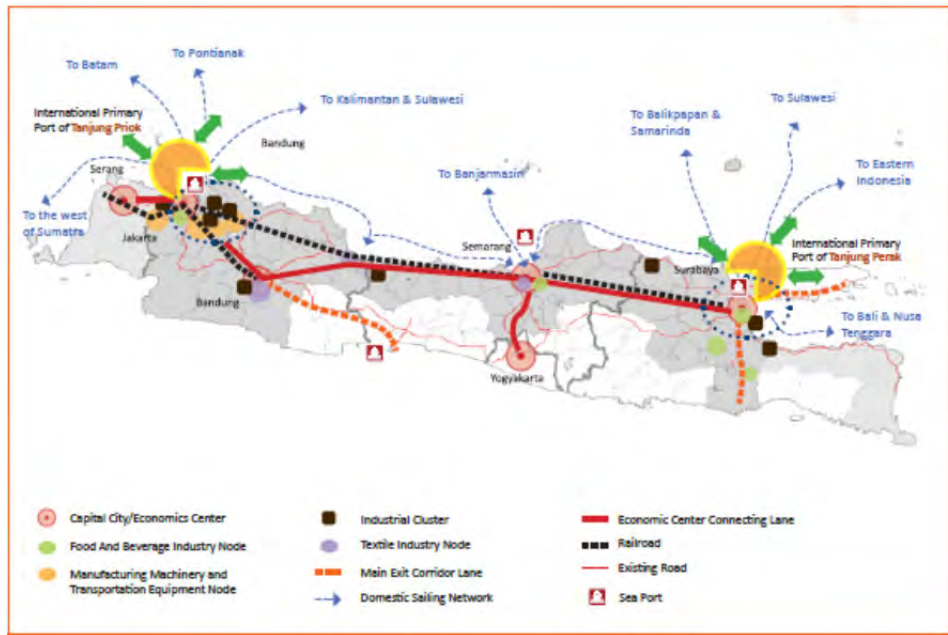
(3) Master Plan for the Acceleration and Expansion of Indonesian Economic Development (MP3EI)

MP3EI, published in June, 2011, specifies the area for policy objectives, development concept, and infrastructure plan for the purpose of creation and reinforcement of economic infrastructure which are synthetic and competitive. It locates the main physical distribution routes of the main islands in Indonesia as 6 economic development corridors (1)Sumatra, 2) Java, 3) Kalimantan, 4) Sulawesi, 5) Bali – Nusa Tenggara, 6) Papua – Kepulauan Maluku), and shows the development guideline.



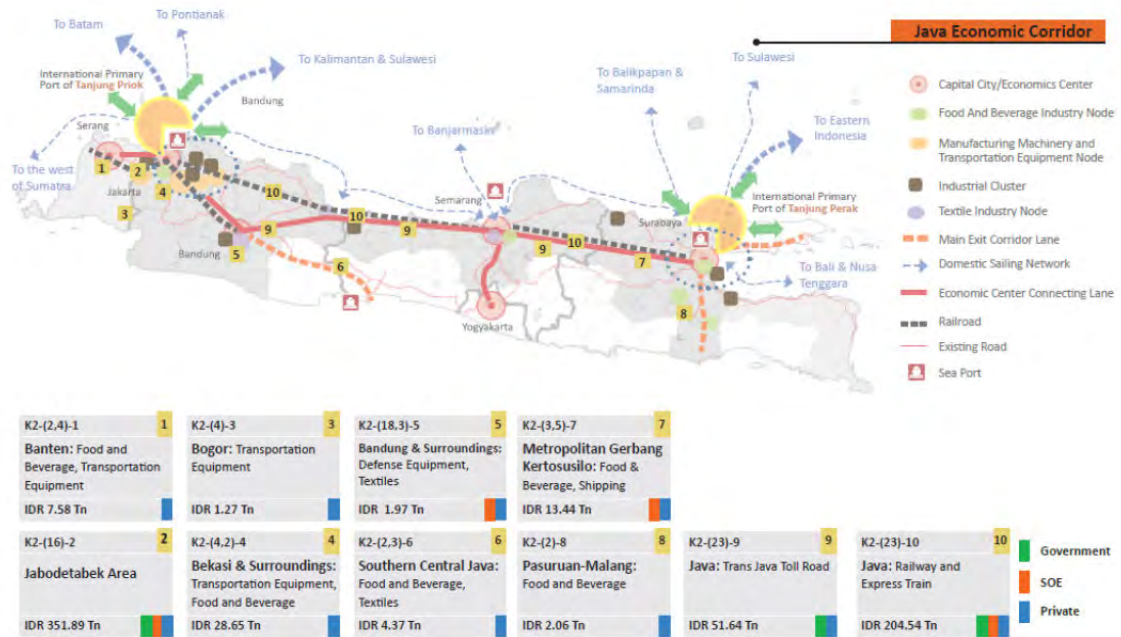
Source: MP3EI

Figure A.1.1.1 Concept figure of 6 economic development corridors



Source: MP3EI

Figure A.1.1.2 Concept figure of Java economy development corridor



Source: MP3EI

Figure A.1.1.3 Summary of Java economy development corridor

A.1.1.2 Development Plan (Regional Level)

(1) Middle-Term Development Plan in DKI Jakarta (2013-2017)

The Middle-Term Development Plan in DKI Jakarta (2013-2017) is formulated as the third term planning years. The identified issues of its development plan are urban transport, flood, living environment, green space, urban poverty, bureaucracy reform, education, public health, urban planning, public safety, abnormal weather, environmental problems, water supply, food security, power/gas supply, economic stability, investment, trade and service, local public finance, and inter-regional cooperation. The following six items are governmental missions to tackle the issues.

- 1) Qualitative and quantitative reinforcement of public infrastructure
- 2) Realization of strong economy
- 3) Formation of social and cultural collaboration among stakeholders
- 4) Protection of the natural environment, Improvement of the urban environment
- 5) Development of public administration capacity in the government
- 6) Technical innovation at the regional level

The target of public administration is clarified through setting numerical indicators for the above missions. For example, regarding item '1)', the target number of TOD (Transit Oriented Development) promotion districts by 2017 is four districts although no TOD promotion districts have been developed so far. Moreover, DKI Jakarta has formulated an action plan to increase the number of railway stations, around which development projects are planned, from one station at present to 15 stations by 2017.

(2) Middle-Term Development Plan in West Java Province (2008-2013)

Middle-Term Development Plan in West Java Province (2008-2013) is formulated as the second term planning years. The target of the second term is "Realization of West Java Province with dynamic and economic strength". Moreover, the following are five missions for realizing that target.

- Mission-1: To have strong productivity and competitive spirit in 2013.
- Mission-2: To obtain strong economic competitiveness taking advantage of development potential.
- Mission-3: To develop infrastructure for sustaining strong economic growth.
- Mission-4: To consider the environment in order to maintain sustainable growth.
- Mission-5: To improve the quality of local government services for residents

In order to realize these missions, concrete policies for each mission are stated in the plan. For example, the plan mentions smooth logistics and transportation by developing the infrastructure in the field of public works as a policy of mission-3. The plan also mentions specific measures to realize this policy in five years.

(3) Middle-Term Development Plan in Bekasi City (2010-2014)

The Middle-Term Development Plan in Bekasi City (2010-2014) is formulated as the second term planning years. The basic concept of the middle-term development plan is "Creative Bekasi City", and the following five items are shown as administrative missions for development of Bekasi City.

- 1) Sound and steady governance
- 2) Realization of healthy, cultural, intellectual, and productive civic life
- 3) Urbanization with an active service industry and commerce
- 4) Urbanization with a balance between growth and public investment
- 5) Realization of a comfortable living environment

Among them, the mission of item '4)' is strongly related with infrastructure development. Specifically, the mission mentions the following: 1) Development of the road network for improving access among urban areas, rural areas, and adjoining regencies, 2) Development of parks and preservation of green areas for rain water irrigated cultivation, 3) Security of sanitary drinking water, 4) Flood control, 5) Development of residential areas, 6) Maintenance of public facilities, 7) Garbage collection work, and 8) Security of sufficient electric power.

(4) Middle-Term Development Plan in Bekasi Regency (2012-2017)

The Middle-Term Development Plan (2012-2017) in Bekasi Regency is formulated as the second term planning years. The basic concepts of the middle-term development plan are "Religion Society that is Superior in the Fields of Industry, Trade, Agriculture and Tourism", and the following seven items are formulated as policies for realizing the basic concept.

- 1) Action for development by public and private partnership
- 2) Public administration to meet all the needs of the residents of Bekasi Regency
- 3) Economic growth and reinforcement of competitiveness by internationalization of industry and commerce
- 4) Development of urban infrastructure for forming environmental symbiosis and sustainable communities
- 5) Embodiment of high productivity and good governance by utilization of human resources
- 6) Enforcement of fair legal system
- 7) Improvement of citizen satisfaction level for public administration by reform of social infrastructure and public facilities

In the concrete policy deployment of the second term planning (2012 to 2017), the fields of education, health enhancement, economy, and society are related with infrastructure development. In the commercial transaction sector, the plan mentions providing the supporting services by practical use of the information system on the license application of commercial activity, etc. In the agricultural sector, support for

reform of the agricultural production infrastructure is mainly planned. Moreover, in the tourism sector, the support work on cultural tourism rooted in the region is planned.

(5) Middle-Term Development Plan in Karawang Regency (2010-2015)

The Middle-Term Development Plan in Karawang Regency (2010-2014) was formulated with the following five strategic targets.

- 1) Qualitative improvement of civic life (for a healthy and cultural life)
- 2) Synthetic enactment of laws/regulations and growth of the regional economy
- 3) Improvement of civic life by infrastructure development
- 4) Qualitative improvement of administrative services
- 5) Qualitative and quantitative improvement in the environment of the regency

In the plan, 1) dedicated width (more than 6 m) of arterial roads in region, 2) water-source management, 3) improvement in the living environment, 4) security of public spaces (parks etc.), etc. are specified as concrete policies as far as infrastructure, and a numerical target is also set for each policy.

A.1.1.3 Spatial Plan

(1) National Spatial Plan (RTRWN) (Planning period: 2008-2027)

Spatial plans in Indonesia have a legal basis with the passing of Law No. 24 of 1992, Spatial Planning Act. The current national spatial plan covers a 20-year period in accordance with Law No. 26/2007 on spatial planning, and it is to be reviewed every five years, 2008-2012 (first term), 2013-2017 (second term), 2018-2022 (third term), 2023-2027 (fourth term) . The organization responsible for formulating the plan is the National Spatial Planning Coordination Board chaired by the Coordinating Minister for Economic Affairs (CMEA). The National Development Planning Agency (BAPPENAS) is in charge of the secretariat of the board. The plan is formulated by the officials of BAPPENAS.

The Directorate General of Spatial Planning of the Ministry of Public Works handles the implementation of the plan prepared by the board. . The plan includes guidelines for the planning process for effective and efficient implementation of the plan. There is a strategic development framework for the purpose of creating a national land strategy. The framework seeks to achieve security, economic viability, and sustainability in the use of land in this archipelagic country, in addition to national cohesiveness and stability.

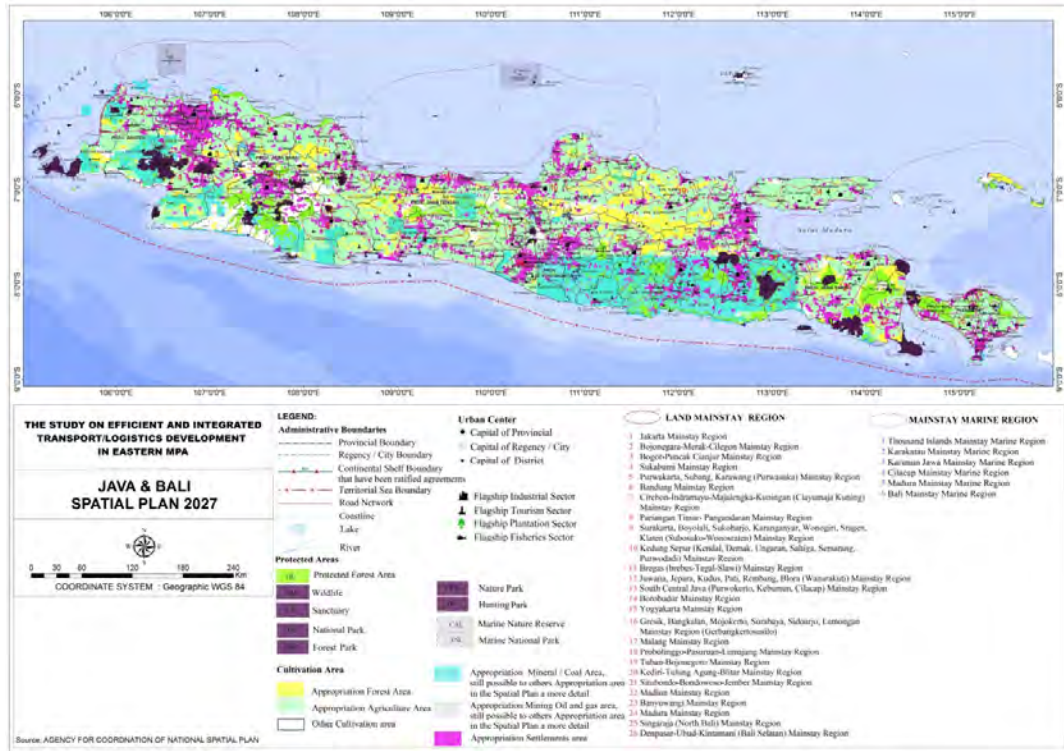


Figure A.1.1.4 Land Use Plan & Structure Plan (RTRWN(2008-2027))



Figure A.1.1.5 Land Use Plan & Structure Plan(2008-2027)

Project plans, future land use plans, and regulations of Java-Bari Area are as follows.

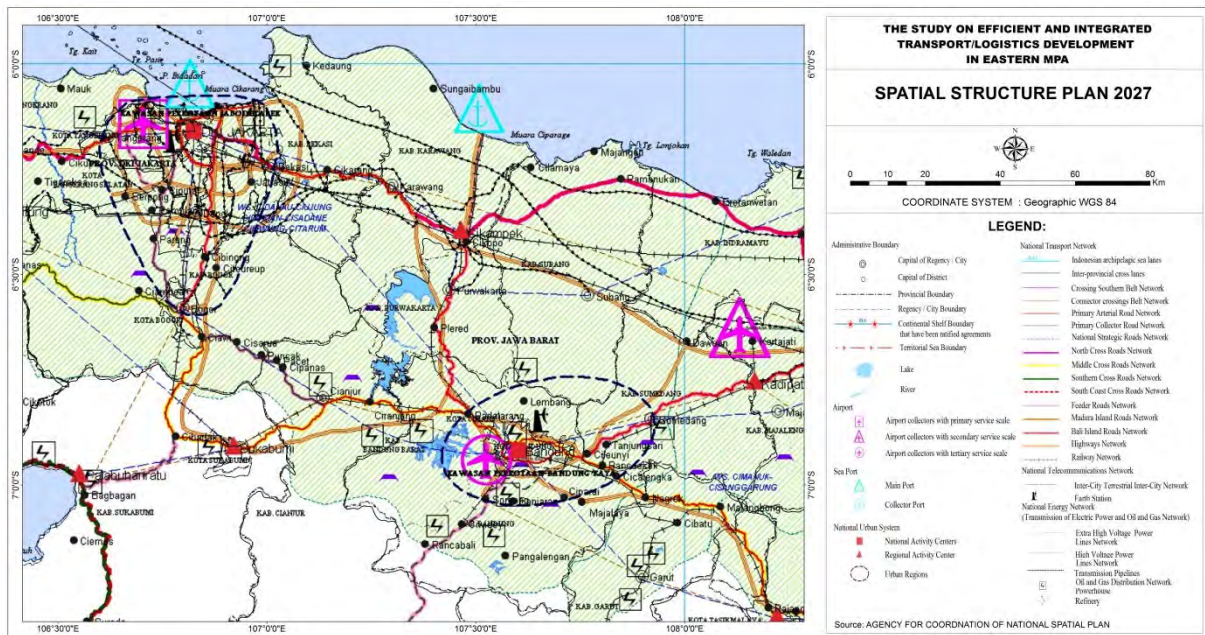
1) Development Projects

Table A.1.1.2 and Figure A.1.1.6 show the development projects related to the study area.

Table A.1.1.2 Development Projects (RTRWN)

No.	Project Title	Remarks
1	Highway Network	- Toll Road - Outer Ring Road - Outer Outer Ring Road - Access Road to Cilamaya New Port
2	Java-Bari Road Network	- JL.Raya Patok Besi Subang (No.1)
3	Arterial Road Network	- JL.Cikuda Campaka (No.4)
4	Railway Network	- Access Railway to Cilamaya New Port
5	Primary Port	- Tanjung Priok Port - Cilamaya New Port
6	Primary Airport	- Soekarno-Hatta International Airport
7	Secondary Airport	- Kertajati New Airport

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA



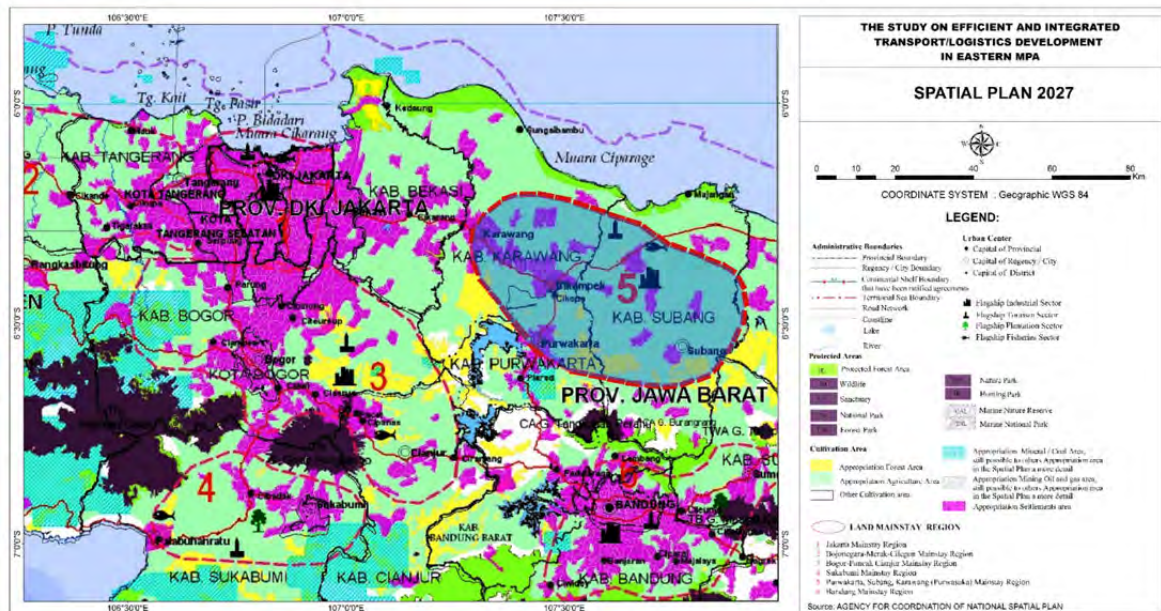
Source: RTRWN

Figure A.1.1.6 Development Projects Map (RTRWN(2008-2027))

2) Future Land Use

Figure A.1.1.7 shows future land use related to the study area. In the future, the urban area will expand along the highway, especially near the IC and the fringe of existing settlements. The region between Subang Regency and Karawang Regency as shown in (No.5 (definition of Article 73-74 Law of No.26 2008)) of Figure A.1.1.7 is regarded as one of the important areas for future development. The forests on

the coastline in Karawang Regency and Subang Regency are protected in accordance with this spatial plan. Most of No.5 area in the figure is protected for paddy fields in the spatial plan. Protected forest is distributed near Lake Jatiluhur.

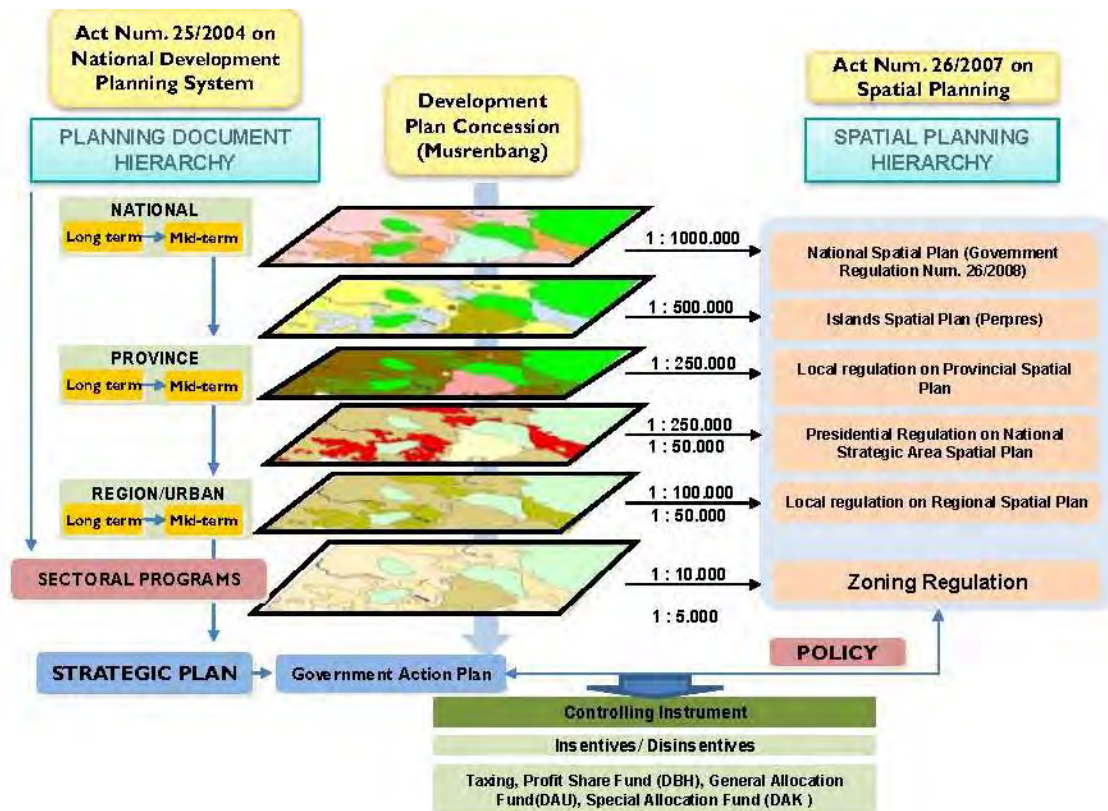


Source: RTRWN

Figure A.1.1.7 Future Land Use Plan (RTRWN(2008-2027))

A.1.1.4 Hierarchy of Spatial Planning and Development Planning

The hierarchy of spatial planning and development planning is shown in Figure A.1.1.8. The development plan should be consistent with the existing spatial and development plans legally authorized at each administrative level. It is necessary for the description of development projects to be consistent with the spatial and development plans at all levels: nation, province, and region/urban. This consistency is confirmed by reviewing the upper level plans or more detailed plans.



Source: National Spatial Plan Coordination Board

Figure A.1.1.8 Hierarchy of Spatial Planning and Development Planning

(1) Regional Spatial Plan for JABODETABEK (PP No.54/2008)

All of the local governments in Greater Jakarta Metropolitan Area (called JABODETABEKPUNJUR a name derived from the constituent areas) came together in 1971 to form a cooperative organ which eventually became the JABODETABEKPUNJUR Development Cooperation Board. Since then the board has been engaged in the planning and development of the metropolitan area.

The regional spatial plan for JABODETABEKPUNJUR emphasizes the unity of the metropolitan area, the optimal use of its space, the coordination of the spatial plans of the local governments, the sharing of basic data on spatial use and roadmaps with a view to the future use of spaces, the designation of special economic zones, and the social welfare aspects of spatial plans.

1) Plan for Urban Transportation

JABODETABEKPUNJUR Development Cooperation Board plans to develop the Outer Outer Ring Road, Second Toll Road (Jatiasih-Cikampek Toll Road) and Tg.Priok Access from JORR. JL.Raya Patok Besi Subang (No.1) is designated as an arterial road. JABODETABEKPUNJUR Development Cooperation Board plans to develop Bekasi Line (railway) as an urban rail rapid transit system to improve transport capacity.

2) Land Use and Development Plan

This spatial plan is used as a reference for development implementation related to efforts on water and land conservation to guarantee available groundwater and surface water flood control and economic development for prosperity. Based on this B-4,5 stipulates (a)Housing with low density, (b)Agriculture wet/dry land (with technology) and (c)Crops, fisheries, poultry agro-industry, production forest) and N-1,2 (Protected and Conservation Zone) as conservation categories and places restrictions on urban use as shown in Figure 2.1.x (upper map).

The directions of development include transportation, industrial estates, development of the water supply, wastewater treatment, solid waste systems, flood control, power and electricity.

(2) Spatial Plan (Region Level)

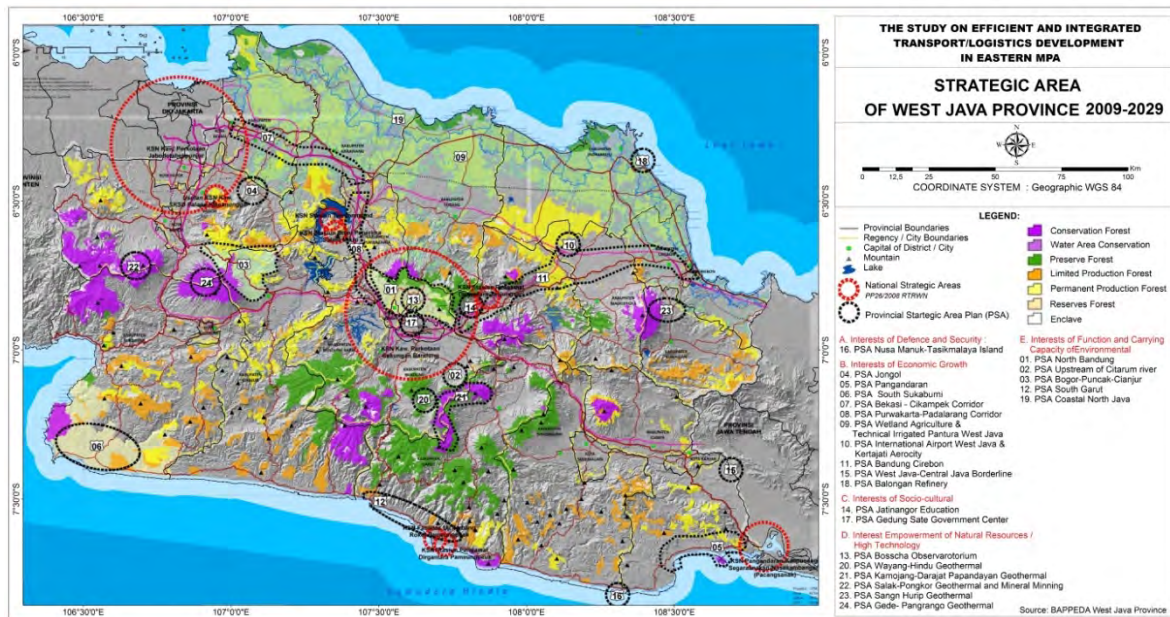
1) West Java Province

The Spatial Plan of West Java Province was formulated in 2008 (partially revised in 2010). The target year of the Spatial Plan is 2029 (plan period 2009 - 2029). West Java Province belongs to the Java - Bali Economic Development Corridor. The Western part of West Java Province forms the eastern and southern parts of the Jakarta Metropolitan Area, which is the core of economic development in Indonesia. West Java Province has planned economic development around Bandung City.

The traffic lines connecting Bandung urban area and Jakarta metropolitan area are regarded as Bekasi-Cikampek Corridor and Purwakarta-Pagandaran Corridor. Roadside development and reinforcement of the traffic lines for the corridors are planned in the spatial plan. Development of Cilamaya Port and the access railway to the port are also specified in the plan.

i) Plan for Urban Transportation

Development of an east-west arterial road along the coast of Bekasi and Karawang Regency is planned. This road will be connected to national highway No.1 and existing highway (Jatiasih-Cikampek) across north-south through the centre of Subang Regency. No access road to Cilamaya new international port has been specified in the Spatial Plan of West Java Province.



Source: Spatial Plan of West Java Province

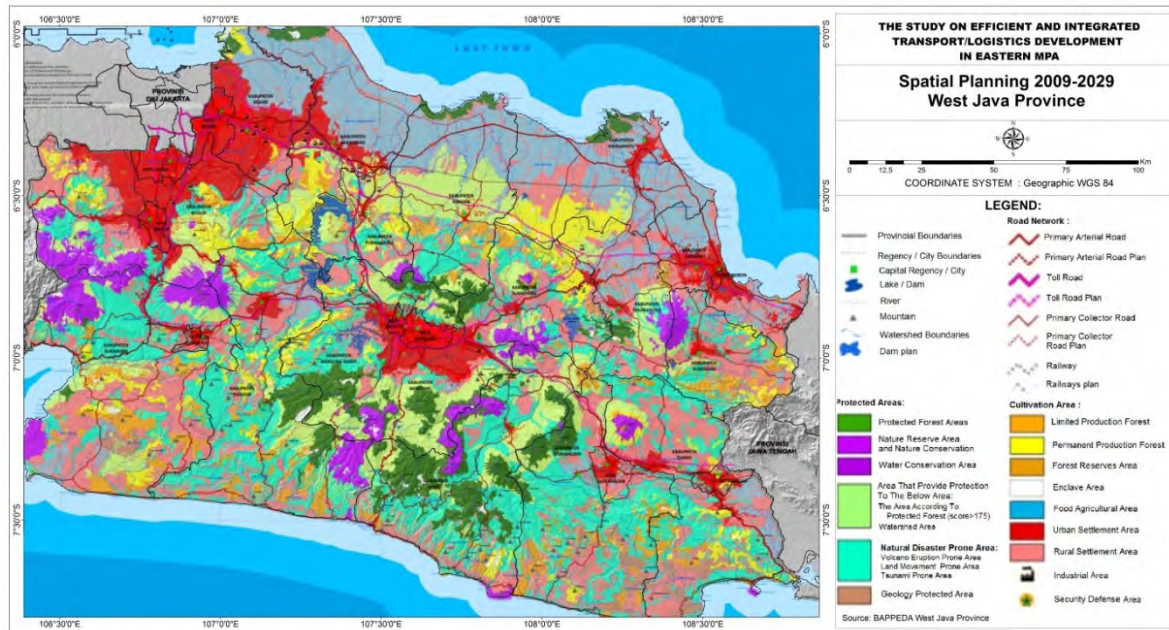
Figure A.1.1.10 Concept Plan of West Java Province

ii) Parks and Green areas plan and environmental plan

There is a colony of mangroves in the coastal area of Bekasi and Karawang Regency. This area is reserved for Protected Forest. In addition, protected forest is also located on the north side of Lake Jatiluhur.

iii) Land Use and Development Plan

In the land use plan of the West Java Province Spatial Plan, the coastal area is regarded as village land and forest area, and the hinterland of the coastal area is farmland. The whole area of Bekasi City adjacent to DKI Jakarta, the western area of Bekasi Regency, and the roadside of the toll road in Karawang Regency have become urban areas. The southern part of Karawang Regency is a mountainous forest area.



Source: Spatial Plan of West Java Province

Figure A.1.1.11 Future Land Use Plan of West Java Province

2) Bekasi City

Bekasi City spatial plan was formulated in 2008. The target year of the plan is 2030. Statements regarding future land use and infrastructure development plan in the spatial plan are as follows.

i) Road Network Plan

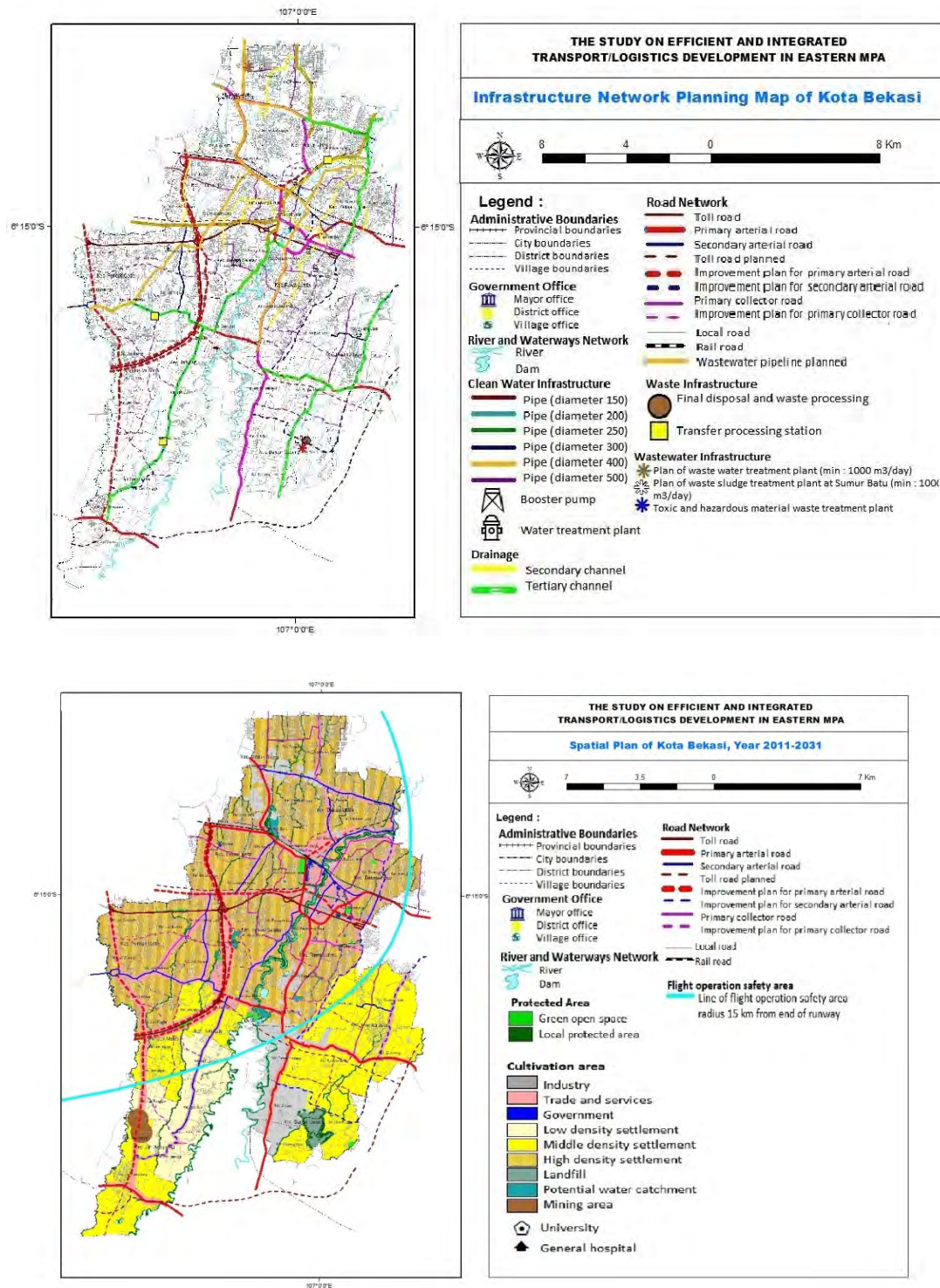
The road network pattern of Bekasi City is a grid type and links to the eastern part of the Jakarta road network. The most important project is the development of the eastern part of the Outer Outer Ring Road including construction and repair of the roads linking to the Outer Outer Ring Road.

ii) Parks and Green Areas Plan

Bekasi City BAPPEDA plans to a construct park and green area by utilizing the land of the former waste treatment plant. Bekasi City has a plan to expand its parks and green areas through slum clearance.

iii) Land Use Plan

Bekasi City BAPPEDA plans to develop a central zone including commercial and office functions of the city around the IC of the Toll Road and to develop commercial and office zones around the Outer Outer Ring Road. New residential area is planned in the south-eastern and south-western parts of the city.



Source: Bekasi City BAPPEDA

Figure A.1.1.12 Road Network and Structure Plan, Land Use Plan

3) Bekasi Regency

Bekasi Regency spatial plan was formulated in 2011. The target year of the plan is 2031. Statements regarding future land use and the infrastructure development plans in the spatial plan of Bekasi Regency are as follows.

i) Road Network Plan

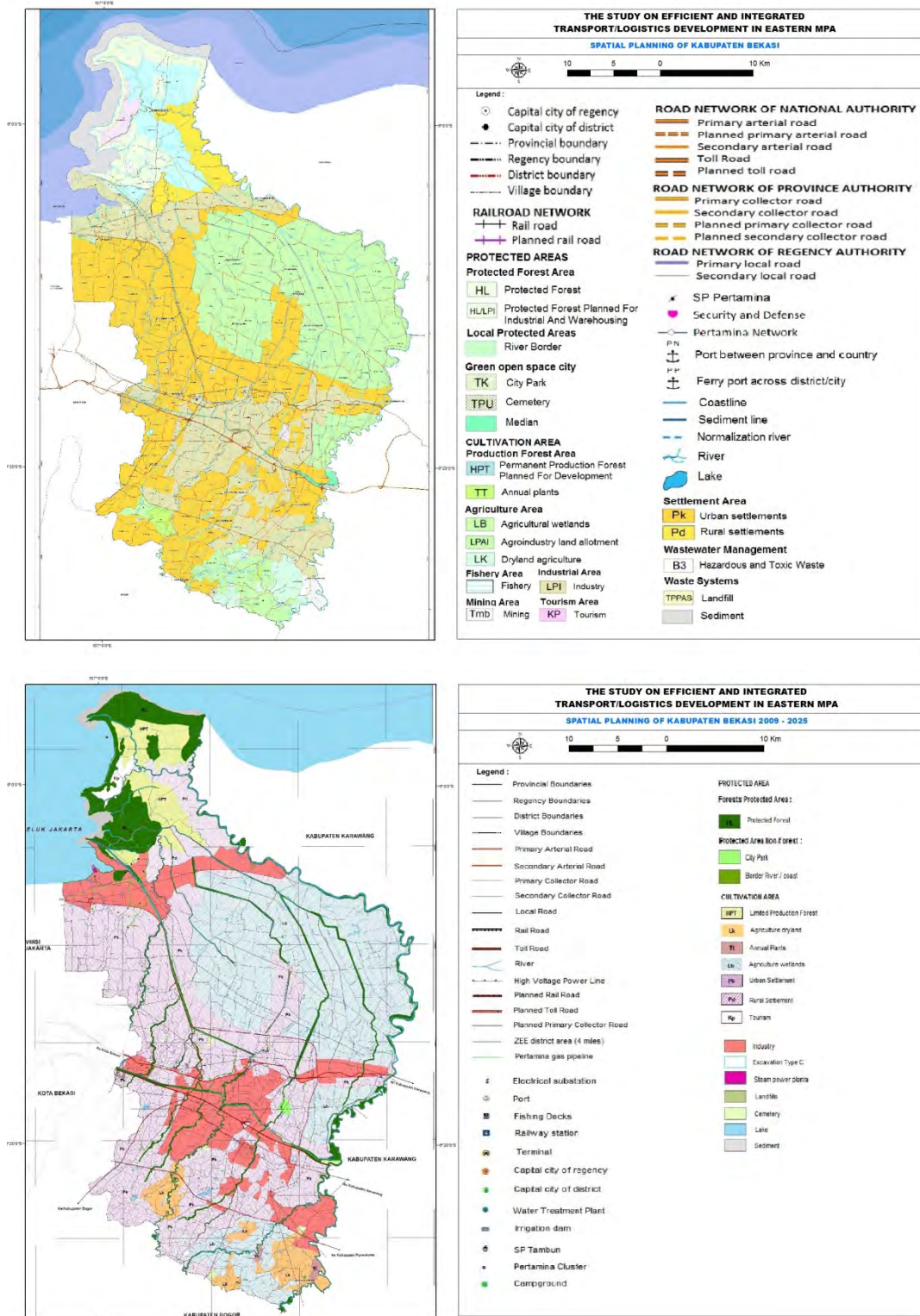
The road network plan of Bekasi Regency is integrated with the road network of DKI Jakarta, Bekasi City and Karawang Regency. Bekasi Regency BAPPEDA plans the regional road network based on a Toll Road Network. Arterial roads (regency level) link with interchanges of the Toll Road and JL.Raya Patok Besi Subang (No.1), and some north-south arterial roads (regency level) are planned for the seaside and mountainous area.

ii) Park and Green Area Plan

In Bekasi Regency, the target share of parks and green areas among the whole land area is 30%, 20% for a public land and 10% for a private land. Wetlands are distributed near the coastline, so BAPPEDA plans to designate this area as a flood control area.

iii) Land Use Plan

Bekasi Regency's land use is classified into six categories: conservation, agriculture and forestry, industry, tourism, residential, and others. In the agriculture and forestry areas there are permanent protected forests and land use cannot be converted to urban. Industrial area is planned in the Cikarang, Tarumajaya and Cabanbungun areas. The industrial area is 21,714 acres. Tourism area in the plan has about 1,400 acres. The tourism area has three functions: nature, culture, and recreation. Residence area is planned in built-up areas of 13,918 acres and development area of 42,950 acres.



Source: Bekasi Regency BAPPEDA

Figure A.1.1.13 Spatial Plan and Structure Plan

4) Karawang Regency

The spatial plan of Karawang Regency was formulated in 2011. This plan's target year is 2031. Statements regarding future land use and infrastructure development plan in the spatial plan are as follows.

i) Road Network Plan

The road network plan of Karawang is integrated with Bekasi, Subang and Purwakarta Regency road networks. Karawang BAPPEDA plans an access road from the Toll Road to Cilamaya New International Port. And BAPPEDA also plans a new access railway to Cilamaya New International Port. Improvement of the road network between the villages in the Regency has been planned.

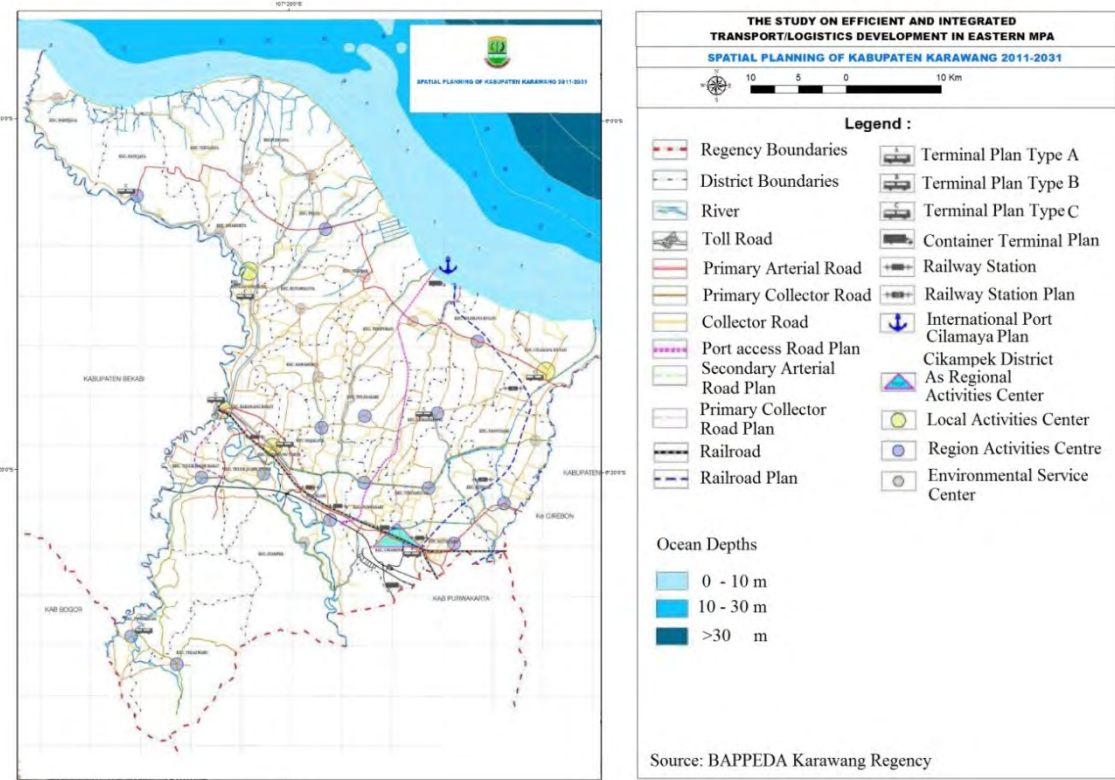
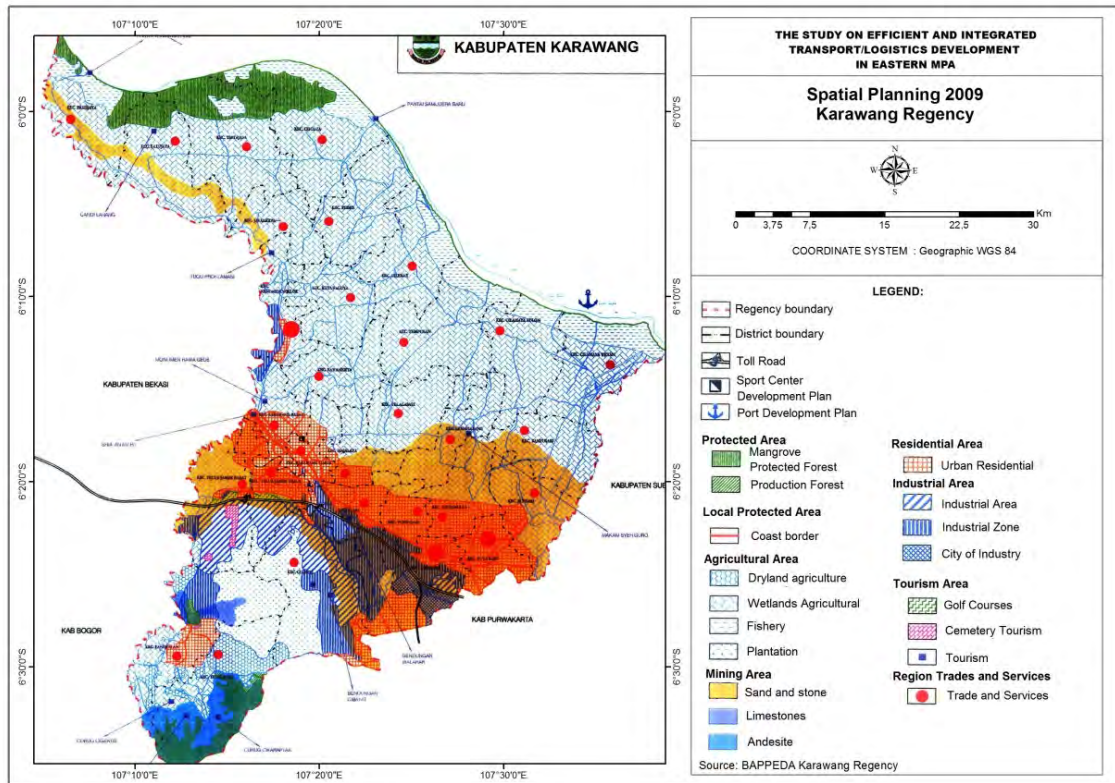
ii) Agriculture Promotion Plan (Irrigation Plan)

In the Karawang Regency spatial plan, an administrative plan for irrigation systems for paddy fields (over 100,000 ha) is mentioned. Karawang BAPPEDA has formulated an administrative plan for agricultural water and river management. Karawang Regency has a vision for continuous agriculture promotion.

iii) Land Use Plan

Karawang Regency BAPPEDA has formulated a layout plan of public facilities (hospitals, schools and fields for sport) and forest that has the function of water retention, which is a countermeasure against natural disaster. BAPPEDA has chosen a layout plan agriculture and forestry areas. Waterfront area and paddy fields cannot be changed to urban use. The waterfront area has a risk of flood tides and tsunami. Especially, permanent protected forests and sustainable agricultural land are specified the same as in Bekasi Regency.

In the spatial plan, BAPPEDA has placed an industrial zone in a mountains area, but the effective residential rate is lower. And because sustainable agricultural land cannot be diverted to new urban land use, it is necessary to accept an increasing population in the existing residential area.



Source: Karawang Regency BAPPEDA

Figure A.1.1.14 regulation of land use and Spatial Plan

A.1.1.5 Port Development Plans/Policies of Central/Local Government

(1) Port Development Plans/Policies of Central/Local Government

Basic guideline on public-private partnership (PPP) projects in Indonesia in infrastructure provision is stipulated in Presidential Regulation No. 67, Year 2005. Substance of the regulation is as follows;

- PPP should be established in accordance with fairness, publicity, transparency and competitive circumstance beneficial to both public and private parties.
- Value and/or feasibility of PPP projects should be evaluated by the government in an appropriate manner prior to recruiting the projects.
- Any risks should be borne by a party who can manage the risks more skilfully with less cost than other. Risk sharing scheme should be determined after a mutual agreement has been reached.
- Government support should be limited to projects socially desirable but fiscally non-feasible.
- PPP partners should be selected through competitive bidding.
- PPP projects can be proposed by private entities; however, the project tendering should be conducted under a competitive circumstance when the project is approved by the government.
- Price on PPP projects should be set based on repayment amount of capital cost for the project as well as legitimate profit of the investment.
- PPP projects should be executed by concession contract or by granting business right.

(2) New Shipping Law (Law No. 17/ 2008)

GOI promulgated a new shipping law in April 2008 which calls for port management to be conducted either by the Port Authority or Port Management Unit based on the concept of port land-lord in which management is separated from operation. With this law, a framework for effective and efficient port development, management and operation through Public and Private Partnership can be established.

The new law dictates two major policies in the port sector, one is introduction of a port management body, and the other is promotion of private sector participation in port development, management and operation. The objectives of introducing the new public-private partnership scheme to port development, management and operation can be said to be as follows:

Increase operational efficiency

- Create a system to recover state investment and to raise state revenue
- Create conditions for more efficient and accountable entities in port management and operation
- Create a more transparent and competitive port concession scheme consistently applied throughout the country for financially sound and efficient port development, management and operation

(3) Port Master Plan

The Ministry of Transport gave public notice in April, 2011 concerning the Master Plan of Tanjung Priok Port which is managed by the Port Authority of Tanjung Priok. (Revised Master plan was notified in June, 2012.)

Port Master Plan (MOT Regulation (No.42 /2011))

i) Terms of Master Plan

The Master Plan consists of three stage plans including a short-term plan (2011-2015), mid-term plan (2011-2020) and long-term plan (2011-2030).

ii) Planned Areas

The Master Plan covers future development plans in some areas including the North Kalibaru, Cilamaya and Tarumanegara Areas of Tanjung Priok Port.

iii) Development Plan (Cilamaya Area)

Table A.1.1.3 Development Plan (Cilamaya Area) of MOT Regulation (No.42 /2011)

Facility Development		Short-term	Mid-term	Long-term	Total
		2011-2015	2011-2020	2011-2030	
Channel	Width (m)	-	310	-	310
	Draft (m)	-	-15.5	-	-15.5
Breakwater	Length (m)	-	2,140	-	2,140
Seawalls	Length (m)	-	4,680	-	4,680
Revetment	Length (m)	-	1,210	810	2,020
International Container Terminal	Berth Length (m)	-	2,160	2,160	4,320
	Draft (m)	-	-12.5 ~ -15.5	-12.5 ~ -15.5	-12.5 ~ -15.5
	Area (ha)	-	87	86	173
	Capacity (million TEU/Year)	-	3.2	4.3	7.5
Multi-purpose Terminal	Berth Length (m)	-	-	600	600
	Draft (m)	-	-	-9	-9
	Yard Area (ha)	-	-	15	15
Service Boat Basin	Berth Length (m)	-	-	800	800
	Draft (m)	-	-	4	4
Mainland Area (ha)			-	160	290
Bridge	Length (m)	-	800	150	950
Access Road	Length (m)	-	28,600	-	28,600

Source: Ministry of Transport

Port Master Plan (MOT Regulation (No.38/2012))

i) Terms of Master Plan

The Master Plan consists of three stage plans including a short-term plan (2011-2015), mid-term plan (2011-2020) and long-term plan (2011-2030).

ii) Planned Areas

The Master Plan covers future development plans in some areas including North Kalibaru, Cilamaya and Tarumanegara Areas of Tanjung Priok Port.

iii) Development Plan (Cilamaya Area)

Table A.1.1.4 Development Plan (Cilamaya Area) of MOT Regulation (No.38/2012)

Facility Development		Short-term	Mid-term	Long-term	Total
		2011-2017	2011-2023	2011-2030	
Channel	Width (m)	-	380	-	380
	Draft (m)	-	-17	-	-17.0
Breakwater	Length (m)	-	2,307	-	2,307
Seawalls	Length (m)	-	4,680	-	4,680
Revetment	Length (m)	-	1,234	504	1,738
International Container Terminal	Berth Length (m)	-	1,680	1,680	3,360
	Draft (m)	-	-17	-	-17
	Area (ha)	-	120	110	230
	Capacity (million TEU/Year)	-	3.2	4.3	7.5
Car Terminal	Berth Length (m)	-	690	-	690
	Draft (m)	-	-12.5	-	-9.0
	Yard Area (ha)	-	25	15	40
Service Boat Basin	Berth Length (m)	-	350	630	980
	Draft (m)	-	-4	-	-4
Mainland Area (ha)			-	221	-
Bridge	Length (m)	-	800	150	950
Access Road	Length (m)	-	28,600	-	28,600

Source: Ministry of Transport

Major change between Master Plan No.42 /2011 and No.38/2012

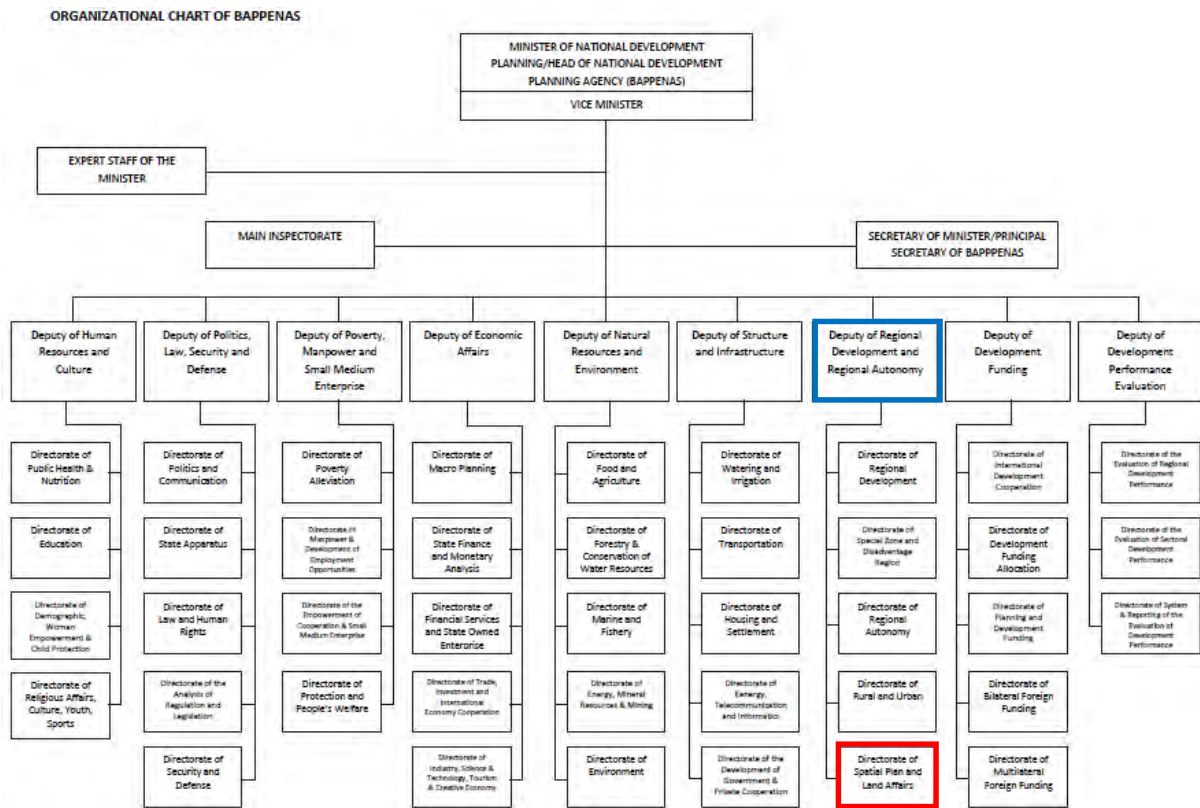
- 1) Deepen International Container Terminal basin (-15.5m → -17m)
- 2) Conversion of Car Terminal to Multi-purpose Terminal, deepen the basin (-9m → -12.5m)
- 3) Change in capacity of Container Terminal (Middle Term Plan: 3.2 mil TEU, Long Term Plan: 4.3 mil TEU → Middle & Long Term Plan : 3.75 mil TEU)
- 4) Early project implementation (Long Term Plan →Middle Term Plan)

A.1.2 Understanding the Roles of Related Agencies and Organizations, and Executing Structures

A.1.2.1 Organization of Central Government

(1) BAPPENAS

Works of the National Development Planning Agency (BAPPENAS) are described in 2002 No. 2, 5 Executive Order of the President. The main work is the planning and execution of the national development plan. The organizational structure of BAPPENAS is organized by the Expert Staff, Secretaries, Main Inspectorate, and 9 departments as shown in Figure A.1.2.1. The Directorate of Spatial Planning and Land Affairs under the Deputy of Regional Development and Regional Autonomy is in charge of the spatial plan. In reality, BAPPENAS establishes a team of experts and working group for planning.

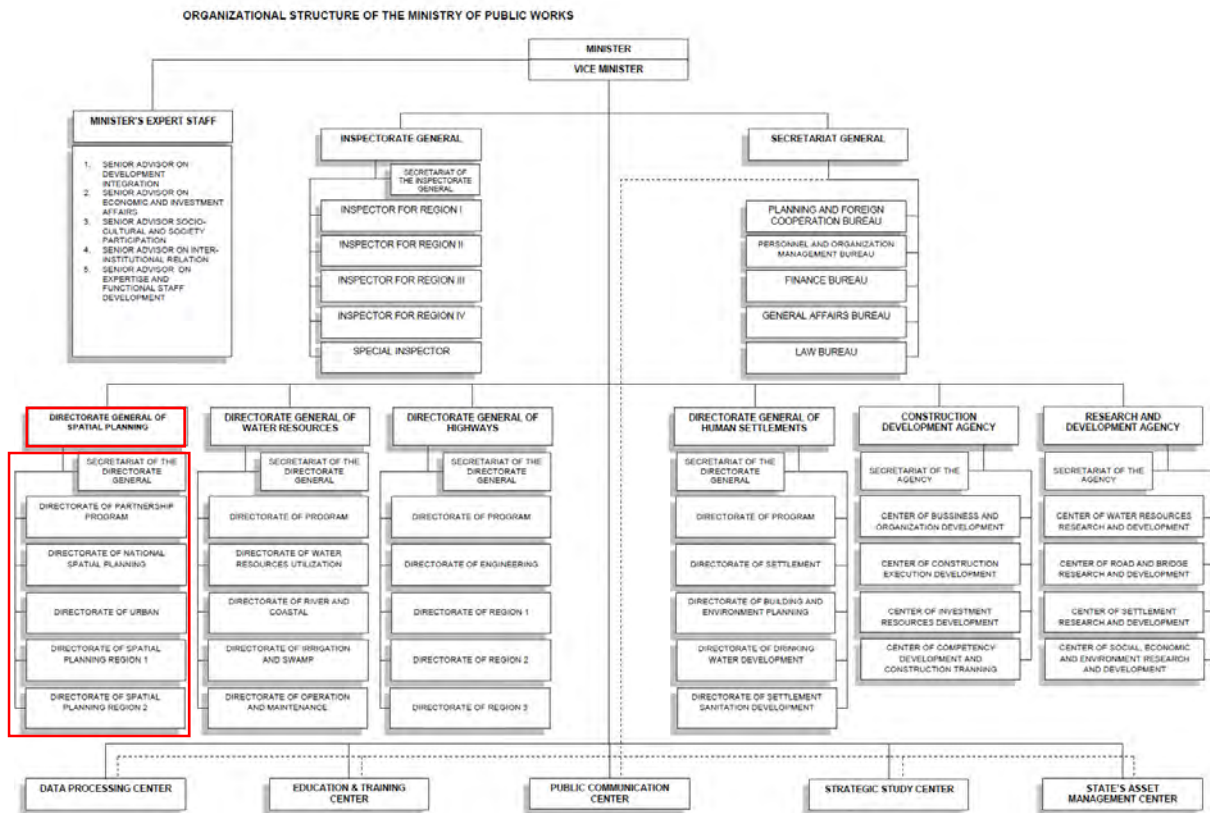


Source: Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on BAPPENAS HP

Figure A.1.2.1 Organizational Chart of BAPPENAS

(2) Ministry of Public Works

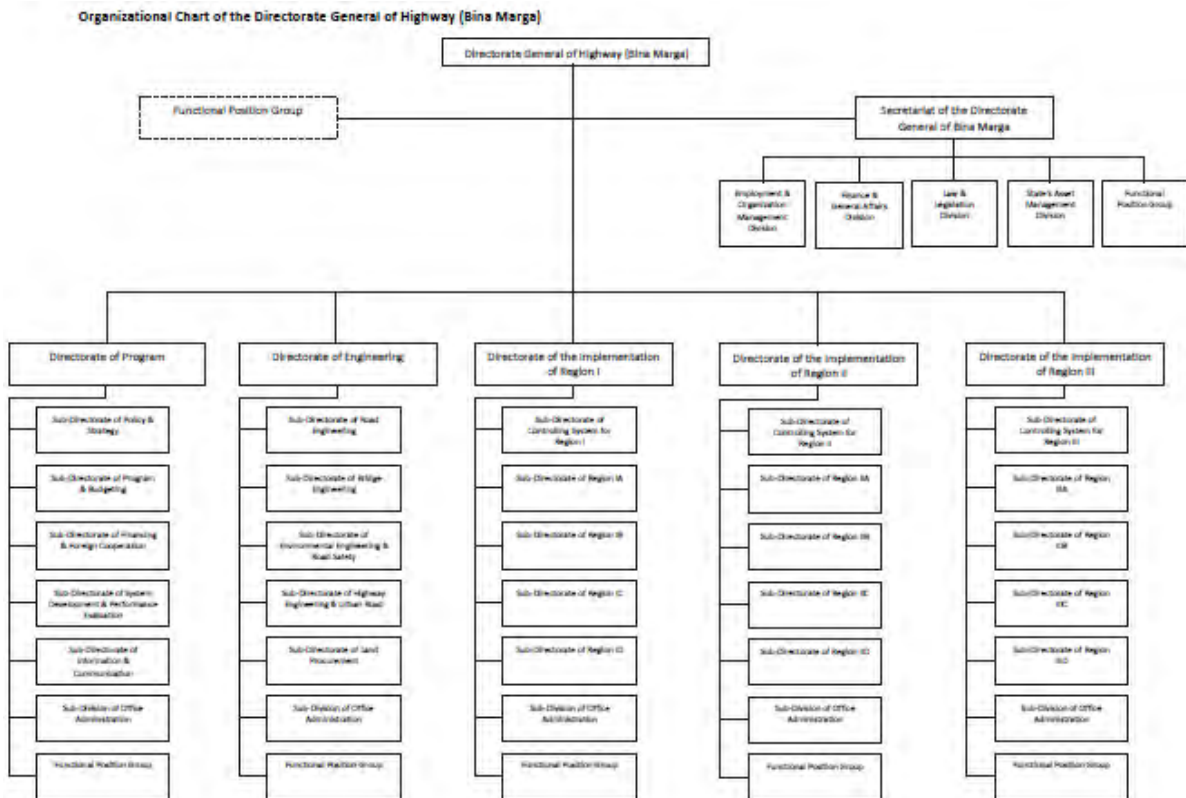
The organizational structure of the Ministry of Public Works is formed by the Minister's Expert Staff, Inspectorate General, Secretariat General, and six directorates (Spatial Planning, Water Resources, Highways, Human Settlements, Construction Development Agency, and the Research and Development Agency). The Minister's Expert Staff is formed by five senior advisors (Development Integration, Economy and Investment, Social-Cultural, Inter Institutional Relations, and Expertise and Functional Staff Development). Of these, the Directorate of National Spatial Planning, Directorate of Urban affairs, and the Directorate of Spatial Planning Region I and Region II belong to the Directorate of General of Spatial Planning who manages the Spatial Plan.



Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on Ministry of Public Works HP

Figure A.1.2.2 Organizational Chart of Ministry of Public Works

Furthermore, organizational chart of Ministry of Public Works/Directorate General of Highway (BINA MARGA) related to Cilamaya new Port access road is as follows.



Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on Ministry of Public Works/Directorate General of Highway HP

Figure A.1.2.3 Organizational Chart of Directorate General of Highway

BAPPENAS plays the role of the secretariat of the National Spatial Planning Coordinating Committee, which has the function of national spatial planning. The Coordination Minister of Economic Affairs (Menko Polhukan) is the chairman of the committee. The Directorate General of Spatial Planning under the Ministry of Public Works works on formulation of the spatial plan with BAPPENAS. The following table shows the division of roles for the spatial plan between BAPPENAS and the Directorate General of Spatial Planning, and the Ministry of Public Works

Table A.1.2.1 Division of roles for the Spatial Plan

	BAPPENAS	Ministry of Public Works Directorate General of Spatial Planning
The Scope of Work	<p><u>Article 438 role of the section</u></p> <ol style="list-style-type: none"> 1. Planning of RPJPN 2. Adjustment of projects of RPJPN 3. Financial planning of PRJPN 4. Evaluation of RTRWN 5. Monitoring and Evaluation of RPJPN 6. Process control of PRJPN 7. Utilization of human resources 	<p><u>Article 107 role of the section</u></p> <ol style="list-style-type: none"> a) Planning the RTRWN b) Study of realization method c) Work of norms and standards of RTRWN d) Technical guidance, evaluation
	<p><u>Article 441 The activities related to the spread of planning</u></p> <ol style="list-style-type: none"> 1. Evaluation of RTRWN 2. Use of spatial information and RTRWN 3. The formulation of national development plans based on RTRWN 4. Study of development funds 5. Evaluation of development funds of RTRWN 6. Monitoring of RTRWN 	<p><u>Article 153 role of the section (sub)</u></p> <ol style="list-style-type: none"> a) Monitoring, evaluation and planning of RPJPN b) Dissemination of standards and procedures to plan RPJPN c) Adjustment of projects of RTRWN d) Planning of medium-term plan for infrastructure development e) Adjustment of related departments and local government f) General affairs
	<p><u>Article 443 role of the section of RTRWN</u></p> <ol style="list-style-type: none"> 1. Impact assessment of regulatory of RTRWN 2. Use of PRJPN and land use regulations 3. Examination of development plan of RTRWN 4. Financial plan of development plan of RTRWN 5. Arrangement and analysis of policy 6. Monitoring and reporting 	<p><u>Article 156 role of the section (sub)</u></p> <ol style="list-style-type: none"> a) Formulation of national strategy b) Planning sectorial strategic plan of the state c) Review of RTRWN d) Monitoring of RTRWN
	<p><u>Article 445 role of Land Management section</u></p> <ol style="list-style-type: none"> 1. The impact assessment of the Control of land 2. Use of the PRJPN from the side of the land use regulation 3. Funding for land use 4. Analysis from the side of the land use policies 5. Monitoring of development programs as a land management section 	<p><u>Article 163~166</u> (IA,IB) Planning and evaluation of Sumatra, Java Island</p> <p><u>Article 167 ~ 170</u> (II) Planning and evaluation of Bali, Nusa Tenggara, Kalimantan, Sulawesi, Maluku and Papua islands</p> <p><u>Article 187 ~ 192</u> Duties relating to urban development</p> <p><u>Article 194</u> Items related to planning of urban areas</p> <p><u>Article 200~242</u> Items relating to rural planning</p> <p><u>Article 420</u> Items relating to highway network</p>

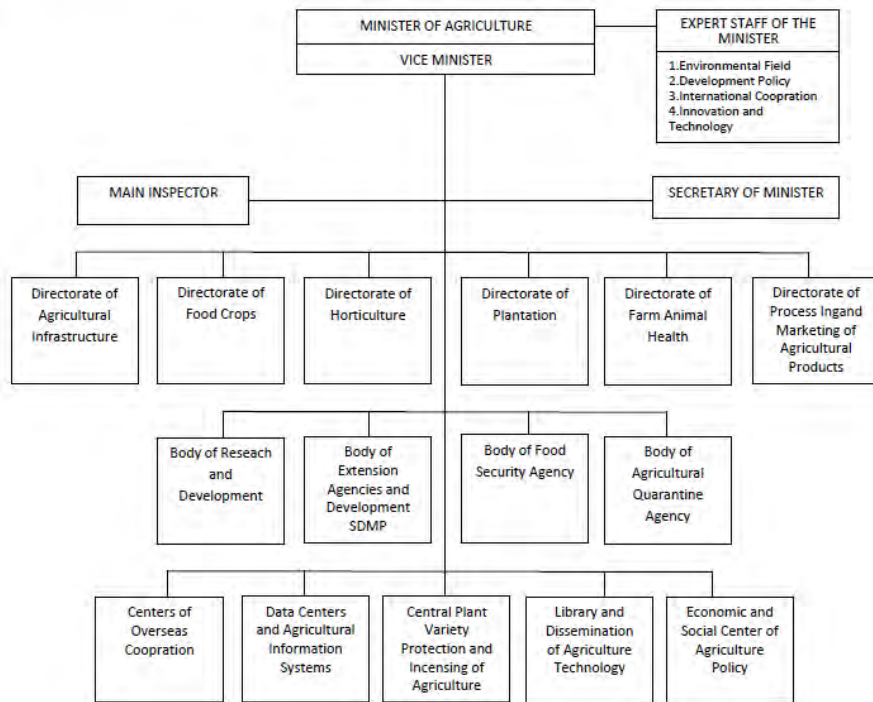
Source : Ministerial ordinance : BAPPENAS (No.5.2007), Ministry of Public Works (No.8.2010)

The Ministry of Public Works is responsible for the technical part of infrastructure development projects and Spatial Planning. BAPPENAS is responsible for the coordination of interagency and financial support for the realization of the projects.

(3) Ministry of Agriculture

The organizational structure of the Ministry of Agriculture is formed by the Minister’s Expert Staff, Main Inspector, Secretary of Minister General, and six directorates (Agricultural Infrastructure, Food Crops, Horticulture, Plantation, Farm Animal Health, and Marketing of Agricultural Products) as shown in Figure A.1.2.4. The Minister’s Expert Staff is formed by four expert staff of the minister (Environmental Field, Development Policy, International Cooperation, and Innovation and Technology). Plus, four bodies at the second layer and five centres at the third layer are organized under the Minister and Vice Minister.

ORGANIZATIONAL CHART OF Ministry Agriculture

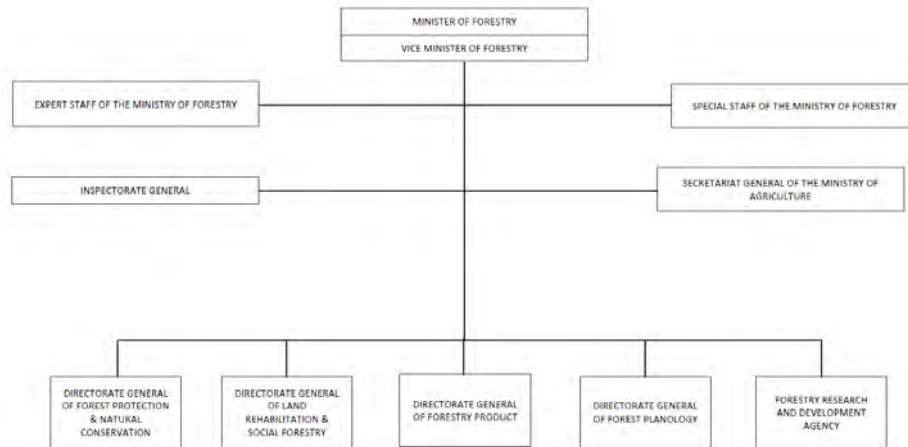


Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on Ministry of Agriculture (Kementerian Pertanian) HP

Figure A.1.2.4 Organizational Chart of Ministry of Agriculture

(4) Ministry of Forests

The organizational structure of the Ministry of Forests is formed by Expert Staff, the Inspectorate General, Special staff, Secretariat General and five directorates (Forest Protection & Natural Conservation, Land Rehabilitation & Social Forestry, Forest Planology and Research & Development Agency).



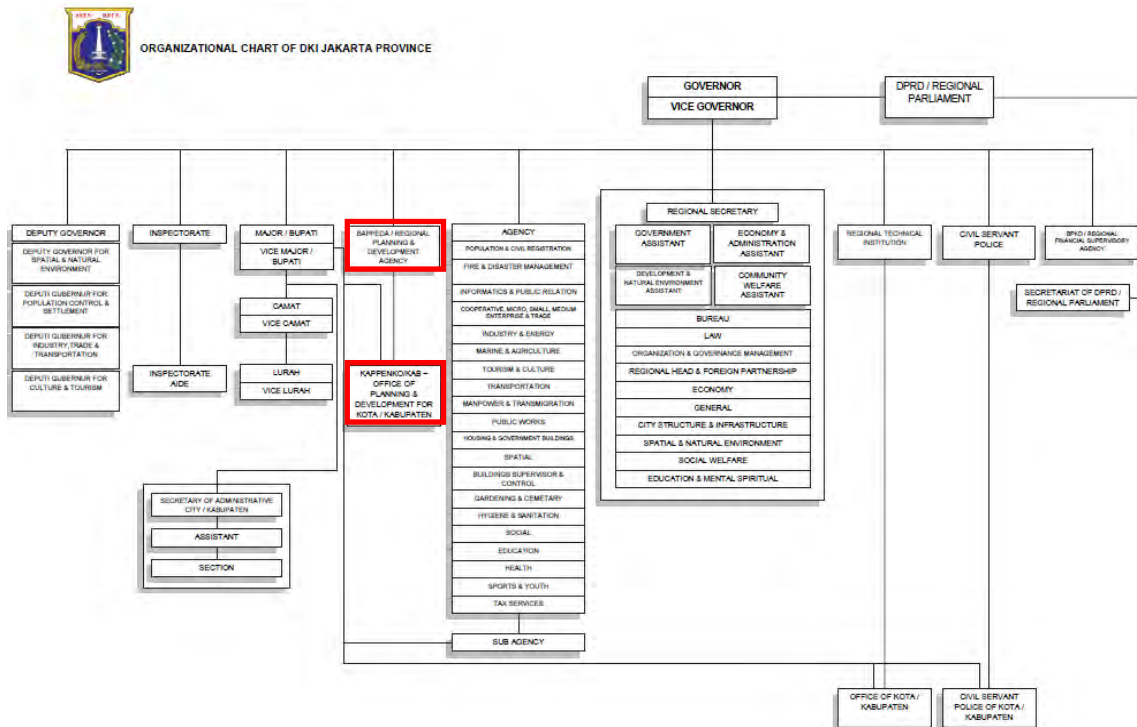
Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on Ministry of Forestry(Kementerian Kehutanan) HP

Figure A.1.2.5 Organizational Chart of the Ministry of Forestry

A.1.2.2 Organization of Local Government

(1) DKI Jakarta

The organizational structure of DKI Jakarta is formed by DPRD (Council of the State) and nine units as shown in Figure A.1.2.6. Of these, BAPPEDA (Regional Development Planning & Development Agency), that belongs to the Governor, plans and manages the Spatial Plan; and the City and Regency BAPPEDA offices connect with that. DKI Jakarta BAPPEDA is under the Governor, but BAPPENAS also has connected to BAPPEDA of DKI Jakarta for technical advice regarding the spatial planning and Coordination with the province plans.



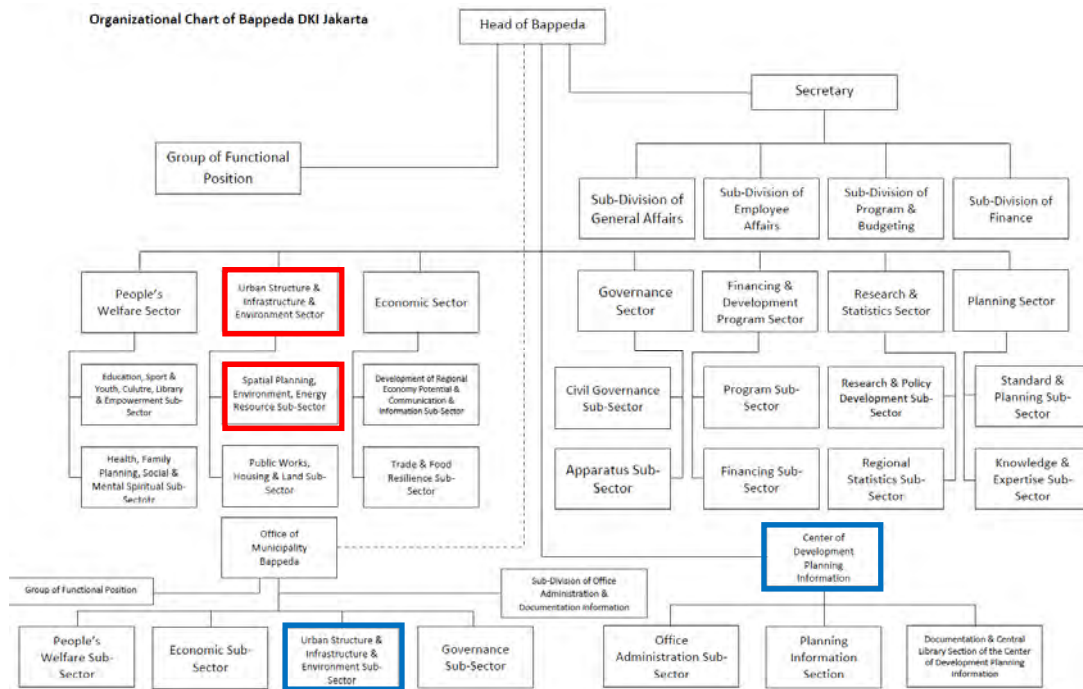
Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on DKI Jakarta HP

Figure A.1.2.6 Organizational Chart of DKI Jakarta

The organization of DKI Jakarta Projects Agency (BAPPEDA) is divided into Functional Positions, four sections of the Secretary (General Affaires, Employee Affaires, Program & Budgeting and Finance) and seven sectors (Welfare, Urban Structure & Infrastructure & the Environment, Economic, Governance, Financing & Development Program, and Planning).

The Spatial Planning Environmental Energy Resource Sub-Sector, which belongs to the Urban Structure & Infrastructure & Environment Sector, plans and manages the Spatial Plan of DKI Jakarta. And the Housing & Land Sub-Sector belongs to the Urban Structure & Infrastructure & Environment sector, too.

For the public relations activities related to urban development, the development planning Information Center is organized under BAPPEDA. The information centre has been publishing information on urban development. In addition, the branch on public works is set up in a unit of local towns and villages.



Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on DKI Jakarta HP

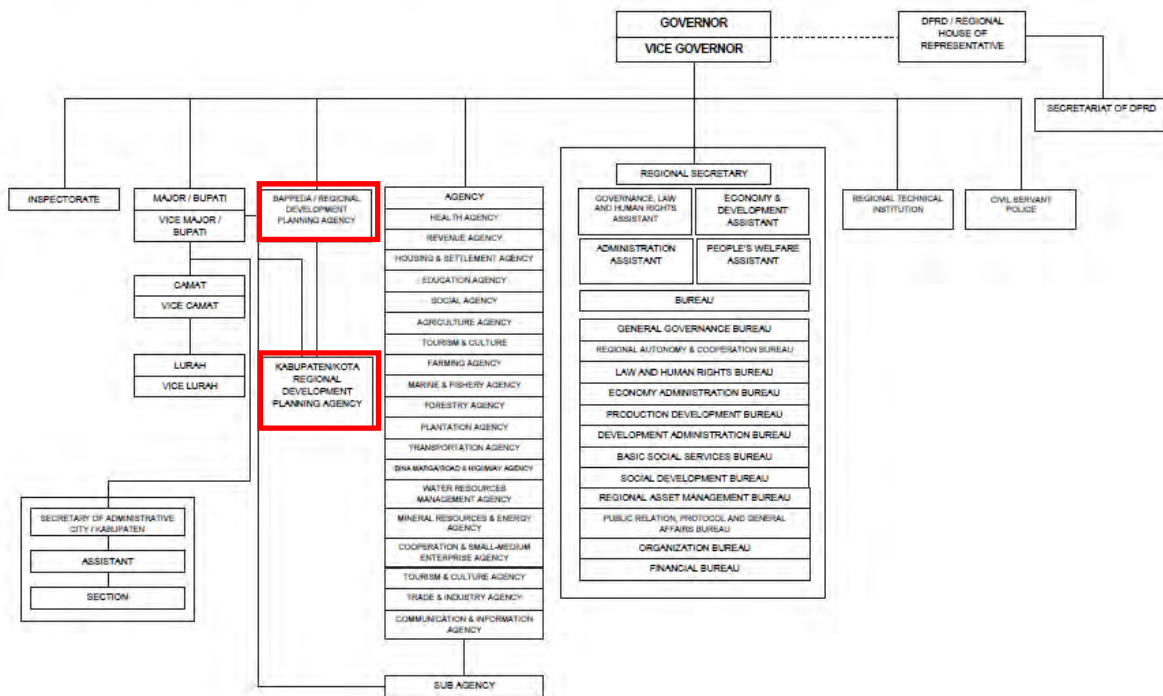
Figure A.1.2.7 Organizational Chart of DKI Jakarta BAPPEDA

(2) West Java Province

The organizational structure of West Java Province is formed by DPRD (Council of the State) and seven units.

Of these, BAPPEDA (Regional Development Planning Agency) belongs to the Governor. BAPPEDA is under the control of the Province, but BAPPENAS and DKI Jakarta also have connected to West Java Province BAPPEDA regarding the technical advice for the spatial planning and coordination with the province plans.

ORGANIZATIONAL CHART OF WEST JAVA PROVINCE



Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on West Java Province HP

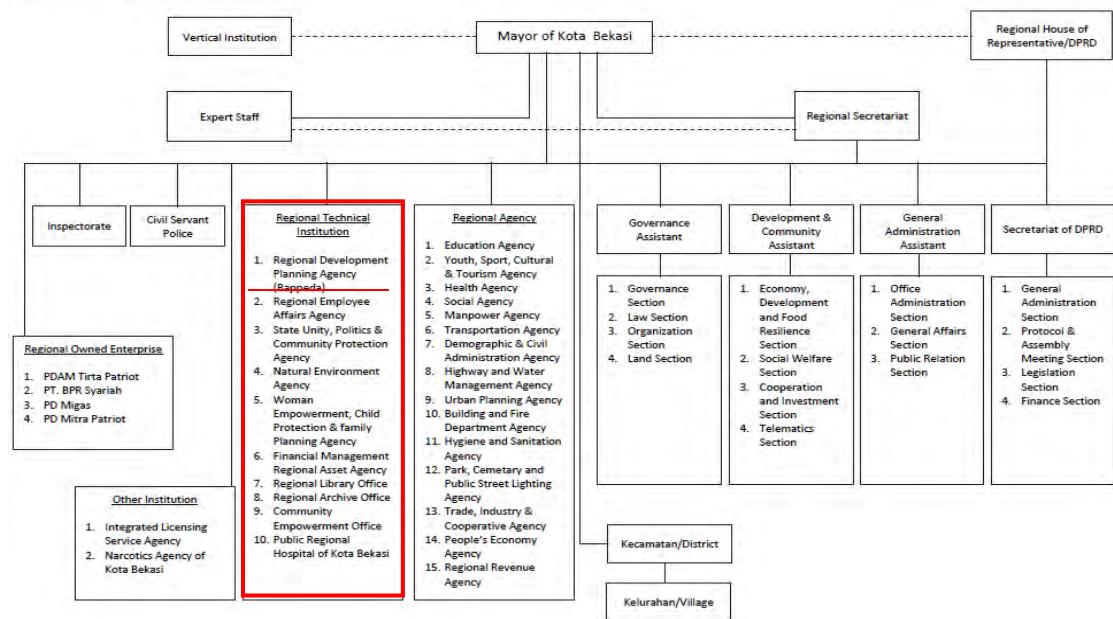
Figure A.1.2.8 Organizational Chart of West Java Province

(3) Bekasi City

The organizational structure of Bekasi City Hall is formed by the Vertical Institution (Polica, Legal Affairs etc.), City Council, Expert Staff, Regional Secretariat and 11 units.

Of these, BAPPEDA (Regional Development Planning Agency), which belongs to the Regal Technical Institution, plans and manages the Spatial Plan of Bekasi City. BAPPEDA is under the control of City Hall, but West Java Province BAPPEDA also has connected to Bekasi City BAPPEDA regarding the technical advice for the spatial planning and coordination with the province plans.

ORGANIZATIONAL CHART OF KOTA BEKASI

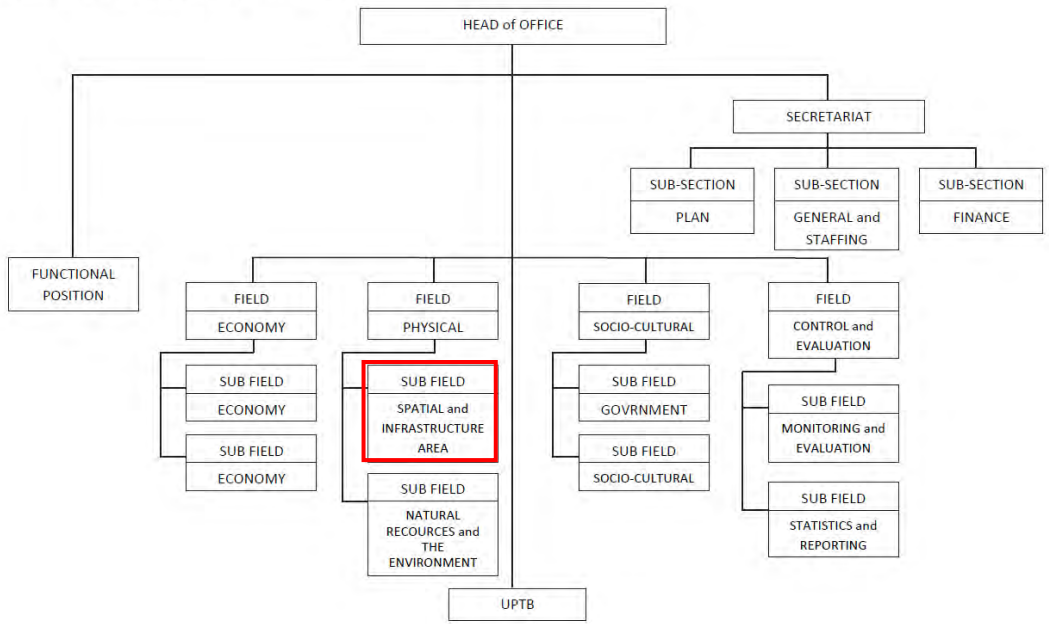


Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on Bekasi City HP

Figure A.1.2.9 Organizational Chart of Bekasi City

The organization of Bekasi City Projects Agency (BAPPEDA) is divided into four fields: Economy, Physical, Social-Culture and Control and Evaluation. Spatial planning is planned and managed by the Spatial and Infrastructure Sub-field (Sub-section) of the Physical Field (Section).

ORGANIZATIONAL CHART OF BAPPEDA (BEKAI CITY)



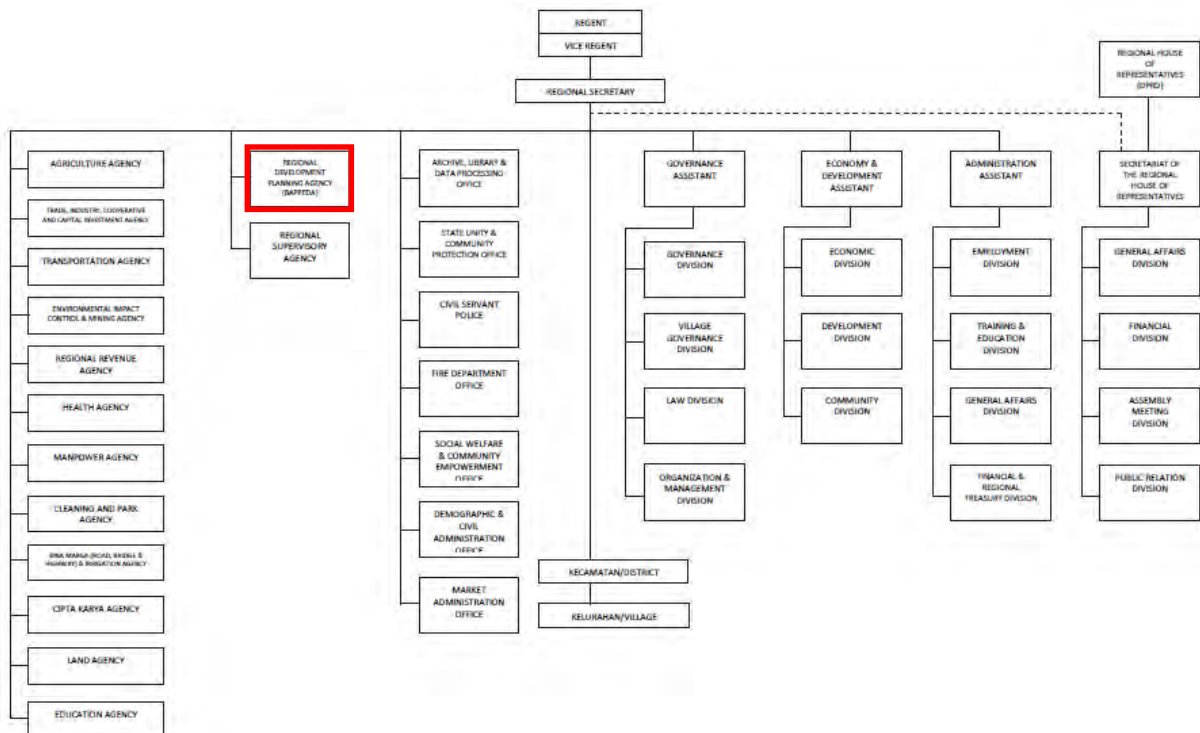
Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on Bekasi City HP

Figure A.1.2.10 Organizational Chart of Bekasi City BAPPEDA

(4) Bekasi Regency

The organizational structure of Bekasi Regency is formed by three management departments (Governance, Economy & Development, and Administration) and 21 Agencies.

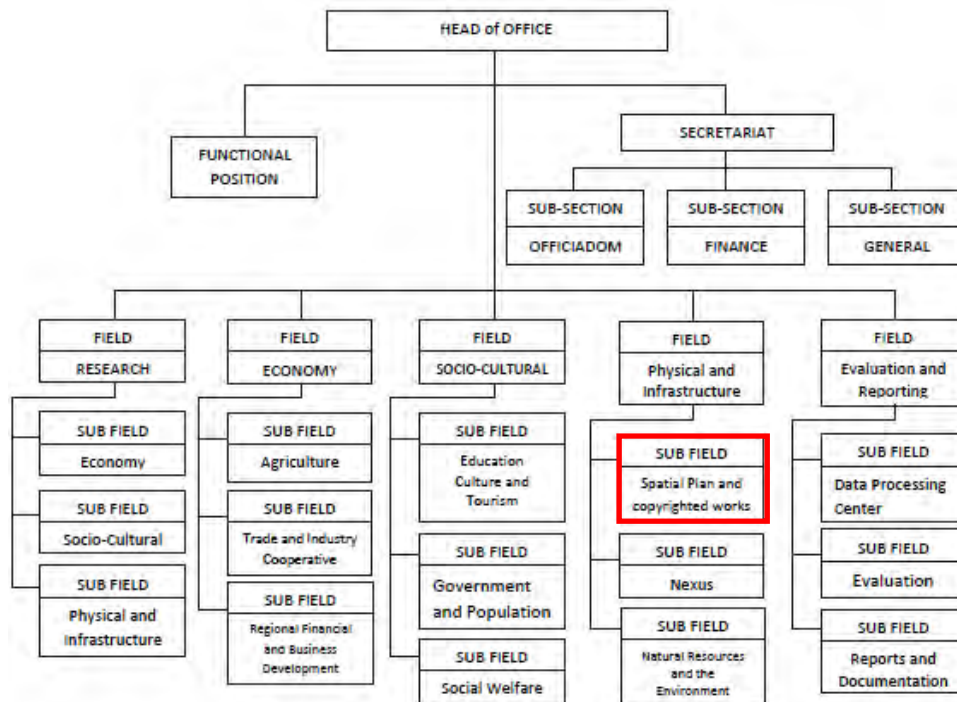
Of these, BAPPEDA (Regional Development and Planning Agency), which belongs to the Regional Secretary manages the Spatial Plan of Bekasi Regency. BAPPEDA is under the control of Bekasi Regency, but West Java Province BAPPEDA also has connected to Bekasi Regency BAPPEDA regarding the technical advice for the spatial planning and coordination with the province plans.



Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on Bekasi Regency HP

Figure A.1.2.11 Organizational Chart of Bekasi Regency

The organization of Bekasi Regional Development and Planning Agency (BAPPEDA) is divided into Functional Positions, the Secretariat, and five divisions: Research, Economic, Social-Culture, Physical and Infrastructure, and Evaluation-Reporting. Spatial planning is planned and managed by the Spatial Plan and Copyrighted Works of the Physical and Infrastructure Section.



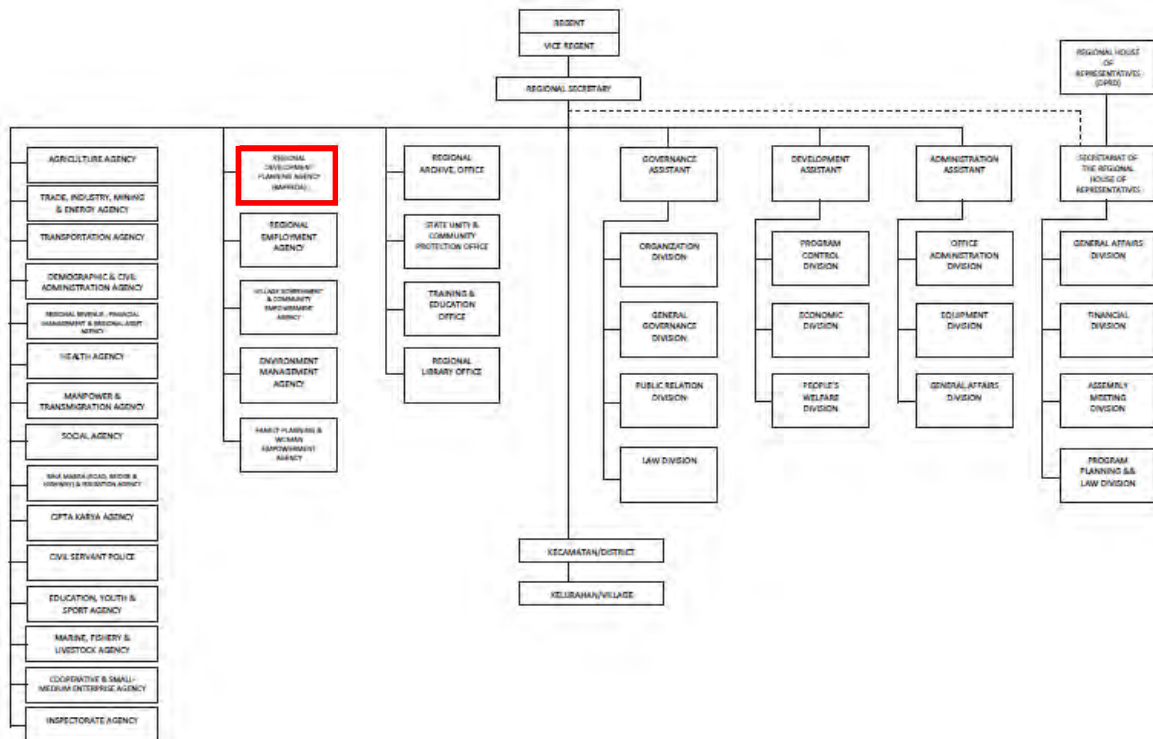
Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on Bekasi Regency HP

Figure A.1.2.12 Organizational Chart of Bekasi BAPPEDA

(5) Karawang Regency

The organizational structure of Karawang Regency is formed by three management departments (Governance, Economy & Development, and Administration) and 21 Agencies. Apart from this, the parliamentary system and Congressional Secretariat are organized.

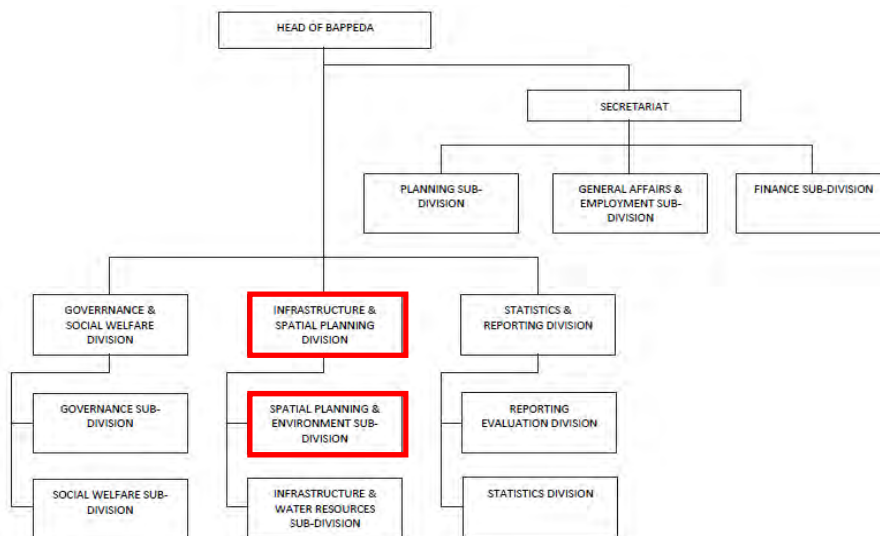
Of these, BAPPEDA (Regional Development and Planning Agency), which belongs to the Regional Secretary manages the Spatial Plan of Karawang Regency. BAPPEDA is under the control of Karawang Regency, but West Java Province BAPPEDA also has connected to Karawang Regency BAPPEDA regarding the technical advice for the spatial planning and Coordination with the province plans.



Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on Karawang Regency HP

Figure A.1.2.13 Organizational Chart of Karawang Regency

The organization of Karawang Regional Development and Planning Agency (BAPPEDA) is divided into the Secretariat and three divisions (Governance & Social Welfare, Infrastructure & Spatial planning, and Statistics & Reporting). The Spatial Plan is planned and managed by the Infrastructure & Spatial Planning Division.



Source : Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on Karawang Regency BAPPEDA

Figure A.1.2.14 Organizational Chart of Karawang BAPPEDA

A.1.2.3 Governmental Port Management/Operation Organizations

Table A.1.2.2 shows major governmental players in port management/operation in Cilamaya Port

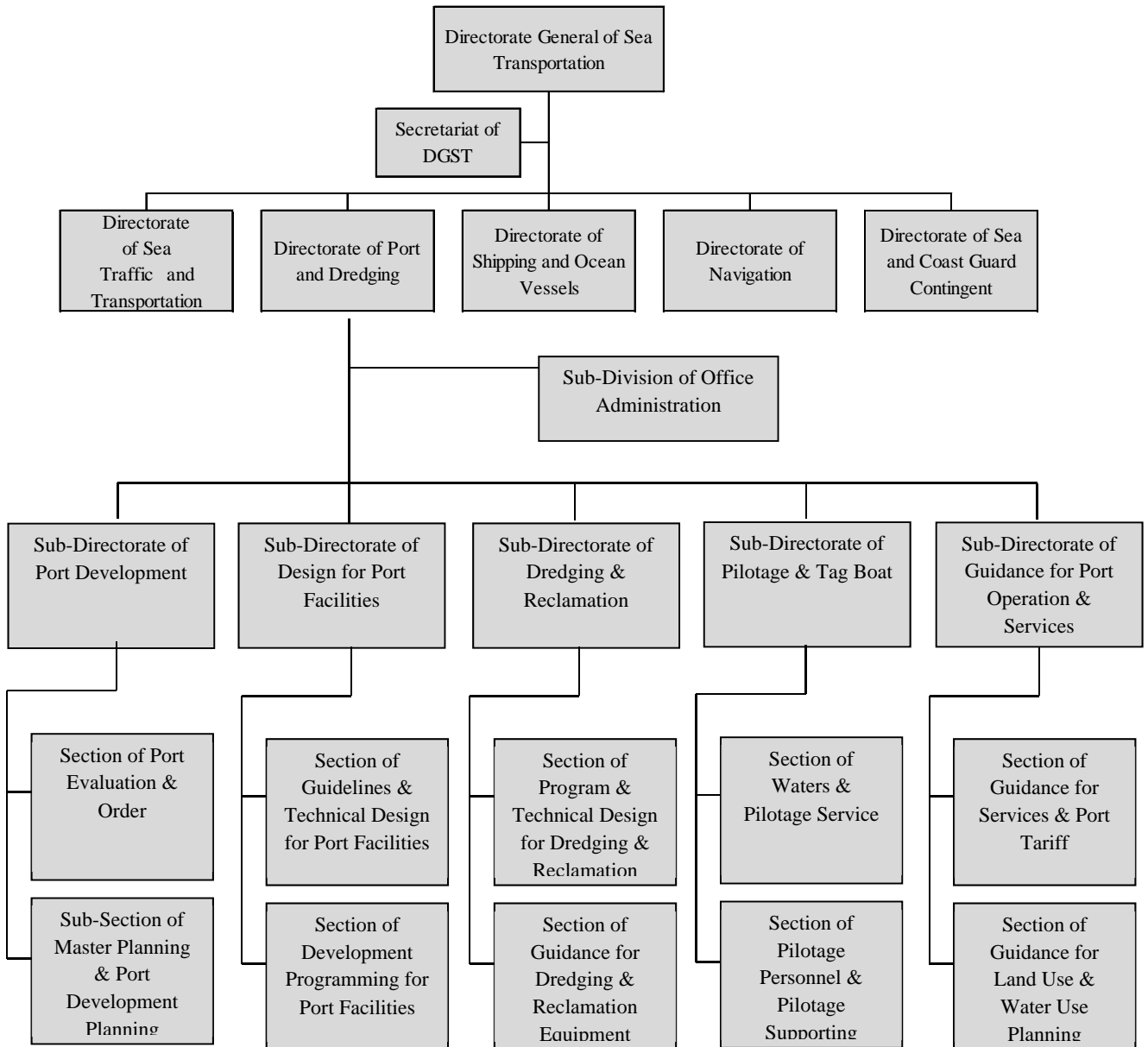
Table A.1.2.2 Governmental Agencies concerned in Port Management/Operation

Agencies	Major Tasks in Port
DGST(MOT)	Administrative Works on Maritime, Port Development, Safety of Navigation and Coast Guard etc.
PA(MOT)	Port Management, Preparation of Port Master Plan, Implementation of Port PPP Project
Harbormaster (MOT)	Ensuring Security and Safety in Port
Directorate General of Customs and Excise (DGCE), Ministry of Finance	Supervising of International Cargo and Collection of Customs Duties
Directorate General of Immigration (DGI), Ministry of Laws and Human Rights	Passport Control
Ministry of Health	Quarantine Inspection
Agricultural Quarantine Agency, Ministry of Agriculture	Plant and Animal Quarantine Inspection
Fish Quarantine Agency, Ministry of Maritime Affairs and Fisheries	Fish Quarantine Inspection

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

(1) DGST

DGST belonging to the Ministry of Transport is in charge of maritime transport, ports, vessels, navigation and the coast guard. The organization of DGST is as follows;

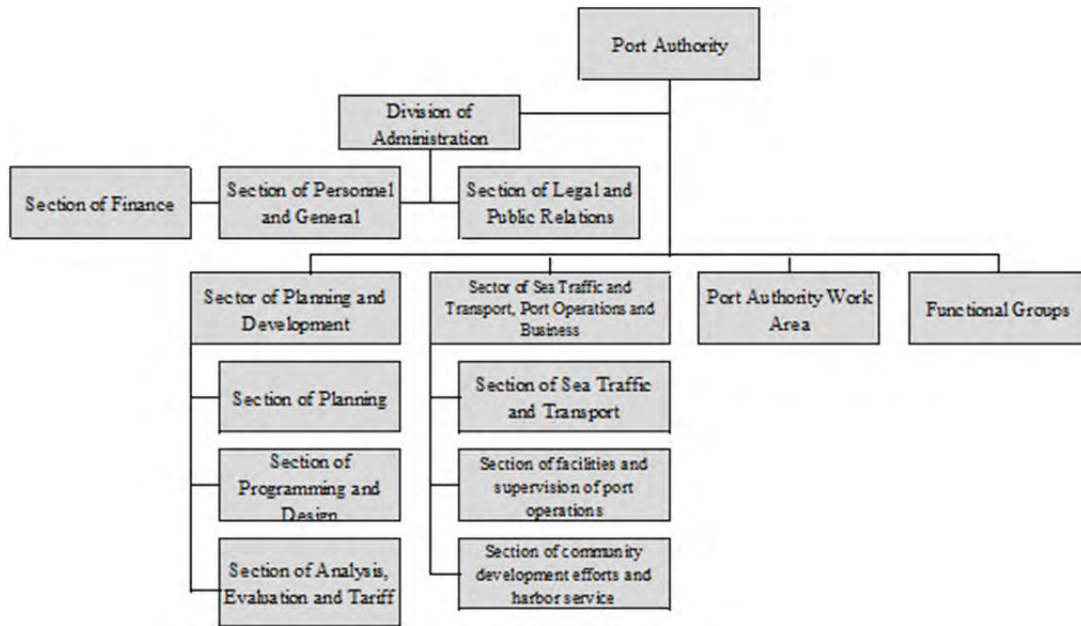


Source: DGST

Figure A.1.2.15 Organization Chart of DGST

(2) Port Authority (PA)

PAs are established based on Law No.17/2008, New Shipping Law, MOT Regulation No.61/2009 and MOT Regulation No.63/2010. Organization of PA is as follows;

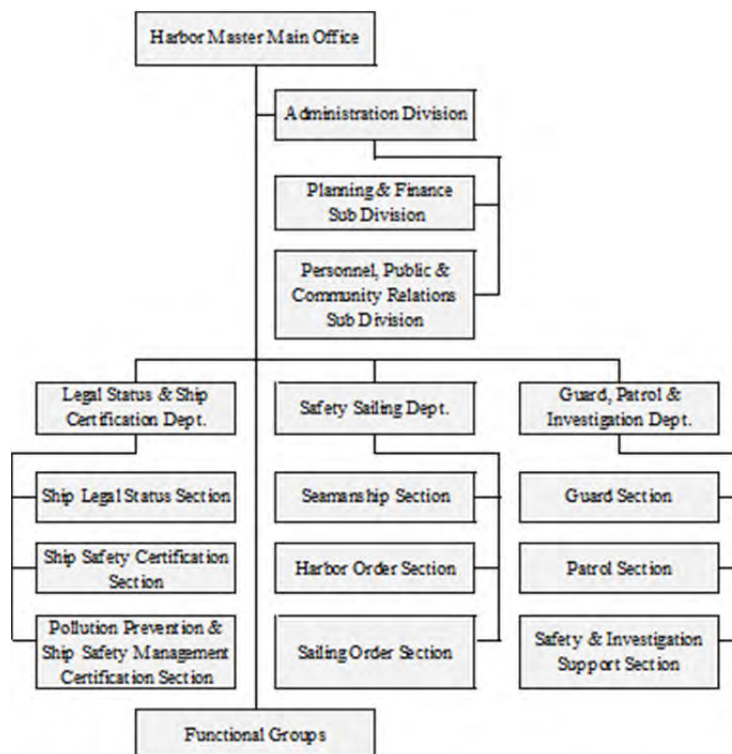


Source: MOT Reg. No. KM63/2010

Figure A.1.2.16 Organization Chart of PA

a) Harbor Master

The harbor master is responsible for maintaining security and safety of the port and ship's navigation. Organization of the Harbor master is as follows;

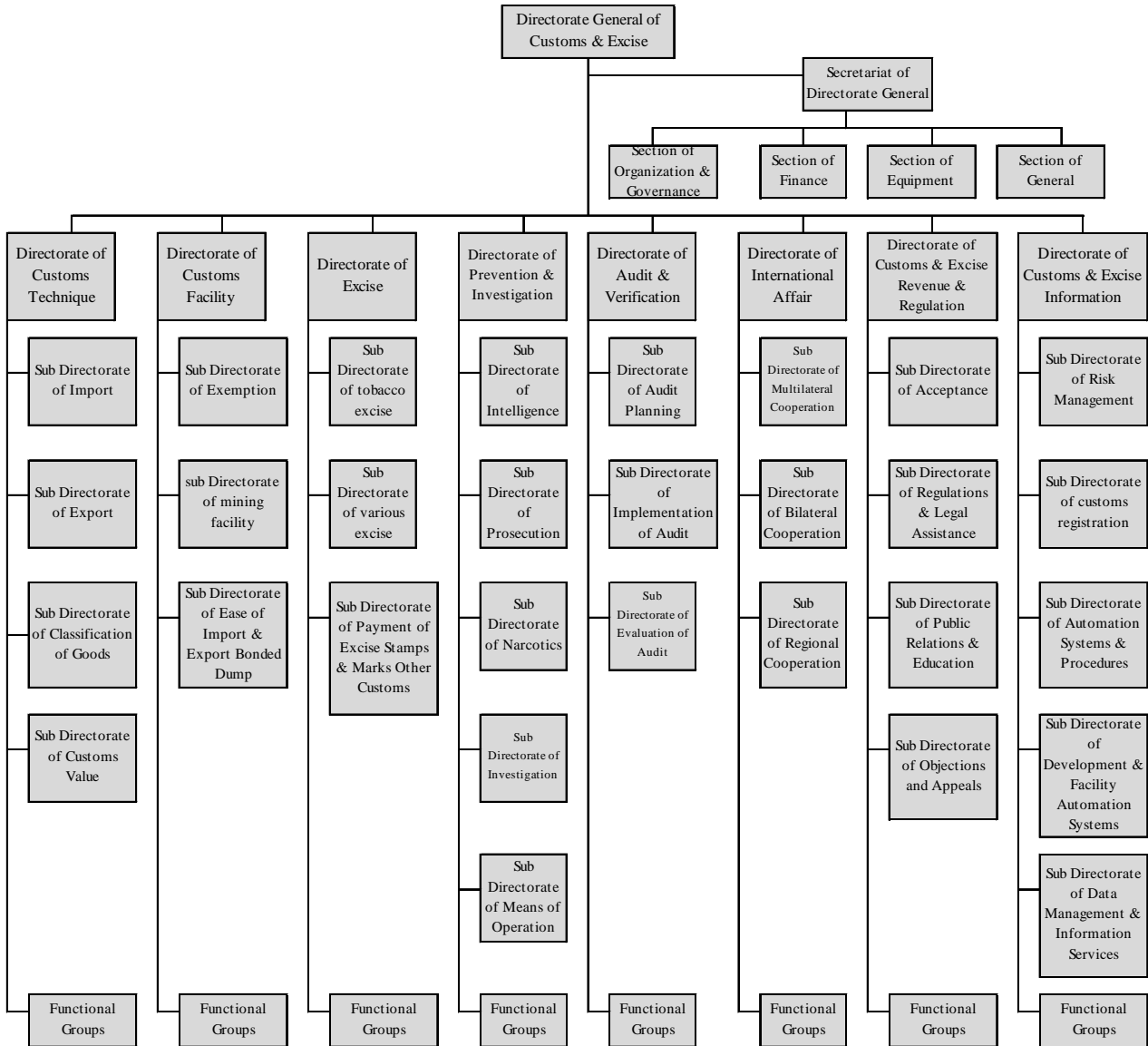


Source: MOT No. KM64/2010

Figure A.1.2.17 Organization of Main Office of Harbor Master

b) Directorate General of Customs & Excise (DGCE)

DGCE, an agency under the Ministry of Finance, is responsible for customs procedures. Organization of DGCE is as follows;



Source: Regulation of MOF No.184/PMK.01/2010

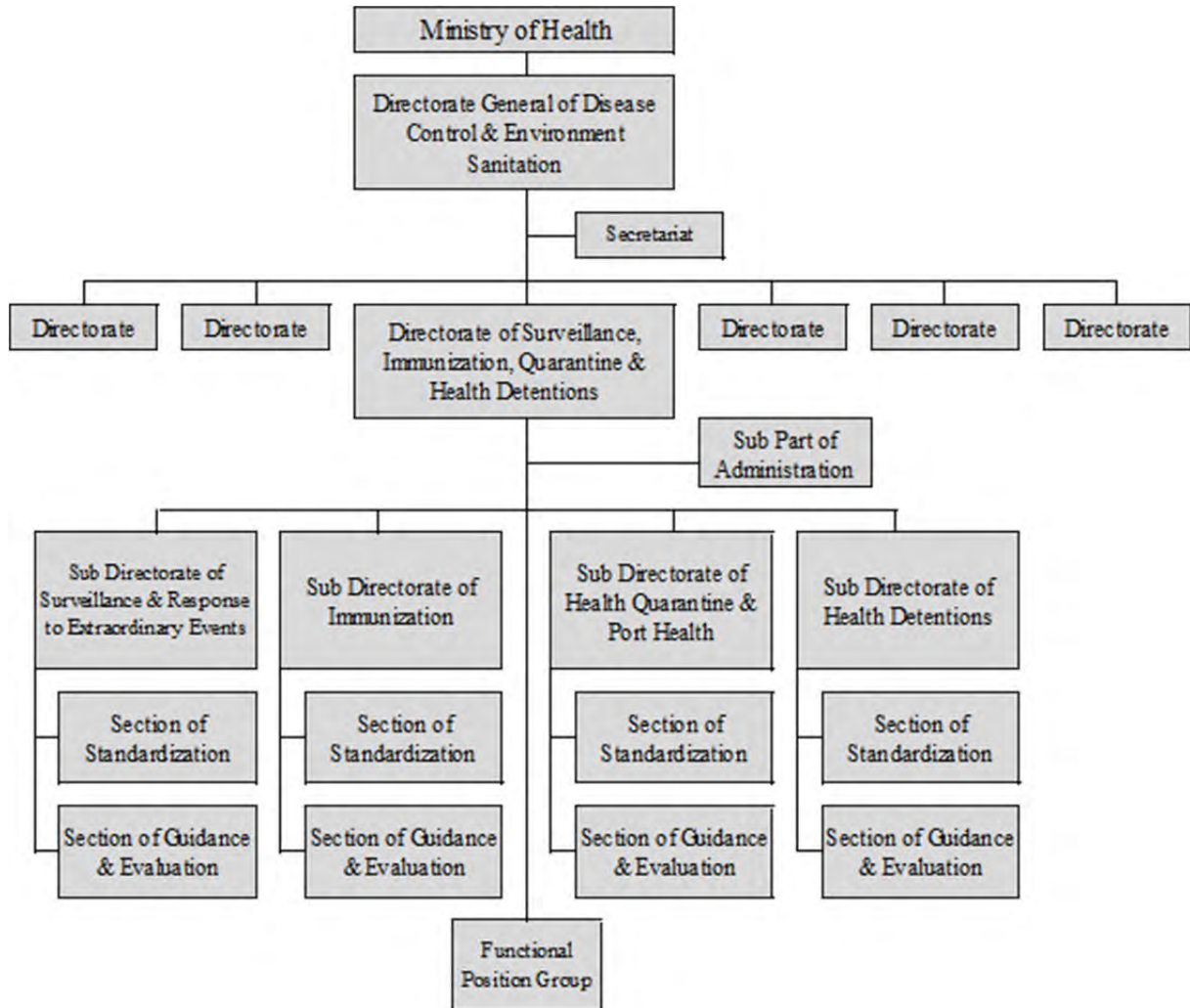
Figure A.1.2.18 Organization of Directorate General of Customs and Excise

c) Directorate General of Immigration (DGI)

DGI which belongs to the Ministry of Law and Human Rights is the responsible state agency for passport control. DGI consists of the Secretary of the Director General of Immigration, Directorate of Travel Documents, Visas & Immigration Facility, Monitoring & Enforcement Directorate of Immigration, Directorate of Borders and International Cooperation, Directorate of Immigration, Directorate of Immigration Stay Permit & Status and Information Systems Directorate of Immigration.

d) Directorate of Surveillance, Quarantine and Health Detention (DSIQ)

DSIQ is in charge of quarantine inspection at the port. It belongs to the Ministry of Health. Organization of DSIQ is shown in Figure A.1.2.19.



Source: Regulation of MOH No.1144/MENKES/PER/8-2010

Figure A.1.2.19 Organization of DSIQ

e) Other State Agencies

The Agricultural Quarantine Agency which belongs to the Ministry of Agriculture is responsible for animal and plant quarantine. The Fish Quarantine and Inspection Agency which belongs to the Ministry of Maritime Affairs and Fisheries is responsible for fish quarantine.

A.1.3 Industrial Estates

A.1.3.1 Basic Characteristics of Industrial Estates Status in study area

About 69% of the total number of industrial estates (IE) is concentrated on Java Island. They represent about 88% of all individual companies operating from within an IE. Also, the average occupancy ratio in IEs is highest on Java Island. Taking Java Island by itself, the Eastern MPA defined by the administrative boundaries of Bekasi City/Regency and Karawang Regency assume a predominant role. (Table A.1.3.2)

Table A.1.3.1 Industrial Estates on major islands in Indonesia

Major Island	Share of the number of IE in Indonesia	Average Occupancy Ratio (%)	Occupancy ratio for all tenants
Sumatra Island	25.0%	31.0%	8.8%
Java Island	69.0%	46.3%	88.0%
Sulawesi Island	3.0%	19.2%	3.1%
Kalimantan Island	3.0%	9.5%	0.1%

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Table A.1.3.2 Relative Position of Industrial Estates in Eastern MPA in Java Island

Region	Number of IE	Gross Land Area (GLA) (ha)	Number of Companies	Share of the number of IE for Java Island	Share of GLA for IE area	Occupation ratio for the number of companies on Java Island
Bekasi City/Regency	11	6,499	2,992	18.0%	32.3%	47.2%
Karawang Regency	6	4,290	252	9.9%	21.3%	4.0%
Total	17	10,789	3,244	27.9%	53.6%	51.2%

Note: Based on data from "Industrial Estate Directory", 2012 Edition

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

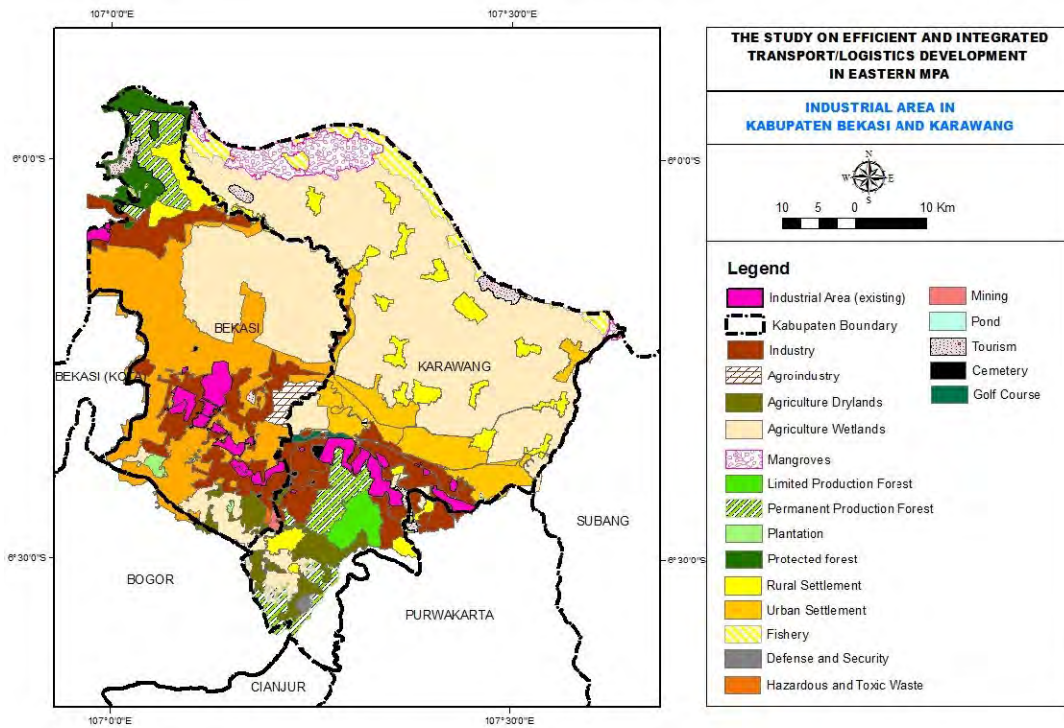
A.1.3.2 Current condition of IE in study area

Table A.1.3.3 shows the current condition of IE in Bekasi City/Regency and Karawang Regency.

Table A.1.3.3 Catalogue of Industrial Estates

No	Abbreviation	Name	Address	Area (Ha)	Number moving in	Remarks
Bekasi City / Regency						
1	BIIE	Bekasi International industrial Estate PT Hyundai Inti Development	Cikarang	200	105	Sold out
2	EIIP	East Jakarta Industrial Park PT East Jakarta Industrial Park	Lemahabang, Bekasi	320	102	—
3	GIIC	Greenland International Industrial City PT Puradelta Lestari	Bekasi	1,000	n.a	Rp850,000/m ²
4	JIEC	Jababeka Industrial Estate-Cikarang	Cikarang, Bekasi	1,840	1,500	Rp1,000,000/m ²
5	KIG	Kawasan Industri Gobel PT Gobel Dharma Nusantara	Cibitung	54	14	Land:Negotiable
6	KITIC	Kawasan Industri Gobel PT Kawasan Industri Terpadu Indonesia China	Bekasi	200	n.a	Land:Negotiable
7	LC	Lippo Cikarang PT Lippo Cikarang Tbk	Cikarang, Bekasi	1,000	650	Land:Negotiable SFB:Available
8	MC	Marunda Center PT Tegar Primajaya	Marunda, Bekasi	540	100	Land:Negotiable SFB:Available
9	MM2100 BFIE	MM2100 Industrial Town PT Bekasi Fajar Industrial Estate	Cibitung, Bekasi	300	125	Land:US\$130/m2
10	MM2100 MMID	MM2100 Industrial Town PT Megalopolis Manunggal Ind.Dev.	Cibitung, Bekasi	1,200	396	Land:US\$110-115/m2
11	PMIE	Patria Manunggal Industrial Estate PT Patria Manunggal Jaya	Bekasi	39	n.a	Land:Negotiable
Karawang Regency						
1	BIIP	Bukit Indah International Park PT Indotaisei Indah Development	Kalihurip, Karawang	700	29	Land:Negotiable
2	DKIP	Daya Kencanasia Industrial Park PT Daya Kencanasia	Teluk lambe, Karawang	150	n.a	Land:US\$20-55/m2
3	KIIC	Karawang International Industrial City PT Maligi Permata Industrial Estate PT Harapan Anang Bakrie & Sons PT Karawang Tata Bina	Karawang Barat	1,200	101	Land:negotiable
4	KIM	Kawasan Industri Mitra Karawang PT Mitra Karawangjaya	Karawang Timur	500	31	Land:negotiable
5	KIE	Kujang Industri Kujang Cikampek	Kalihurip, Karawang	140	16	Land:US\$3.50/m2/year
6	SCI	Suryacipta City of Industry PT Kawasan Awadaya	Karawang Timur	1,400	75	Land:Negotiable

Source: Industrial Estate statistics in Indonesia (2011-2012)



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.1.3.1 Location map of Industrial Estates

Table A.1.3.4 shows the catalogue of industrial estates that received licenses for development of an industrial estate.

**Table A.1.3.4 List of companies permitted licences for development
(Halftone screening is already developed)**

No.	Company Name	Area (Ha)	Regency
1	Bekasi Fajar Industrial Estate	300.0	Bekasi
2	East Jakarta Industrial Park	320.0	
3	Gobel Dharma Nusantara	54.0	
4	Hyundai Inti Development	200.0	
5	Jababeka Tbk	1,840.0	
6	Kawasan Industri Terpadu Indonesia China	200.0	
7	Lippo Cikarang Tbk	1,000.0	
8	Megalopolis Manunggal Ind.Dev	1,200.0	
9	Patria Manunggal Jaya	39.0	
10	Puradelta Lestari	1,000.0	
11	Tegar Primajaya	540.0	
Subtotal		6,693.0	
12	Alindatamasakti Brother Corp.	400.0	
13	Amcol Propertindo Inv.	230.0	
14	Bekasi Matra Real Estate	500.0	
15	Cikarang Hijau Indah	230.0	
16	Gerbang Teknologi Cikarang	300.0	
17	Great Jakarta Inti Development	12.5	
18	Indocargomas Persada	230.0	
19	Jatiwangi Utama	220.0	
20	Kawasan Darma Industri	18.0	
21	Kreasi Intan	300.0	
22	Sarana Panca Utama	250.0	
23	YKK Indonesia Ziper Co.Ltd.	0.0	
Total		9,383.5	
1	Daya Kencanasia	150.0	Karawang
2	Indotaisei Indah Development	700.0	
3	Kawasan Industri Kujang Cikampek	140.0	
4	Maligi Permata Industrial Estate	1,200.0	
5	Mitra Karawangjaya	500.0	
6	Suryacipta Swadaya	1400.0	
Subtotal		4,090.0	
7	Aneka Inti Sejahtera	500.0	
8	Bintang Puspita Dwikarya	400.0	
9	Canggih Bersaudara Mulikarya	300.0	
10	Hab & Son's	358.0	
11	Karawang Jabar Industrial Estate	506.0	
12	Kawasang Tatabina Industrial Estate	314.0	
13	Mandalapratama Permal	300.0	
14	persadanusa Makmurindo	300.0	
15	Pertiwi Lestari	7,100.0	
16	Pradedhana Anugerah	250.0	
17	Rasindo Perkasa	100.0	
18	Sejatibuana Jayadharma	200.0	
19	Sitiswadaya Permai	500.0	

No.	Company Name	Area (Ha)	Regency
20	Sumber Air Mas Pratama	500.0	
	Total	15,718.0	

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA (Based on the Industrial Estate statistics in Indonesia (2011-2012))

Comparing the scale of industrial estate licenses applied for and developed industrial estates, 29% is undeveloped land in Bekasi City/Regency and 74% is undeveloped land in Karawang Regency. Expansion of manufacturing is expected for Karawang Regency by creation of land and lotting out of these licensed industrial estates in future.

But it is also necessary to carefully consider the escalation of fees for rented ground accompanying the rise in land price in eastern MPA.

A.1.4 General Conditions such as Socio-Economy, Natural-Environment and Land Use

A.1.4.1 Population

(1) Demographic Situation in Related Urban Conditions

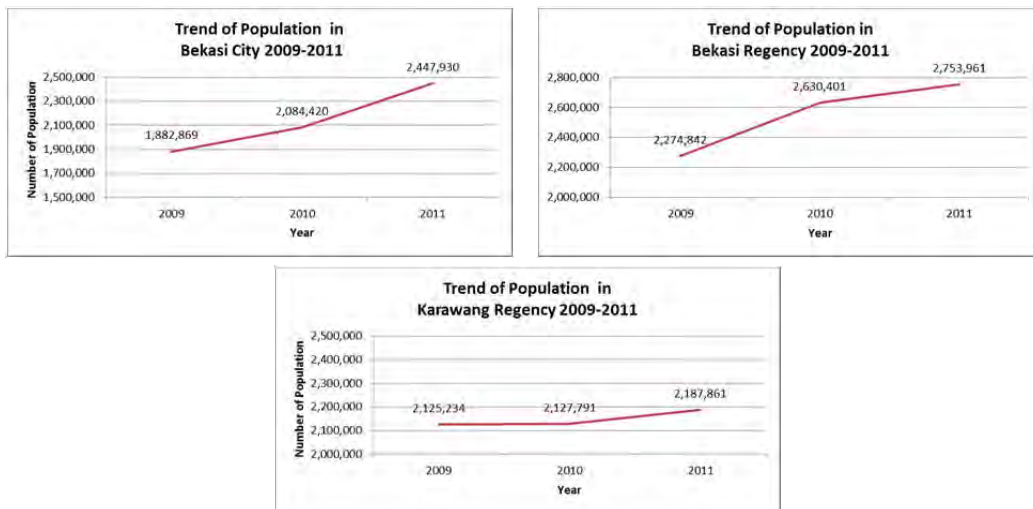
The demographic situation from 2009 to 2011 in the target area of Bekasi regency, Bekasi city and Karawang regency is analysed. According to the statistics of the city and regency from 2010 to 2012, the population of Bekasi regency has increased about 480 thousand people from 2009 to 2011 with annual average growth rate of 10.2%, and Bekasi city has increased about 570 thousand people with 14.1%. On the other hand, the population of Karawang regency slightly increased by 60 thousand people with only 1.5%.

Table A.1.4.1 Population and Annual Average Growth Rate

Unit: million people

	2009	2010	2011	Annual Average Growth Rate (2009-2011)
Bekasi City	1.883	2.084	2.448	14.1%
Bekasi Regency	2.275	2.630	2.754	10.2%
Karawang Regency	2.125	2.128	2.188	1.5%

Source: Statistics of Bekasi city, Bekasi regency and Karawang regency

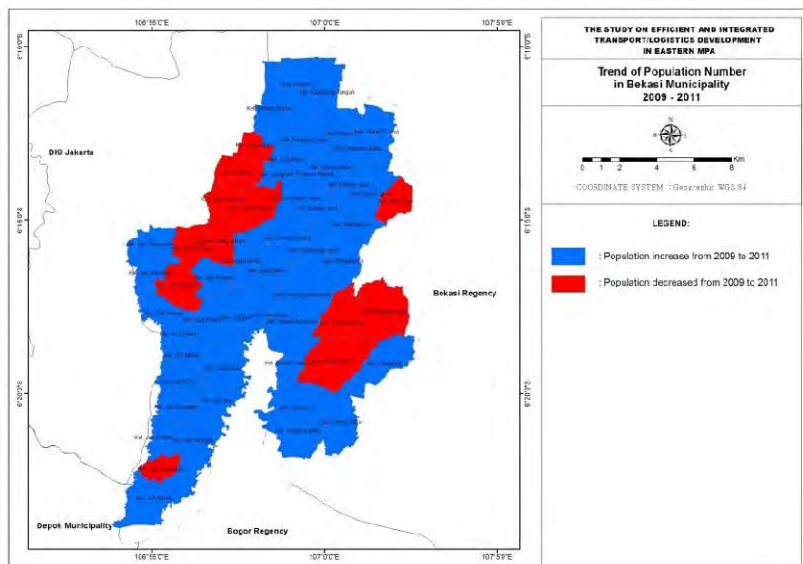


Source: Statistics of Bekasi city, Bekasi regency and Karawang regency

Figure A.1.4.1 Population Trend from 2009 to 2011

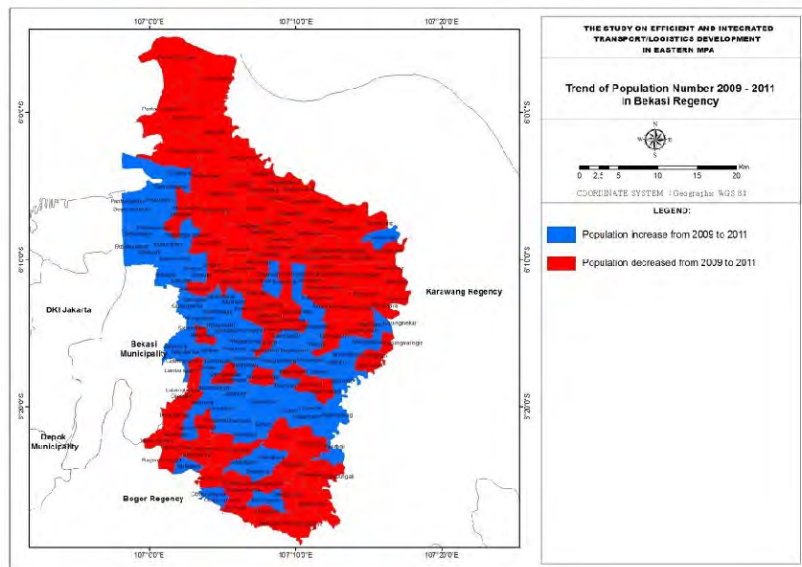
(2) Population Distribution in Bekasi Regency, Bekasi City and Karawang Regency

To understand the areas in which the population increased in Bekasi regency, Bekasi city and Karawang regency, the population trend at village (desa) level is analysed. The blue in the figure indicates the areas in which the population increased and red indicates the areas in which the population decreased from 2009 to 2011. Most areas of Bekasi city and Karawang regency have increased in population. On the other hand, in Bekasi regency the areas in which the population increased is concentrated along with the Jakarta-Cikampek toll road.



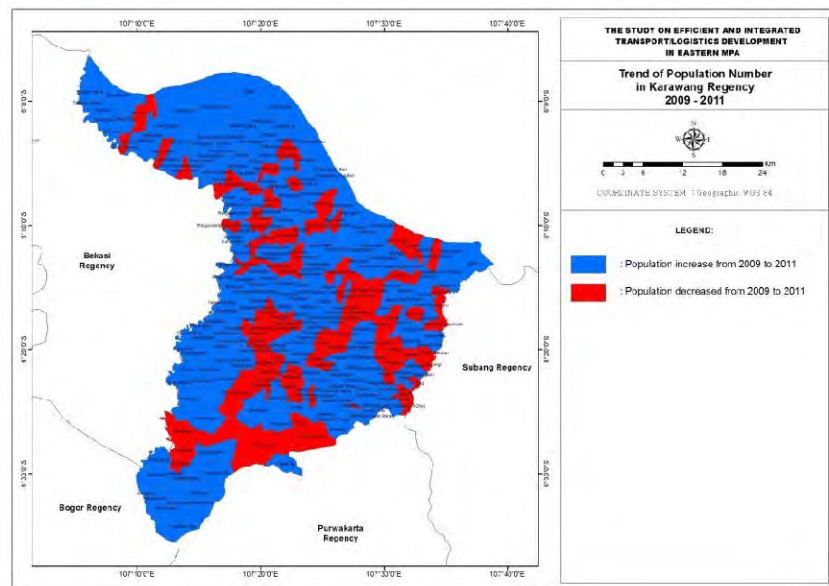
Source: Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on the statistics of Bekasi city

Figure A.1.4.2 Population Distribution in Bekasi City



Source: Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on the statistics of Bekasi regency

Figure A.1.4.3 Population Distribution in Bekasi Regency



Source: Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on the statistics of Karawang regency

Figure A.1.4.4 Population Distribution in Bekasi Regency

A.1.4.2 Employment

The employment in Bekasi city in 2011 is the most with 830 thousand people, following by Bekasi regency with 790 thousand people and Karawang regency with 720 thousand people. In terms of the employment by manufacturing in 2010, the workforce in Bekasi city was relatively small with 58 thousand people compared to the other regencies and the manufacturing of food, beverages and tobacco was the highest with the share of 29% of total. On the other hand, Bekasi regency had 280 thousand

people in manufacturing and Karawang regency had 130 thousand people. The manufacturing of transport, machinery and apparatus was the highest in both regencies, especially in Bekasi regency, 58% of employment worked for the transport, machinery and apparatus industries.

Table A.1.4.2 Employment (2011)

	Employment(thousand people)
Bekasi City	831
Bekasi Regency	794
Karawang Regency	717

Source: Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on the statistics of Bekasi city, Bekasi regency and Karawang regency

Table A.1.4.3 Employment by Manufacturing (2010)

Unit: People

By manufacturing	Bekasi city	Bekasi regency	Karawang regency
Food, beverages, tobacco	12,757	6,912	21,223
Textile, leather, footwear	16,679	30,214	16,077
Wood & related	89	4,892	7,732
Paper & printing	2,591	7,682	3,172
Fertilizers, chemicals & rubber	7,273	43,391	9,120
Cement, non-metallic	389	12,223	-
Basic iron/steel	5,087	6,428	-
Transport, machinery & apparatus	6,298	163,246	36,222
Other manufacturing	6,961	6,242	32,507
Total	58,124	281,230	126,053

Source: Statistics of Bekasi city, Bekasi regency and Karawang regency

A.1.4.3 GRDP

The GRDP of Bekasi regency in 2009 was Rp 88,162 billion with the growth rate of 7.7%, followed by Karawang regency of Rp 46,694 billion with 8.8%, and Bekasi city of Rp 31,475 billion with 5.7%. Out of GRDP in Bekasi regency, the manufacturing shared 79%, which indicated the importance of manufacturing. The data of Karawang regency was not available.

Table A.1.4.4 GRDP (2009)

	GRDP (nominal) (billion Rp)	Real Growth Rate (2008 – 2011)	Manufacturing GRDP (nominal) (billion Rp)	The share of manufacturing
Bekasi City	31,475	5.7%	13,499	43.0%
Bekasi Regency	88,162	7.7%	69,659	79.0%
Karawang Regency	46,694	8.8%	-	-

Note: GRDP excludes the oil and gas.

Source: Statistics of Bekasi city, Bekasi regency and Karawang regency

A.1.4.4 Workers' Wages

The workers' wages by city and regency were not available, therefore the workers' wages were estimated based on the labour costs and employment by manufacturing in DKI Jakarta and west Java province. The average wage in manufacturing is Rp 13.4 million/year, and the manufacturing of basic iron/steel is the highest with Rp 29.9 million/year, followed by Fertilizers, chemicals and rubber with 19.6 million/year. On the other hand, the textile, leather, and footwear is the lowest with 7.4million/year. The transport, machinery and apparatus, which is the main industry in the target area is 13 million/year.

Table A.1.4.5 Workers' Wages by Manufacturing (2010)

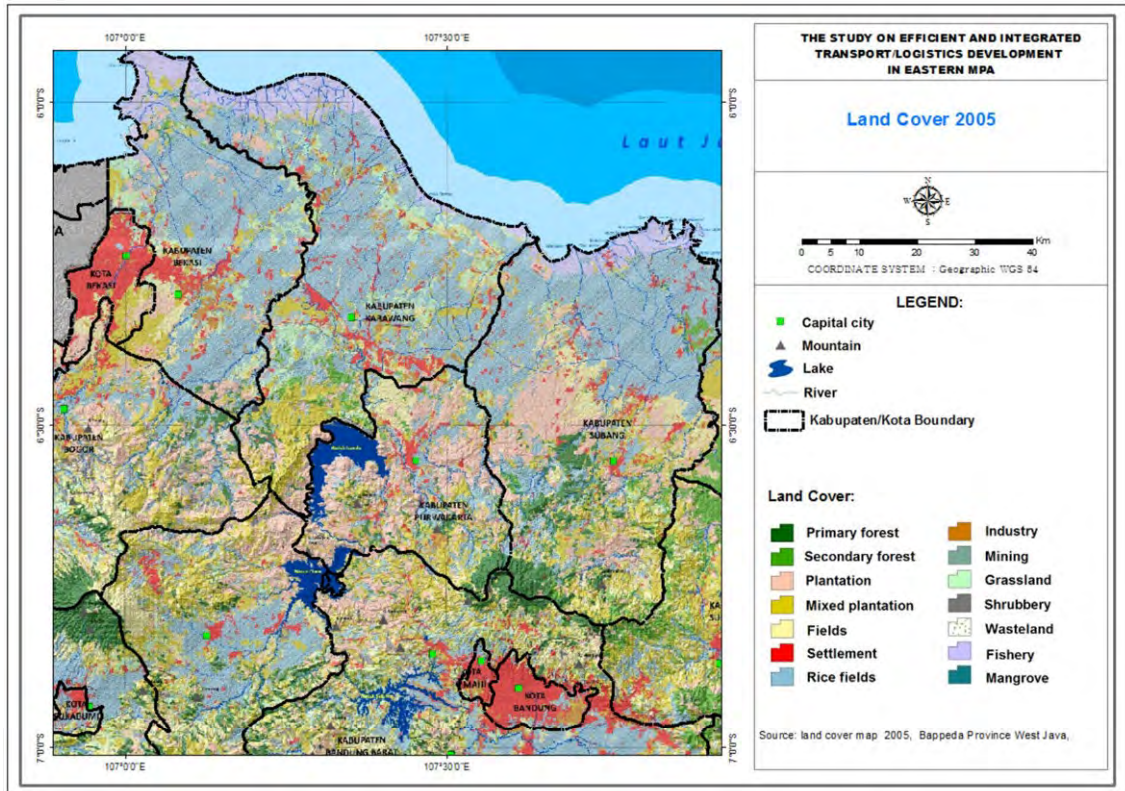
By manufacturing	Worker wage (million Rp)
Food, beverages, tobacco	13.1
Textile, leather, footwear	7.4
Wood & related	9.5
Paper & printing	13.0
Fertilizer, chemical & rubber	19.6
Cement, non-metallic	12.1
Basic iron/steel	29.9
Transport, machinery & apparatus	13.0
Other manufacturing	18.3
Average	13.4

Source: Formulated by the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on statistics of DKI Jakarta and west Java province

A.1.4.5 Land Use Situation

(1) Current Situation of Land Use

Current situation of land use in Bekasi City, Bekasi Regency, and Karawang Regency, which constitute the eastern MPA, is shown in Figure A.1.4.5 and Table A.1.4.6



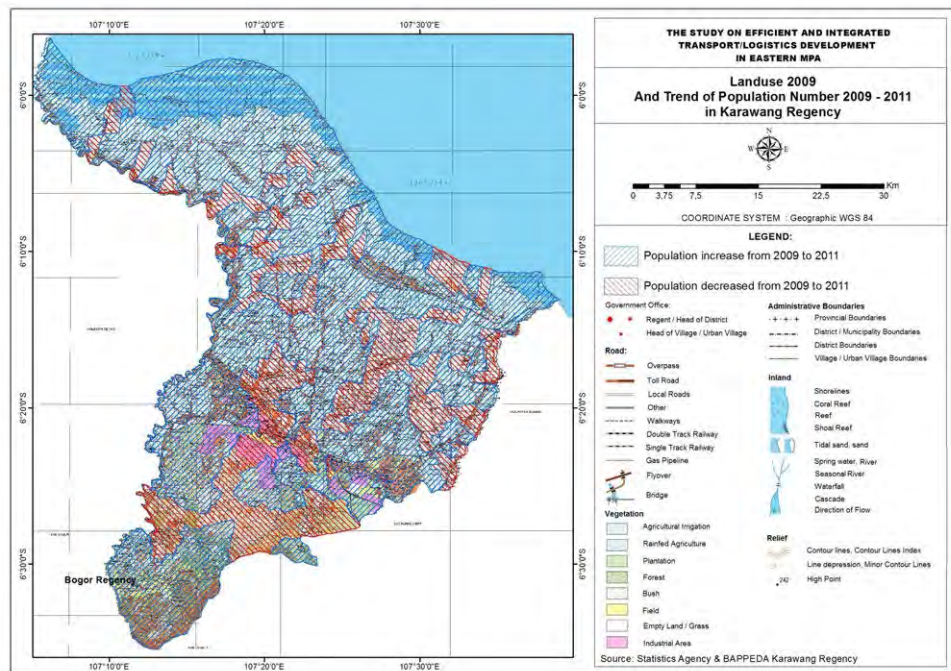
Source : Land Use Current Situation Figure (West Java Province HP /2005)

Figure A.1.4.5 Land Use Current Situation Figure

Table A.1.4.6 Land Use Situation

	Bekasi City	Bekasi Regency	Karawang Regency
Land Use	<ul style="list-style-type: none"> ➤ Urban development is progressing in the suburban residential area of MPA. The urbanization rate is very high especially in an area stretching from the city centre to the northern part. ➤ In the southern part, farmland and existing villages exist, and urbanization is progressing every year. ➤ Industrial land use is concentrating along the arterial road (JI. Raya Narogong) in the southern part. ➤ Commercial service land use with high development potential is progressing in the nodal point of the Jakarta-Cikampek Toll Road and Jakarta Outer Ring Road. Large-sized commercial facilities exist in the neighbourhood of the interchange. ➤ Urban areas are located between Jakarta Inner Ring Road and Jakarta Outer Ring Road, and urban development with high development potential is expected in the future. 	<ul style="list-style-type: none"> ➤ Suburban development is progressing under the influence of the urbanization of MPA. ➤ Industrial parks are concentrating along the Jakarta-Cikampek Toll Road. Large-sized new town development is progressing together with the industrial parks. ➤ Farmland (Paddy fields) spreads in the northern part, along with agricultural villages. ➤ Forest conservation areas exist in the coastal area. 	<ul style="list-style-type: none"> ➤ The urban areas are not yet strongly affected by the influence of the urbanization of JABODETABEK MPA. Urban residential and commercial land use progress is centring on the existing urban area along the railway. Large-sized commercial facilities do not exist. ➤ Industrial parks are concentrating along Jakarta-Cikampek Toll Road and on the south side of the road. ➤ The northern part has the largest paddy field zone in West Java Province, and agricultural infrastructures such as irrigation facilities are fully provided. ➤ Mangrove forest conservation areas exist in the coastal area. ➤ Massive production forest and plantation farms exist in the southern part. ➤

Source : The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA



Source : The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.1.4.7 Population Trend Figure of Each Village (DESA) in Karawang Regency

In the medium-rise residential areas, which spread from north to south in the areas adjoining DKI Jakarta of Bekasi City, the population from 2009 to 2011 increased in the suburban areas and decreased in the central areas. This increase means that urbanization is advancing to the fringe area due to the reduction of open spaces in the existing central city area. The population is decreasing in the low-rise residential areas of the south-eastern part, and this also contributes to the growing urbanization in the fringe areas of the city. The population of Bekasi City increased by about 570,000 people (30%) in the three years from 2009 to 2011. This increase in population is seen in the areas with the blue crosshatching in Figure A.1.4.6. It is considered that the population of DKI Jakarta spills over into Bekasi City.

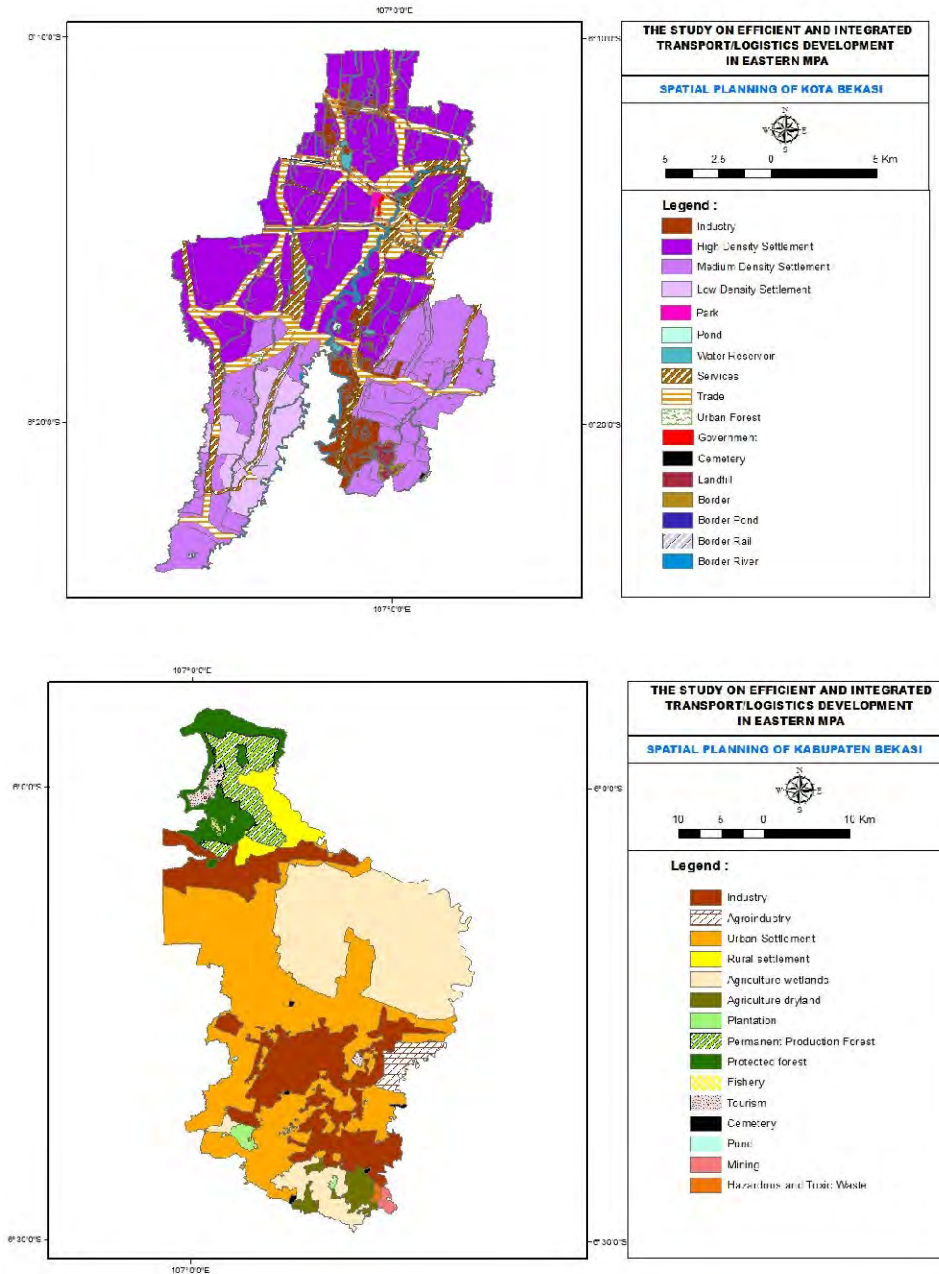
In Bekasi Regency, the increase in population is seen across the whole city area. It is considered that the urban areas in the regency have expanded. The population in Bekasi Regency increased by about 480,000 people (21%) from 2009 to 2011. This increment of population had contributed to the expansion of the urban areas but did not affect the farm lands. The population in the southern industrial area is growing, and mixed land use with residences and industry may be brought about in the future.

The population in Karawang Regency increased by about 60,000 people (3%) from 2009 to 2011. The population trend in each agricultural village differs from one to another. The population is increasing in the existing city area, and both existing and future industrial areas.

From this analysis, the population increase in Bekasi City and Bekasi Regency are brought about by people that want to work in the industries in DKI Jakarta, Bekasi City, and Bekasi Regency. This may cause the yearly expansion of residential areas and commercial areas. However, this trend has not actualized yet in Karawang Regency. If development and operation of the industrial parks in Karawang Regency get into full swing in the future, it is thought that the city areas, such as residential areas and commercial areas, will expand as well as Bekasi City and Bekasi Regency.

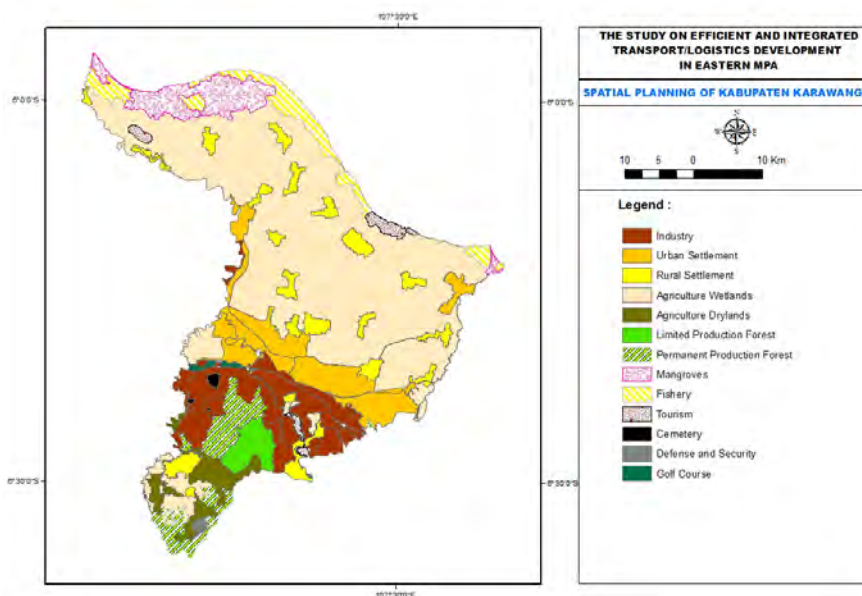
(3) Future Land Use Concept

The future land use concept figure and the area summary table in 2031 are shown below. These are based on the spatial planning of Bekasi City, Bekasi Regency, and Karawang Regency, which constitute the eastern MPA.



Source : The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.1.4.8 Future Land Use Concept Figure in Bekasi City and Regency (2031)



Source : The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.1.4.9 Future Land Use Concept Figure in Karawang Regency (2031)

Table A.1.4.7 Future Land Use Concept Area Table

Land Use	Spatial Planning Area (ha)					
	Kab. Bekasi	distribution	Kab. Karawang	distribution	Kota Bekasi	distribution
Protected Forest	6,891	6,725		0		
Permanent Production Forest	6,080	5,934	8,688	8,072		
Agriculture wetlands	34,505	33,675	97,434	90,531		
Agriculture drylands	2,403	2,345	5,822	5,410		
Plantation	718	701				
Fishery	129	126	8,437	7,839		
Industry	25,948	25,324	19,821	18,417	1,196	1,167
Tourism	1,297	1,266	2,100	1,951		
Urban Settlement	45,272	44,183	19,489	18,108		
Rural Settlement	4,117	4,018	12,534	11,646		
Water Reservoir					97	95
Sanctuary						
Limited Production Forest			3,852	3,579		
Sustainable Agriculture Land						
Shore Line						
Border River					1,262	1,231
Mangroves			9,181	8,531		
Park					43	42
Low Density Settlement					1,448	1,413
Medium Density Settlement					4,928	4,808
High Density Settlement					8,022	7,826
Trade					2,767	2,700
Services					1,453	1,418
Government					34	33
Mining	407	397				
Cemetery	231	225	394	366	16	16
Defense and Security			470	437		
Golf Course			474	440		
Airport Area						
Dam catchment						
Port Area						
Urban Forest					36	35
Border					94	92
Border Rail					52	51
Border Pond					6	6
Pond	117	114			19	19
Landfill					102	100
Agroindustry	2,239	2,185				
Hazardous and Toxic Waste	173	169				
TOTAL from Map	130,527.00	127,388.00	188,696.00	175,327.00	21,575.00	21,049.00
Total from PERDA	127,388.00		175,327.00		21,049.00	
Total from Map/PERDA	1,025		1,076		1,025	

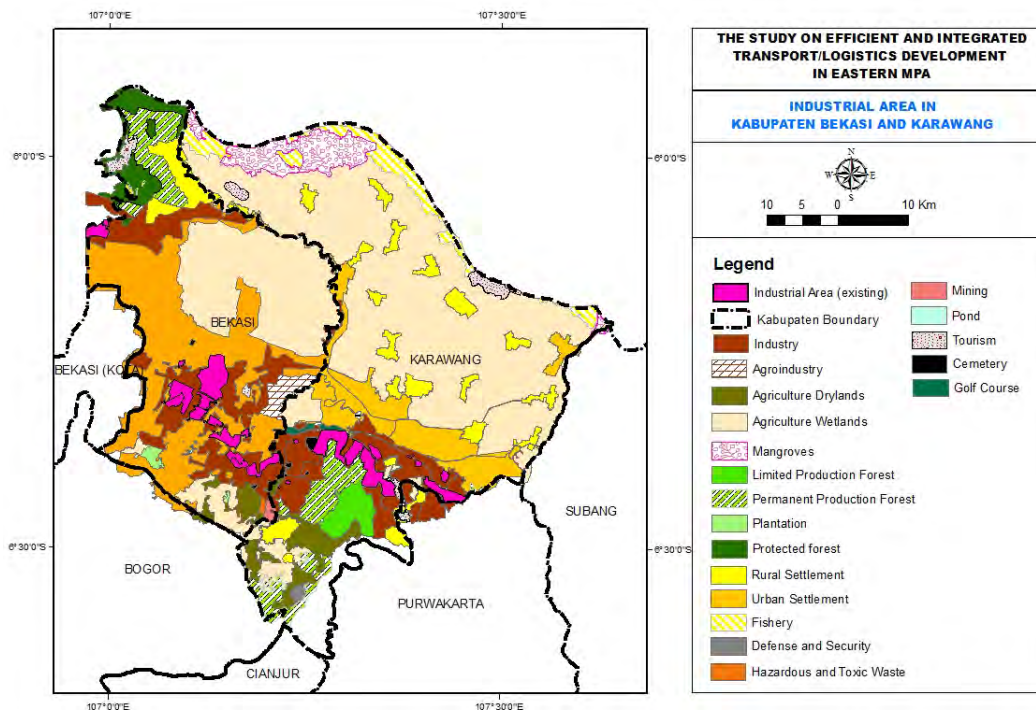
Source : The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

(Measurement of each land use from figure)

According to the future land use concept figure on spatial planning, Bekasi City has a role which will share the residential function with DKI Jakarta in the future. Industrial land use area is about 1,200 ha (result from the land use concept figure), and is about 6% of the whole land use. Industrial land use is planned in the northern part and southern part of Bekasi Regency, and residential areas and farmland are planned in the other parts. Conservation forest, production forest, and villages exist in the coastal part, and the coastal part is designated as vegetation and environmental conservation areas.

In Karawang Regency, the land use in the area stretching from the coastal part to the central part is designated as farmland and villages. As well as Bekasi Regency, the coastal part is designated as mangrove primeval forest, fishery region, and tourist resort region, etc. to preserve the environment. The southern part is designated as residential area and industrial area, and the neighbourhoods along the expressway and its south side are designated as the areas where industrial land use will be promoted in the future.

Although about 18,000 ha (4,000 ha: on sale or sold) are planned for industrial land use according to the drawing in Karawang Regency, the development licenses for about 16,000 ha have been already allocated as industrial parks according to the Indonesian Industrial Estate Directory 2011-2012. Moreover, the industrial land use of about 30,000 ha are planned in the spatial planning of Bekasi City and Bekasi Regency, and the development licenses for about 9,000 ha (7,000ha:on sale or sold) have been already allocated. The potential development land in the future is identified by superimposing the area of industrial parks published on the list (on sale or sold) of the Indonesian Industrial Estate Directory 2011-2012 on the future land use concept figure of spatial planning.



Source : The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.1.4.10 Industrial Parks Current Situation in Bekasi and Karawang Regency

A.1.4.6 Regulation of land use

(1) Regulations related to protection of paddy fields

As farmland conservation areas, the paddy fields equipped with irrigation facilities are clustered in the northern part of Bekasi Regency and Karawang Regency. Once a paddy field is specified as "sustainable agricultural food land", regulation of the paddy field will be tightened as a conservation area. However, paddy fields in the Study Area have not been specified as "sustainable agricultural food land" so far.

The laws of farmland conversion were issued in law No. 41/2009 and law No. 2/2011. The main points are shown in Table A.1.4.8

Table A.1.4.8 The laws regarding the farmland diversion for the purpose of conservation of sustainable agricultural food land

Items	Contents
Necessity for approval of ministry of agriculture on farmland conversion ⇒Law No.41/2009	<ul style="list-style-type: none"> ➤ If the area is specified as "sustainable agricultural food land", the farmland conversion needs approval by ministry of agriculture. ➤ If the area is planned as "general agricultural food land" or "sustainable agricultural food land", approval by ministry of agriculture is not needed.
Condition for approval of ministry of agriculture on farmland conversion ⇒Law No.1/2011	<ul style="list-style-type: none"> ➤ If the land use plan corresponds to the following items, the diversion of farmland is allowed <ul style="list-style-type: none"> a) National Highway, National Road, Province Road, Regency/City Road b) Reservoir c) Dam d) Irrigation Project e) Water Treatment Plant f) Sewage Treatment Plant g) Irrigation Project Facilities h) Port i) Airport j) Railway, Railway station k) Terminal l) Facilities to ensure the safety of the public m) Nature Reserve n) Power Supply Facilities Limited to projects that are positioned in the spatial plan or detailed plan

Items	Contents
<p>Approval requirement for farmland conversion ⇒Law No.41/2009 ⇒Law No.2/2011</p>	<ul style="list-style-type: none"> ➤ Only in the case of necessary development for the public good or measures against natural disaster, can the farmland conversion in "sustainable agricultural food land" be allowed. (Law No.2/2011) ➤ Public necessity must be clearly specified in the spatial planning and/or detailed spatial planning. (Law No.2/2011) ➤ Provision of alternative land for sustainable agricultural food land must be carried out under the following requirements based on the state of the land. <ul style="list-style-type: none"> a) At least 3 times original land size in irrigated farming land b) At least 2 times original land size in tidal swamp reclamation land c) At least equal to original land size in non-irrigated farming land <p>Technical guidelines for alternative land provision are provided in the regulation of the respective local governments. (Law No.41/2009)</p>
<p>Technical guideline for alternative land ⇒Law No.2/2011</p>	<ul style="list-style-type: none"> ➤ Technical guideline for alternative land and area <ul style="list-style-type: none"> (Area) <ul style="list-style-type: none"> a) To be Minimum of 5 ha b) To produce sufficient commodities (Land) <ul style="list-style-type: none"> a) Land must be productive and must provide a sufficient source of income to the farmers b) Technical potential <ul style="list-style-type: none"> – All irrigated land has potential – Reclaimed swamps depend on the depth of turf and conservation of soil and water – Non-irrigated land has potential if annual precipitation is more than 1000mm c) Basic infrastructure <ul style="list-style-type: none"> – Irrigated land must have terrier irrigation system and/or the plan to do so – Swamps must have primary and secondary drainage systems and/or the plan to do so – Non-irrigated land must have a plan to develop a water irrigation system – All types of land must be accessible to ease the transportation of produce d) Land must be utilized as productive agricultural land

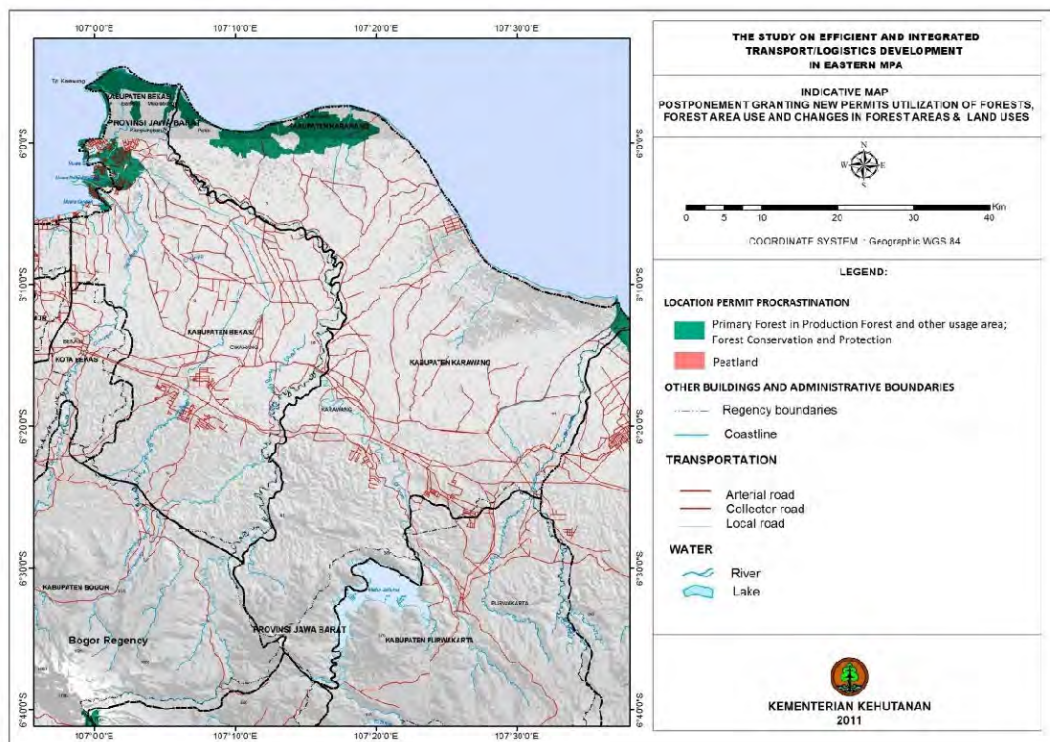
Source: Law No.41/2009, Law No.2/2011

The alignment of Cilamaya access road passes through an area which will be specified as "sustainable agricultural food land". There is no necessity for obtaining approval from ministry of agriculture for farmland conversion in this case, but the provision of substitute land is needed according to the actual land condition of the lands to be converted.

(2) Regulations related to protection of forest

Indonesia has protected forest areas where land conversion is prohibited for business purposes including mining. The total of the protected areas in Indonesia is about 64.68 million ha, and this equals over 30% of the area of the whole country. The protected forest areas can be converted for public services including construction of public roads, highways, railways and transportation facilities, by obtaining the approval of the Ministry of Forestry.

In the study area, the mountains and coastal areas (mangrove primeval forest, etc.) of Bekasi and Karawang are specified as protected forest areas as shown in Figure A 1.4.11.



Source : Ministry of Forestry

Figure A.1.4.11 Distribution of Protected Forest Areas and Production Forest Areas

In Government Regulation No.24 Year 2010 and No.61 Year 2012, the regulation of “Utilization of Forest Area” may only be enforced in respect of activities with clear strategic purposes such as construction of public roads, highways, train railways and transportation facilities, which are not categorized as public transportation for transporting production output. Incidental facilities of Cilamaya new port, the access road and railway fall under B (f) to (i), therefore, deforestation will be approved. However, the developer must make substitution forests for this project.

Table A.1.4.9 Government Regulation No.24 Year 2010 (No.61 Year 2012)

Utilization of Forest Areas	
Article No.	Notes
2-5	<p>A. "Utilization of Forest Areas" refers to utilizing part of a Forest Area for non-forestry activities.</p> <p>B. Forest Area Utilization may only be carried out in</p> <p>(i) Production Forest Areas</p> <p>(ii) Protected Forest Areas</p> <p>in respect of activities with a clear strategic purpose such as;</p> <p>(a) religious activities</p> <p>(b) mining (id est oil and gas, coal, mineral and geothermal mining)</p> <p>(c) installation of generators, transmission and distribution of electricity</p> <p>(d) promotion of new and renewable energy technology</p> <p>(e) construction of telecommunication networks, radio transmitting stations, television relay stations</p> <p><u>(f) construction/operation/support of public roads, highways and train railways</u></p> <p><u>(g) construction/operation/support of transportation facilities, which are not categorized as public transportation for transporting production output</u></p> <p>(h) construction/operation/support of facilities for water resources, water installations and canals for clean water and / or waste water</p> <p>(i) construction/operation/support of public facilities</p> <p>(j) operation of forest related industries</p> <p>(k) security and defence</p> <p>(l) public safety supporting facilities; or</p> <p>(m) shelter for natural disaster victims</p>
Rent Use Permits	
Article No.	Notes
6-18	<p>1. General Description</p> <p>A. Utilization of Forest Areas must be carried out in reliance upon a Rent-Use Permit.</p> <p>B. The Rent-Use Permit carries with it a "Land compensation requirement" as follows</p> <p>(a) If the total Forest Area in the relevant Province, where the target Forest Area is situated, comprises less than 30 % of the total Provincial land area (including islands and rivers) then the applicant must provide compensation land in the ratio of</p> <p>(i) 1:1 for non-commercial purposes or</p> <p>(ii) 1:2 for commercial purposes</p> <p>(b) If the total Forest Area in the relevant Province, where the target Forest Area is situated, comprises more than 30 % of the total Provincial land area (including islands and rivers) then the applicant is obliged to</p> <p>(i) pay non-tax State Revenues in respect of Forest Area Utilization and</p> <p>(ii) carry out reforestation in the ratio 1:1</p>

Source : Government Regulation No.24 Year 2010 (No.61Year2012)

(3) Land Acquisition Law

In recent years, many infrastructure projects are planned in response to the growing demand for infrastructure development, but land acquisition and compensation of the project sites are not easy and the projects do not proceed as planned. Land acquisition law (No. 41/2011) was enacted to promote implementing infrastructure projects as planned.

The Law in 2011 stipulates compensation to landowners and land acquisition process for public purposes. In addition, the implementing regulations of this law (No. 71/2012) and the detailed operations of the law are specified. It can be said that clarification of the period for legal actions and the requirement to complete the land acquisition within two years are crucial and distinctive in the flow of the land acquisition process. The flow of the land acquisition process is shown in Table A.1.4.10.

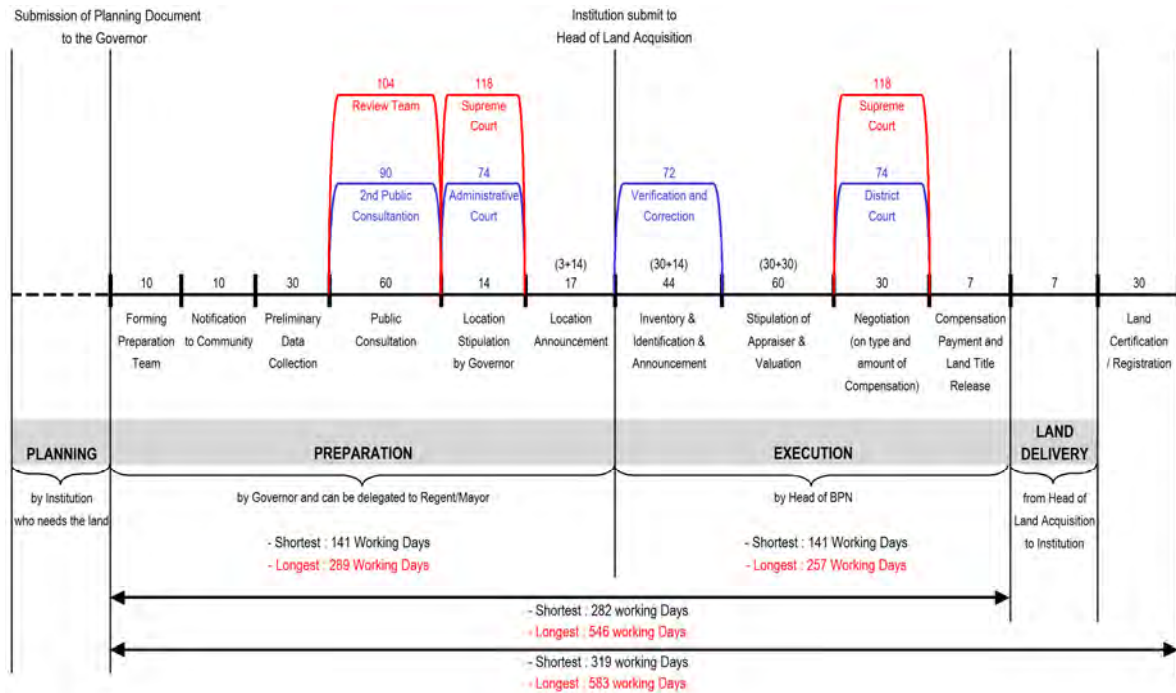
Table A.1.4.10 Explanation of Land Acquisition Flow

progress	remarks
1	The institution prepares the land acquisition planning documents.
2	The institution submits the land acquisition planning documents to the Governor.
3	The Governor forms a preparation team within 10 working days after receiving the land acquisition planning documents.
4	The preparation team notifies the surrounding community of the development plan within 20 working days after the receipt of the land acquisition planning documents by the Governor.
5	The preparation team conducts preliminary data collection within 30 working days after the notification to the community.
6	The chairman of the preparation team signs a temporary location plan list as the result of the preliminary data collection.
7	The preparation team conducts public consultation within 60 working days after the date of signing of the temporary location plan list, and outlines the results in minutes of agreement. <ul style="list-style-type: none"> - If there are any objections from the relevant community, the preparation team holds a 2nd public consultation within 30 working days after the date of the minutes of agreement. - If there are still objections from the relevant community, the institution reports such objections to the Governor through the preparation team. The Governor will establish a review team and issue a letter of acceptance or rejection of the objection within 14 working days after the receipt of the objection based on the recommendations from the review team.
8	The Governor issues a location stipulation within 14 working days after the receipt of the application by the institution. The location stipulation shall be valid for two years and can be extended for one year. <ul style="list-style-type: none"> - If there are any objections to the location stipulation, the relevant party may submit a claim to the Administrative Court within 30 working days after the issue of the location stipulation. The Administrative Court issues a decision within 30 working days after the receipt of the claim. - The relevant party may appeal the Administrative Court's decision to the Supreme Court within 14 working days. The Supreme Court issues a decision within 30 working days after the receipt of the appeal.

progress	remarks
9	The Governor and institution announce the location stipulation at the latest within 3 working days after the issue of the location stipulation. The announcement shall be conducted for at latest 14 working days.
10	The institution applies for execution of land acquisition to the head of the BPN regional office/the head of the land office. ("Head of Land Acquisition")
11	<p>The Head of Land Acquisition conducts an inventory and identification of the land and affected parties within 30 working days. The results shall be announced for a period of at least 14 working days.</p> <p>- The relevant party may submit an objection to the Head of Land Acquisition within 14 working days after the announcement. The Head of Land Acquisition conducts verification and correction within 14 working days after the receipt of the objection.</p>
12	The Head of land Acquisition conducts procurement of an appraiser within 30 working days and the appraiser conducts appraisals within 30 working days after its stipulation by the Head of Land Acquisition.
13	<p>Negotiation regarding the form and amount of compensation with the relevant party shall be conducted within 30 working days after the appraisal result being obtained by the Head of Land Acquisition. The results of the negotiation shall be outlined in minutes of agreement.</p> <p>- If an agreement of the form and amount of compensation cannot be reached, the relevant party may submit an objection to the District Court within 14 working days after the signing of the minutes of agreement. The District Court issues a decision within 30 working days after the receipt of the objection.</p> <p>- A party who objects to the District Court's decision may submit an appeal to the Supreme Court within 14 working days. The Supreme Court issues a decision within 30 working days after the receipt of the appeal.</p>
14	The institution, based on validation of the Head of Land Acquisition, provides monetary compensation within 7 working days after the stipulation of the form and amount of compensation.
15	The Head of Land Acquisition delivers the land acquisition results to the institution within 7 working days after the land title release.
16	The institution conducts land registration/certification within 30 working days after the delivery of the land acquisition results.

Source : Land Acquisition Law(No.41/2011) ,Regulation (No.71/2012)

The process of land acquisition can be divided into planning, arrangement of action, implementation, and land delivery. It can be said that the Land Acquisition Law revised in 2011 would contribute reasonably well to solving problems that could arise in discussions an compensation negotiations with the relevant right holders, by legal actions. In addition, it specifies 583 working days (or about two years) as the maximum number of days required for land acquisition. As such, the system of land acquisition has been well designed to implement necessary infrastructure development projects through the Law. The time schedule of land acquisition for public works based on the Land Acquisition Law is shown in Figure A.1.4.12.



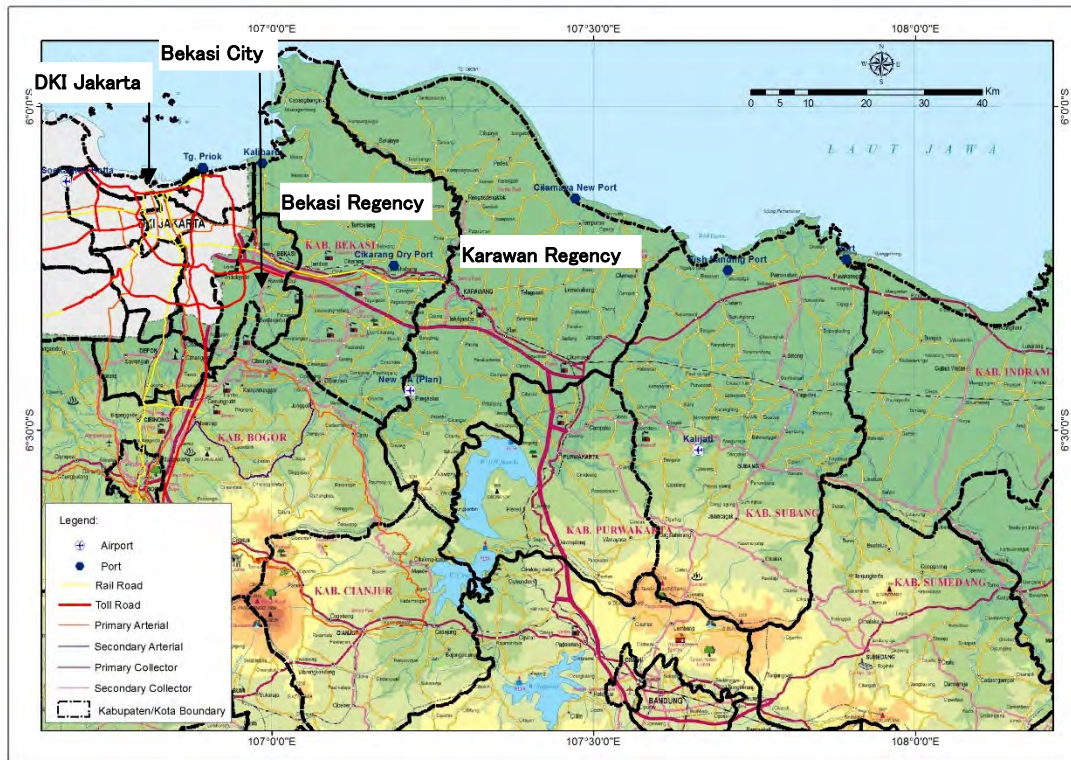
Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.1.4.12 Time Schedule of Land Acquisition

A.1.4.7 Natural Environment

(1) General

The Eastern Jakarta area faces the Jawa Sea on the northern coastal flat land and the altitude gradually increases to the south. The area consists of four administrations, DKI Jakarta, Bekasi City, Bekasi Regency and Karawan Regency from the west. DKI Jakarta is highly urbanized and Bekasi City has also been urbanized as the eastern suburb of DKI Jakarta. The Jakarta-Cikampek Toll-Road and a railway which reaches Bandung, Solo, Semarang or Cirebon run east and west through the area. In Bekasi and Karawan regencies, residential areas are especially located along the railway and large scale industrial estates are located along the Jakarta-Cikampek Toll-Road. In the northern area from the railway to the coastal area, great rice paddies spread out.



Source: National Coordinating Agency for Surveys and Mapping ,the Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.1.4.13 Topographic and Geographic Features of Eastern Jakarta

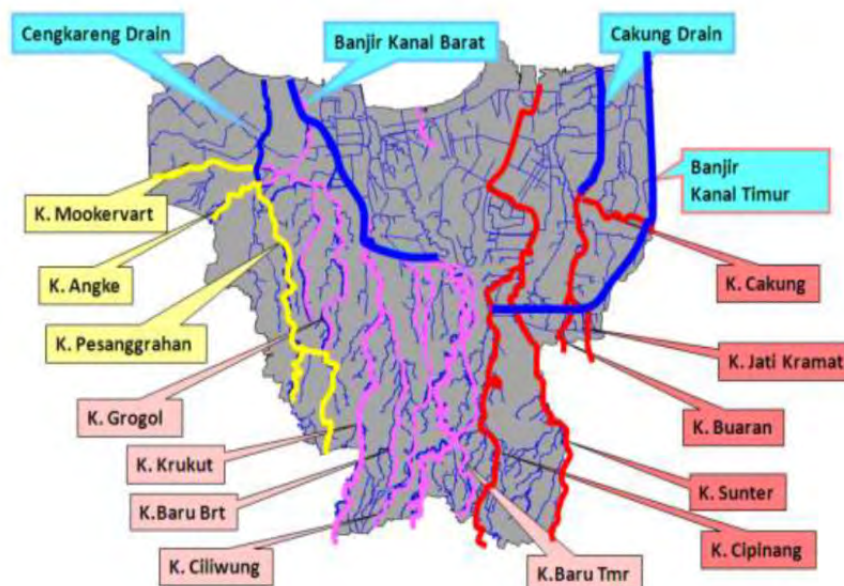
(2) DKI Jakarta

1) Topography and Geographical Features

DKI Jakarta is totally lowland with an average altitude of 7 meters above sea level while the altitude increases from the northern coastal area to the southern area. There are lands of 1 - 1.5 meters below sea level especially in the delta area by the coastal area. Geologically, the whole area of Jakarta is an alluvial plain, which is formed of sediment transported with water runoff through rivers.

2) Water Systems

DKI Jakarta has 13 main rivers and streams which are affected by tidal water especially in the northern coastal areas. In addition, there are two major canals, the West Flood Canal and the East Flood Canal, built connecting to these rivers and streams for controlling flood. Flood is a yearly event in the lowland of DKI Jakarta due to the topographic and geographic conditions mentioned above.



Source: DKI Jakarta Medium-Term Regional Development Plan Year 2013-2017

Figure A.1.4.14 River Systems of DKI Jakarta

3) Climate

In 2011, DKI Jakarta had an annual rainfall of 1,274 mm and February had the most rainfall of 231 mm while the least rainfall was in August at 1.5 mm. The lowest average temperature was recorded at 27.3 °C in January and the highest was 29.2 °C in October.

Table A.1.4.11 Rainfall and Temperature of DKI Jakarta 2011

Month	Rainfall (mm)	Temperature (°C)		
		Maximum	Minimum	Average
January	145.6	32.6	23.4	27.3
February	230.7	33.2	23.6	27.4
March	147.7	34.8	24.0	27.9
April	106.8	34.0	24.2	28.6
May	198.9	34.4	24.0	28.8
June	70.5	33.6	24.6	28.7
July	18.1	33.2	24.0	28.3
August	1.5	34.6	24.0	28.8
September	52.6	34.8	24.0	29.0
October	80.1	35.2	24.0	29.2
November	44.6	35.4	24.0	28.9
December	177.0	35.0	24.0	28.9
Total	1274.1			

Source: DKI Jakarta Statistics (Daram Angka) 2012

(3) Bekasi City

1) Topography and Geographical Features

Bekasi city is topographically flat and its land lies at an altitude between 11 m to 81 meters above sea level with the slope conditions between 0 - 2%. The northern side from the Jakarta-Cikampek Toll-Road in the city has an altitude less than 25 meters above sea level while the southern side is located higher than the northern side. In the low land it is difficult to drain storm runoff water quickly, consequently water often accumulates in the area.

2) Water Systems

Three main rivers named Cakung River, Bekasi River and Sunter River run through Bekasi City. Bekasi River has headwaters in Cikeas River coming from the mountains at an altitude of approximately 1,500 meters outside of the city. The waters of the rivers and irrigation channels are polluted with domestic waste and industrial waste from the southern part of the city of Bekasi and Bogor Regency. Groundwater in the city has the highest potential as a source of clean water, especially in the southern part. However, the groundwater is likely contaminated by Bantargebang landfill site.

3) Climate

Annual rainfall amount has increased in the most recent three years in Bekasi City. In 2011, Bekasi City had an annual rainfall of 4,351 mm and January had the most rainfall of 858 mm while the least rainfall was in September at 20 mm. Estimated daily temperatures ranged from 23.6 °C to 34.2 °C.

Table A.1.4.12 Rainfall of Bekasi City

Month	2009	2010	2011
January	311	466	858
February	302	246	360
March	234	103	393
April	83	93	480
May	89	123	564
June	64	122	110
July	-	72	236
August	1	62	24
September	69	358	20
October	28	314	152
November	120	105	401
December	217	84	753
Total	1,518	2,148	4,351

Note: Unit (mm)

Source: Bekasi City Statistics (Daram Angka) 2012, 2011, 2010

(4) Bekasi Regency

1) Topography and Geographical Features

Most of Bekasi Regency is low-lying, especially in the northern area while the southern area is a little hilly. Bekasi Regency lies at an altitude between 0-115 meters above sea level with the slope conditions between 0 - 25%.

2) Water Systems

There are 16 major watersheds in Bekasi Regency, and the rivers have width ranging from 3 to 80 meters. Major rivers which run south to north are Citarum River, Cibet River, Cikarang River, Ciherang River and Cipamingkis River. Citarum River and Cibet River adjoin Karawan Regency, and Cikarang River runs through the middle of the regency.

The existing groundwater level is mostly shallow at a depth of 5 - 25 meters below ground, while the aquifer soil is generally located at depths between 90 - 200 meters.

3) Climate

Bekasi regency has a hot climate with average temperatures from 28 °C to 32 °C and two seasons, dry and rainy seasons. In 2011, the least annual rainfall amount was recorded at 918.5 mm in these five years. It was less than half comparing the annual rainfall amount of 2007 (2,441.9 mm). Regarding monthly rainfall amount in 2011, September was the driest month at 2.1 mm and April had the most rainfall at 138.7 mm.

Table A.1.4.13 Rainfall of Bekasi Regency

Month	2007	2008	2009	2010	2011
January	499.8	199.1	n/a	304.1	138.5
February	724.4	553.9	n/a	187.0	99.9
March	155.7	173.6	n/a	108.5	50.4
April	289.1	188.2	n/a	80.7	138.7
May	89.9	49.1	n/a	95.4	92.2
June	104.4	27.9	n/a	103.0	41.7
July	0	3.1	n/a	62.3	44.5
August	19.9	10.8	n/a	49.3	4.5
September	1.2	3.2	n/a	196.0	2.1
October	104.1	83.9	n/a	292.2	43.9
November	132.8	109.5	n/a	149.4	110.1
December	320.6	165.7	n/a	112.3	152.1
Total	2,441.9	1,568.0	n/a	1,739.9	918.5

Note: Unit (mm)

Source: Bekasi Regency Statistics (Daram Angka) 2012

(5) Karawan Regency

1) Topography and Geographical Features

Similar to Bekasi Regency, the land of Karawan Regency is also covered by broad flat terrain with variations in height between 0 - 5 meters above sea level. The plain lies on the north coast and is sedimentary rock formed especially by marine sediments and volcanic alluvium. The southern part is undulating and hilly mainly formed by sedimentary rocks. At the southern end of the area, there is Mount Sanggabuana with a peak of 1,291 meters above sea level.

2) Water Systems

There are two major rivers named the Citarum River and the Cilamaya River in Karawan Regency. The Citarum River is the border of Bekasi Regency on the western side while the Cilamaya River adjoins Subang Regency on the eastern side. Three large reservoirs, Saguling, Cirata and Jatiluhur, are located upstream of the Citarum River. In addition to these rivers, three large irrigation channels also form important water systems in the regency, which are named North Tarum Channel, Central Tarum Channel and West Tarum Channel. These channels are connected to the Citarum River and the water is used for irrigating rice fields, farms and power plants.



Source: Directorate of Water Resources Management, Ministry of Public Works, The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.1.4.15 Major River Systems in East Jakarta

3) Climate

Karawan regency has an average temperature at 27 °C. Monsoon winds blow from the Java Sea in January and southeast in June. Annual rainfall amounts have stayed at around 2,000 mm from 2007 to 2010, but it has gradually increased. Generally, the least rainfall amount was in July and August.

Table A.1.4.14 Rainfall of Karawan Regency

Month	2007	2008	2009	2010
January	176.39	226.9	479.00	480
February	463.13	483.8	434.53	284
March	192.65	159.4	240.15	180
April	124.35	167.9	134.52	74
May	58.83	58.8	115.17	166
June	60.09	41.7	70.89	105
July	12.00	0.3	31.77	92
August	7.74	12.1	4.00	78
September	16.00	27.8	45.22	110
October	59.00	104.0	65.88	231
November	102.52	130.1	175.85	213
December	239.65	142.7	169.03	151
Total	1,512.35	1,555.7	1,842.13	2,163

Note: Unit (mm)

Source: Karawan Regency Statistics (Daram Angka) 2011

A.1.4.8 Environmental and Social Considerations

(1) Outline of the Project

In this study, soft-infrastructure is mainly proposed as the short-term solutions before opening the Cilamaya Port for the eastern Jakarta metropolitan area. The proposed short-term improvement solutions of hard infrastructure have been already planned, ongoing, under construction, or have still unclear project scales on the scope of the Study.

For the development of North Kalibaru Port, the Ministry of Transportation planned the master plan of Tanjung Priok Port in 2012, and PERINDO 2 is developing the North Kalibaru Port. For the road improvements in the eastern industrial estates, some were constructed or are under construction, or others are in planning. Regarding those road improvements, a memorandum of understanding (MOU-2006) was signed in 2006 by the Ministry of Public Works, Government of West Java Province, Government of Bekasi Agency, PT. Jasa Marga (Persero) and seven industrial estates in Cikarang area to specify the responsibility of each party by project. However, not all improvement projects have been implemented due to budget shortfalls or other reasons. The MOU was revised in 2012; still the signs have not been completed according to the BAPPEDA of Bekasi Regency.

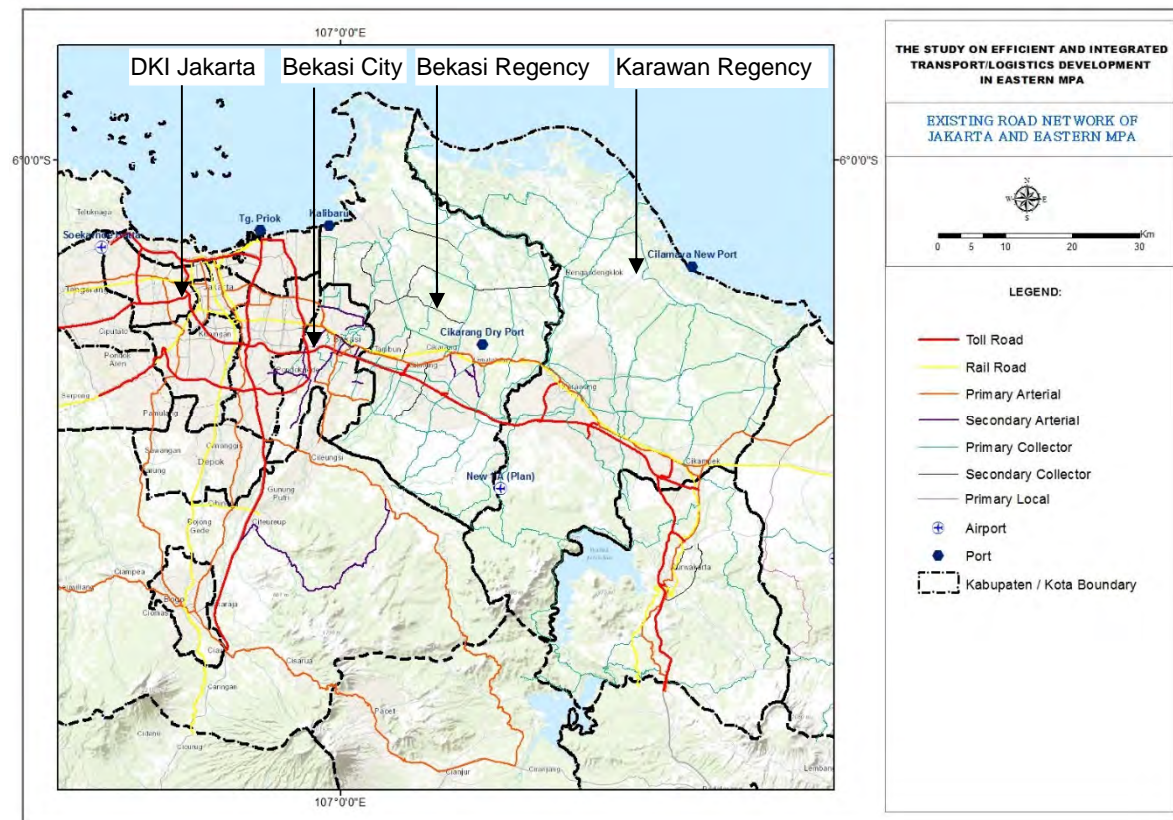
In this context, the Preparatory Survey for Metropolitan Arterial Road Improvement Project was conducted by JICA (2011 – 2012) to support the road improvement projects in the eastern industrial estates. The improvements of Jl. Karimarang, Jl. Bali and Jl. Iman Bonjol including constructions of a flyover at an intersection, a bridge over the toll road, and a bridge across river were proposed in the

Preparatory Study. Scoping, UKL/UPL study and preparation of LARAP for environmental and social considerations were supported in the preparatory study. Other projects of the access to Cikarang Dry Port, Delta Mas-Jakarta/Cikampek Toll Road access and interchange, and MM2100 – EJIP access are under construction or implementation by the PU, MM2100-EJIP and/or industrial estates.

Meanwhile, if the projects are not started within three years after an environment permit has been issued, the project implementation parties must re-submit the UKL/UPL or AMDAL to obtain the environmental permits per Indonesian law. In addition, the EIA screening criteria were changed in 2012, as were the land acquisition procedures, which concern implementation of projects. As land acquisition and resettlement remain the most critical issues for the development of hard infrastructure in Indonesia it is recommended that these new rules be applied.

(2) Outlines of the Project Sites

The eastern area of Jakarta metropolitan area is composed of DKI Jakarta, Bekasi City, Bekasi Regency and Karawang Regency shown in Figure A.1.4.16. The conditions of land use, natural, and social environments are described earlier in Section A.1.4.



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.1.4.16 Administrations of Eastern Jakarta Area

(3) Legal and Institutional Frameworks

1) Legal Framework

"Law No.4 on Basic Provision for Environment" was first enacted in 1997 as the organic law of Indonesia. Later, this law was amended to "Law No.23/1997 on Environmental Management", which consisted of 52 articles describing the importance of a sustainable environment, environment impact assessment, the discharge of waste, and management of toxic and hazardous substances. As a measure of the environmental management, it was mandated to conduct environmental assessments and to issue business permits for business activities with potential for significant environmental impact.

Then, "Government Regulation No.51/1993 on EIA" was enacted in 1993, which stipulated environmental impact assessment reports (EIA) would consist of an environmental assessment report (ANDAL), an environmental management plan (RKL), an environmental monitoring plan (RPL), and an (AMDAL: Analisis Mengenai Dampak Lingkungan, EIA) to better manage the environmental impacts caused by business development.

Furthermore, "Law No.32/2009 on Environmental Protection and Management" was enacted in 2009 that required a review of "Law No.23/1997 on Environmental Management" in order to protect the rights of every person by legally ensuring their ability to earn a living wage in a healthy environment as a means of protecting the whole ecosystem.

In this law (Article 3), environmental protection and management aim to:

- a. protect the territory of the Republic of Indonesia from pollution and/or damage to the environment;
- b. ensure safety, health, and human life;
- c. ensure the continuity of life and preservation of living things in the ecosystems;
- d. preserve the environmental functions;
- e. achieve harmony, synchronize, and balance the environment;
- f. guarantee the fairness of the present generation and future generations;
- g. ensure compliance and protection of environmental rights as part of human rights;
- h. controlling the use of natural resources wisely;
- i. sustainable development; and
- j. anticipate the global environmental issues.

Major laws and regulations on environmental and social considerations in Indonesia are as follows.

Table A.1.4.15 Legal Framework of EIA (AMDAL)

Category	Laws and Regulations
1) Law of Republic of Indonesia	<ul style="list-style-type: none"> • Law No.32/2009 concerning Environmental Protection and Management (Law No.23/1997 for Environmental Management (Revised version))
2) Government Regulations	<ul style="list-style-type: none"> • Government Regulation No.27/1999 on Analysis of Environmental Impacts • Government Regulation No.15/2010 on Spatial Arrangement • Government Regulation No.27/2012 on Environmental Permits
3) Decision of Minister and Head of Bapedal	<ul style="list-style-type: none"> • Decree of Head of BAPEDAL No. 299/1996 on Technical Guidance for Study of Social Aspects in the Development of Environmental Impact Assessments • Decree of Head of BAPEDAL No.105/1997 on Technical Guidance Study of Social Aspects in the Development of Environmental Impact Assessments • Decree of the Ministry of Environment No.2/2000 on Guidance on the Evaluation of the EIA (AMDAL) Document • Decree of Head of BAPEDAL No.8/2000 on Public Involvement and Information Disclosure in EIA Process • Decree of Head of BAPEDAL No.9/2000 on Guideline for Preparation of EIA Study • Decree of the Ministry of Environment No.40/2000 on guidelines for administration of appraisal commission on environmental impact analysis • Decree of the Ministry of Environment No.17/2001, about type of business or environment which must complete an Analysis of Environmental Impact • Decree of the Ministry of Environment No.86/2002 on Regulation on UKL and UPL (Environmental Management Efforts and Monitoring Efforts) • Decree of the Ministry of Environment No.45/2005 on Guidelines for Report of Environmental Management Plan (RKL) and Environmental Monitoring Plan (RPL) • Decree of the Ministry of Environment No.11/2006 on Type of Business Plan and/or Activity Required to file an EIA • Decree of the Ministry of Environment No.8/2006 on Guidelines for EIA • Decree of the Ministry of Environment No.5/2008 on Working Procedures of EIA Appraisal Commission • Decree of the Ministry of Environment No.6/2008 on License of EIA Appraisal Commission • Decree of the Ministry of Environment No.13/2010 on Environmental Management Efforts and Monitoring Efforts and Statement of Ability for Environmental Management and Monitoring • Decree of the Ministry of Environment No.27/2009 on Guidelines for Implementation of Strategic Environmental Assessment • Decree of the Ministry of Environment No.9/2011 on General Guidelines for Strategic Environmental Assessment (revised edition of Decree No.27/2009) • Decree of the Ministry of Environment No.5/2012 on Type of Business Plan and/or Activity Required to file an EIA

Source: Laws and Regulations of Indonesia

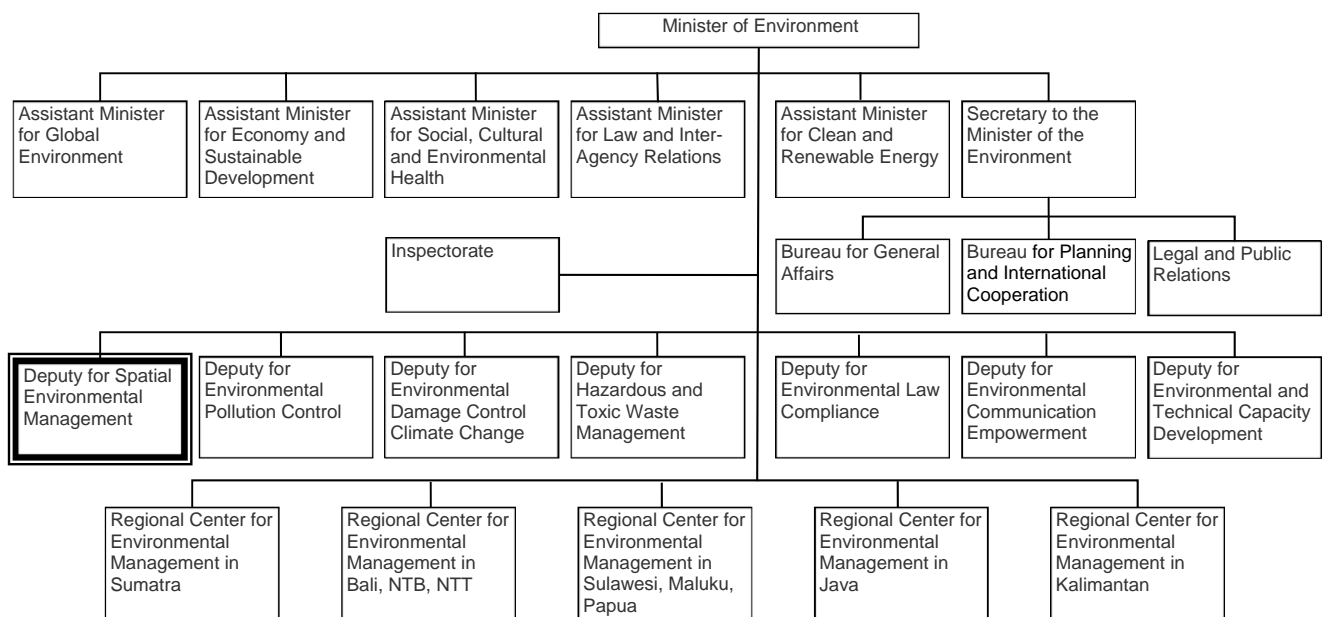
2) Institutional Framework

i) Central Government

In 1993, the Ministry of the Environment (MOE): Kementerian Lingkungan Hidup (KLH) was established in Indonesia, which was reorganized by the Ministry of Population and Environment. The MOE leads the environmental administration of Indonesia with environmental assessments, natural environment protection, pollution control, hazardous waste management, and other environmental matters. It employs roughly 1,200 people.

The organization of the MOE is shown in Figure A.1.4.17. In the organization, the "Assistant Deputy for Environmental Impact Assessment" is in charge of works related to environmental impact assessment in the following four sections under the "Deputy for Spatial Environmental Management":

- Assistant Deputy for Environmental Impact Assessment
- Assistant Deputy for Environmental Planning
- Assistant Deputy for Environmental Evaluation and Monitoring
- Assistant Deputy for Environmental Institutions



Source: Project for the Master Plan Study on Multiple-Airport Development for Greater Jakarta Metropolitan Area, Ministry of Environment, The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.1.4.17 Structure of Ministry of Environment

ii) Local Government

For local environmental administration, each local government of province/city/regency has a Regional Environmental Management Agency (Badan Pengendalian Lingkungan Hidup Daerah: BPLHD) in charge of the environmental administration for the respective administrative district. However, environmental issues and EIA of development projects for specific cities and/or regencies are managed by the provincial BPLHD in those areas. Those affecting provinces are managed by the MOE.

Thus, in DKI Jakarta, Bekasi City, Bekasi Regency and Karawang Regency, each BPLHD is in charge of its own EIA for infrastructure development projects if required. In the case of infrastructure development projects in Bekasi City, Bekasi Regency and Karawang Regency, EIA is managed by the West Java provincial BPLHD. If a project is in DKI Jakarta or West Java Province, the MOE manages its EIA.

3) EIA Procedure

i) Purpose of Environmental Impact Assessment (EIA)

An Environmental Impact Assessment (EIA) in the Republic of Indonesia called AMDAL (Analisis mengenai dampak lingkungan hidup), is required for all projects that have substantial impact on the environment as stipulated in Article 22 of “Law No.32/2009 concerning Environmental Protection and Management”. AMDAL is a part of the feasibility study designed to assess mitigate, manage and monitor the environmental impacts of development projects.

The screening criteria of AMDAL are set forth in the “Decree of the Ministry of Environment No.5/2012 on Type of Business Plan and/or Activity Required to file an EIA” amended in 2012. For the projects in which the criteria of AMDAL are not applied in the list of criteria, the Environmental Management Effort (UKL) and Environmental Monitoring Efforts (UPL) are required. The two have similar functions, but are simpler studies than the Environmental Management Plan (RKL) and Environmental Monitoring Plan (RPL), which are included in the AMDAL as applicable. If UKL and UPL are not required, the project may apply for a Statement of Ability for Environmental Management and Monitoring (SPPL).

AMDAL Report contains:

- Study on impacts of business plan and/or proposed activities;
- Evaluation of activities around the location of the site of the implementation of the business plan and/or proposed activities;
- Input and advice on community responses to the business plan and/or proposed activities;
- Forecasts of the magnitude and characteristics of the impacts and their significance if the business plan and/or proposed activities are carried out;
- Holistic evaluation of the impacts to determine environmental feasibility or infeasibility; and
- Environmental management plan and monitoring plan.

AMDAL Report is composed of the following:

- KA-ANDAL (Kerangka Acuan Analisis Dampak Lingkungan Hidup): Terms of Reference of ANDAL;
- ANDAL (Analisis dampak lingkungan hidup): Environmental Impact Assessment and Analysis;
- RKL (Rencana pengelolaan lingkungan hidup): Environmental Management Plan;
- RPL (Rencana pemantauan lingkungan hidup): Environmental Monitoring Plan; and
- Summary

ii) Approval of AMDAL

According to the “Decree of the Ministry of Environment No.5/2008 on Working Procedures of EIA Appraisal Commission”, a department that handles AMDAL (EIA) is basically a Regional Environmental Management Agency (BPLHD) where projects are proposed. An AMDAL Assessment Committee is established to assess the results of AMDAL at the local level. However, the MOE in conjunction with the Central AMDAL Assessment Committee handle strategic projects and/or activities of national defence and security matters, or other specific projects in which large negative impacts are anticipated (i.e. oil/gas/radioactive material, hazardous waste treatment, or international airport/port construction.) The MOE also handles any project extending across more than one province. AMDAL is approved by the Minister of MOE, the governor of the province or mayor of the city/governor of the regency through an AMDAL Assessment Committee at each jurisdiction level.

iii) Screening Process

In Indonesia, Law No.32 of Environmental Protection and Management requires EIA for all projects that have substantial impact on the environment. The criteria for business plans and/or proposed activities were amended in the "Decree of the Ministry of Environment No.5/2012 on Type of Business Plan and/or Activity Required to file an EIA". This decree explains the primary indicators used in determining project plans and/or proposed activities which may have significant impact and are required to file an EIA. They are as follows:

a. The potential for significant impacts

The potential for significant impacts from every type of business and/or activity is determined by:

- Large number of residents who will be affected by the business plan and/or activities;
- Scale of the area affected;
- Intensity and duration of the impacts;
- Amount of other environmental components that will be affected;
- Characteristics of cumulative impacts;
- Reversibility or irreversibility of the impacts, and
- Other criteria in accordance with the development of science and technology, and/or
- International references applied by some countries as the basis of the EIA policy.

b. Uncertainty of technological capabilities available to address significant negative impacts that will arise.

Screening procedures described in this decree are shown in Figure A.1.4.18. As listed in the procedures, there are three steps a) It is determined whether the business plans and/or proposed activities are among those specified in the list defining type and scale of projects required to file an EIA (Annex I of the decree). If the project scale exceeds the criteria an EIA will be required. No EIA will be required if it is determined it will not have significant environmental impact b) It is determined whether the project location is in a protected area or adjacent to one c) exclusion criteria are checked. Unless the exclusion criteria are not applied, an EIA is required for the project.

- Step i): screening by list of type and scale of business plans and proposed activities required to file an EIA (Appendix I)
- Step ii): screening whether project location is in a protected area or adjacent to a protected area (Appendix III)
- Step iii): screening by exclusion criteria in protected areas or adjacent areas (Article 3/Paragraph (4))

On the other hand, if the project location is not in a protected area or adjacent area, the project proponent prepares and submits an Environmental Management Effort (UKL) and Environmental Monitoring Effort (UPL) or Statement of Ability for Environmental Management and Monitoring (SPPL) in prescribed form to the supervisory BPLHD to obtain approval. If the project location is in a protected area or adjoining area, if those are applicable to the exclusion criteria, UKL/UPL or SPPL is required.

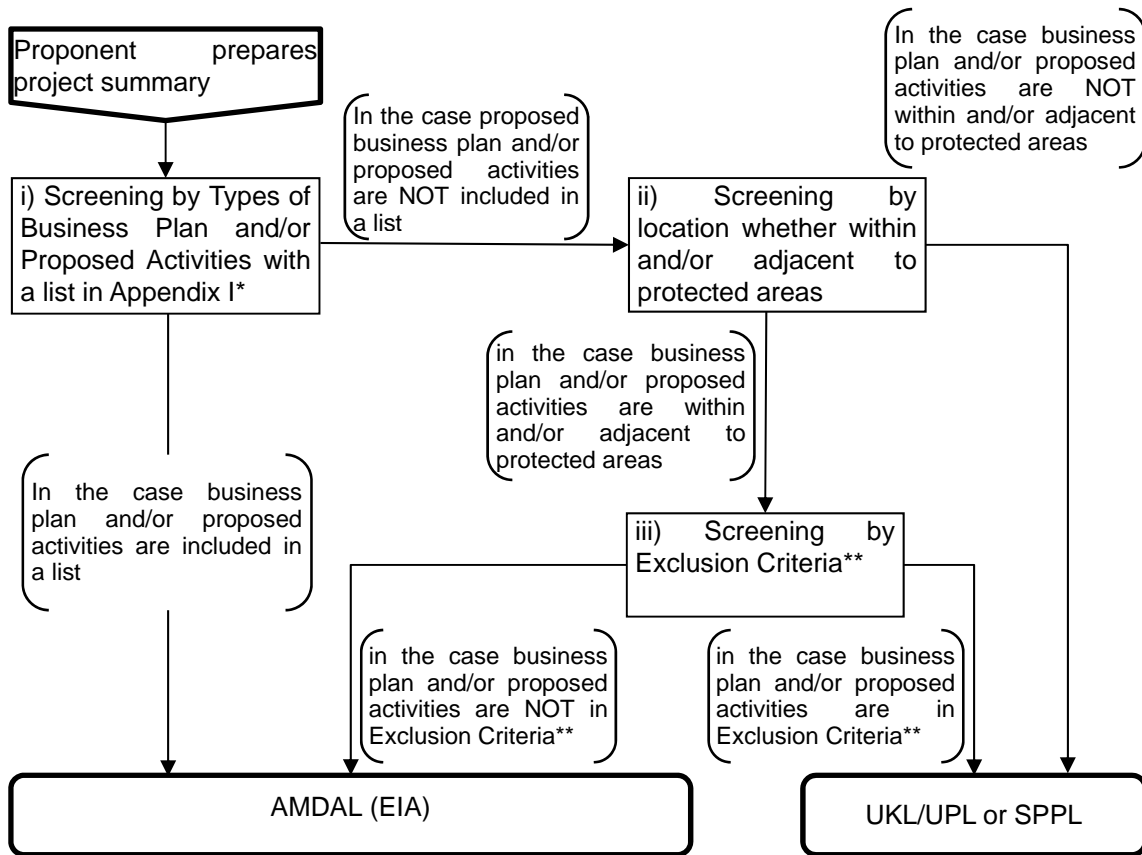
SPPL is required if UKL/UPL are not required for a project with less severe impacts than projects for which UKL/UPL are required, as stipulated in the Decree of Ministry of Environment No.13/2010 on Environmental Management Effort (UKL) and Environmental Monitoring Effort (UPL) and the Statement of Ability for Environmental Management and Monitoring (SPPL).

In the decree, SPPL is defined as a statement of ability of the persons in charge of the business and/or activity to perform environmental management and monitoring of impact, except projects for which EIA or UKL/UPL are not required. A proponent prepares SPPL with a designated format and submits it to a head of the environmental agency in charge in the local government with jurisdiction over the project. An environmental agency head will then examine and approve the SPPL.

Table A.1.4.16 Screening Criteria of EIA (AMDAL) in Protected Areas and Exclusion Items

List of Protected Areas (Appendix III)	Exclusion Items (Article 3/Paragraph (4))
<ol style="list-style-type: none"> 1. Protected Forest Area 2. Peaty Area 3. Water Catchment Area 4. Coastal Border 5. River Banks 6. Lake or Reservoir Areas 7. Wildlife and Marine Wildlife 8. Nature Reserve and Marine Sanctuary 9. Mangrove Forested Coastal Area 10. National Park and National Marine park 11. Forest Park 12. Natural Park and Marine Natural Park 13. Cultural and science heritage Area 14. Geological Conservation Area 15. Groundwater Recharge Area 16. Spring Area 17. Germ plasma Protection Area 18. Wildlife Refuge Area 19. Coral Reefs 20. Animals or Marine Biota Protected Corridor 	<p>Business plans and/or proposed activities in protected areas, and/or adjacent to the protected area, the followings are excluded from EIA.</p> <ol style="list-style-type: none"> a. exploration for mining, oil and gas, and geothermal resources b. research and development in the life sciences c. support for preservation of protected areas d. related to defence and security interests of the country, which does not significantly impact on the environment e. cultivation which does not significantly impact on the environment f. cultivation of indigenous people in a fixed area that does not diminish the function of the protected areas and is under strict supervision.

Source: Decree of the Ministry of Environment No.5/2012 on Type of Business Plan and/or Activity Required to file an EIA,
The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA



Note: *Appendix of Decree of the Ministry of Environment No.5/2012 on Type of Business Plan and/or Activity Required to file an EIA

**Article 3/Paragraph (4) of Decree of the Ministry of Environment No.5/2012 on Type of Business Plan and/or Activity Required to file an EIA

Source: Decree of the Ministry of Environment No.5/2012 on Type of Business Plan and/or Activity Required to file an EIA, The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.1.4.18 Screening Procedures for EIA (AMDAL)

iv) Procedures for EIA (AMDAL)

The outline of procedures for EIA (AMDAL) are explained in the “Decree of Head of BAPEDAL No.8/2000 on Public Involvement and Information Disclosure in EIA Process” as shown in Figure A.1.4.19.

a) KA-ANDAL preparation through disclosure of information and public hearing

A project proponent discloses the project information for public hearings to collect opinions, comments and questions from stakeholders with project interests including local residents within 30 days of the announcement. The project proponent reflects those opinions and comments in the KA-ANDAL preparation and the Terms of Reference (TOR) of ANDAL.

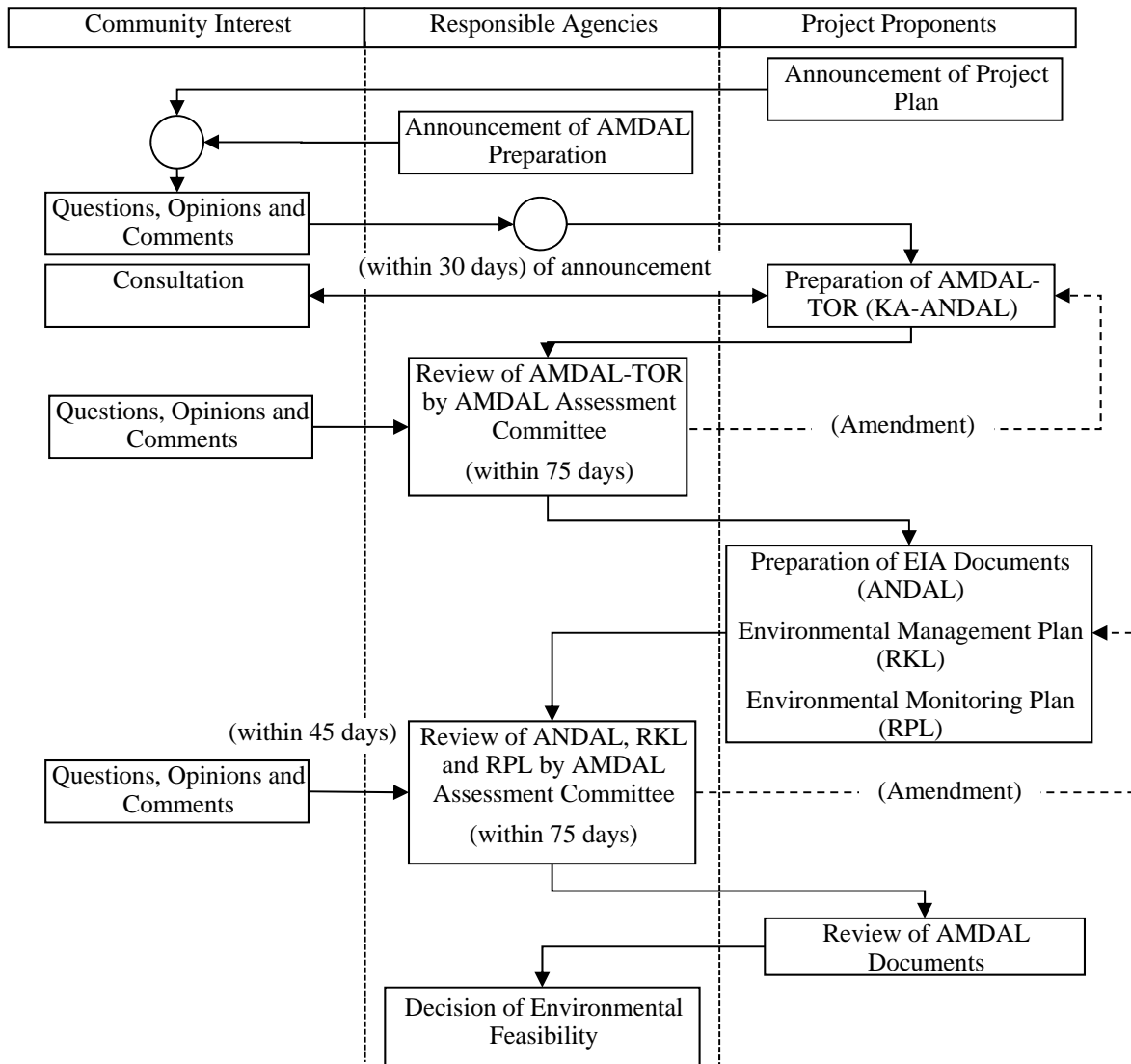
The proponent submits KA-ANDAL to an AMDAL Assessment Committee with jurisdiction and the AMDAL Assessment Committee reviews KA-ANDAL along with the opinions and comments from the

stakeholders. The project proponent amends KA-ANDAL based on comments from the committee and the stakeholders. KA-ANDAL is approved within 75 days from its official submission date.

b) Assessment of AMDAL report

After approval of KA-ANDAL, the project proponent conducts ANDAL and, based on the result, prepares RKL and RPL. The project proponent submits a set of AMDAL reports including KA-ANDAL, ANDAL, RKL, RPL and summary to the AMDAL Assessment Committee with jurisdiction.

The AMDAL Assessment Committee reviews the AMDAL report with opinions and comments from the stakeholders. The project proponent amends the AMDAL report based on the comments from the committee and the stakeholders. The AMDAL report is approved within 75 days from its official submission date.

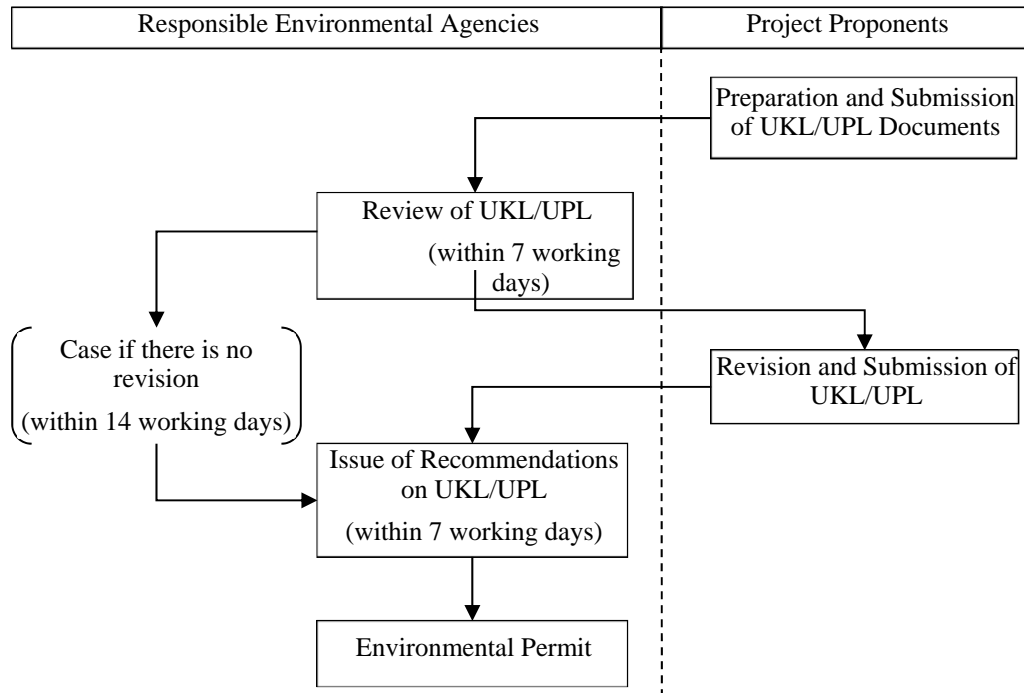


Source: Decree of Head of BAPEDAL No.8, 2000 on Public Involvement and Information Disclosure in EIA Process

Figure A.1.4.19 Outline of EIA (AMDAL) Procedures

iv) Procedures for UKL/UPL

If a project is required UKL/UPL through the screening shown in Figure A.1.4.18, a project proponent prepares UKL/UPL, submits it to the competent BPLHD and obtains an environmental permit. The procedures are described in Decree of the Ministry of Environment No.13/2010 on Environmental Management Efforts and Monitoring Efforts and Statement of Ability for Environmental Management and Monitoring, and summarized in Figure A.1.4.20 below.



Source: Decree of the Ministry of Environment No.13/2010 on Environmental Management Efforts and Monitoring Efforts and Statement of Ability for Environmental Management and Monitoring

Figure A.1.4.20 Outline of UKL/UPL Procedures

(4) New Screening Criteria of AMDAL in Indonesia

The Decree of the Ministry of Environment No.5/2012 stipulate new screening criteria of AMDAL by business/project type. Table A.1.4.17 is an extraction of listed criteria for road projects.

Even in the context of the new criteria, the proposed road improvement projects in the eastern industrial estates supported by the JICA Preparatory Study will not exceed this criteria and not be subject to an AMDAL as long as the existing planed scales do not change greatly.

Scale	EIA (AMDAL) Criteria
Road improvement: 2 km within the existing alignment	≥ 5 km with the procurement of land ≥ 20 ha
Flyover: 71m and 190m, total 261 m	≥ 2 km
Bridge: 50m	≥ 500 m

Table A.1.4.17 AMDAL (EIA) Criteria for Road Projects

Category	Type of Activity	Scale
Public Works	Development and/or improvement of highways which require land acquisition outside of road area	
	a. in metropolitan/large city area - Length of road with area of land acquisition, or - Area of land acquisition	≥ 5 km with the procurement of land ≥ 10 ha ≥ 30 ha
	b. in city area - Length of road with area of land acquisition or - Area of land acquisition	≥ 5 km with the procurement of land ≥ 20 ha ≥ 30 ha
	c. in rural area - Length of road with area of land acquisition, or - Area of land acquisition	≥ 5 km with the procurement of land ≥ 30 ha ≥ 40 ha
	Development and/or improvement of roads which require land acquisition outside of road area	
	a. in metropolitan/large city area - Length of road with area of land acquisition, or - Area of land acquisition	≥ 5 km with the procurement of land ≥ 20 ha ≥ 30 ha
	b. in city area - Length of road with area of land acquisition or - Area of land acquisition	≥ 5 km with the procurement of land ≥ 30 ha ≥ 40 ha
	c. in rural area - Length of road with area of land acquisition, or - Area of land acquisition	≥ 5 km with the procurement of land ≥ 40 ha ≥ 50 ha
	Construction of subway/underpass, tunnel, overpass/flyover	≥ 2 km
	Construction of bridge	≥ 500 m

Source: Appendix I, Decree of the Ministry of Environment No.5/2012 on Type of Business Plan and/or Activity Required to EIA

A.1.4.9 Land Acquisition and Resettlement

(1) Necessity of Land Acquisition and Resettlement

Improvements in hard infrastructure logistics and transportation in eastern MPA will require land acquisition and resettlement, as concerns implementation of future projects, including the planned development of 2020 and even longer-term development. As described below, the three new legislations were enforced in 2012 and land acquisition procedures have been revised in the country.

(2) Legal Framework

1) Legislation

Land in Indonesia has been managed through the national land law (Law No.5/1960 on Basic Agrarian Affairs). The national territory is defined as belonging to the state, and Indonesian citizens and cooperate bodies have the right to land ownership by permission of the State. In addition, it is stipulated that land may be acquired by the government in the public interest for proper compensation.

Meanwhile, “Law No.2/2012 on Land Acquisition for Development in Public Interest” of 2012 was promulgated to realize a just and prosperous welfare society under the 1945 Constitution of the Republic of Indonesia. The law is also provided for government development in the public interest through land acquisition by giving preference to the principles of the constitution and the national land law, inter alia, humanity, justice, benefit, certainty, transparency, agreement, participation, welfare, sustainability, and harmony.

In addition, “Presidential Regulation No.71/2012 on Land Procurement for Implementation of Public Interest” was promulgated and enforced to regulate the implementation mechanism for land acquisition in the public interest. Following the presidential regulation, the National Land Agency (BPN) promulgated the “Decree of Head of National Land Agency No.5/2012 on Technical Guideline for Land Acquisition” as technical guidance for the presidential regulation.

Major legislation concerning land acquisition and resettlement are as follows:

- 1945 Constitution of the Republic of Indonesia
- Law No.5/1960 on Basic Agrarian Law
- Law No.2/2012 on Land Acquisition for Development in the Public Interest (enforced in January, 2012)
- Presidential Regulation No.71/2012 on Land Procurement for Implementation of Public Interest (enforced in August, 2012)
- Decree of Head of National Land Agency No.5/2012 on Technical Guideline for Land Acquisition (enforced in October, 2012)

2) Procedure of Land Acquisition Works

Land acquisition and resettlement procedures for public interest in Indonesia are described in three legislations promulgated in 2012, Law No. 5/2012, Presidential Regulation No.71/2012 and Decree of Head of National Land Agency No.5/2012. The implementation of a determined time limit in each step

in the system brought a major change. This implementation has changed from local government-led, to regional offices of BPN-led.

Two major steps of the procedures are i) determination of project location by provincial government and ii) implementation of land acquisition activities by the National Land Agency (BPN). The procedures are summarized in Table 1.4.18 and Table A.1.4.19 based on the legislation. However, in the case of land acquisition of less than one hectare, regardless of these procedures, project implementation agencies that require land acquisition can directly negotiate with the entitled parties.

It is to be noted that the former procedures are effective for the projects in which land acquisition and resettlement plans were prepared concurrent with project plans, or in which land acquisition and resettlement were underway before the new legislation came into effect. However, in this case, the land acquisition and resettlement activities should be completed by the year-end of 2014. On the other hand, if land acquisition and resettlement plan was being prepared at the time of the effective dates of the new legislations, the new rules can be applied.

i) Determination of project location by provincial government

First, a project implementation agency prepares a Land Acquisition Plan (LAP) according to spatial plans at national, province, and regency/city levels, with development priority stated in the medium-term development plan, strategic plan and working plan. These are then submitted to the provincial government. After the provincial government receives the LAP, they organize a Land Acquisition Preparation Team (LAPT) and make a public announcement of the project location.

The LAPT conducts initial data collection and public consultations. If the project location is agreed upon, the provincial government approves the project location and announces it publicly, including the project's purpose, layout drawing, area of land acquisition, expected land acquisition period and construction period. In response to this decision, the project implementation agency requests that the National Land Agency (BPN) begin its land acquisition activities.

Under this system, parties affected by the project may object (particularly to the project's location). In this case, the LAPT conducts the public consultation again. For the further objections, the LAPT reports to the provincial governor the objections. The governor then establishes a Review Team to deal with the objections. The team conducts studies and makes recommendations. Based on the recommendations of the Review Team, the provincial governor determines whether the project location is approved, a change of location is recommended or the project is cancelled. If the affected parties still have objections to the decision of the project location by the provincial governor, they can file a lawsuit with the local State Administrative Court and the objecting parties to the decision of the State Administrative Court may file a petition for cessation with the Supreme Court of the Republic of Indonesia.

ii) Implementation of land acquisition activities by the National Land Agency (BPN)

The BPN organizes a Land Acquisition Implementation Team (LAIT) and the LAIT prepares a work plan, inventory and identification of affected peoples and assets. The LAIT announces the results of their investigation to the affected parties, receives their opinions and objections to the results, and then inventory and identification are reviewed once more. Meanwhile, the BPN procures appraisers and the

appraisers assess the compensation values with the results of the inventory and identification. Based on the results of the assessments, consultations are conducted with the affected parties and they are compensated as agreed. The compensations are done with waivers of land titles for the affected parties. Following compensation, the lands are transferred to the project implementation agency and the lands are registered so that construction may begin. The BPN conducts monitoring and evaluation through the implementation of land acquisition activities.

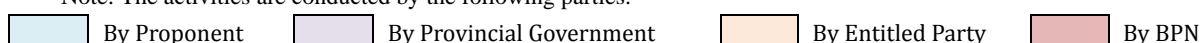
During these procedures, the affected parties may file an objection to the terms of compensation (amount of compensation) with a district court. If the objecting parties disagree with the decision of the district court, they may file a petition with the Supreme Court of the Republic of Indonesia and appeal a final decision.

Table A.1.4.18 Land Acquisition Procedures Step-I: Determination of Project Location by Provincial Government

No.	Implementation Steps	Activities
1.	Preparation of Land Acquisition Plan	An agency requiring land prepares Land Acquisition Plan (LAP) and submit it to Provincial Government. The LAP is based on Spatial Plans (National, Provincial and/or Regency/City levels) and development priority as stated in the medium-term development plan, strategic plan, and work plans of relevant agencies.
2.	Formulation of Land Acquisition Preparation Team	Provincial Government formulates Land Acquisition Preparation Team (LAPT) within 10 working days.
3.	Public Announcement of the Development Plan	The LAPT gives public notice of the development plan within 20 working days from official receipt of the LAP.
4.	Initial Inventory Works	The LAPT conducts an initial inventory work including preliminary data collection within 30 days from the public announcement, and makes a provisional list signed by the Chairman of the LAPT.
5.	Public Consultation	The LAPT conducts public consultation to use the results of the initial data collection within 60 working days from the signing date of the provisional list.
6.	Objection Re-Public Consultation Agreement	Agreements on location of the development plan in the Public Consultation are recorded in the Minutes of Agreement. If there are objections to the project location, the LAPT conducts further public consultations within 30 working days from the date of the Public Consultation.
7.	Report to the Governor	If there are still objections, the agency requiring land reports to the Governor through the LAPT.
8.	Review Team Formulation Recommendations	The Governor forms a Review Team (RT) to study the objections. The RT makes recommendations within 14 working days from the receipt date of the objections.
9.	Decision by the Governor Cancel or Change the Project Location Acceptance of the Project Location	The Governor issues a letter accepting the location (rejecting objection), to cancel the development plan or to remove the location of construction.
10.	Objection Announcement of Determination of the Project Location	The Governor, together with the agency requiring land, announce the location confirmation for development in the Public Interest. (They decide locations for the announcement within 7 working days and announce it within 14 working days.)
11.	Request of the Land Acquisition to Regional BPN	An Agency requiring land requests the Land Acquisition implementation to Regional BPN (as the Land Administrator).

12.		<p>Entitled Party can file a lawsuit with the local State Administrative Court within 30 working days of the issue of the location confirmation.</p> <p>The State Administrative Court holds whether to accept or reject the lawsuit within 30 working days of the receipt of the lawsuit.</p>
13.		<p>The party objecting to the decision of the State Administrative Court may file a petition for cassation with the Supreme Court of the Republic of Indonesia within 14 working days.</p> <p>The Supreme Court issues a decision within 30 working days from the receipt of the petition for cessation.</p>

Note: The activities are conducted by the following parties.

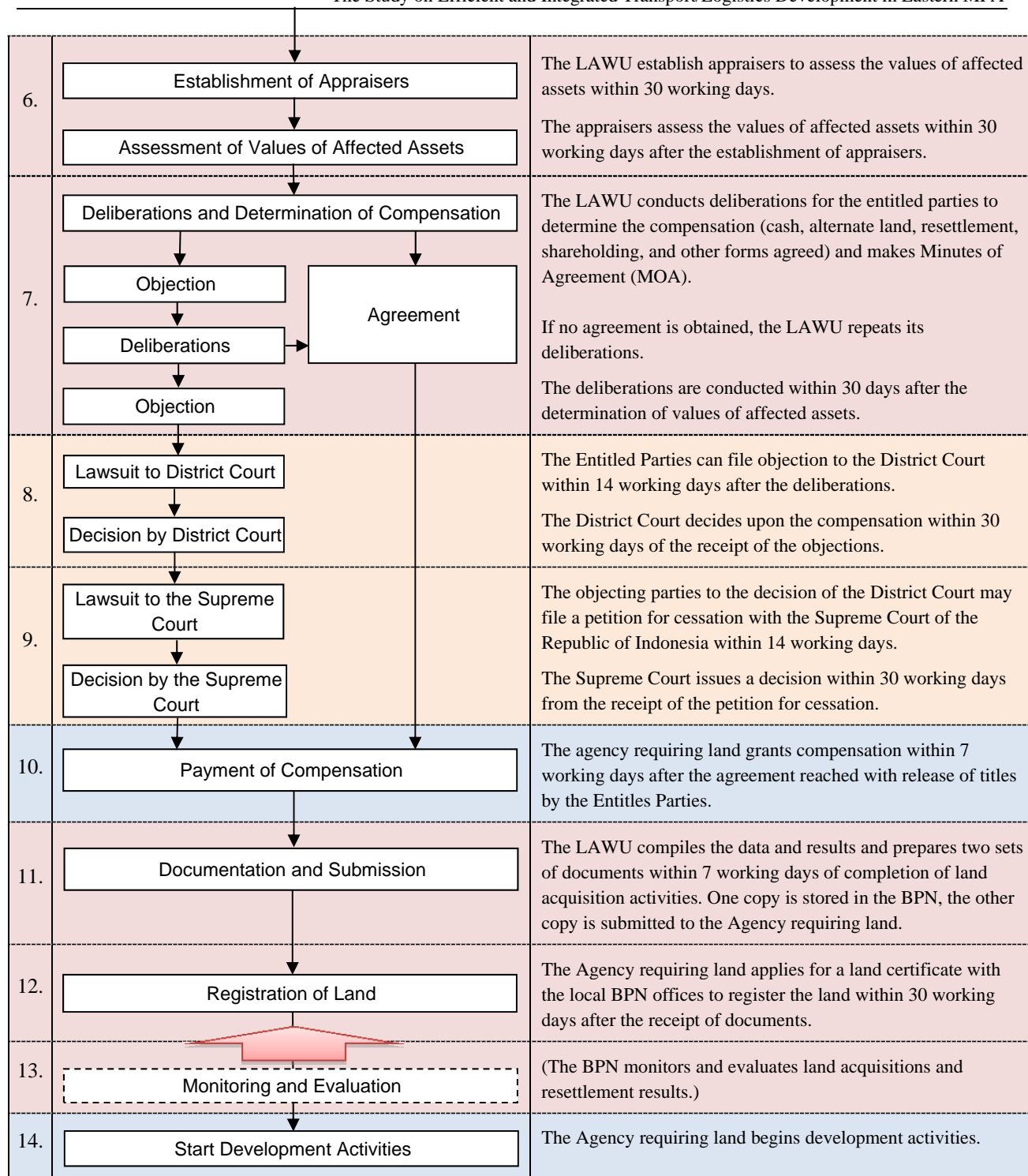


Source: Law No.2/2012 on Land Acquisition for Development in Public Interest, Presidential Regulation No.71/2012 on Land Procurement for Implementation of Public Interest, Decree of Head of National Land Agency No.5/2012 on Technical Guideline of Land Acquisition

Table A.1.4.19 Land Acquisition Procedures Step-II: Implementation of Land Acquisition and Resettlement by BPN

No.	Implementation Steps	Activities
1.		<p>Regional BPN office establishes Land Acquisition Work Unit (LAWU) to manage the land acquisition and resettlement activities.</p> <p>The LAWU prepares the Work Plan of land acquisition and resettlement implementation.</p> <p>The LAWU establishes two task forces, Task Force A and B (TF) to carry out inventory and identification works.</p>
2.		<p>The TFs carry out inventory and identification works within 30 working days.</p> <p>The TF-A is in charge of inventory and identification of lands (physical conditions, ownership, land uses) through measurement and mapping.</p> <p>The TF-B is in charge of inventory and identification of PAPs including affected assets and socio-economic conditions.</p>
3.		<p>The TF-A and B submit LAWU the results of inventory and identification works.</p> <p>The LAWU announces the results of inventory and identification works at villages and district offices within 14 working days.</p>
4.		<p>The entitled Parties can object to the results of inventory and identification works within 14 working days from the announcement.</p>
5.		<p>The LAWU verify the objections and reviews the results within 14 working days from the receipt date of the objections.</p>

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Note: The activities are conducted by the following parties.

By Proponent
 By Provincial Government
 By Entitled Party
 By BPN

Source: Law No.2/2012 on Land Acquisition for Development in Public Interest, Presidential Regulation No.71/2012 on Land Procurement for Implementation of Public Interest, Decree of Head of National Land Agency No.5/2012 on Technical Guideline of Land Acquisition

3) Gaps between JICA Guidelines and Legislation of Indonesia

As shown in Table A.1.4.20, the laws of Indonesia (in particular, Law No.2/2012, Presidential Regulation No.71/2012 and Decree of Head of National Land Agency No.5/2012) are intended to regulate land acquisition and stipulate compensation procedures for land, and buildings, so-called lost assets. In that sense, the detailed rules for resettlements safeguarded by JICA guidelines and the World Bank are not observed, as they lack support related to the maintenance and restoration of living standards and livelihoods of inhabitants before and after resettlement.

There are gaps within the JICA guidelines and World Bank safeguards in this regard. However, with respect to land acquisition and resettlement, if the Indonesian Government receives supports for projects from international organizations, they are carried out based on the policy of each institution. Efforts to compensate for the discrepancy are made by preparing land acquisition and resettlement plan (LARAP).

As for the assessment of compensational values by local government, the land price appraisal team is comprised of members from agencies involved in pricing and taxing of land, buildings and crops. It is this team that calculates the amount of compensation to be paid. However, under the new legislation, appraisers approved by the Ministry of Finance assess the amount of compensation values.

Regarding assessment measures, Decree of Head of National Land Agency No.3/2007 stipulates that the land price appraisal conducted is based on Taxed-Object Selling Value (NJOP) and real value with regard to the NJOP price of the current year. Buildings, trees and others objects related to land, are assessed with reference to the base price in legislations stipulated by each local government. However, the new Decree of Head of National Land Agency No.5/2012 does not specify the assessment measures. The decree stipulates that the appraiser assess the amount of compensation. (In this regard, the National Land Agency does not respond to concrete assessment measures similarly.)

In fact, it is assumed that procedures may not change significantly since the amount of compensation is the result of consultation with affected persons on the basis of the assessment, against which they may file objections even with the change in laws. Therefore, the compensation by replacement cost, a gap between the JICA guidelines and World Bank safeguards, is considered and studied in LARAP as it was before.

Table A.1.4.20 Gaps between JICA Guidelines and Legislation of Indonesia on Land Acquisition and Resettlement

No.	JICA Guidelines/World Bank	Laws of Indonesia	Gaps between JICA Guidelines/World Bank and Laws of Indonesia
1	Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives. (JICA GL)	None	No legislation was identified.
2	When population displacement is unavoidable, effective measures to minimize impact and to compensate for losses should be taken. (JICA GL)	Land Acquisition Law No.2/2012 (Article 9)	Article 9 of the Land Acquisition Law stipulates that Acquisition of Land in the Public Interest shall be performed by giving reasonable and fair Compensation. However, it does not state effective measures to minimize impact.
3	People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels. (JICA GL)	None	No legislation was identified to stipulate that affected people are compensated so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels. Article 9 of the Land Acquisition Law just stipulates "reasonable and fair Compensation".
4	Compensation must be based on the full replacement cost as much as possible. (JICA GL)	None	No legislations was identified to stipulate that compensation must be based on the full replacement cost as much as possible. Decree of Head of National Land Agency No.3/2007 (Article 28/29) stipulates that land values are assessed with Tax Object Sale Value (NJOP) or market values, and buildings, plants, other objects associated with land are assessed with standard prices promulgated by local governments. However, Decree of Head of National Land Agency No.5/2012 does not stipulate the same.
5	Compensation and other kinds of assistance must be provided prior to displacement. (JICA GL)	None	No legislations was identified to stipulate that compensation and other kinds of assistance must be provided prior to displacement.
6	For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public. (JICA GL)	Land Acquisition Law No.2/2012 (Article 14/15) Presidential Regulation No.71/2012 (Article 3-7)	The articles in the left column stipulates that an agency requiring land prepares a land acquisition plan referring to spatial plans and submits it to a provincial government. However, no criteria of resettlement scale are mentioned. Land Acquisition Law No.2/2012 (Article 16/17) and Presidential Regulation No.71/2012 (Article 10-15) stipulate that a development plan is made public notice and public consultations are conducted. However, it is not set forth that the land acquisition plan is opened.
7	In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance. (JICA GL)	None	No legislation was identified to stipulate how to prepare the land acquisition plan although preparation of the land acquisition plan and its submission are stipulated as mentioned above.

No.	JICA Guidelines/World Bank	Laws of Indonesia	Gaps between JICA Guidelines/World Bank and Laws of Indonesia
8	When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people. (JICA GL)	None	Same as above
9	Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans. (JICA GL)	None	Same as above
10	Appropriate and accessible grievance mechanisms must be established for the affected people and their communities. (JICA GL)	Law No.32/2009 Environmental Protection and Management (Article 65)	Article 65 of the Environmental Protection and Management Law stipulates that Every person has the rights to propose and / or objections to business plan and / or activities that may impact on the environment.
		Land Acquisition Law No.2/2012 (Article 20/21) Presidential Regulation No.71/2012 (Article 34/61) Decree of Head of National Land Agency No.5/2012 (Article 18)	The articles in the left column stipulates that the entitled parties can object to project locations and results of inventory /identification works. Responsible land acquisition team and/or provincial governor address the objections.
		Law No.2/2012 (Article 23/38)	Article 23 and 38 of the Land Acquisition Law stipulates that the entitled parties can file their objections with courts.
11	Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socioeconomic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers of others who wish to take advance of such benefits. (WB OP4.12 Para.6)	Land Acquisition Law No.2/2012 (Article 18-20) Presidential Regulation No.71/2012 (Article 27-33)	The article in the left column stipulates that preliminary data collection and registration of affected parties and assets, and public consultations are conducted to explain its results after provincial government opened the project plan. However, this is not at the project identification stage.
12	Eligibility of benefits includes, the PAPs who have formal legal rights to land (including customary and traditional land rights recognized under law), the PAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal right to the land they are occupying. (WB OP4.12 Para.15)	Presidential Regulation No.71/2012 (Article 17-26)	The articles in the left column stipulates that persona who own land conventionally in community based on customary law are entitled for compensation. Also for public land users and indigenous people, those who do not have certificates can be proved ownerships and compensated with written statement which was made by at least two witnesses of local residents out of two degrees of kinship.
13	Preference should be given to land-based resettlement strategies for displaced	None	No law was identified on preference to land-based resettlement strategies for displaced

No.	JICA Guidelines/World Bank	Laws of Indonesia	Gaps between JICA Guidelines/World Bank and Laws of Indonesia
	persons whose livelihoods are land-based. (WB OP4.12 Para.11)		persons.
14	Provide support for the transition period (between displacement and livelihood restoration). (WB OP4.12 Para.6)	None	No legislation was identified on the provision of support for the transition period.
15	Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc. (WB OP4.12 Para.8)	Land Acquisition Law No.2/2012 (Article 40) Presidential Regulation No.71/2012 (Article 17)	The article in the left column stipulates that indigenous people are eligible for compensation. However, no legislation was identified with particular attention to other vulnerable groups.
16	For projects that entail land acquisition or involuntary resettlement of fewer than 200 people, an abbreviated resettlement plan is to be prepared. (WB OP4.12 Para.25)	None	No legislation was identified on the criteria of abbreviated resettlement plan.

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

(3) Measures of Compensation and Supports

1) Compensation

In Article 23, Decree of Head of National Land Agency No.5/2012 stipulates that land, objects on land and underground, buildings, trees, objects related to land and other assessable objects are to be compensated. No legislation to specify assessment measures were found, however, the decree describes appraisers licensed by the Ministry of Finance to assess amounts of compensation with values set at the time the project position is announced.

There are five forms of compensation: cash, replacement land, resettlement, stock ownership, and/or other forms agreed by both parties. With respect to the stock ownership, Article 80 of the Presidential Regulation No.71/2012 describes that state-owned enterprises with special assignments from the Government shall provide stock based on mutual agreement between entitled parties.

2) Rehabilitation measures of livelihoods

No legislation defines rehabilitation measures of livelihood, however, livelihood recovery programs have been adopted in LARAP projects supported by international organizations. A LARAP framework of JICA Preparatory Survey for Metropolitan Arterial Road Improvement Project proposes applying livelihood recovery programs for resettlement assistance, livelihood recovery support with further support for vulnerable groups as a means to compensate for the gaps in Indonesian law. Though a more detailed eligibility will be determined through consultation with the affected people when the LARAP is updated, the expected programs are as follows:

- Skills acquisition training for job placement
- Micro-finance for small-scale business

- Assistance on land lease agreement for landless Aps who will start small business
- Others

3) Resettlement site

Provision of resettlement site is one of compensation conditions and its location is determined through consultation with affected peoples. The value of the resettlement site is equivalent to the amount in the case of cash compensation. The project implementation agency prepares the resettlement sites within a year after it is agreed as the compensation conditions. However, it is understood that a waiver of rights for affected people can be submitted after the location of the resettlement site is agreed upon and it can even be done even without waiting for the completion of the resettlement sites. Thus, it is of questionable effectiveness as a compensation condition.

In the case of replacement land, the project implementing agency also provides land within six months after the agreed compensation conditions have been met. It is also understood that waiving the rights of affected people may be done even after the location of the replacement land is agreed upon and can be even done without waiting for the provision of replacement land.

4) Eligibility

Land Acquisition Law No.2/2012 and Presidential Regulation No.71/2012 stipulate the entitled parties for compensation as follows.

- Landholders: individuals with land ownership rights or bodies established pursuant to provisions of laws and regulations
- Land concessionaires: authorities that manage land delegate pursuant to provisions of laws and regulations
- Waqf (endowed land) organizers: mainly religious groups
- Indigenous people
- Ex-customary land owners
- Parties in possession of the state-owned land in good faith: individuals, legal entities, charities, religious groups or government agencies which control, use and maintain state lands in a particular time and/or obtain the lands without violation of legislations, and are proved by evidences
- Land tenure holders: parties which have means of proof issued by competent authority (e.g. holders of deed of sale and purchase of untitled land, uncertified customary titles/rights, and dwelling permits)
- Owners of buildings, plants or other objects related to land: individuals, legal entities, charities, religious groups or government agencies which have means of proof issued by a competent authority (in the case of buildings, they are proved by evidence of bill or payment of electricity, telephone or water company last month)

(4) Grievance Redress Mechanism

A concrete grievance redress mechanism of project implementation has not yet been studied. The procedure under the legislation is described in this subsection. According to three legislations on the land

acquisition mentioned in “Procedure of Land Acquisition Works”, the entitled parties may raise complaints against the project plan (location) and the results of inventory/identification works to respective Land Acquisition Team and/or the courts.

1) Phase to decide the project plan (location)

As Table A.1.4.18 explains (serial No. 6 to 10, 12 and 13), the entitled parties may file objections to the project plan (location) to the Provincial Land Acquisition Preparation Team, which the team addresses through public consultation. Nevertheless, if they have still objections, an agency requiring land reports it to the provincial governor. The governor establishes the review team and the team makes recommendations after they study the objections. Eventually, the provincial governor makes the decision. If there are still objections, the entitled parties can file a lawsuit to the State Court and the Supreme Court.

i) Complains to Province

- Against the project plan (location): to the Provincial Land Acquisition Preparation Team, to the Provincial Governor (the Review Team)

ii) Lawsuit to the Courts

- Against the decision of project plan (location) by the Provincial Governor: to the State Court, to the Supreme Court

2) Phase to implement land acquisition and resettlement

As Table A.1.4.19 explains (serial No. 4, 5, 7, 8 and 9), the entitled parties can file the objections for the results of inventory/identification works to a respective regional BPN Land Acquisition Work Unit, and the unit addresses this through verification and revision of the results. In the same way, they can protest against the determined compensation terms. The regional BPN Land Acquisition Work Unit makes efforts to reach consents by repeating deliberations. If there are still objections to the compensation terms, the entitled parties can file a lawsuit to the State Court and the Supreme Court.

i) Complains to Regional BPN

- Against the results of inventory/identification works: to the Regional BPN Land Acquisition Work Unit including task forces

ii) Lawsuit to the Courts

- Against the decision of compensation terms: to the State Court, to the Supreme Court

(5) Institutional Framework

Based on the request of the land acquisition of the project implementation agency, a head of BPN provincial office decides which BPN provincial office or regency/city office leads implementation of land acquisition activities. If the target land of land acquisition is located over plural regencies and/or cities, the BPN provincial office leads the land acquisition activities. The BPN regency/city office leads the land acquisition activities, if the targeted land of the land acquisition is located within their limits.

A head of BPN provincial office forms a Land Acquisition Work Unit (LAWU) at a provincial or regency/city level. A Chief Executive of LAWU is appointed at the provincial level while a head of BPN regency/city office as a Chief Executive of LAWU is also appointed at a regency/city level . The LAWU arranges the following preparations before they implement land acquisition activities since the early stage of the establishment:

- The LAWU prepares a land acquisition action plan.
- The Chief Executive of LAWU organizes a Task Force A for land measurement, drawing and mapping.
- The Chief Executive of LAWU organizes a Task Force B for identification of affected people and socio-economic conditions, ownerships, affected assets and land use.
- The Chief Executive of LAWU procures Appraisers to assess the amount of compensation.

1) Land Acquisition Work Unit (LAWU)

In the province or regency/city level, the LAWU consists of the members shown in Table A.1.4.21 and A.1.4.22, which is led by the head of the BPN regional office. Further, a maximum of four secretaries can be designated by the chief executive to support office works of the team.

Table A.1.4.21 Land Acquisition Work Unit of Province Level

Administration Level	Person in charge	Status
BPN provincial office	a. Head of BPN provincial office	Chief executive
	b. Head of Land Right and Land Registration Section	Member
	h. Head of Government Land Arrangement Section or Administrative Officer	Secretary/Member
BPN Regency/City office	c. Head of BPN Regency/City office	Member
Provincial Government	d. Head of Section for Land Affairs or Administrative Officer at equal level	Member
Regency/City Government	e. Head of Section for Land Affairs or Administrative Officer at equal level	Member
District	f. Head of District or another local person	Member
Village	g. Head of Village or another local person	Member

Source: Decree of Head of National Land Agency No.5/2012 on Technical Guideline of Land Acquisition

Table A.1.4.22 Land Acquisition Work Unit of Regency/City Level

Administration Level	Person in charge	Status
BPN Regency/City office	a. Head of BPN Regency/City office	Chief executive
	b. Head of Land Right and Land Registration Section or Administrative Officer at equal level	Member
	f. Head of Government Land Arrangement Section or Administrative Officer	Secretary/Member
Regency/City Government	c. Head of Section for Land Affairs or Administrative Officer at equal level	Member
District	d. Head of District or other local person	Member
Village	e. Head of Village or other local person	Member

Source: Decree of Head of National Land Agency No.5/2012 on Technical Guideline of Land Acquisition

2) Task Force A

The Task Force A consists of one representative and at least two members from the BPN staff members. Furthermore, the team can use licensed land surveyors. The team's main tasks are surveying of the land and bordering areas, and drawing/mapping of each parcel of land.

3) Task Force B

The Task Force B consists of one representative and at least two members from the BPN staff members. Furthermore, the team can procure technical persons from relevant agencies if necessary. The team's main tasks are identification, data collection, registrations and preparation of inventory for affected people (name, occupation, address, and identification number), affected assets (land, buildings, plants, objects related to land), those conditions (ownerships of assets, certificates, locations and sizes), land use, and objects on the ground and underground.

4) Appraiser

The LAWU procures the appraisers licensed by the Ministry of Finance in public to assess the amount of compensation. If the appraisers are not decided within 30 days, the Chief Executive nominates them. The appraisers assess land, objects on ground and underground, buildings, trees, objects related to land and other assessable objects based on the results of Task Force A and B with the value at the time of announcement of the project location. They compile the assessment results in the prescribed documents, and submit to the Chief Executive of LAWU.

(6) Implementation Schedule

i) Phase to decide the project plan (location)

The required number of days of the procedures is shown in Table A.1.4.18. From submission of the LAP to provincial government to when the provincial governor determines the project location, a 6 month minimum is expected. If there are objections and/or a lawsuits this process may take up to 12.5 months.

ii) Phase to implement land acquisition and resettlement

In the same way, the required number of days for the procedures shown in Table A.1.4.19, from project implementation agency requests for land acquisition to when the implementation agency starts construction will require less than 8 months at a minimum, with 13.5 months expected should objections or lawsuits arise.

Total time period from submission of the LAP to provincial government to the start of construction will require less than 14 months, minimum; 26 months maximum .

(All mentioned above are calculated using 22 working days in a month.)

(7) Cost and Finance

In the legislation, the budgets for the land acquisition implementation is to be financed by local government budgets and/or the national budget. The BPN requests the project implementation agency cover the costs for the land acquisition procedures and compensation. The project implementation agency ensures the costs in their annual budget. These costs also include public consultations, administrative and management, monitoring and evaluation.

(8) Monitoring System

In Law No.2/2012 on Land Acquisition for Development in Public Interest, it is stipulated that the Indonesian government monitors and evaluates the land acquisition activities through planning, preparation, implementation and result delivery. The BPN monitors and evaluates the land acquisition implementation results which are delivered to the project implementation agency. Similarly, Presidential Regulation No.71/2012 on Land Procurement for Implementation of Public Interest and Decree of Head of National Land Agency No.5/2012 on Technical Guideline of Land Acquisition stipulate that the BPN monitors and evaluates the land acquisition implementation results.

However, it is not specified which institutions of Indonesian government monitor and evaluate the land acquisition activities within these laws. Furthermore, it may be understood that the BPN intends to evaluate land acquisition implementation results but not to monitor those activities. Requests for a more concrete and detailed monitoring system were not met by the BPN. The BPN answered that the central office and competent regional offices will be conducting all the monitoring and evaluations.

BACKGROUND INFORMATION 2

BACKGROUND INFORMATION 2

CURRENT STATUS OF RELATED PROJECTS AND STUDY IN THE EASTERN MPA

A.2.1 Current Status of Related Projects and Study

A.2.1.1 Current Status of Related Projects and Study

The current status of Flagship Projects, Fast Track Projects, and Second Priority Projects of MPA, which are to be implemented in Bekasi City, Bekasi Regency, Karawang Regency, Subang Regency, and Purwakarta Regency, are described as follows.

(1) Development of a New International Port (Cilamaya New Port Development) and the Construction of an Access Road

Project Description		
<u>Port</u>		
This project is to develop a new international port off Cilamaya Coast in West Java Province. The new international port is planned to develop offshore reclamation land located in Cilamaya.		
Handling capacity	: 7,500,000 TEU	Berth length : 4,320 m (16 berths)
Depth	: -12.5~-17m	Terminal area : 268 ha
Port Backup area	: 208 ha	
Dredging works of the access channel and basin	: about 47.6 million m ³	
Breakwater/seawall construction:	about 4.7 km long	
Access Bridge from the coastline to the offshore terminal	: 800m length with 4 lanes	
<u>Access Road</u>		
New access road will connect the existing Jakarta-Cikampek Toll Road and the New Cilamaya Seaport.		
Funding Scheme and Cost (Billion IDR)	PPP	
		<u>Port</u> <u>Access Road</u>
	Private:	6,500 5,800
	Public (GOI):	1,700 100
	Public (Foreign):	6,700 --
Total:	14,900 5,900	
Progress Indicator		
Supplemental F/S is ongoing		

(2) Smart Community (including a Pilot Project for the Smart Grid)

Project Description	
This project aims at the spread of technologies of clean energy, called the “Smart Community”. Main targets are: stabilization of the whole industrial estate power system independent of individual factories; reduction of CO ₂ by energy conservation; and peak shift by energy management system.	
Funding Scheme and Cost (Billion IDR)	Private
	Private: 300
Progress Indicator	
MOU was already signed in accordance with the project implementation between the Ministry of Energy and Mineral Resources and NEDO	

(3) Jakarta Mass Rapid Transit (MRT): N-S I, N-S II, E-W

Project Description	
The project is to introduce a rail-based mass rapid transit (MRT) system in Jakarta. The first priority was given to the Jakarta MRT North-South Line and the second priority is the East-West Line. The North-South Line is divided into two sections, Phase I (Lebak-Bulus) and Phase II (Bundaran HI-Kampung Bandan).	
<p>(1) N-S Line Phase I (Lebak Bulus – Bundaran HI)</p> <ul style="list-style-type: none"> • Length: 15.7 km • Stations: 6 underground and 7 elevated • Depot: at Lebak Bulus • Project Cost: Approximately JPY 157 billion • Commencement of service (expected): 2016 <p>(2) N-S Line Phase II (Bundaran HI – Kampung Bandan)</p> <ul style="list-style-type: none"> • Length: 7.8 km • Stations: 7 underground and 1 at grade • Depot: at Kampung Bandan • Commencement of service (expected): 2018 <p>(3) E - W Line</p> <p>Candidate Routes:</p> <ol style="list-style-type: none"> 1) Alternative 1A: Balaraja – Karawaci – Kalideres – Kembangan – Sawah Besar – Pulo Gebang 2) Alternative 1B: Balaraja – Karawaci – Kalideres – Kembangan – Thamrin – Senen – Ujung Menteng – Cikarang 3) Alternative 2: Balaraja – Karawaci – Panunggangan Utara – Karang Tengah – Tanah Abang – Thamrin – Senen – Ujung Menteng – Cikarang 4) Alternative 4: Balaraja – Karawaci – Panunggangan Utara – Kebayoran – Sisingamangaraja – Iskandar Dinata – Kali Malang – Bekasi 	
Funding Scheme and Cost (Billion IDR)	Public
	Private: --
	Public (GOI): 5,000
	Public (Foreign): 28,300
Progress Indicator	
E-W Line : In preparation of formal finance request for a Yen Loan from GOI to GOJ	

(4) JABODETABEK Railways Capacity Enhancement Project (Phase I) and Further Improvement (Phase II)

Project Description	
The project is to improve the present commuter railway system in JABODETABEK. Procurement of rolling stock and improvement of railway facilities to remove bottlenecks regarding the railway operation for the short-term plan of capacity enhancement will occur in Phase I. Further improvement would be implemented as Phase II	
Funding Scheme and Cost (Billion IDR)	Public
	Private: --
	Public (GOI): 1,400
	Public (Foreign): 6,900
Progress Indicator	
Phase I : In preparation of formal finance request for a Yen Loan from GOI to GOJ	

(5) DKI Jakarta – Bekasi – Karawang Water Supply (Jatiluhur)

Project Description	
Rehabilitation/expansion of the facilities of the municipal water supply corporations (PDAMs) that aims to increase water supply capacity for the regions of DKI Jakarta – Bekasi – Karawang. The water treatment plant will be constructed downstream of Jatiluhur Dam and the treated bulk water will be supplied by a bulk water supplier (SPC) to the receiving points of PDAMs. This will be coursed through a pipeline installed along the West Tarum Canal or Jakarta-Cikampek Toll Road. The public sector will bear the cost for land acquisition.	
Project Features (First Phase)	
Planned water supply discharge:	5,000 l/s (Total)
to Karawang	500 l/s
to Bekasi	500 l/s
to DKI Jakarta	4,000 l/s
Water Treatment Plant:	5,000 l/s
Transmission Pipeline :	Diameter 1,800 mm x 58 km long
Funding Scheme and Cost (Billion IDR)	PPP
	Private: 4,400
	Public: 0
Progress Indicator	
Funding scheme is under consideration	

(6) Development of New Academic Research Cluster (NARC)

Project Description	
<p>NARC is developed to promote the "Cluster Development in Support of Six Economic Corridors Development" by "innovation cluster strengthening as the center of excellence".</p> <p>A cluster will bring people together to enhance learning, advance research, and promote collaboration to take Indonesia to a new academic level. Engineering students, medical students, and other undergraduate students will work alongside engineering faculty, clinicians and researchers from across the campus and around the world. An exhibition center will be established as an annex. The candidate sites are Serpong, Bekasi, and Bogor.</p> <p>The project has three components:</p> <ol style="list-style-type: none"> (1) Integrated Support Center (Phase 1): the core intelligent facility that links existing academic institutions and laboratories with current and future business activities. (2) Business Incubation Centers (Phase 1): These facilities are dedicated to fostering an optimum environment for potential business activities to be actively conducted with support from functions of the Integrated Support Center. (3) Research Center (Phase 2): Equipped with smart grid and zero-emissions technology (water, sewage and hazardous waste disposal infrastructure, etc.) and situated on the outskirts of the greenbelt zone. 	
Funding Scheme and Cost (Billion IDR)	PPP
	Private: 1,800
	Public (GOI): 1,000
	Total: 2,800
Progress Indicator	
PPP F/S is ongoing	

(7) Development of Jakarta Outer Outer Ring Road

Project Description	
<p>Jakarta Outer-Outer Ring Road is a planned toll road running on the outskirts of DKI Jakarta to provide a detour when existing roads are congested and to contribute to sub-center development in BODETABEK.</p> <p>The development of the circumferential road makes the toll road network robust and reliable.</p> <ol style="list-style-type: none"> 1) Cikarang (Cibitung) - Tj.Priok (Cilincing) 2) Cimanggis - Cibitung 3) Cinere - Cimanggis 4) Serpong - Cinere 5) Kunciran - Serpong 6) Cengkareng - Kunciran 	
Funding Scheme and Cost (Billion IDR)	PPP
	Private: 19,900
	Public (GOI): 5,500
	Public (Foreign): --
Progress Indicator	
In the stage of land acquisition	

(8) Rehabilitation of Water Supply Facilities in DKI Jakarta, Bekasi, and Karawang with the integration of DKI Jakarta – Bekasi – Karawang Water Supply (Jatiluhur)

Project Description	
<p>Rehabilitation/expansion of the facilities of the municipal water supply corporations (PDAMs) will be executed with the aim to increase water supply capacity to distribute the additional water purchased from the “DKI Jakarta – Bekasi – Karawang Water Supply (Jatiluhur)”.</p> <p>The capacity of the facilities shall be in accordance with the planned additional bulk water received from Jatiluhur Project (Phase 1).</p> <p>Received bulk water: DKI Jakarta: 4,000 l/s Kota Bekasi: 250 l/s Kabupaten Bekasi (Kec. Tambun Selatan and Tambun Utara): 250 l/s Kabupaten Karawang (Kec. Karawang Timur, Karawang Barat, Telukjambe Timur, Telukjambe Barat, and Ciampel): 500 l/s</p>	
Funding Scheme and Cost (Billion IDR)	PPP
	Public: 0
	Private: 1.000
Progress Indicator	
The project is only a development concept.	

(9) Development of Water Supply Systems for Large-Scale Infrastructure Development

Project Description	
<p>Large-scale infrastructure development, such as a new airport, a new industrial estate, or a new international port, requires additional water supply systems to ensure the sustainable operation of the infrastructure.</p> <p>This project is the second phase of the Jatiluhur Project including additional pipelines, water treatment plant, and other water supply facilities.</p> <p>Project feature includes: Planned water supply : 5,000 l/s of which, input to Karawang 500 l/s (200 l/s for new port at Cilamaya) (200 l/s for new airport) (100 l/s for newly developed area) to Bekasi 500 l/s to DKI Jakarta 4,000 l/s</p> <p>Outline of the Facility: Water Treatment Plant: 5,000 l/s Transmission Pipeline : Diameter 1,800 mm x 58 km long Diameter 450 mm x 50 km long (to new port) Diameter 450 mm x 20 km long (to new airport)</p>	
Funding Scheme and Cost (Billion IDR)	PPP
	Private: 4,300
	Public: 0
Progress Indicator	
The project is only a development concept.	

(10) Development of New Township

Project Description	
<p>The New Township will be designed as a model for a better urban environment, low carbon energy consumption and amenities with relaxation and entertainment. Candidate sites are in the Karawang area.</p> <p>(1) Features of the New Township</p> <ol style="list-style-type: none"> 1) Environmental considerations (natural environment protection, wastewater treatment and solid waste management); 2) Disaster resilience with the application of state-of-the-art disaster-prevention technologies; 3) Backup functions of administrative services for crisis management by the national government in the event of natural disasters; 4) Utilization of renewable energy and smart technology; 5) Traffic hubs using new information and communication management technology, ICT; and 6) Government involvement in the township development. <p>(2) Project Components and Development Areas</p> <ol style="list-style-type: none"> a) Project Components <ul style="list-style-type: none"> • Residential, Commercial, and Business areas; • Administration, Education area; and, • Road/Park/Green areas. b) Development areas <ul style="list-style-type: none"> 100 ha (Phase 1: by 2020) 2,400 ha (Phase 2: from 2021 to 2030) 2,500 ha (Total : from 2011 to 2030) 	
Funding Scheme and Cost (Billion IDR)	PPP
	Private: 5,000
	Public (GOI): 400
	Public (Foreign): 200
Progress Indicator	
Pre F / S was completed	

(11) Development of New Industrial Estate in the Vicinity of the New Airport

Project Description	
<p>The new industrial estate will promote the establishment of high-tech, high-value, and export-oriented industry with advanced logistic management systems in the Karawang area.</p> <p>Project Features:</p> <ul style="list-style-type: none"> · Project Site: Kab. Karawang, West Java Province (near the new airport) · Development Area: 750 ha (Overall: Phases 1 and 2) 375 ha (Phase 1 until 2020) 375 ha (Phase 2 after 2021) · Infrastructure: Roads, electricity and water supply, wastewater treatment, solid waste management facilities, etc. · Type of Industry: High-value-added industry including automobile, electronics, ICT, pharmaceutical, food, fashion, etc., to be prioritized 	
Funding Scheme and Cost (Billion IDR)	PPP
	Private: 1,600
	Public (GOI): 100
Progress Indicator	
The project is only a development concept.	

(12) Construction of Second Jakarta-Cikampek Toll Road

Project Description	
To expand the capacity of Jakarta-Cikampek Toll Road, a second line will be developed in parallel with the existing line.	
Funding Scheme and Cost (Billion IDR)	PPP
	Private: 4,800
	Public (GOI): --
	Public (Foreign): --
Progress Indicator	
Pre F / S was completed	

(13) Construction of Freight Railway to New Cilamaya Seaport

Project Description	
A new freight railway will connect the existing railway line in Karawang and extend to the New Cilamaya Seaport.	
<ul style="list-style-type: none"> (1) Construction of single track between Cilimaya Terminal and Cikarang Dry Port (2) Construction of Stabling Track in Cikarang (3) Construction of Container Terminal at Cilamaya New Terminal (4) Procurement of Rolling Stock (5) Operation Plan 	
Funding Scheme and Cost (Billion IDR)	Public (SOE)
	Private: 1,700
	Public (GOI): 1,700
	Public (Foreign): --
Progress Indicator	
Details are being elaborated in this study	

(14) Construction of Jakarta - Bandung High Speed Railway via the New International Airport

Project Description	
<p>Development of a high-speed railway between Jakarta and Bandung that will connect with the new international airport. The section between Jakarta and Bandung is the first priority of the development. It can be extended to Cirebon via Kertajati.</p> <p>The section between Jakarta and NIA will be constructed as Stage I, and the section from NIA to Bandung will be constructed as Stage II.</p> <ul style="list-style-type: none"> • Station: Dukuh Atas (Sudirman), Manggarai, Bekasi, NIA, and Bandung • Operational Speed: Maximum commercial speed of 300 km/h • Route Length: 140 km (Stage I: 65 km, and Stage II: 75 km) • Travel Time: Jakarta to NIA: 20 min (Stage I), NIA to Bandung : 20 min (Stage II) • Gauge: 1,435 mm • Power: AC 25 kV 50 Hz • Maximum Gradient: 25 per mm • Rolling Stock: Electrical Multiple Unit (EMU), 8 cars (opening stage), 12 cars (future) <p>Signal: Cab Signal, Automatic Block, Digital Automatic Train Control (ATC)</p>	
Funding Scheme and Cost (Billion IDR)	PPP
	Private: 5,000
	Public (GOD): 17,400
	Public (Foreign): 17,400
Progress Indicator	
In preparation for starting F / S	

(15) Development of a New Car Terminal at Cilamaya Port

Project Description	
<p>A new car terminal will be developed in Cilamaya Port to expand the capacity for export/import of finished automobiles. The development project of a new car terminal with a handling capacity of at least 500,000 units consists of the following components:</p> <ol style="list-style-type: none"> (1) Provision of a berthing facility with at least 500 m berth length for Pure Car Carrier (PCC) operations of 22,000 DWT. The water depth of the facility will be -12.5 m in order to accommodate at least two large PCCs with 200 m length simultaneously; (2) Provision of a yard area sufficient for at least 10,000 parking slots. The total area is expected to be not less than 200,000 m² (500 m x 400 m); (3) Provision of a backup area outside of the terminal for the car motor pool to be utilized by the car manufacturers; and (4) The necessary utility supply and terminal management office building. 	
Funding Scheme and Cost (Billion IDR)	Private
	Private: 400
	Public (GOI): --
	Public (Foreign): --
Progress Indicator	
Supplemental F/S study as mentioned in (1) is ongoing	

(16) Development of Logistics Parks (Supporting Facilities for the New Port)

Project Description	
<p>The Logistics Park aims to create efficient logistics in JABODETABEK region. The project aims to create a new logistics network centered at the new Cilamaya Port. The new port will have an efficient cargo/logistics distribution system and will contribute to the economic activities in the region. Traffic congestion in and around the port area would be alleviated. The project includes the two major logistics parks:</p> <p>(1) Logistics Park (1): Port Supporting Area (near Cilamaya Port) Location: near Cilamaya Port (on the opposite shore) Area: about 150 ha</p> <p>(2) Logistics Park (2): Dry Port and Logistics Center (along the highway and the railway) Location: Cikampek (along the highway and railway) Area: about 150 ha</p>	
Funding Scheme and Cost (Billion IDR)	Private
	Private: 5,800
	Public (GOI): 0
Progress Indicator	
The project has only development concept.	

A.2.1.2 Major Future Infrastructure Development in the Study Area

Implementation of the following 17 MPA projects out of all 45 MPA projects is planned in the eastern part of the MPA Area. Out of 17 projects 13 are to be implemented in Karawang Regency and 5 projects are planned in Purwakarta Regency. Only two projects are planned in Subang Regency.

Table A.2.1.1 List of MPA Projects Planned in the Study Area

No.	Project	Study Area				
		Kekasi City	Kab. Bekasi	Kab. Karawang	Kab. Purwakata	Kab. Subang
1	Development of a New International Port (Cilamaya New Port Development) as FTP1.2 [Flagship Project]			✓		
2	Construction of Access Road to New Cilayama Seaport [Flagship Project]			✓		
3	Smart Community (including a pilot project for the Smart Grid) as FTP2.1		✓	✓		
4	Jakarta Mass Rapid Transit (MRT) N-S I, N-S II, E-W as FTP3.1 [Flagship Project]	✓	✓			
5	JABODETABEK Railways Capacity Enhancement Project (Phase I) as FTP3.2 and Further Improvement as Phase II	✓	✓			
6	DKI Jakarta – Bekasi – Karawang Water Supply (Jatiluhur) as FTP 6.1	✓	✓	✓	✓	
7	Development of New Academic Research Cluster [Flagship Project]		✓			
8	Development of Jakarta Outer Outer Ring Road	✓	✓			
9	Rehabilitation of Water Distribution Facilities in DKI Jakarta, Bekasi, and Karawang, with the integration of DKI Jakarta – Bekasi – Karawang Water Supply (Jatiluhur)	✓	✓	✓		
10	Development of Water Supply Systems for Large-Scale Infrastructure Development	✓	✓	✓		
11	Development of a New Township			✓	✓	✓
12	Development of a New Industrial Estate in the Vicinity of the New Airport			✓	✓	✓
13	Construction of Second Jakarta-Cikampek Toll Road	✓	✓	✓	✓	
14	Construction of Freight Railway to New Cilamaya Seaport			✓		
15	Construction of Jakarta-Bandung High Speed Railway via the New International Airport	✓	✓	✓	✓	
16	Development of a New Car Terminal at Cilamaya Port			✓		
17	Development of a Logistics Park (Supporting Facilities for the New Port)			✓		
	Total Number of Projects	8	10	13	5	2

Source: Compiled based on MPA Master Plan Study

The current status of MPA projects planned in the Study Area as of September, 2013 are shown as follows.

Table A.2.1.2 Current Status of MPA Projects Planned in the Study Area

No.	Project	Current Status
1	Development of a New International Port (Cilamaya New Port Development) as FTP1.2 [Flagship Project]	Supplemental F/S ongoing
2	Construction of Access Road to New Cilayama Seaport [Flagship Project]	Supplemental F/S ongoing
3	Smart Community (including a pilot project for the Smart Grid) as FTP2.1	MOU signed between the Ministry of Energy and Mineral Resources and NEDO
4	Jakarta Mass Rapid Transit (MRT) N-S I, N-S II, E-W as FTP3.1 [Flagship Project]	E-W Line : In preparation of formal finance request for a Yen Loan from GOI to GOJ
5	JABODETABEK Railways Capacity Enhancement Project (Phase I) as FTP3.2 and Further Improvement as Phase II	Phase I: In preparation of formal finance request for a Yen Loan from GOI to GOJ
6	DKI Jakarta – Bekasi – Karawang Water Supply (Jatiluhur) as FTP 6.1	Funding scheme is under consideration
7	Development of New Academic Research Cluster [Flagship Project]	PPP F/S ongoing
8	Development of Jakarta Outer-Outer Ring Road	Land acquisition ongoing
9	Rehabilitation of Water Distribution Facilities in DKI Jakarta, Bekasi, and Karawang, with the integration of DKI Jakarta – Bekasi – Karawang Water Supply (Jatiluhur)	Concept level
10	Development of Water Supply Systems for Large-Scale Infrastructure Development	Concept level
11	Development of a New Township	Pre F/S completed
12	Development of a New Industrial Estate in the Vicinity of the New Airport	Concept level
13	Construction of Second Jakarta-Cikampek Toll Road	Pre F/S completed
14	Construction of a Freight Railway to New Cilamaya Seaport	Elaborating in this study
15	Construction of Jakarta-Bandung High Speed Railway via the New International Airport	F/S to be started
16	Development of a New Car Terminal at Cilamaya Port	Supplemental F/S ongoing
17	Development of a Logistics Park (Supporting Facilities for the New Port)	Concept level

Source: Compiled based on The Study on Monitoring and Implementing Acceleration for Metropolitan Priority Area for Investment and Industry (MPA) in JABODETABEK Area Related Project

A.2.2 Analysis of Expected Benefits of MPA Projects in Strengthening Connectivity

A.2.2.1 Expected Economic Benefits

The government of Indonesia announced the “Expansion of Indonesian Economic Development (MP3EI)” from 2011 to 2035 in May, 2011. MP3EI aims at infrastructure development to strengthen the connectivity between regions and corridors. The development of connectivity is to promote the economic

activities by the mobility of people, materials/goods, money, and information and it will lead to regional development and industrial promotion.

In the development of Java economic corridor, the economic benefits in the Eastern MPA that will be produced by the infrastructure development proposed in MPA shall be analysed. Especially job creation and tax revenue are examined as expected benefits.

A.2.2.2 Job Creation

The effect on job creation by 2030 shall be analysed in the target area. In estimating the employment, the participation rate of 37%, which includes the actual employment and waged labourers who are seeking a job is adopted.

Employment in 2030 is estimated at 4.29 million people with annual average growth rate of 3.24%, and approximately 1.83 million jobs created.

Table A.2.2.1 Anticipated Employment up to 2030

Year	2013	2015	2020	2025	2030
Employment (million people)	2.495	2.660	3.120	3.660	4.292

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Next, the manufacturing employment in 2030 is estimated for the target area. The following basic assumption is set up based on the statistics in 2011.

- The GRDP of manufacturing is estimated to account for 70% of the total GRDP.
- The GRDP growth of manufacturing is 7.7%.
- The manufacturing employment in 2013 is estimated to account for 19.9% of the total employment.
- Growth rate of labour productivity is 3.0%.
- The value of production per employee is Rp 4.3 million.

Based on the above basic assumptions, the GRDP manufacturing is estimated, and manufacturing employment is calculated based on the value of production per employee. The manufacturing employment in 2030 is estimated at 1.57 million with annual average growth rate of 7.0, and approximately 1 million jobs will be created. Also, the manufacturing employment accounts for 37% of the total employment in 2030.

Table A.2.2.2 Manufacturing Employment to 2030

Year	2013	2015	2020	2025	2030
Manufacturing Employment (people)	496,670	552,042	775,607	1,099,561	1,568,981
Manufacturing Employment in % of Total Employment	19.9%	20.8%	24.9%	30.0%	36.6%

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

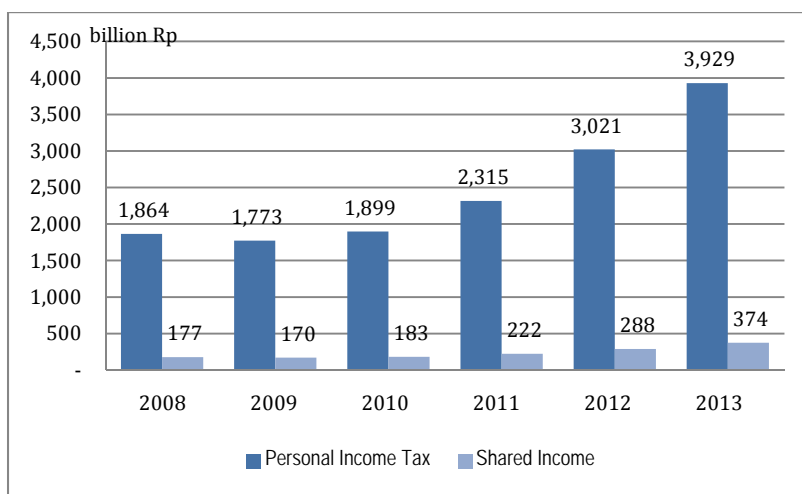
A.2.2.3 Tax Revenue

By promoting productivity and creating employment, revenue is expected to increase. The taxes are mainly personal income tax and corporate tax. In Indonesia, those taxes are treated as tax revenue of the central government. There are three kinds of funds from central government to regional government that are shared income, the general fund and special fund. The shared income is calculated with a fixed estimation rate of personal income tax based on the total tax revenue gathered from each city and regency. If the revenue from personal income tax is increased, the income shared with the regional government is also increased.

This means that the personal income tax revenue directly impacts the regional government. The study will analyse the tax increase in the target area.

Table A.2.2.3 shows the personal income tax paid to the central government and the shared income given to the regional government from 2008 to 2013. Due to the financial crisis in 2008, the tax revenue decreased in 2009, even though the revenue increased steadily from 2010. The tax revenue paid to the central government in 2013 was Rp. 3,929 billion, 37% of West Java province. A total of 9.56% of the tax revenue is given back to the regional government as a shared income, and this is important tax revenue for the regional government.

Based on the past tax revenue, the personal income tax and shared income to 2030 are estimated. The shared income is estimated at Rp 1,469 billion in 2030.



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.2.2.1 Personal Income Tax and Income Sharing

Table A.2.2.3 Estimation of Personal Income Tax to 2030

Unit: billion Rp

Year	2013	2015	2020	2025	2030
Personal income tax	3,929	5,170	8,569	11,967	15,366
Shared income	374	494	819	1,144	1,469

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

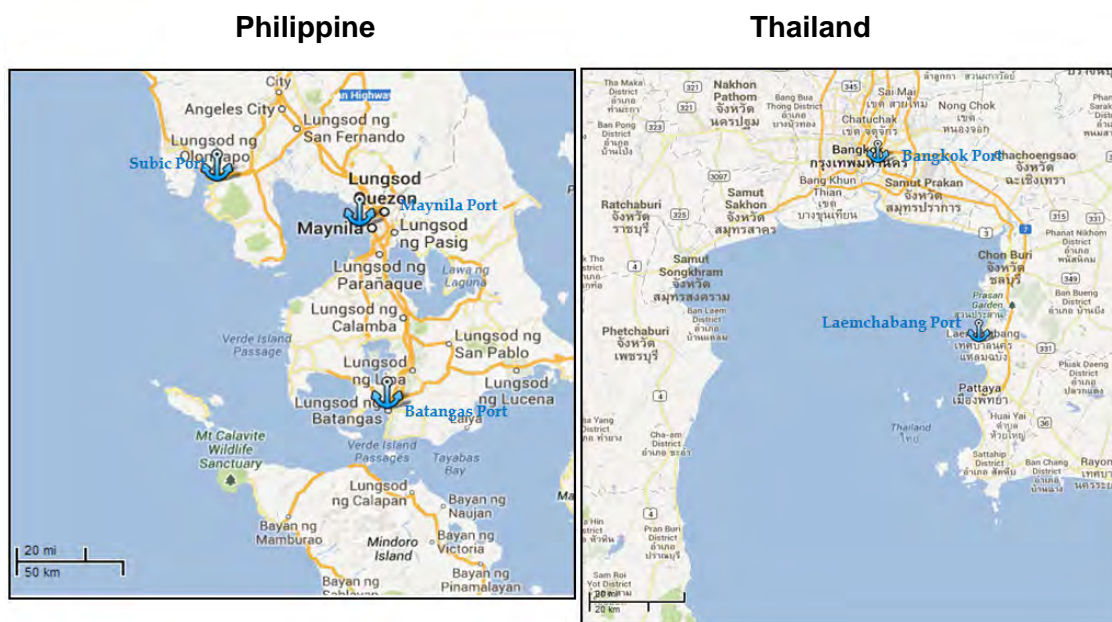
BACKGROUND INFORMATION 3

BACKGROUND INFORMATION 3 LESSONS LEARNED BY SIMILAR PORTS IN OTHER COUNTRIES AND THEIR HINTERLANDS' DEVELOPMENT PROJECTS

A.3.1 Current Situation in Case Study Port

A.3.1.1 Development Background and Hinterland of Case Study Port

The study was conducted to learn from the experiences of three ports, Laem Chabang Port in Thailand, Subic Port and Batangas Port in the Philippines, which are similar to Cilamaya Port as regards the background of development and local circumstances. Figure A.3.1.1 shows the locations of the ports. Development background and necessity of each port and Cilamaya Port are described in Table A.3.1.1.



Source: Google Map

Figure A.3.1.1 Location of case study port and existing ports

Laem Chabang Port, Subic Port, and Batangas Port were developed to alleviate traffic congestion and provide balanced development. And each port exists in a metropolitan area and also within around 100 km of another existing port. Development background and location of each port in relationship to the previously existing ports are similar to the relationship between Cilamaya new Port and Tanjung Priok Port.

Table A.3.1.1 Development Background and local circumstances of case study port

Name of Port	Development background and Necessity	Port location and local circumstances
Laem Chabang Port (Thailand)	Bangkok port could not readily expand its container capacity because Bangkok port is located in the shallow Chao Phraya river and a factor regarding traffic congestion in Bangkok is that the Bangkok port is only short distance from the centre of Bangkok. To solve these problems, Laem Chabang Port was developed in 1991.	Laem Chabang port is located about 130 km southeast of Bangkok on the east bank of Bangkok gulf, it does business with the centre of Laem Chabang industrial estate on the eastern seaboard in Thailand.
Subic Port (Philippines)	A new international container terminal was constructed and rehabilitation of existing port facilities was completed to increase the cargo handling volume of the port in order to cope with the demand of international logistics developed by the hinterland of the Subic and Clark areas.	Subic port is located about 138km northwest and Clark free port zone is situated immediately behind it.
Batangas Port (Philippines)	The purpose of Batangas port development is to contribute to the balanced development of the Calabarzon region and the alleviation of traffic congestion caused by overconcentration in Manila by coordinating the efficiency of logistics in the Philippines through the construction of an international port in Batangas that could handle the containers for foreign-trade.	Batangas port is located about 110km south of Manila, southwest of Luzon Island, and it makes up a part of the SCMB corridor. The south tagalog region that is the main industrial region in the Philippines is situated in the hinterland of Batangas port.
* * Cilamaya Port (Indonesia)	Handling volume of cargo in Tanjung Priok Port is projected to exceed capacity soon, and the issues regarding port logistics, e.g. traffic congestion in Jakarta metropolitan area, exert a negative effect on not only port logistics but also economic activity in this region. New Port development is planned to improve this situation.	Cilamaya Port is located about 100km from the centre of the Jakarta metropolitan area. Jakarta east industrial estates consisting largely of the auto industry are situated in this area and the significance of the new hub is increasing within the Asian area.

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

A.3.1.2 Outline of Case Study Port

Table A.3.1.2 shows the outlines of Laem Chabang Port, Subic Port, Batangas Port, Bangkok Port and Manila Port.

Table A.3.1.2 Outlines of Laem Chabang Port, Subic Port, Batangas Port, Bangkok port and Manila port

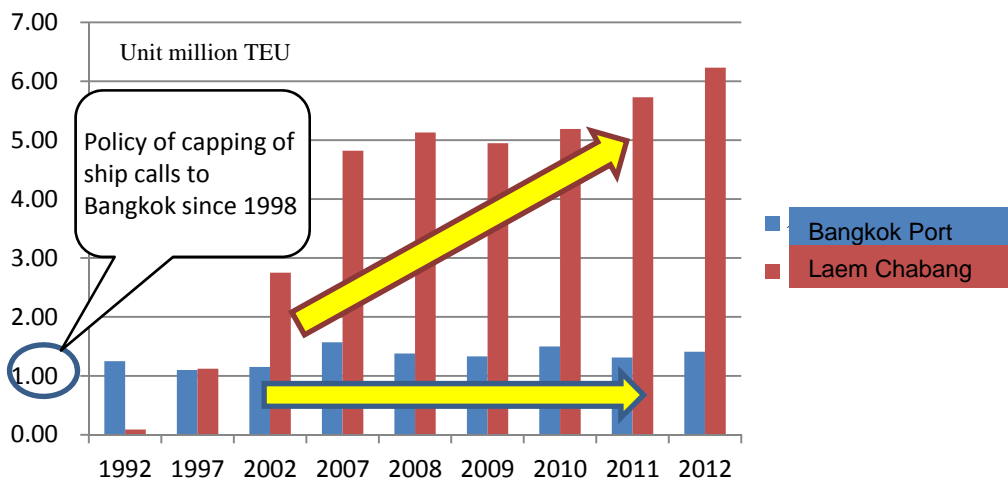
		Thailand		Philippines				
		Bangkok	Laem Chabang	MICT	South port of Manila	North port of Manila	Subic	Batangas
Berths	Number of berths (Container berths)	84 0	18 11	5 3	28 12	50 7	3	2 2:multi
	Berth length (M) (Container berth length (M))	7,688	6,724 3,959	1,300 n.a	3,614 3,082	4,791 2,256	342	240 0
	Alongside depth (M) Draft (M)	4.6-8.2 n.a	10.0-16.0 n.a	12.5-14.5 12.5-14.5	8.5-12.0 7.0-12.0	8.5-12.0 n.a	12.6-12.8 n.a	10 n.a
	Stock yard	Terminal Facilities (m ²) CFS (m ²)	363,168 498,063	3,329,265 74,792	822,200 10,208	850,000 22,000	317,013 10,468	100,000 1
Facilities	Container gantry cranes Yard gantry cranes	14 34	26 68	10 28	7 14	0 0	1 0	n.a 1
	Other	Port operation time (Time) Customs (Time) Vessel calls (per year)	24 n.a 2,570	24 24 6,410	24 07:00-19:00 2,061	24 n.a 6,292	24 n.a 6,292	24 08:00-17:00 n.a

Source: International Containerization handbook, 2006

A.3.1.3 Container Cargo Volume in Case Study Port

(1) Laem Chabang

Laem Chabang port was opened in 1991 to cope with the containerization. Figure shows the handling volume of container cargo from the next year after opening the port to 2012 comparing with the Bangkok port and Laem Chabang port. (But, the Thai government has capped the number of shipping calls to Bangkok port since 1998.) Laem Chabang port handled 1,120,000 TEU/year in 1997, so this volume is more than the volume of Bangkok port (1,100,000 TEU/year). The handling volume of containers in Laem Chabang port in 2011 is ranked 23rd in the world. This volume is 4.37 times that of Bangkok port, e.g. 5,730,000 TEU. And Super Post-Panamax ships could enter the Laem Chabang port and it is rated as the highest growth container port in the world. (Lloyd’s list)



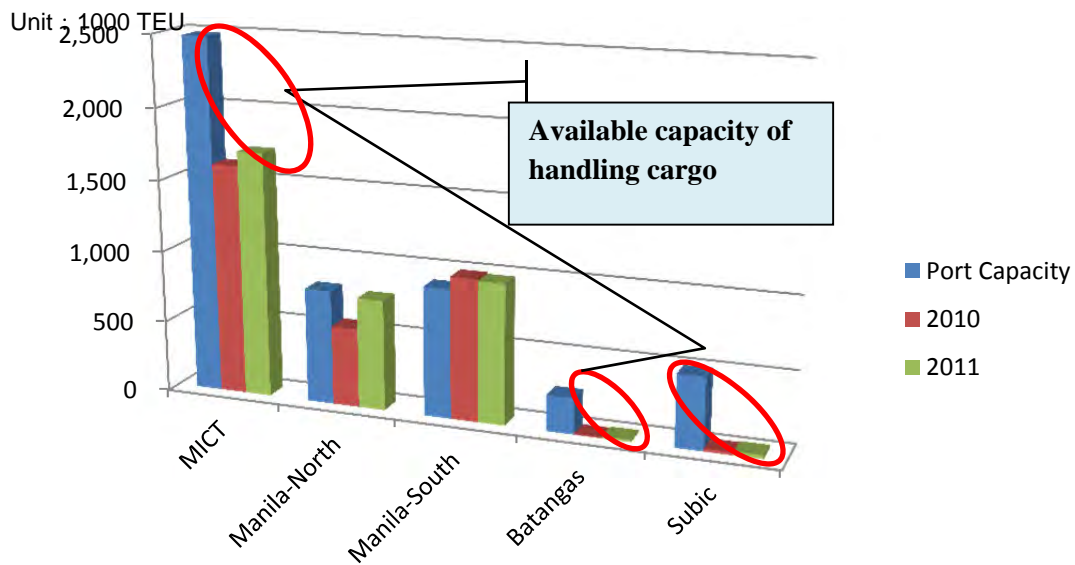
Source : Port Authority of Thailand (PAT)

Figure A.3.1.2 Transition of container cargo in Bangkok port and Laem Chabang

(2) Subic Port/Batangas Port

Figure A.3.1.3 shows the handling volumes of container cargo of Subic Port, Batangas Port, and Manila Port in 2010 and 2011, and capacity of handling volume of container cargo.

Handling volume of container cargo of Batangas port and Subic port was less than the capacity of both ports. And MICT and north port of Manila, excluding the south port of Manila have reserve capacity for handling container cargo as MICT expand the port in 2010.



Source : Philippine Port Authority (PPA)

Figure A.3.1.3 Capacity of handling volume and handling volume of container cargo in Subic, Batangas, and Manila Port

A.3.1.4 Current Situation of Case Study Port and Existing Harbour

Neither Subic nor Batangas port act as alternative ports for Manila Port at present. Handling volume of container cargo in Manila Port is increasing every year, and expansion is conducted according to the increase of volume, so the available capacity of handling of container cargo is adequate. On the other hand, Laem Chaban port in Thailand, acts as an alternative port to Bangkok port, which does not have adequate capacity for receiving vessels due it being a river port and the port authority of Thailand has carried out a policy of capping the number of shipping calls since 1998. And as a result, handling volume of container cargo in Laem Chaban port is increasing every year.

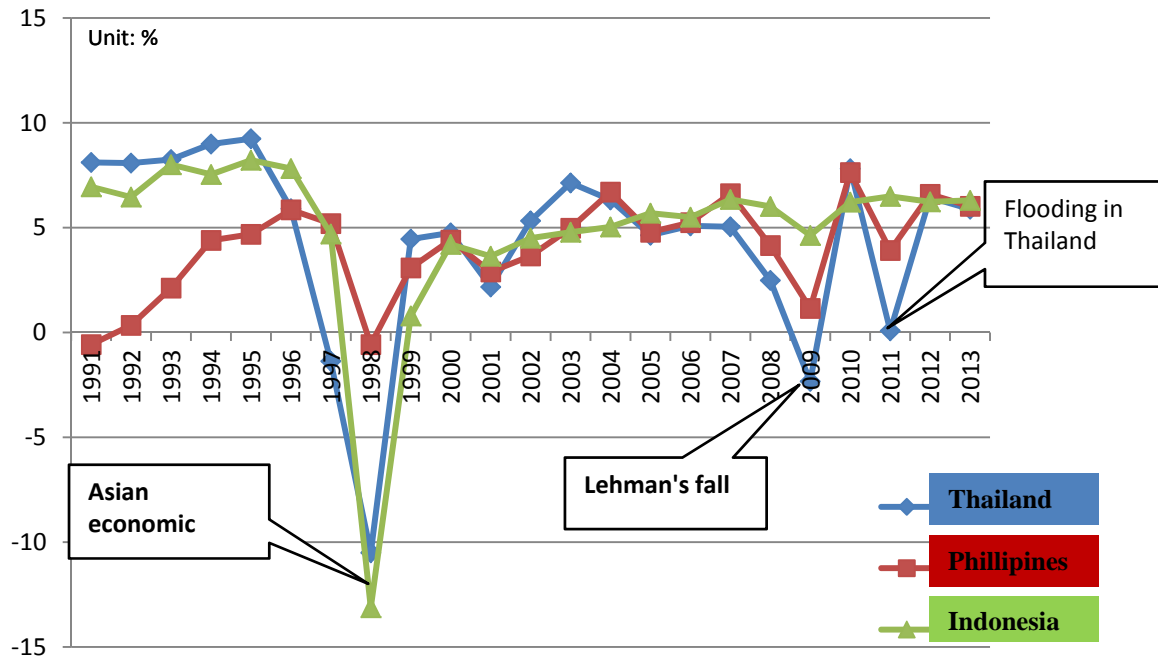
A.3.2 Influencing Factors for Current Situation of the Ports

A.3.2.1 Factors at the Macro-Level

(1) Influential factors for cargo volume

1) Economic Growth rate

Figure A.3.2.1 shows the transition of real economic growth rate from 1991 to 2012 of Thailand and the Philippines. (Real economic growth rate of Indonesia is shown for reference.)



Note: Value of 2013 is estimated value

Source : IMF-World Economic Outlook Database

Figure A.3.2.1 Transition of real economic growth rate in Thailand, the Philippines, and Indonesia (1991~2012)

Real economic growth in the Philippines grew at a satisfactory pace from 1991 to 1998, which was the time of the Asian economic crisis, and economic growth went into a free fall temporarily due to the Asian economic crisis in 1998. However, real economic growth rate from 1991 to 2013 was 3.88% although economic growth declined due to the decline of exports due to the turmoil of September 11 2001 in the U.S.A, Lehman’s fall in 2008, the rapid increase in crude oil prices in 2011, earthquake in eastern Japan and flood damage in Thailand. Meanwhile, real economic growth of Thailand was 8% per year in the time of opening of Laem Chaban in 1991, and real economic growth in Thailand was 4.4% in average between 1991 and 2013 notwithstanding the drastic decline of minus 10.5% in the time of the Asian crisis in 1998, the decline of exports due to the turmoil September 11 2011 in the U.S.A, Lehman’s fall in 2008, and the flood in 2011.

2) Situation of industrial estates in the hinterland

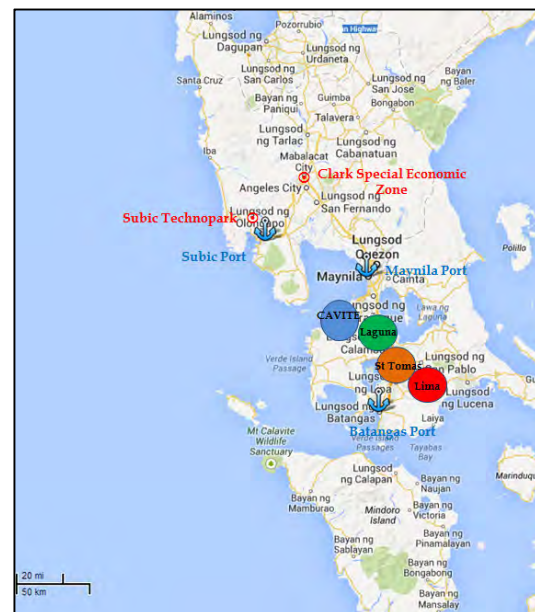
Figure A.3.2.2 shows the situation of industrial estates surrounding Laem Chaban Port and Bangkok Port. Laem Chaban Industrial estate (Chonburi Province) and Eastern seaboard industrial estate (Rayong Province) are situated in the surroundings of Laem Chaban in Thailand, and there are many electric manufacturers, automobile and automobile parts manufacturers. Industrial estates including electric, machine, and automobile manufacturers exist in many areas surrounding Bangkok.



Source: JETRO Home page

Figure A.3.2.2 Situation of Industrial estates in the areas surrounding Laem Chaban Port and Bangkok Port

Figure A.3.2.3 shows the situation of industrial estates surrounding Manila Port, Subic Port, and Batangas Port. The First Cavite industrial estate and Luisita industrial estate are situated in the areas surrounding Manila port and there are many factories making electric devices, apparel, and light industry. Calabarzon region is developing industrial areas in the suburbs of Manila and the number of industrial estates reached 44 in 2005. However, many expanding enterprises are IT related enterprises, and many products of these companies are better suited for air cargo than maritime cargo. In hinterland of Subic Port, “Subic industrial estate” of Taiwan descent exist and personal computer manufacturer (Acer) of Taiwan descent expand their business to this area, but they move to China that is one-third in production cost compared with Subic or bail out of this area. Note: The above section was not constructed in a manner that readily allows changes to be made. The text should read as follows: However, many of the expanding enterprises are IT related enterprises, and many products of these companies are better suited for air cargo than maritime cargo. “Subic industrial estate” of Taiwanese origin is situated in the hinterland of Subic Port in the area around Manila and the Taiwanese personal computer manufacturer (Acer) expanded their business and moved into this area, but they are going to move to China because production cost there is one third compared with Subic. Federal Express, the American international cargo transportation company utilized a Subic



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.3.2.3 Industrial estate situation in surrounding of Manila Port, Subic Port, and Batangas Port

international airport for the hub of its Asian operations but it is moving that function to the Guangzhou Baiyun international airport in Guangzhou province. “Subic Techno Park” was developed in Subic base as a Japanese Industrial estate after moving out of a Taiwanese industrial estate, and about 10 Japanese enterprises e.g. Hitachi-Omron, are operating in Subic Techno Park. And Texas Instruments is pre-operating in 2009 in Clark Special Economic Zone. Yokohama Rubber Co., Ltd made their way into this area, and they have a plan to expand their production capacity from 7 million pieces/year to 17 million pieces/year, e.g. approximately 2.4 times expansion of production.

(2) Port Development Support

1) Connectivity to the Port

Table A.3.2.1 Connectivity to the port of the case study shows the connectivity of the expressway, railway, and coastal shipping to the case study port and related ports.

Table A.3.2.1 Connectivity to the port of the case study

		Thailand		Philippines				
		Bangkok	Laem Chaban	MICT	South port of Manila	North port of Manila	Subic	Batangas
Connectivity	Expressway	○	○	○	○	○	○	○*
	Railway	○	○	○	○	○		
	Coastal Shipping	○		○	○	○		

Note: In Batangas port, some sections of the expressway were not operational at the time of the port opening

Source: ASEAN Logistics Network Map (2nd Edition), JETRO

The existing port, Bangkok port of Thailand and Manila port of the Philippines are excellent at connectivity and are superior in this regard to the newly developed Laem Chaban, Subic, and Batangas ports. However, traffic congestion surrounding Bangkok port and Manila port is occurring, so the newly developed ports, Laem Chaban, Subic, and Batangas, are superior to the existing port regarding time required for land transportation.

2) Port development policy in government (Relationship of PA and Operator)

In Thailand, the Port Authority of Thailand (PAT) manages both the port of Bangkok and Laem Chaban. And regarding the operation of the ports, Bangkok port is managed by PAT, and Laem Chaban port is managed by a private sector entity that has received the concession right for operation from PAT. Thus, PAT has created an environment that allows it to easily implement a unified policy for port operation and development. In this environment, PAT can execute policies such as putting a cap on the number of shipping calls to Bangkok port and providing support for the State Railway of Thailand (SRT) to construct an inland container depot (ICD) for promotion of Laem Chaban port.

On the other hand, in the Philippines, the Philippine port authority (PPA) that was established by presidential decree in 1974 was in charge of management and operation of all ports in the Philippines, but Manila port was privatized

A.3.2.2 Factors at the Micro-Level

(1) Competition Principle

1) Number of port operators

Thailand :

In Laem Chaban port, competition is very keen in price and service among operators because more than one operator has been operating since the opening and currently seven port operators including Japanese, Western, and Asian are operating. On the other hand, in Bangkok port, there is no competition as the Port Authority of Thailand is both managing and operating.

Philippines :

MICT of Manila port and Subic port is operated by International Container Terminal Service Inc. (ICTSI) and Subic Bay International Container Terminal (SBICT) based on the concession contract with the port authority of the Philippine government. And Batangas port is operated by Asian Terminal Inc (ATI) based on the concession contract with the port authority of the Philippines. A competitive environment does not exist because there is more than one operator in the same port and each operator competes in price and service as in Laem Chaban port. In addition, Manila port and Subic port are operated by the same operator, thus the ports do not compete with each other.

2) Port Tariff

Thailand :

Bangkok port and Laem Chaban port are operated based on the tariff decided by PAT. However, in Laem Chaban port, many operators are competing, thus Laem Chaban port is actually operated on a discounted tariff based on the operators' judgment. On the other hand, Bangkok port is operated by PAT and is basically operated on a tariff.

Philippines :

Port dues of Subic port and Batangas port are relatively cheap compared with Manila port. In particular, port dues in Batangas port were discounted 50% from October, 2012 to October, 2013. And also introduction of the same incentive is considered in Subic port.

(2) Measures for promotion of port utilization

SRT constructed an inland container depot (ICD) in Lat Krabang industrial estate 30km east of Bangkok in order to alleviate the traffic congestion in Bangkok, in particular, to alleviate the congestion of Khet Khlong Toei region of Bangkok port and transport the cargo to Laem Chaban port for promotion of Laem Chaban port. The ICD was placed in use by SRT in 1996.

ICD and Laem Chaban port are connected by railway, and ICD is the responsible facility for supporting the expanding Thailand industry. The railway is one track and makes 2 round trips per day, 17 services are operated. The transportation between Laem Chaban port and Lat Krabang ICD is handled 30% by railway and 70% by truck. ICD is separated into 6 modules and is operated by a private company based on the concession from SRT. ICD carries out the functions of vaning, devanning, and customs clearance. On the other hand, no special measures are taken by the Philippine government to promote Subic port or Batngas port.



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure 3.2.4 Lat Krabang ICD

(3) Port Support Function

There are no basic problems in the support function, e.g. pilot, tugboat, lash, CIQ, terminal operator, custom broker, logistics company, opening time of Subic port, Batangas port, or Laem Chaban port. However, coordination problems with the logistics businesses such as the cargo truck to Batangas port was high jacked at the opening of Batangas port.

A.3.2.3 Good Lessons Led by Case Study

Table A.3.2.2 the Evaluation Based on the Degree of Influenc shows that the evaluation based on the degree of influence of each item for the 3 ports of the case study taken and the existing port. In Batangs port and Subic port, items that influence the development significantly have negative impacts. On the other hand, in Laem Chaban, items that influence the development significantly are positive. The differences among the three ports are shown in the difference of development of each port.

(1) Factors for success in Laem Chaban Port

1) Hinterland of Port

Industry suitable for maritime cargo is clustered in the hinterland of Laem Chaban port in Thailand. In accordance with the development of these industries, maritime cargo was increased steadily. In case of Batangas port and Subic port in the Philippines, manufacturing industry is clustered in the hinterland, and developed, but clustered industry suitable for air cargo rather than maritime cargo, e.g. industry of electronics and related electronics, was developed. Thus, handling cargo of port does not grow in lower than previously planned.

2) Common interests between the Thai government and Shipping Companies regarding utilizing the new port

Big vessels can't enter Bangkok port due to its being a river port, thus Bangkok port is inefficient for shipping companies that would like to transport containers efficiently by big vessels to raise their profit margin. The Thai government would like to alleviate the traffic congestion by handling some of the cargo of Bangkok port in another port because the traffic congestion surrounding Bangkok port is becoming more acute every year. Under such an external environment, Laem Chaban port was developed. In addition, the Thai government carried out a policy not to increase the volume of cargo that is transported to Bangkok port by setting a cap on the number of port calls for Bangkok port. And, in addition to the construction of an expressway transporting the cargo from factories surrounding Bangkok to Laem Chaban port, SRT promoted the alleviation of road congestion through the promotion of railway transportation by constructing an ICD for railway transportation in addition to the road transportation. Shipping companies have combined the transportation cost to the ICD with the ocean freight cost to allow efficient transport utilizing the Laem Chaban port that big vessels can access, thus a great deal of cargo passes through Laem Chaban port. The Thai government's opinion of the situation came into line with that of the shipping companies, as mentioned above, and then cargo flow changed from Bangkok port to Laem Chaban port.

3) Government policy and harbour administration

The port operator in Manila in the Philippines has a great deal of authority based on the concession contract, as a result, PPA's authority is limited to a small area. Under this situation, the Philippine government tried to move some cargo to Batangas port or Subic port to alleviate the traffic congestion in the metropolitan area of Manila by constructing a new port and expressway, but cargo flow did not change from Manila port to Subic port and/or Batangas port because the port operator in Manila could expand the port at their own discretion according to the increase in cargo. On the other hand, PAT conduct harbour administration based on the government policy without difficulty under the concession contract of Laem Chaban port that limits the port operator's authority. Under this situation, PAT put a cap on port the number of calls to Bangkok port managed by PAT, and PAT administration ensures that cargo flows into Laem Chaban in accordance with the government policy.

4) Introduction of competition

Seven Japanese, Western, and Asian port operators are competing every day regarding collecting cargo and how to operate the port efficiently in Laem Chaban port. This competition is similar not only with

other ports within Thailand, but also with the competition of neighbouring countries. While competition does not occur within a port because the port is operated by one operator in the Philippines. In addition, competition with other domestic ports is difficult to create as the port is operated by a specific operator.

(2) Good Lessons for development of Cilamaya Port

The following lessons have been learned from the case study in order to develop the Indonesian economy by balanced developing of the existing Tanjung Priok Port and Cilamaya Port.

1) Strategic development of hinterland of port

It is necessary for government to implement the enticement of manufacturing industry that increases the maritime cargo for hinterland of port strategically through the various incentives. For example, in accordance with the volume of export and import by use of new port, a policy lowering the tax can be considered for new port promotion.

2) Enhancement of Port Authority (PA)

As Thailand and Philippines' examples show, it is necessary to enhance the authority and capacity of the PA that is managing a port, and the PA could conduct the harbour administration in accordance with government policy. The PA in Thailand has a wide authority and it could conduct harbour administration in accordance with the policy of the government. While in the Philippines, the PA has little authority and it is difficult for it to conduct the harbour administration in accordance with the policy of the government. In case of Indonesia, GOI promulgated a new shipping law in April 2008 which calls for port management to be conducted either by the Port Authority or Port Management Unit based on the concept of port land-lord, in which management is separated from operation. With this law, a framework for effective and efficient port development, management and operation through Public and Private Partnership can be established. It is necessary to promote the development of detailed regulation for proper operation of new shipping law in accordance with the law.

3) Creation of competition

It is important to create an environment of competition in the field of service and price in the same port managed by several operators. Competition is created in service and price managed by a number of operators in Laem Chaban port, while competition is not created in service and price managed by a single operator in Batangas port and Subic port.

BACKGROUND INFORMATION 4

BACKGROUND INFORMATION 4 LOGISTIC SURVEY/FORECAST OF TRANSPORTATION AND LOGISTICS

A.4.1 Logistic Survey

It is necessary to predict the changes in cargo transport structure in the future and to consider efficient transportation systems and transportation facility improvement plan. This is because it is necessary to be dispersed the cargo transportation in over-concentration for Tanjung Priok Port, and to ensure a stable transport of cargo. The greatest impact project in logistics is the construction of Cilamaya Port in Eastern MPA. Therefore, the survey was conducted for the purpose of obtaining freight OD (Origin and Destination) data that could get current freight flow and catch the form associated with an industrial activity. The survey was conducted to understand the freight OD focused on port-related traffic. One freight OD was caused by industrial sector, and the other freight OD was truck OD that truck use Tanjung Priok Port and the container depot around Tanjung Priok Port.

A.4.1.1 Freight OD survey

(1) Survey Method

< Survey Target >

Freight OD survey was targeted 3,505 factories with 30 employees or more located in JABODETABEK and Karawang. Goal of effective samples was more than 1,000 factories.

Table A. 4.1.1 Number of Factories in JABODETABEK and Karawang by Kota and Kabupaten by Size of Factory

Municipality and Regency	Number of Employees			
	30 - 100 persons	100 - 500 persons	>500 persons and more	All Size of Factories
West Jakarta	214	82	20	316
Central Jakarta	22	5	2	29
South Jakarta	39	14	1	54
East Jakarta	104	71	29	204
North Jakarta	178	105	56	339
Bogor	253	161	64	478
Depok	33	25	10	68
Bekasi	366	247	96	709
Karawang	96	105	41	242
Tangerang	448	418	157	1,023
South Tangerang	25	10	8	43
Total	1,778	1,243	484	3,505

Source: Direktori Industr Manufaktur Indonesia

<Survey Methodology>

The survey was conducted that interviewer visited the company, and described in the questionnaire.

<Study period>

The survey was conducted from June 2013 to August 2030.

<Survey items>

The questions was factory overview, delivery costs, Import/Export item OD through Tanjung Priok Port. Details of the study item were shown below.

- Company Profile
 - Number of employees, Width of area, Production output per year
- Information of freight transport
 - Outsourcing, Delivery cost
- Information of the condition of the freight transport via Tanjung Priok Port
 - Freight transportation from Tanjung Priok Port to the freight owner (Item, Departure Port, Shipment to Tanjung Priok Port, and Transport from Tanjung Priok Port to the freight owner)
 - Freight transportation from the freight owner to Tanjung Priok Port (Item, Arrival Port, Shipment from Tanjung Priok Port, and Transport from the freight owner to Tanjung Priok Port)

(2) Survey results summary

About 80% of the factory was to transportation trough Tanjung Priok Port. It is considered that Tanjung Priok Port is one of the most important logistics facilities for the logistics of factories in Jakarta and surrounds area.

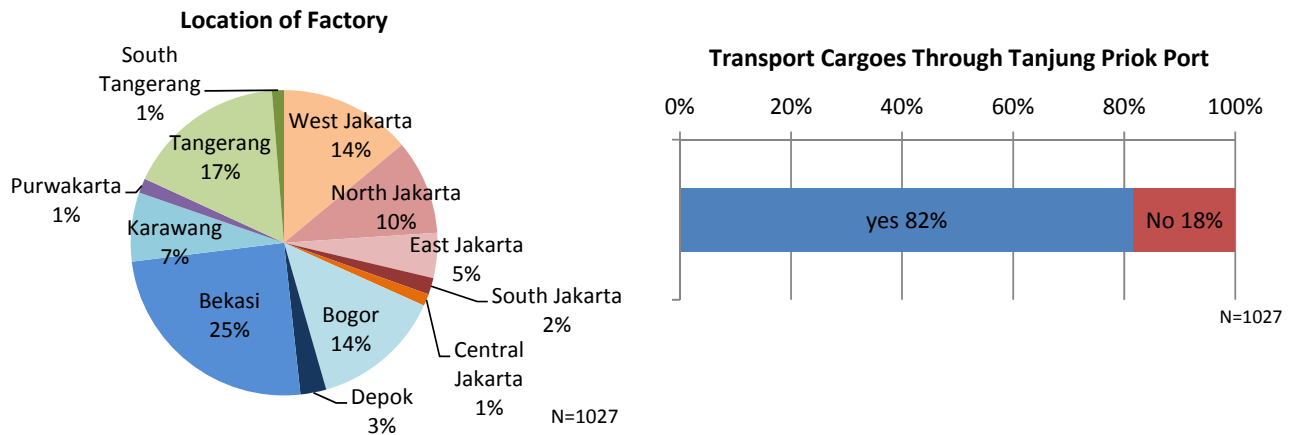
Many of the goods which were carrying-in to the factory were the raw materials and components from China, Japan and Korea etc. Port of call frequency of ship loaded with goods was 1-2 times / month in many cases. 23% of the container truck or trailer loaded with goods from Tanjung Priok Port was to eastern MPA.

Many of the goods which were from factory were clothing, furniture, electrical parts and auto parts to Indonesia, USA, Japan, and China. Port of call frequency of ship loaded with goods was 1-2 times / month in many cases. 20% of the container truck or trailer loaded with goods to Tanjung Priok was from eastern MPA.

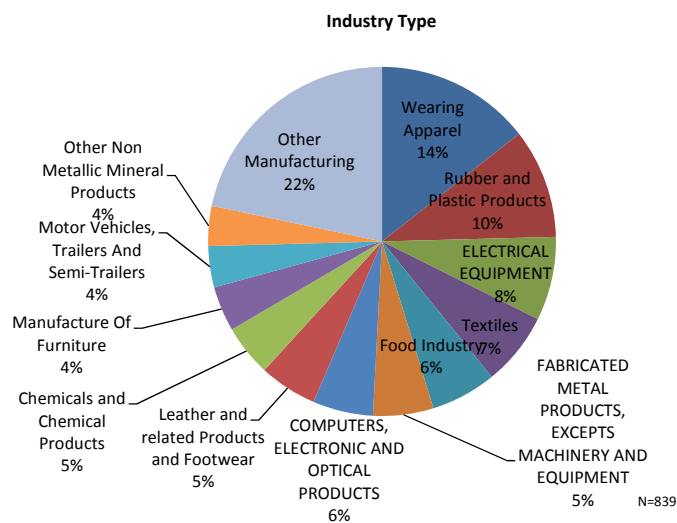
Summary of the survey results are as follows.

<Outline of Target >

Answers got from 1027 factory in Jakarta and surrounding area. 839 factories (82%) transported though Tanjung Priok Port. Apparel factories were the largest industries.



Note: Bekasi, Bogor, Tagerang was total of Kota and Kabupaten

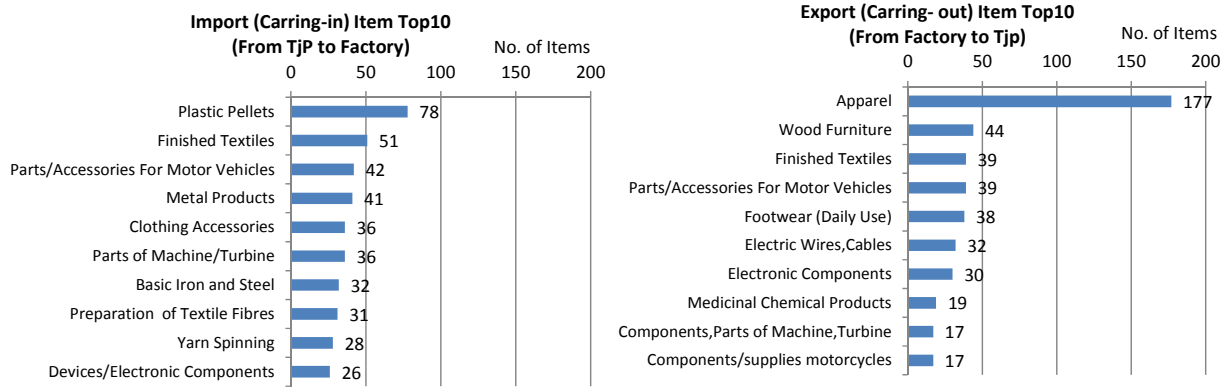


Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.1 Outline of Target

<Items through Tanjung Priok Port>

Many of Import / carrying-in commodities were plastic pellets, and textile. Many of export / carrying-out commodities were apparel-related items such as apparel, textile, clothing accessories

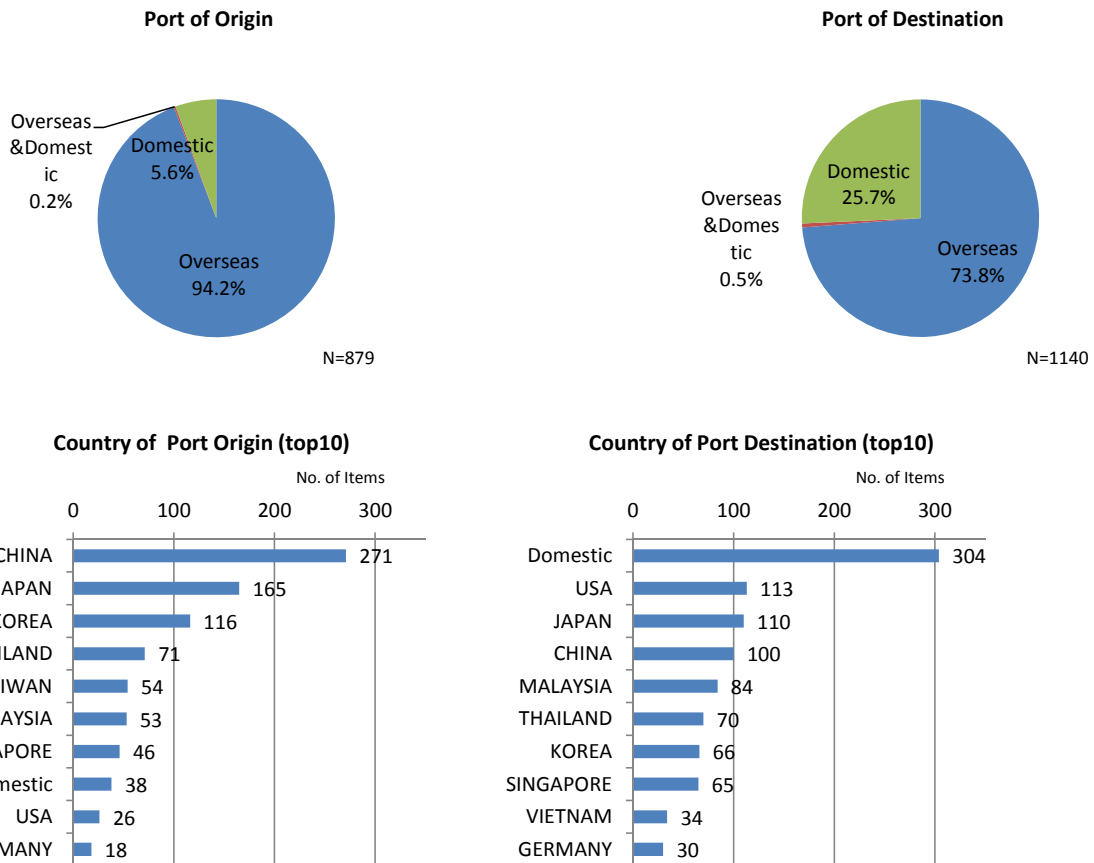


Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.2 Items to go through Tanjung Priok Port

<Departure / Destination of items from/ to Tanjung Priok Port>

94% of Items to import / carrying-in items was from overseas, China has the largest of them. 26% export / carrying-out items was Indonesia, 74% was overseas.

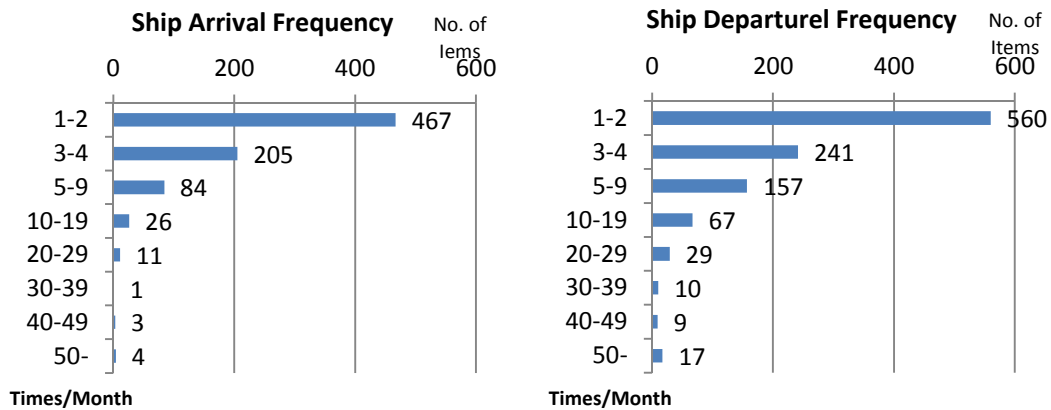


Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.3 Departure and Destination Port

<Port of call frequency from/ to Tanjung Priok Port>

The largest port of call frequency which were import / carrying-in and export / carrying-out was 1-2 times / month



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.4 Port of call frequency from/ to Tanjung Priok

<Volume of items and number of vehicles between Tanjung Priok Port and Factory >

Volume of loading and unloading between Tanjung Priok Port and western MPA were the highest rate in the total, approximately 40% each. Number of vehicles between Tanjung Priok Port and western MPA were also the highest rate in the total, approximately 40% each. Volume of loading and unloading, the number of vehicles was a value that was calculated based on the Direktori Industr Manufaktur Indonesia.

Table A. 4.1.2 Volume of Unloading / Loading by area by vehicles type

Unloading (from Factory to Tanjung Priok Port)

(ton / month)

	Truck 2axels	Truck 3axels	Truck 4axels and more	Container Trailer (20ft)	Container Trailer (40ft)	Other	Total	
DKI	114	467	365	3,596	1,863	264	6,669	11%
MPA West	108	238	123	16,396	7,721	1,083	25,669	43%
MPA South	310	394	2,584	3,717	2,819	400	10,224	17%
MPA East	0	20	51	9,132	1,812	92	11,107	19%
Karawang	231	509	762	2,130	1,795	0	5,427	9%
Total	763	1,628	3,885	34,971	16,010	1,839	59,096	

Loading (from Tanjung Priok Port to Factory)

(ton / month)

	Truck 2axels	Truck 3axels	Truck 4axels and more	Container Trailer (20ft)	Container Trailer (40ft)	Other	Total	
DKI	29	3	108	4,023	2,442	8,838	15,443	23%
MPA West	222	680	219	19,255	6,495	331	27,202	40%
MPA South	482	78	896	3,331	1,613	3	6,403	9%
MPA East	505	468	579	10,835	2,820	0	15,207	23%
Karawang	0	100	323	1,391	1,425	0	3,239	5%
Total	1,238	1,329	2,125	38,835	14,795	9,172	67,494	

Note: The total value does not match in relation to rounding

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Table A. 4.1.3 Number of Vehicles of Unloading / Loading by Area by Vehicles type

Unloading (from Factory to Tanjung Priok Port) (number of vehicles / month)

	Truck 2axels	Truck 3axels	Truck 4axels and more	Container Trailer (20ft)	Container Trailer (40ft)	Other	Total	
DKI	87	306	102	1,282	300	89	2,166	14%
MPA West	202	133	31	3,815	967	433	5,581	37%
MPA South	63	248	564	1,158	1,026	192	3,251	22%
MPA East	7	19	74	2,875	477	210	3,662	24%
Karawang	9	53	68	142	97	0	369	2%
Total	368	759	839	9,272	2,867	924	15,029	

Loading (from Tanjung Priok Port to Factory) (number of vehicles / month)

	Truck 2axels	Truck 3axels	Truck 4axels and more	Container Trailer (20ft)	Container Trailer (40ft)	Other	Total	
DKI	12	31	97	938	565	452	2,095	19%
MPA West	129	76	19	3,046	623	185	4,078	37%
MPA South	33	3	222	816	534	35	1,643	15%
MPA East	22	44	22	2,463	429	0	2,980	27%
Karawang	0	10	49	103	150	0	312	3%
Total	196	164	409	7,366	2,301	672	11,108	

Note: The total value does not match in relation to rounding

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

A.4.1.2 Truck OD survey

(1) Survey Method

< Survey Target >

The survey was carried out for the truck drivers passing through the gate and container depot at 5 Tanjung Priok port gate and 15 container depots (Cilincing, Semper, Marunda, Tanjung Priok area).

Survey location was shown below.



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.5 Location of Gate and Container Depot

<Survey Methodology>

The survey method was that investigators interviewed for truck drivers at the exit of gate or container depot, and described in questionnaire. The survey was conducted for three days on Thursday, Friday, and Saturday. Sample rate was 40% of truck (truck two or more axes, and trailer) that has passed gate or exit.

<Study period>

The survey was conducted from June 27th 2013 to June 13th.

<Survey items>

The survey items was that vehicle model, purpose (loading or unloading), occupancy, origin/destination address and facilities, departure or arrival time, loading capacity, and commodity.

(2) Survey results summary

Average value of the three-day traffic passed JICT and KOJA which was handle the import and export cargo was that, JICT was 3,406 vehicles / day, KOJA was 728 vehicles / day. The Traffic volume related to import toward Eastern MPA was 1,912 vehicles / day and 46% of the total, toward DKI was 24%, west MPA was 20% and south MPA was 8%.

Table A. 4.1.4 Daily Traffic Volume by Vehicle Type at Gate or depot (3 days average)

Unit: number of vehicle /day

	1	2	3	4	5	6	TOTAL	
	Pick up, Truck 3/4 Single	Truck 3/4 Ton Truck 2 Axle	Truck 3 Axle	Truck 4 Axle and more	Container 20 fit	Container 40 fit	5-6 Container (20ft+40ft)	1-6 Total
JICT	8	0	1	1,237	739	1,415	2,154	3,400
Koja	1	-	-	50	228	449	677	728
Gate I	121	156	377	519	534	424	957	2,131
Gate III	187	277	268	385	174	257	430	1,547
Gate IX	231	290	349	1,987	917	1,401	2,318	5,175
Depot	5	13	2	54	22	51	74	147
Total	553	736	997	4,232	2,613	3,997	6,610	13,128

Note: Truck 4 Axles and more included trailer which loaded only chases and did not load the container. Container (20ft, 40ft) included vehicle loaded with empty containers

Note: The average value of the three-day Thursday, Friday and Saturday.

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Table A. 4.1.5 Daily Traffic Volume of import-related trailer by Direction

Area	Container (number of vehicle /day)	Rate
DKI	1007	24.3%
MPA South	320	7.7%
MPA East	1912	46.2%
MPA West	822	19.8%
Unknown	81	1.9%
Total	4141	100.0%

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

A.4.1.3 Logistics Service Company Survey

It is possible to get a flow of freight transport by freight OD survey, but there are many unclear points for conditions of the transportation business. Therefore, survey was conducted to understand the reality of transport business

(1) Survey Method

< Survey Target >

Target of survey was 50 truck operators in Jakarta and surrounding area.

< Survey Methodology >

The survey was conducted that interviewer visited the company, and described in the questionnaire.

<Study period>

The survey was conducted from June 2013 to August.

<Survey items>

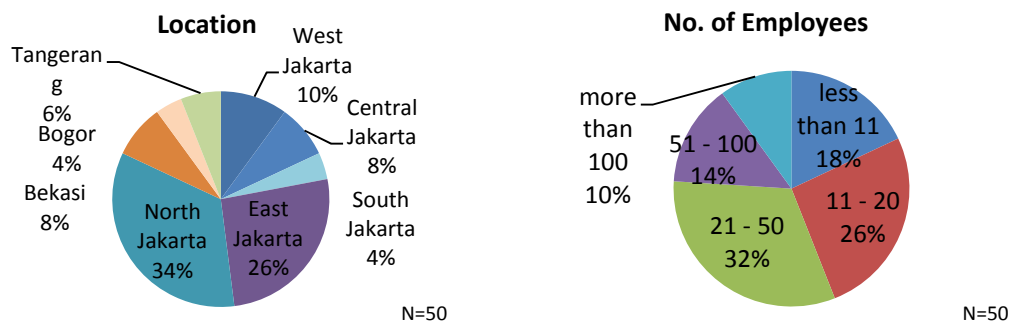
The questions was factory overview, delivery costs, Import/Export item OD through Tanjung Priok Port. Details of the study item were shown below.

- Company Profile
 - Number of employees, Annual amount
- Service contents, Service areas
- Customer Outline
 - Number of customers
 - Fare revenue, Transportation cost
 - Major operating routes

(2) Survey results summary

<Outline of Target >

Answers got from the 50 companies in Jakarta and surrounding area. Company in Jakarta was approximately 80%. 70% of the company was that the number of employees of the company was approximately 50 people or less, but 10% was more than 100 people.

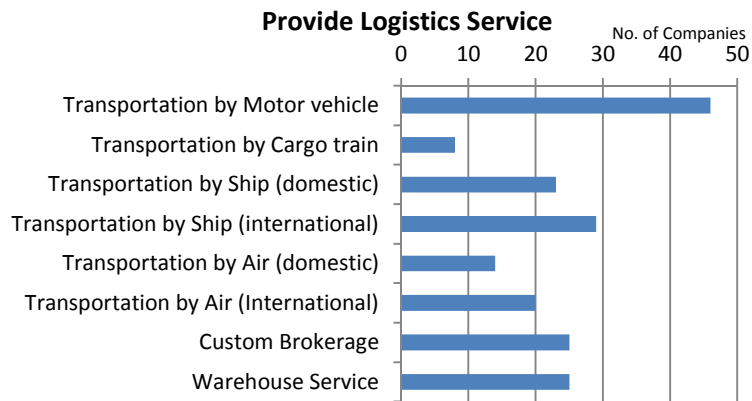


Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.6 Outline of Target

<Outline of Freight Service >

Many companies are doing not only land transportation, but also transportation services using ship and aircraft. Companies also deal with international transport, not only in domestic.

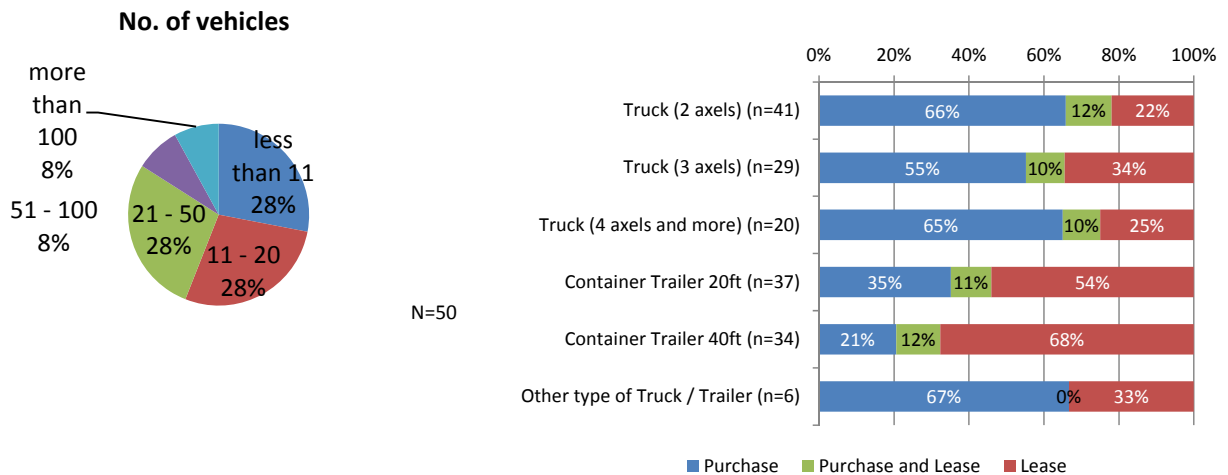


Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.7 Outline of Freight Service

<Status of owned vehicle>

Ownership of by vehicle, 55%-66% companies owned purchased truck (2 axles, 3 axles, 4- axles or more). 54% companies leased 20ft container truck, 68% companies leased 40ft container truck. It was considered that the ownership of the vehicle was different depending on the service provided.



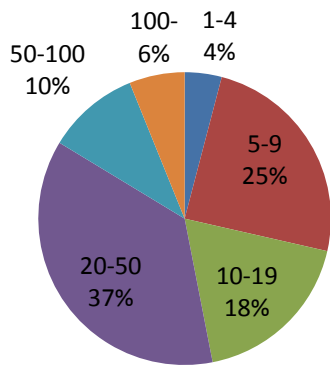
Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.8 Number of vehicles owned/ Ownership of vehicles

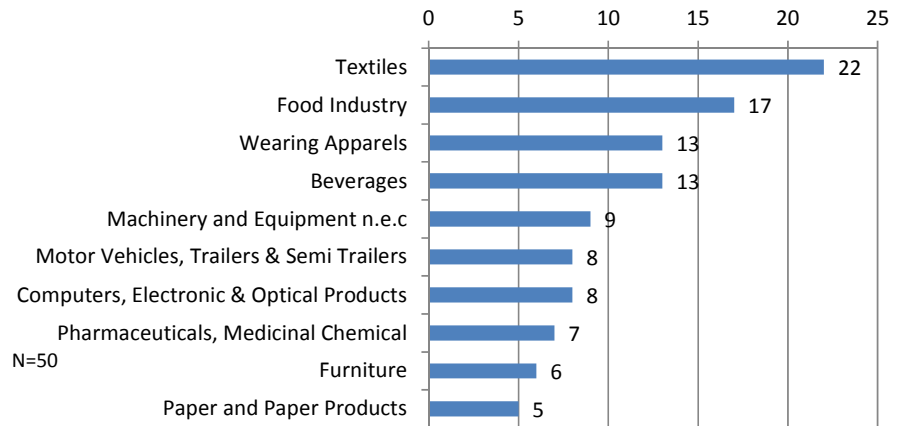
<Customers Outline>

Company that have number of customers of 20 to 50 companies was the largest. Customers' industry up to 4 in the top was textile, apparel, food and beverage.

Number of Clients/Customeres



Main Industry of Clients / Customers (Top10)



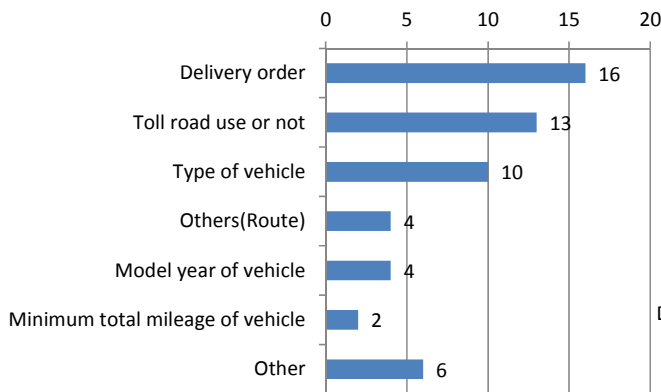
Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.9 Number of customers and customer industries

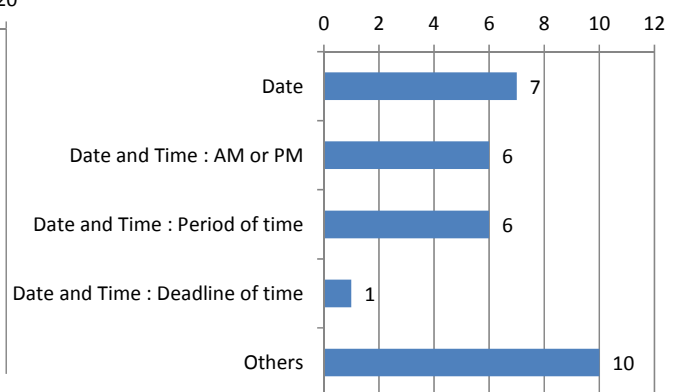
<Customer Requests>

The large number of the items that were specified by the customer was delivery order, toll road use, type of vehicle. 27 companies to specify the delivery time was by the customer, as way of the arrival time specification, there were many companies specified in the date and approximate time.

Clients/Customeres Request



Clients/Customeres Request (Arrival time)



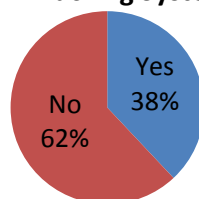
Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.10 Customer Requests / Customer Requests (arrival time)

<Ownership of tracking system>

Company that introduced a tracking system was 38%. Tracking system is to understand the position information of the vehicle and to manage the state by attached a GPS OBE on the vehicle.

**Ownership percentage of
Trucking System**



N=50

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.11 Ownership of Trucking system

A.4.1.4 SP survey

In order to understand the intention of port use when Cilamaya port will have opened, SP (Stated Preferences) Survey was carried out for the factories located in Jakarta and surrounding area.

(1) Survey Method

< Survey Target>

Target of SP survey was targeted 1,756 factories with 100 employees or more located in JABODETABEK and Karawang. Goal of effective samples was more than 200 factories.

<Survey Methodology>

The survey was conducted that interviewer visited the company, and described in the questionnaire.

<Study period>

The survey was conducted from July 2013 to August.

<Survey items>

The survey items were as for import and transfer through Tanjung Priok port, because there is a case to be carried out and finished the customs clearance at the factory when factory export. Items were travel time, transportation costs for 1 container in order to understand current situation, and factor in selecting of Cilamaya port and freight rail. Usage Intention for Cilamaya port was investigated to set the alternative level of service for the port of call frequency, time required, and cost.

Details of the study item were shown below.

- Situation of cargo through Tanjung Priok Port
 - Container size
 - Customs channels
 - Required Time (in port, out port)
 - Transportation costs (unloading from the ship, customs clearance costs, and freight costs)

- Use of intention Cilamaya port
- Use of intention freight rail
- Port selection factor

(2) Survey results summary

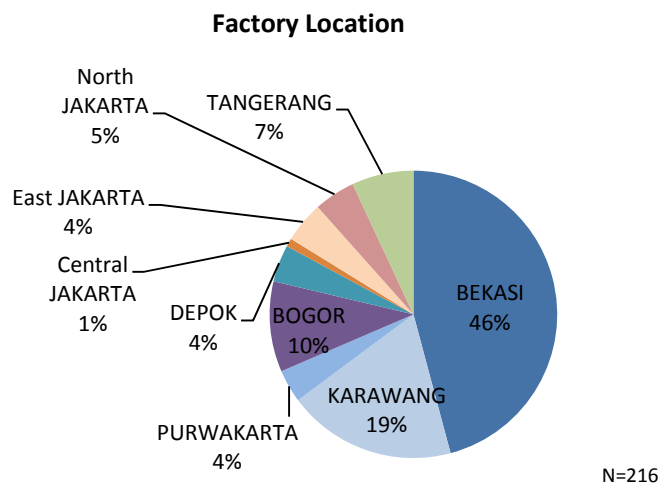
Survey was carried out for factories located JABODETABEK and Karawang. Main factories were located in Bekasi and Karawang close to Cilamaya port.

Many factories answered that most important factor when they choose port was required time between factory and port. It is expected that many factories that located Bekasi and Karawang would be converted to Cilamaya port. Because of required time to Cilamaya port will be shortened as compared to Tanjung Priok port. 75% factory answered low cost and punctual operation when they would select freight rail. It is considered that there is a possibility to select freight rail depending on the conditions.

Summary of the survey results are as follows.

<Outline of Target >

Answers got from 1027factory in Jakarta and surrounding area.

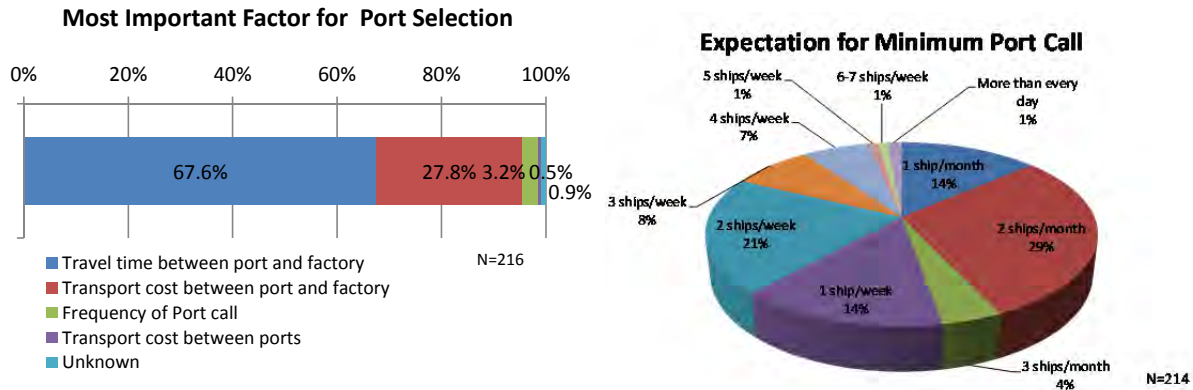


Note: Bekasi, Bogor, Tagerang was total of Kota and Kabupaten
 Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.12 Location of Target

<Port selection factors>

The answer of the most important factor when they determine the port from the choices was 68% factory answered that the required time between port and factory. Expected minimum port of call frequency was 29% factory answered 2 times / month and 21% factory answered 2 times / week

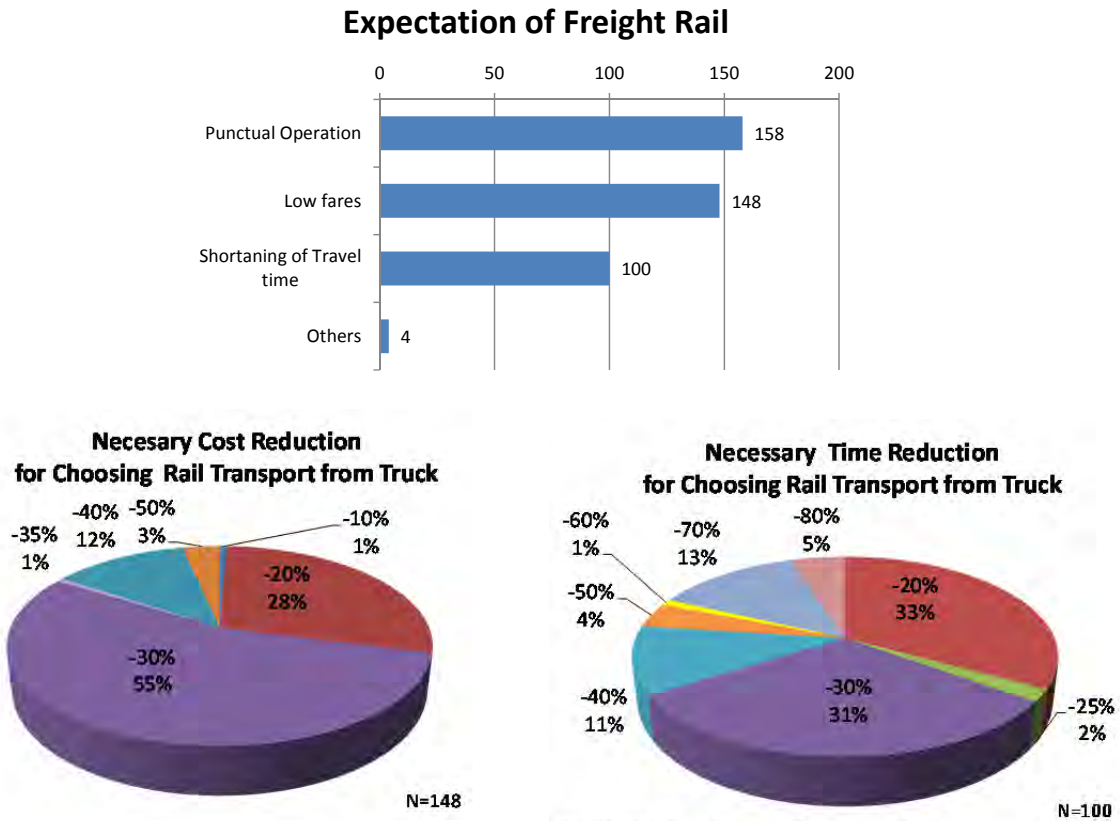


Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.13 Most important factor of select factors / expectation for minimum port call

<Freight rail selection factor>

As a factor for selecting a freight rail, 158 factories answered punctual operation, and 148 factories low cost. As the cost, if the cost would be -10% to -30% compared to by truck, 83% factory answered to select the railway. If the time would be -20% to -30% compared to by truck, 66% factory answered to select the railway.



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.14 Freight rail selection factor

A.4.1.5 Interview survey for cargo owner, shipping company and logistic company

In order to understand current state, the future trend of transportation and logistics to supplement re-commissioned survey. Interview survey was carried for manufacturers, shipping companies, logistics companies.

(1) Survey Method

< Survey Target>

Interview survey was targeted manufacturers, trading companies, industrial park management companies, shipping companies, logistics companies in Jakarta and Eastern MPA.

<Survey Methodology>

The survey was conducted that interviewer visited the company, and described in the questionnaire.

<Study period>

The survey was conducted from May 2013 to June 2030.

<Survey items>

The questions was factory overview, problem and issues for port, custom, and transport, future trend for production, mark a trend, choice of the port.

(2) Survey results summary

Factories located Eastern MPA such as Bekasi, Karawan are away from Tanjung Priok Port and transport from port to factory is only by truck. But, urban area of Jakarta and tall road are congested chronically. Therefore, secure smooth access to port is required for port-related heavy vehicle such as container trailers.Lack of container yard capacity and chronic congestion is caused in Tanjung Priok Port.In recent years, it tends to time required for customs clearance is long, because inspected items are increase due to the increase of new companies, speed and efficiency of customs clearance work is required.

Expansion and integrated factory of automobile and auto parts is expected in the eastern MPA in the future. But there is no land can be allocated to the factory in Jakarta neighbourhood, development in the area away from Jakarta such as Karawang Puruwakaruta is expected.

Intention of Cilamaya Port of manufacturers located in eastern MPA was that they showed the intention to utilize Cilamaya Port expectations such as to shorten the time by improving accessibility to port. Shipping companies have also predicted that trend, but they said that it will be difficult to ports of call in both 2 port because Cilamaya Port and Tanjung Priok Port will be too close. It is expected that distinguish by a clear division of functions Cilamaya Port and Tanjung Priok Port.

1) Problems and issues

<Overall Logistics>

- It needs to reduce the long lead time between warehouse / factory and port. (Trading company)

<Port facilities and management>

- Tanjung Priok port was a chaotic two years ago, because of handling amount was increased. But currently, it gets control for example trying to work out the space. Although narrow space, slow (customs clearance time, etc.), bad access are big problems, facility and operation of the port is no problem in particular. (Shipping companies, logistics companies, industrial park)
- There are five berths for break bulk vessel at JICT1 and JICT2 currently, but it is less than before. Recently, transit shed facilities for break bulk cargo have been collapsed in order to ensure space for container. We feel port has been migrated to the container. (Shipping companies)
- Restriction occurs in the loading and unloading for the domestic vessel. Domestic vessels cannot be docked for berth and waiting out at the sea because number of berth for domestic vessels is less. (Manufacturer)

<Land transport>

- The cycle of export is that goods are produced during the week, carried out from factories to port on Thursday and Friday, and loaded the ship on the weekend in many cases. Therefore, it is the peak of congestion in Friday afternoon. Congestion in the north-south section of the toll road towards the port occurs chronically. (Logistics company)
- Transportation from the port was two rotations a day in 2005, but it is one rotation a day these days because of heavy traffic. It is very inefficient. (Logistics company, trading company)
- It is sometimes difficult to arrange container trailer in the weekend there are a lot of loading to the port. Forwarders which undertake the transport does not easily increase the number of owned trucks/trailers. Because demand of the trucks/trailers increases the weekend, but it for weekday is less than weekend. They cannot equalize the operation. (Logistics companies)

2) Future trend

<Future production and economic outlook>

- The benefits of investment to Indonesia are the number of workers and resources are rich, market size is large, GDP is growing and they have purchasing-power.
- It is expect that it would need 11,000 ha industrial land for next 20 years along Jakarta-Cikampek toll road. Constraint is the price of land. It was US\$ 50/m² in 2010, but it has risen to US\$ 150/m² in 2013. (Industrial Park)
- Vehicle sales in Indonesia is about 110 million vehicles in 2012, it is expected about 200 million vehicles in 2020. About 50% of the current sales volume is Jakarta and surrounding area, but we believe that this ratio would be down in Jakarta and surrounding area and grow in the region in the future. (Manufacturer)
- Industrial land in the eastern MPA has expanded to the east to the east. Because it can considered that it cannot supply enough land near Jakarta, construction of Cikampek-Cirebon toll road is expected, and minimum wage is low. (Manufacturer)

- Car terminal in Tanjung Priok Port is about 13ha currently, 13ha is under construction and it is scheduled for completion in 2013. When it is completed, it can correspond to supply the amount of car manufacturers plan for the time being. But, in the future, it is assumed to be in shortage. Car terminal is basically a vacant site, so it can also be a container terminal, but also in bulk cargo terminal with flexibility in the future. (Shipping company)

< Interest in Cilamaya port >

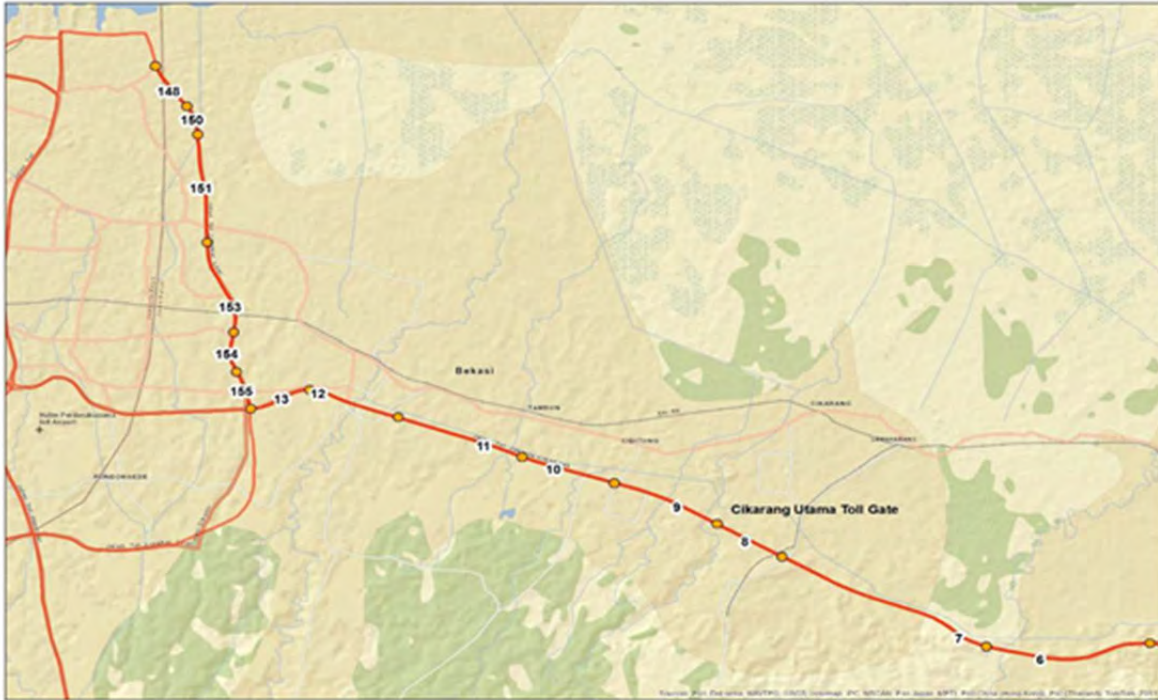
- We would like to use Cilamaya port if Cilamaya port would be opened. The maximum benefit is time-readable. Costs of inventory holding cost will be able to be reduced by the reduce stock. The effect is large for inventory holding cost is high. (Trading company)
- Expectation for Cilamaya port is very large. We would like to open quickly without waiting for 2020. Access to the port will be very efficient without passing through congestion in Jakarta. We think it will contribute greatly improvement of efficient logistics. We would like government to improve access road as well as construction the port. (Manufacturer)
- Port of call to Cilamaya port is up to the customer's demand. It is considered that a lot of car manufacturers which are collect around eastern MPA will select to use Cilamaya port, even if disadvantage caused such as increased costs. However, we wish to avoid to port of call the two ports, Tanjung Priok port and Cilamaya port, in terms of cost. We expect improvement services such as cost competition from private use of terminal operators. (Shipping companies)
- We do not think ship would call at both Tanjung Priok port and Cilamaya Port. It would surely mistake when cargo are transported to the port. If it comes to leaving from Tanjung Priok, or from Chiramaya port by route of the ship in the same shipping company. It need clarify to use properly of Tanjung Priok port and Cilamaya Port. (Logistics company)
- Division of Customs will be change in different province. if companies that have established a good relationship with customs in Tanjung Priok would use Cilamaya port, they need to build a relationship between customs from scratch. So they will be disinclined for select of Cilamaya port a little. (Shipping company)
- It is need not only port development, but also secure sufficient land and developed of facilities hinterland. (Logistics companies)

< Interest in freight rail >

- We might consider using freight rail, if the incoming line would directly be developed by the yard. Freight rail would be occurred rail dust that would enter into the inside of the vehicle, it is necessary to take measures to ensure the quality. (Manufacturer)
- Depends on the service of the port (cost, time) and road conditions (inside and outside of port). (Manufacturer)

A.4.1.6 Travel Speed Survey

To confirm the traffic congestion situation, a Travel Speed Survey was carried out under the study. Targeted routes are as shown in Figure A.4.1.15



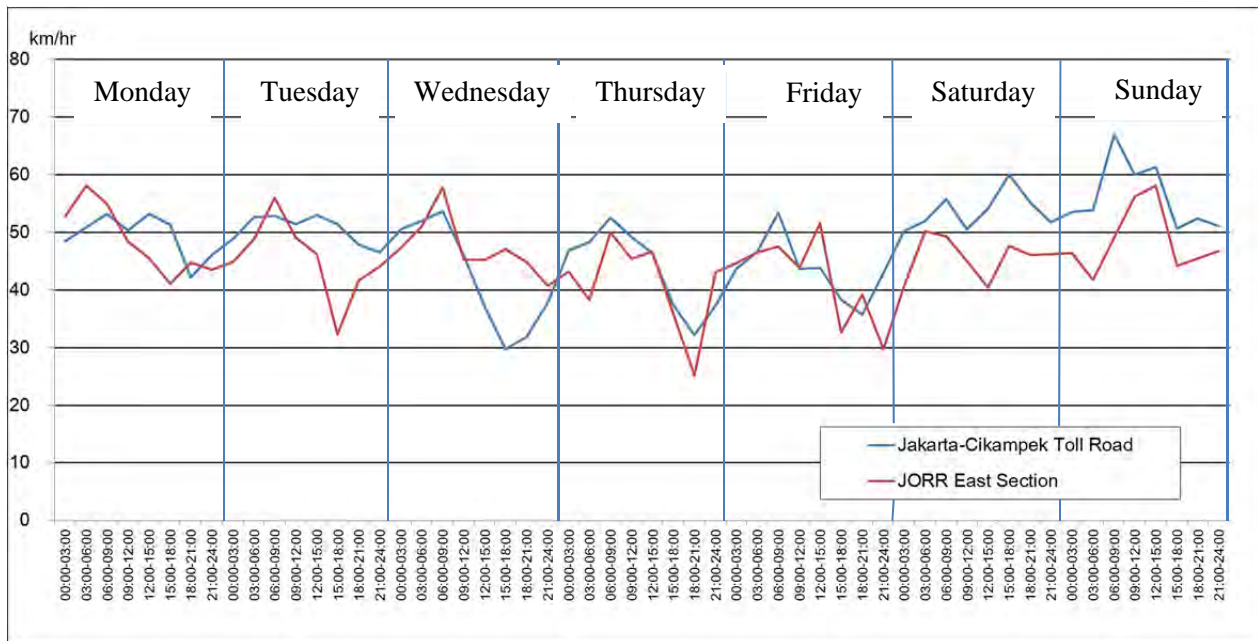
Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.15 Travel Speed Survey Targeted Routes

The survey was conducted as follows;

Survey Area	Gates of Terminal at Tanjung Priok Port to Tangerang, Depok, Bekasi and inside the Tanjung Priok Port
Survey Period	One week from May 20, 2013 to May 26, 2013
Vehicles to be Surveyed	600 trucks from Gates of Tanjung Priok Port to Tangerang, Depok and Bekasi 15 trucks within Tanjung Priok Port

Survey results were compiled in the GIS database and traffic congestion on the road network in the survey area were analysed.



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.16 Average Travel Speed of Trucks by Day of Week and Hour-band on the Jakarta – Cikampek Toll Road and East Section of the Jakarta Outer Ring Road

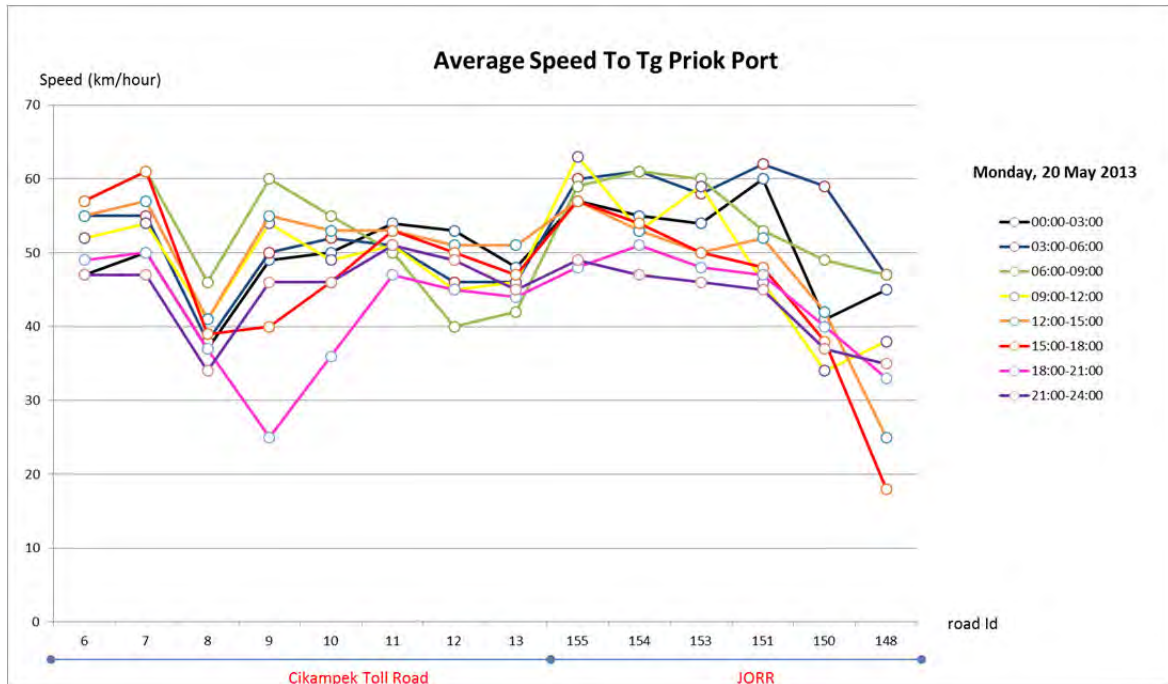
(1) Average Travel Speed by Road Section by Hour Band

Variation of travel speed by day of week indicates that average travel speed on Jakarta -Cikampek Toll Road is relatively high on Saturday and Sunday. This is attributable to the fact that a large number of commuter trips and business trips are made between Jakarta and Belasi/Cikarang on weekday. When looking at hourly fluctuation of travel speed, average travel speeds go down to less than 40 km/hour on the specific day of week and time band but except special occasion, the average speeds are in the range between 40 km/hour and 60 km/hour. Significant difference of travel speed cannot be observed on weekday from Monday to Friday.

In order to examine the difference by road section, the average travel speeds on the Jakarta – Cikampek Toll Road and the East Section of Jakarta Outer Ring Road were illustrated separately by day of week; namely, Monday to Sunday in Figure A.4.1.17to Figure A.4.1.23.

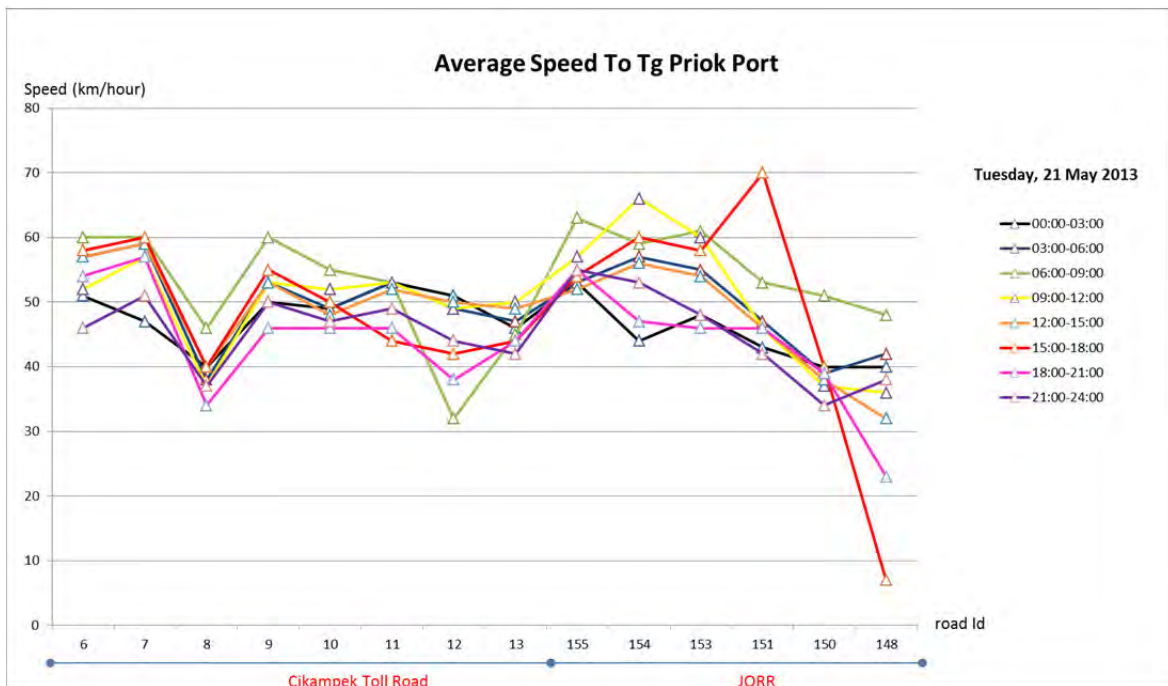
The average travel speed at the section with road ID No. 8 appears lower than those in the neighbouring sections. This road section has Cikarang Utama toll gate on the main line and when traffic congestion at toll gates was occurred, the lower speed was observed.

The road section 148 is the end road section of the East Section of the Jakarta Outer Ring Road. Since it is connected with an arterial road; thus lower speed was observed.



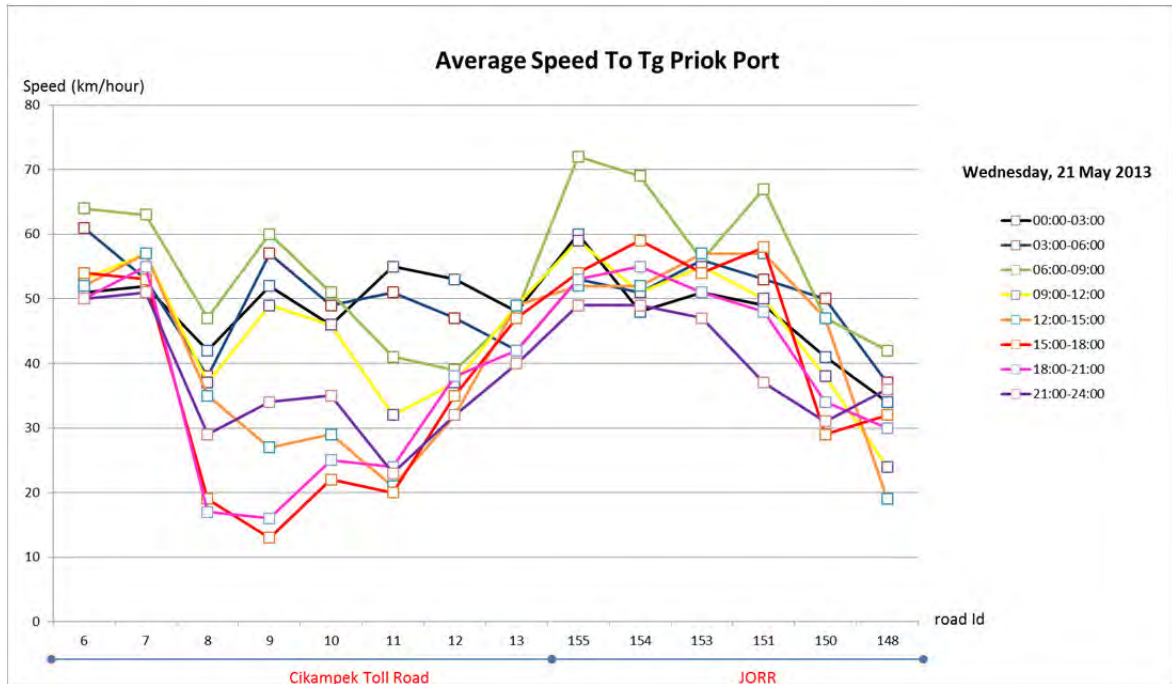
Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.17 Average Travel Speed by Road Section by 3-Hour Time Band on the Jakarta – Cikampek Toll Road and East Section of Jakarta Outer Ring Road: Monday



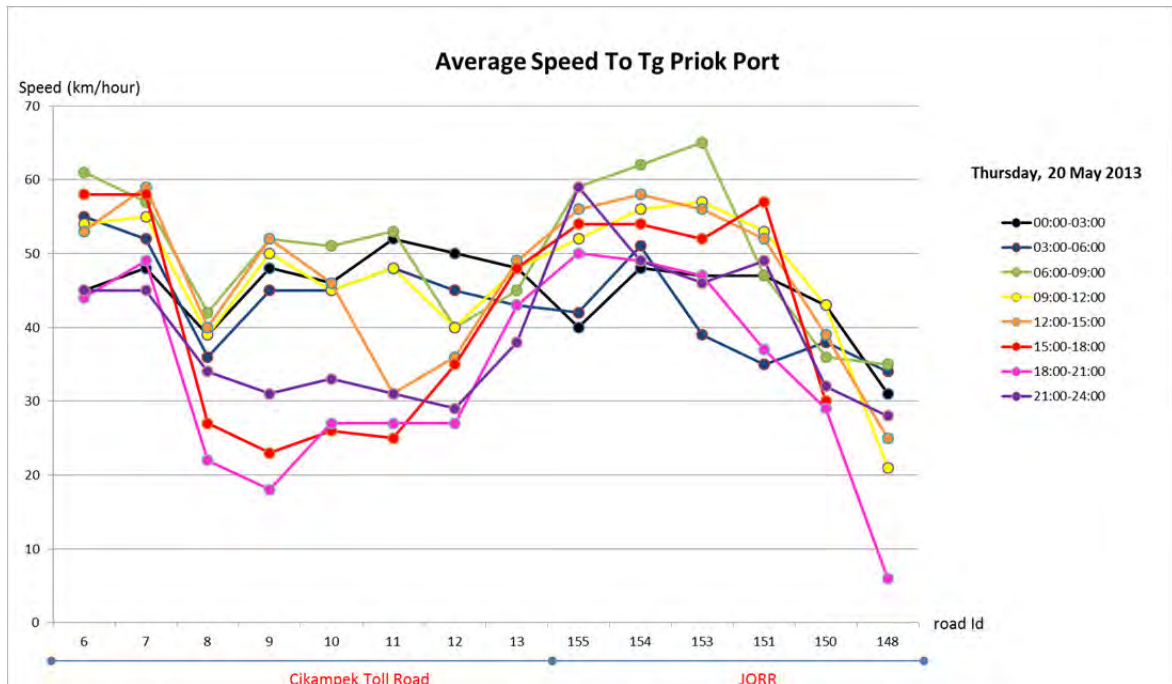
Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.18 Average Travel Speed by Road Section by 3-Hour Time Band on the Jakarta – Cikampek Toll Road and East Section of Jakarta Outer Ring Road: Tuesday



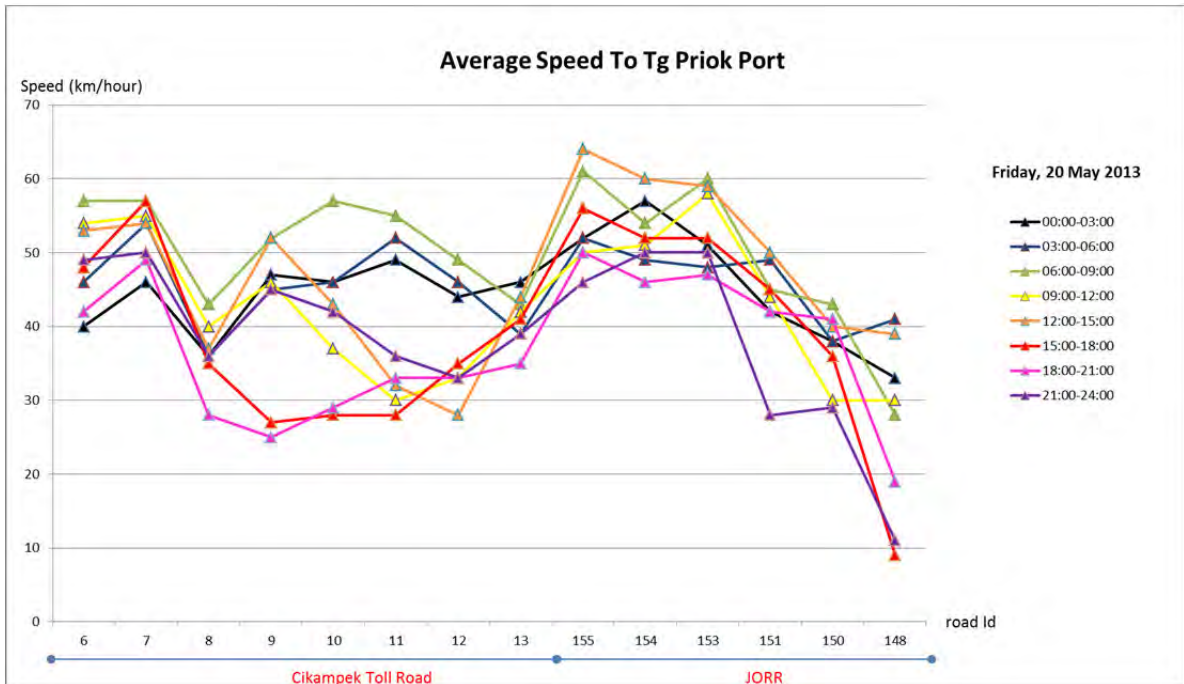
Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.19 Average Travel Speed by Road Section by 3-Hour Time Band on the Jakarta – Cikampek Toll Road and East Section of Jakarta Outer Ring Road: Wednesday



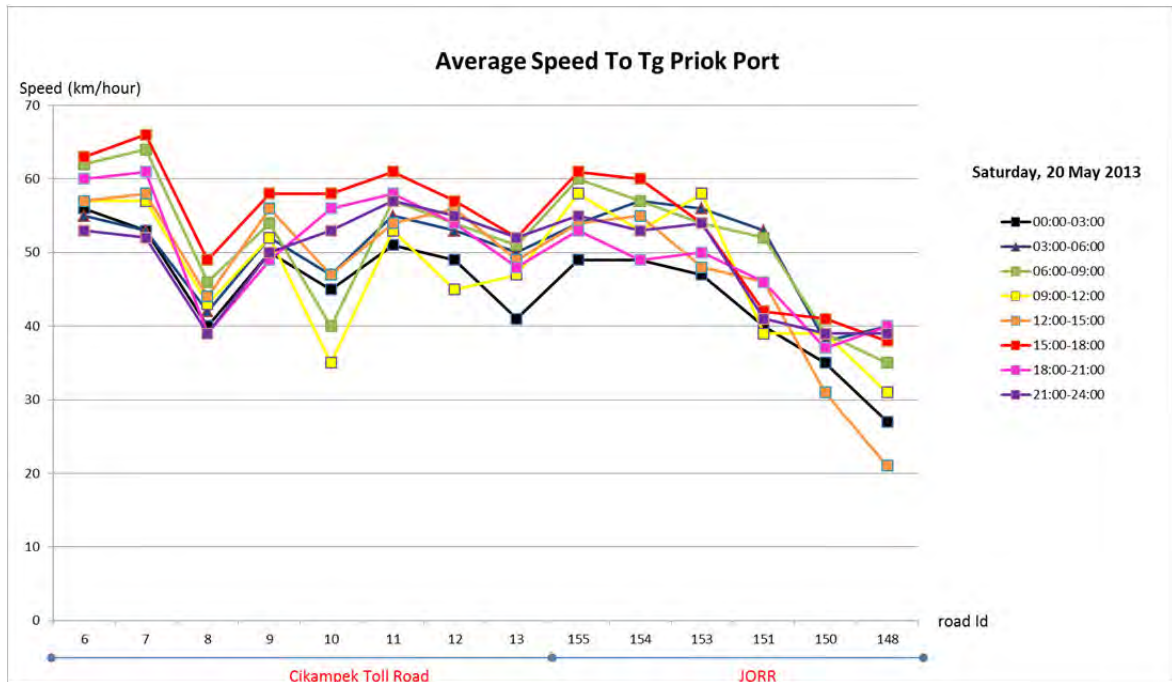
Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.20 Average Travel Speed by Road Section by 3-Hour Time Band on the Jakarta – Cikampek Toll Road and East Section of Jakarta Outer Ring Road: Thursday



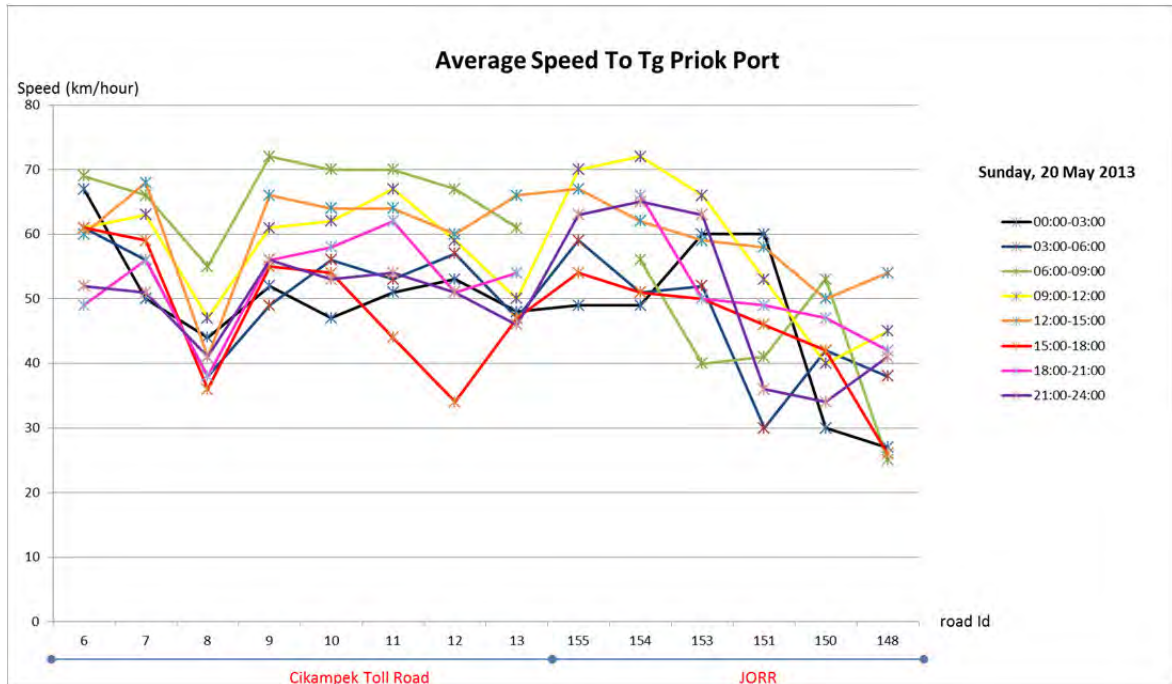
Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.21 Average Travel Speed by Road Section by 3-Hour Time Band on the Jakarta – Cikampek Toll Road and East Section of Jakarta Outer Ring Road: Friday



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

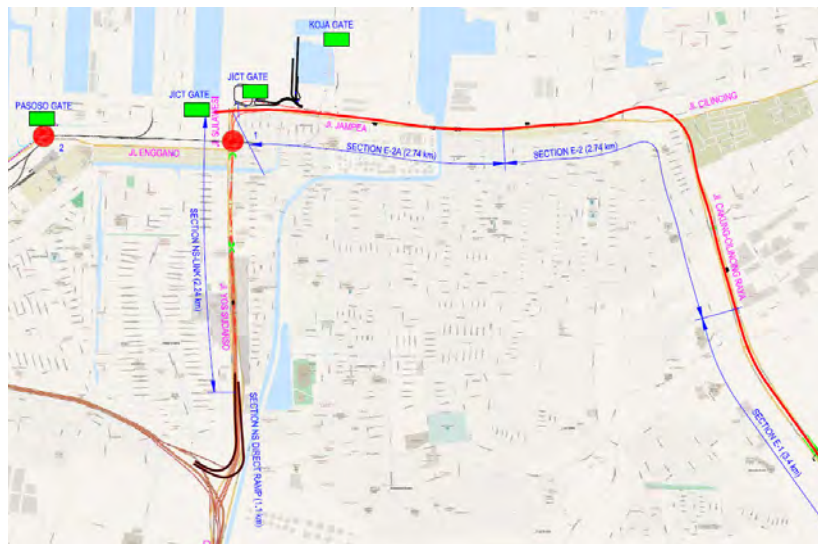
Figure A.4.1.22 Average Travel Speed by Road Section by 3-Hour Time Band on the Jakarta – Cikampek Toll Road and East Section of Jakarta Outer Ring Road: Saturday



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.23 Average Travel Speed by Road Section by 3-Hour Time Band on the Jakarta – Cikampek Toll Road and East Section of Jakarta Outer Ring Road: Sunday

The average travel speeds from Cikarang to Jakarta were gradually decreased except the road section with toll gate on the main line. After entering the Jakarta Outer Ring Road, the speed was increased and it can be said that in general it is less congested on the Jakarta Outer Ring Road compared with the Jakarta – Cikampek Toll Road.



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.24 Roads Surrounding Tanjung Priok Port

Trends of traffic congestion in the roads surrounding Tanjung Priok Port are as follows.

- Most congested roads are Jl. Pelabuhan Raya, Jl. Jampea, Jl. Sulawesi, and Jl. Enggano which is location in front of Tanjung Priok Port.
- East from Tanjung Priok Port is stronger trend of congestion.
- Congestion trend will increase on Wednesday, Thursday and peak is Friday. (Figure A.4.1.17-A.4.1.23 are showing travel speed between JORR and Cikampek Toll Road. Trend of travel speed of this route are reduce speed level Wednesday and Tuesday and Friday is most low speed level due to main ships are concentrating to Friday shipping. However, week end of Saturday and Sunday are recovering a speed. Also, loading from industrial area is one of the main reasons for traffic congestion. However, cause of traffic congestion of this area is not clear for far, more detailed study for cause of traffic congestion shall be implemented on next stage.)
- Early recovery of travel speed in the direction toward Tanjung Priok Port.(Congestion length is short)

(2) Cause of traffic congestion on roads surrounding Tanjung Priok Port

As shown in the above travel speed survey results, there is serious traffic congestion with travel speeds of 0-10km/h on the roads surrounding Tanjung Priok Port. Jl. Pelabuhan and Jl. Jampea which connect to Tanjung Priok Port gate have very serious congestion and obstruct proper transporting for import-export operators. The causes of traffic congestion on the roads surrounding Tanjung Priok Port are as follows.

- Absolute lack of traffic capacity of existing roads
(Road capacity will be improved because of compleation of Tg. Priok access road)
- Illegal parking and/or disabled cars
(Road capacity will be improved because of compleation of Tg. Priok access road)
- Traffic restriction due to Tanjung Priok Port access road construction
(By the completion of Tg. Priok access road, traffic disturbance will be solved as same as above reason.)
- Neglecting of traffic regulations
(Vehicles for construction work and cargo traffic are mixing and make ignorance of traffic control, however, after completion of Tg. Priok access road, traffic police will be able to control such illegal traffic by the traffic signal and/or sign board.)
- Flooding in the rainy season
(Concerning to road flooding surrounding Tg. Priok port, Study team made interview to Cipta Karya and get information concerning to flooding that flooding surrounding Tg. Priok port is not occurring frequently, however monitoring will be made continuously.)
- Excess traffic which exceeds the handling capacity of Tanjung Priok Port
(700 M TEU container is handling at Tg. Priok port even which capacity of 500 M TEU. Therefore, Cilamaya new port plan is ongoing to solve this issue and exceeding cargo which is transported to Cilincin and Marmda Depot will be transported to Cilamaya new port after completion of New Port.)
- Railway station and bus terminal which are located on the west side of the port

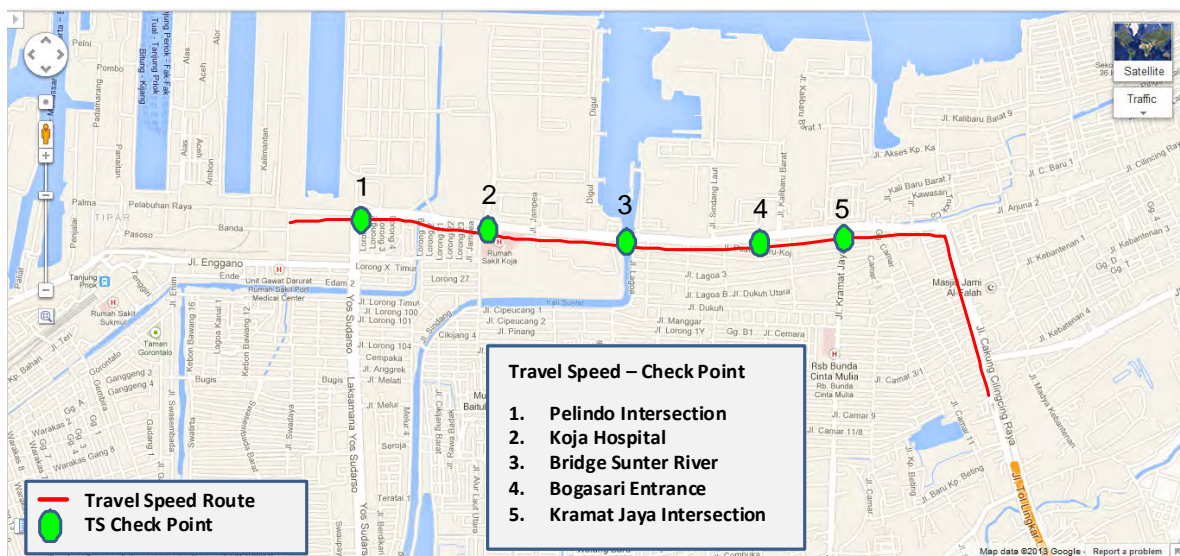
(Bus terminal and rail way station is position for U-turn for Trans Jakarta and heavy vehicles and making traffic congestion. Therefore, study team is recommending to improve railway station and bus terminal with flyover construction)

The above complex factors are causes of traffic congestion on the roads surrounding Tanjung Priok Port. The above factors are also pointed out in the interview survey in the Master Plan Study on Port Development and Logistics in Greater Jakarta Metropolitan Area Study of 2010. Thus, it is not doubtful that those factors are causes of traffic congestion.

To obtain more detailed information regarding congestion on the roads surrounding Tanjung Priok Port, a detailed travel speed survey was carried out. Following are the survey conditions.

- Survey Period : Year 2013, July 25 and 26
- Survey Time : 12 : 00 – 24 : 00
- Survey Location : From Tanjung Priok Port gate to Kramat Jaya intersection
- Survey Items : Fixed point observation by video. Travel speed survey by car. Confirmation of congested points. Interview Survey

Figure A.4.1.25 shows the travel speed survey route and check points.

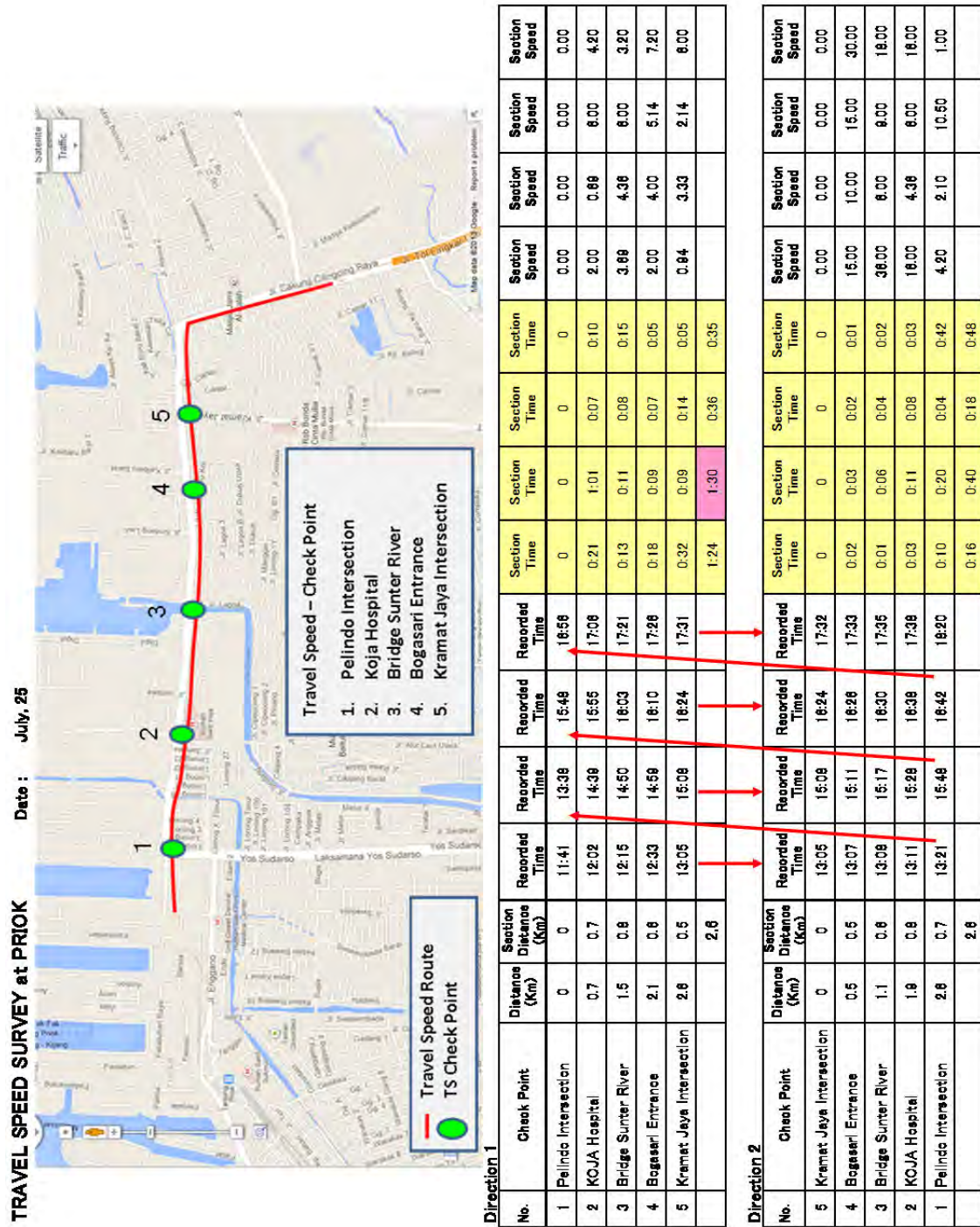


Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.25 Locations of Travel Speed Survey Route and Check Points

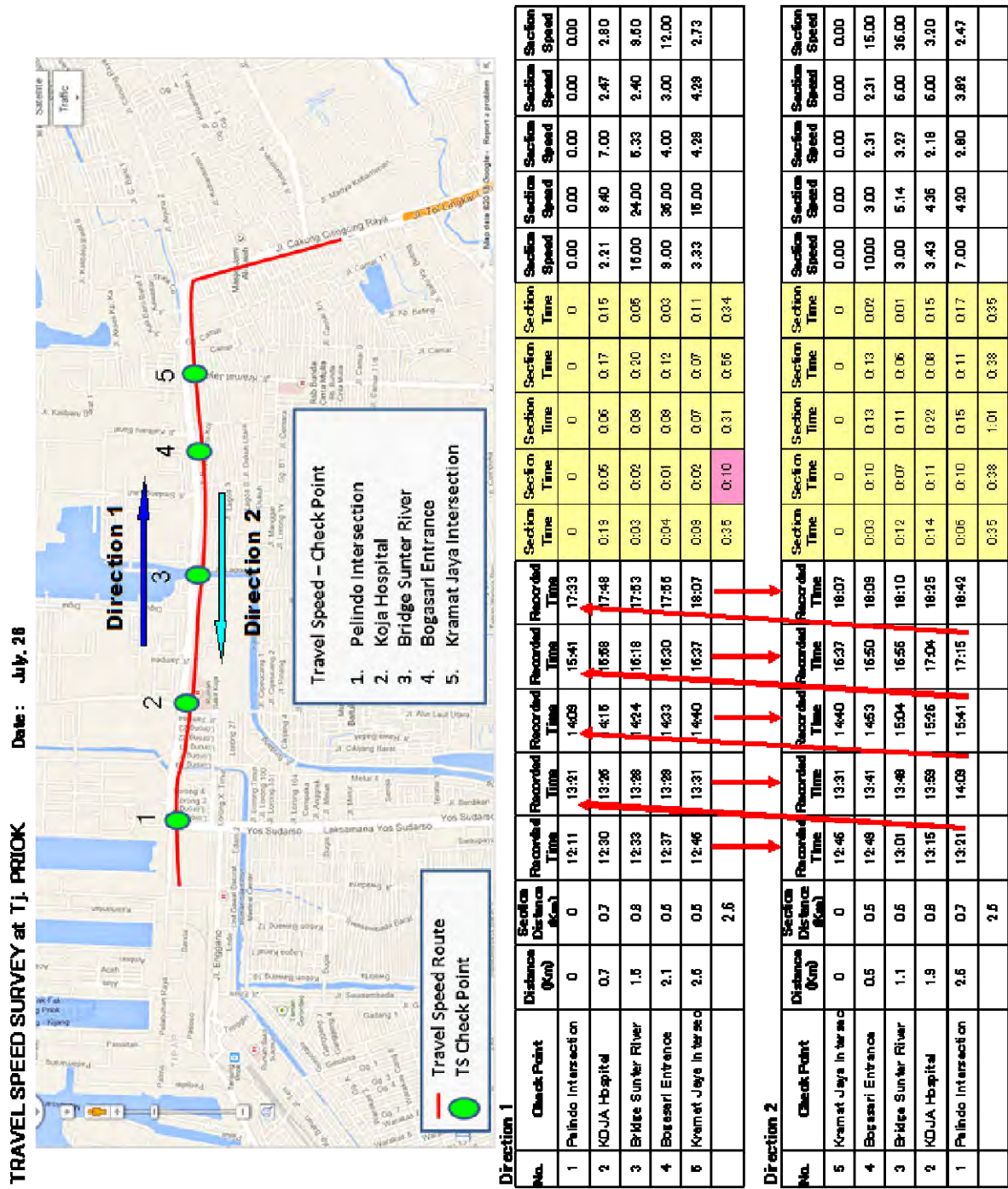
Travel speed survey for Tanjung Priok Port front road was carried out as follows.

Starting from the beginning point of Perind Intersection, travel east to the end point of Kramat Jaya intersection and turn west. A total of 4 round trips were made on 25th July and 5 round trip on 26th July to check recorded time of each check point and calculate travel time for each check point. Based on these travel times, travel speed for each check point and total travel times were calculated. There is great variance in the time that it took to travel over the 2.6 km road length ranging from 1 hour 30 minutes to 10 minutes. According to the Interview Survey, the causes of this traffic congestion are the same reasons as for 4) Cause of traffic congestion on the roads surrounding Tanjung Priok Port



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.4.1.26 Detailed Travel Speed Survey Results (July 25)



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA
Figure A.4.1.27 Detailed Travel Speed Survey Results (July 26)

A.4.2 Forecast of transportation and logistics sector in study area

A.4.2.1 Forecast of Eastern MPA

(1) Socio-economic framework to 2030

The principal factors that forecast the future development in the target area are as follows.

- Demographic (Population and employment opportunities by economic activities)
- GRDP
- Availability of land for manufacturing use developed as industrial estates (already developed and newly to be developed industrial estates)
- Developments in the automotive and motorbike manufacturing and related industries

(2) Future Population

According to the statistics of Indonesia, the average population growth rate of Indonesia will increase by 1.03% from 2010 to 2030, DKI Jakarta by 0.72% and West Java by 1.17%. The growth rate in the target area was estimated at 3.24% annually from the share of the target area out of the national and West Java based on the population in 2010. The increase rate in population was based on the density level of Jakarta (about 14,500people/km²). The population of the target area is estimated at 68.4 million in 2010 and 1.249 million by 2030.

Table A. 4.2.1 Future Population of the target area to 2030

Year	2010	2015	2020	2025	2030
Population (thousand)	6,841	7,741	9,079	10,648	12,488

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

(3) GRDP Forecast

Based on the nominal GRDP in 2009, the real GRDP was converted with the growth rate of GRDP from 2008 to 2011, and real GRDP from 2013 to 2030 was estimated with the base year of 2000.

Table A. 4.2.2 Real GRDP Forecast

Year	2013	2015	2020	2025	2030
GRDP (billion Rp)	272,072	315,443	477,299	664,388	967,266
GRDP per capita (million Rp)	37.56	40.75	50.37	62.40	77.46

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

(4) Manufacturing Expansion

It is necessary to understand the manufacturing structure for the manufacturing forecast. Due to the limited statistical data at city and regency level, the statistics of DKI Jakarta were also included.

As the structural indicators to understand the manufacturing structure, the distribution of the number of establishments, employment, manufacturing output, value added and labour cost are used. In addition, as

performance indicators on a “per employee” basis, the manufacturing output, value added and labour cost is used.

The summary of each indicator by manufacturing are shown as follows.

Table A. 4.2.3 Manufacturing Structure

By Manufacturer	Performance value on a per employee in 2010				Relative share in total manufacturing				
	Average firm size (people)	Output per employee (million Rp/year)	Value added per employee (million Rp/year)	Wage (million Rp/year)	Total number of establishments	Total employment	Total output	Total value added	Total labour cost
Food, beverages, tobacco	149.1	294.61	79.54	13.12	11.5%	7.3%	4.9%	2.1%	7.1%
Textile, leather, footwear	208.9	68.08	30.23	7.44	22.2%	19.7%	3.1%	2.2%	11.0%
Wood & related	164.9	114.39	47.90	9.55	2.9%	2.0%	0.5%	0.4%	1.4%
Paper & printing	114.3	159.91	85.54	13.02	7.3%	3.6%	1.3%	1.1%	3.5%
Fertilizer, chemical & rubber	215.3	274.18	116.13	19.58	16.8%	15.4%	9.7%	6.5%	22.4%
Cement, non-metallic	449.9	118.33	45.80	12.15	1.6%	3.1%	0.9%	0.5%	2.8%
Basic iron/steel	235.3	911.12	187.66	29.95	1.7%	1.7%	3.6%	1.2%	3.9%
Transport, machinery & apparatus	342.3	771.37	557.43	13.01	28.7%	41.8%	73.9%	84.1%	40.5%
Other manufacturing	175.4	174.20	102.90	18.26	7.3%	5.4%	2.2%	2.0%	7.4%
Total	235.1	436.00	276.59	13.41	100.00%	100.00%	100.00%	100.00%	100.00%

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Within the manufacturing structure, the transport, machinery and apparatus is the key sector for the structural and performance indicators. The manufacturing of transport, machinery and apparatus in 2010 accounted for approximately 29% of all establishments, approximately 42% of all employment, 74% of total manufacturing output, 84% of all value added generated and 41% of total labour cost. While the value added generated on a per employee was highest in transport, machinery and apparatus among all manufacturing, the wage based on per employee was below average for manufacturing as a whole. In the target area, manufacturing, which deals with automotive, motorbikes, transport, machinery and apparatus plays an important role for economic development.

Next, in order to expand the manufacturing in the future, what extent industrial estates are likely to accommodate expanding manufacturing activities is examined.

Out of the currently developed industrial estates of 7,548 ha in the target area, 43% is already in use with 3,246 ha, and the rest of 57% with 4,320 ha is not used yet. Also there are 9,883 ha which are approved for development of industrial estates but not yet developed .

The following table shows the manufacturing GRDP by 2030, and necessary land for industrial estates. The necessary land for industrial estates will reach 7,591 ha by 2025. This means that the currently

developed industrial estates will all be used, and newly developed industrial estates of 3,344 ha will be necessary by 2030.

Table A. 4.2.4 Manufacturing GRDP and Necessary Land for Industrial Estates

Year	2013	2015	2020	2025	2030
Manufacturing GRDP (billion Rp)	190,450	220,909	320,104	463,841	672,122
Necessary land for Industrial Estates (ha)	3,246	3,746	5,316	7,591	10,887

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

(5) The Potential Role of Automotive and Motorbike Manufacturing

Indonesia has emerged as the second largest automotive manufacturer among ASEAN member countries over the last decade. The majority of manufacturing facilities are located in the target area and the production of automotive and motorbike products has rapidly expanded from 2000 to 2012 (Table A.4.2.5).

According to the export and import statistics of GAKINDO from 2005 to 2012 (Table A.4.2.6), both export a Table A.4.2.5 and import of CBU has rapidly increased from 2005 to 2012. The export of automobile parts is mainly engines.

Table A. 4.2.5 Trend of Automobile Production in Indonesia (from 2000 to 2012)

Year	2000	2012	Annual average growth rate (2000-2012)
Passenger cars	286,176	743,501	8.28%
Commercial cars	6,546	322,056	38.36%
Sub-total	292,722	1,065,557	11.37%
Motorcycles and scooters	982,380	7,079,721	17.89%
Total	1,275,102	8,145,278	16.71%

Source: Formulated by Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on GAKINDO and ASEAN Automobile Federation

Table A. 4.2.6 Exports and Imports of CBU and Parts (from 2005 to 2012)

Year	2005	2012	Annual average growth rate (2000-2012)
Export (CBU): Vehicles	17,805	173,368	38.42%
Export Parts: Unit	380,371	55,504,758	103.78%
Import (CBU): Vehicles	31,760	125,873	21.74%

Note: CBU means completely build-up

Source: Formulated by Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA based on GAKINDO

Development of the automobile, motorbike and related industries in the target area will play a major role in the future. In fact, Japanese makers have already invested in new facilities to expand production. (Table A.4.2.7)

Table A. 4.2.7 Car Manufacturing Expansion and Investment by Japanese Makers

Maker	Additional capacity	Estimated Investment (million USD)
Maker 1	120 thousand vehicles	534.4
Maker 2	100 thousand vehicles	782.63
Maker 3	100 thousand vehicles	233.3
Maker 4	-	27.8
Maker 5	170 thousand vehicles	About 400

Source: Global Times (July 13, 2012)

The Ministry of Industry has a long term development plan up to 2025 for the automotive and motorbike industry. The production (CBU) of automobiles is estimated at 3.13 million vehicles per year in 2025, and export is 0.46 million per year. On the other hand, the production of motorbikes and scooters is estimated as 8.8 million vehicles, and this is not a rapid increase both production and export such as automobile.

Table A. 4.2.8 Annual Production and Export Planning for Automobiles and Motorbikes

	2015	2020	2025
Production of automobile (CBU): million vehicles	1.208	1.945	3.133
Export of automobile (CBU): vehicles	180,000	289,800	466,800
Production of motorbikes and scooters: million vehicles	8.165	8.796	8.796
Export of motorbikes and scooters: million vehicles	28,117	30,290	30,290

Source: Ministry of Industry

BACKGROUND INFORMATION 5

BACKGROUND INFORMATION 5

CURRENT STATUS OF PORT EDI SYSTEM IN INDONESIA

A.5.1 Current Status in Tanjung Priok Port

In Tanjung Priok Port the MOU (Memorandum of Understanding) was concluded between seven (7) port-related governmental agencies and PELINDO2 in June, 2012, regarding the usage of INAPORTNET. Based on the MOU¹, PELINDO2 established a system management company, PT ILCS Company, to operate INAPORTNET in September, 2012. It is a joint company with 51% capital of PELINDO2 and 49% capital of PT Telkom Indonesia Company.

The aim of the company is to make efficient use of IT technology and to provide an EDI system for port/airport logistics. PELINDO2 has made an order for development of the system to a French IT company, which processes information of ships, cargo and containers in port logistics business. They call it New INAPORTNET or PCS (Port Community System) and are now developing the sub-system in it to process port-related procedures for domestic ships. PT ILCS Company is responsible for the project management.

Now they have developed a Vessel Management Sub-System corresponding to domestic ships and have started an operations test in order to operate on a trial basis in December, 2013. Seven (7) domestic shipping companies are participating in the project and seven (7) banks are also participating for online transactions. When it starts to be operated, the current system of PELINDO2 processing requests from shipping agencies will be replaced by the new system.

A.5.2 Current Status in Tanjung Perak Port

In Tanjung Perak Port, DGST transferred the servers for INAPORTNET from the Harbor Master office to the Port Authority office recently (see Figure A.5.1). But the system is not connected to communication lines or terminal PCs yet, nor is the Port Authority of Tanjung Perak involved in the operation.

PELINDO3 started to operate the EDI system processing ships' service procedures through internet in Tanjung Perak Port from May, 2013. Shipping agencies can get information of ships' positions, apply for port services, calculate and pay the fees by bank transfer and book services by the EDI system through

¹ Note) Main points agreed in the MOU are as follows:

- INAPORTNET is applied under coordination of Port Authority Main Office of Tanjung Priok.
- PELINDO2 takes a role of supporting maintenance and management of the system.
- Joint team will perform socialization and evaluation of implementation of INAPORTNET.
- PELINDO2 is responsible for the cost of the operation of INAPORTNET.

Signed Organizations: Tanjung Priok Port Authority Office, The Main Office of Customs, Type A Tanjung Priok, Tanjung Priok Harbor Master Office of Main Class, Health Port Office Class 1 Tanjung Priok, Tanjung Priok Agriculture Quarantine Office, Fish Quality Control and Security of Fishery Class 1 Jakarta 2, Immigration Office of Class 1 Tanjung Priok and PELINDO2

the internet. But at present there are still many companies doing procedures at the window of PELINDO3. We could not grasp the actual operational situation. In addition, it is not linked with INAPORTNET.

Concerning the other ports, we have learned that a system in which it is possible to calculate and pay fees by online bank transfer has been introduced in Tanjung Emas Port.



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.5.2.1. Servers in Port Authority of Tanjung Perak



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure A.5.2.2. Banner Explaining the EDI System of PELINDO3

A.5.3 Policy of DGST According to Port EDI System

According to the Director of Sea Traffic and Transportation who is responsible for the port EDI system, INAPORTNET is not operated efficiently due to the influence of the maritime law amended in 2008 and the impact of organizational changes. He also cites the following reasons that the system is not operated efficiently: 1. lack of human resources with expertise in IT technology; 2. problems with the organizational structure of Port Authorities.

DGST has compiled Blue Print in 2011, which indicates the direction of INAPORTNET system development. According to this, DGST will complete the improvement of system efficiency by 2015. While not actually included in the Blue Print, persons in charge of INAPORTNET development in DGST are working on the development and improvement of the system to start the operation for domestic ships in Tanjung Priok Port and for international/domestic ships in Belawan Port, Tanjung Emas Port and Tanjung Perak Port. But DGST has not started the consultation process to link it with INSW or other systems.

BACKGROUND INFORMATION 6

BACKGROUND INFORMATION 6

PORT CARGO HANDLING SYSTEM AT TANJUNG PRIOK PORT

A.6.1 Port Cargo Handling System at Tanjung Priok Port (e-Ticket)

Table 6.1.1 Difference of Procedure Before and After the Introduction of the e-Ticket System and Procedure Flow of e-Tickets

Before introduction of e-Tickets (after customs clearance)	After introduction of e-Tickets (after customs clearance)
<p>1. Customer (container owner) after completing the customs clearance process receives the SPPB or “Goods Release Approval Letter” which is issued by the Directorate General of Customs and Excise. Customer will bring the SPPB to JICT billing office for the next process.</p>	<p>1. Customer (container owner) after completing the customs clearance process receives the SPPB or Goods Release Approval Letter which is issued by the Directorate General of Customs and Excise.</p> <p>By using TPS online system, customs will input data of SPPB and send the data by using host-to-host network to the JICT server.</p>
<p>2. Customer brings the SPPB to the JICT Billing Office, and then based on the SPPB, JICT billing office will issue the pro forma invoice, and based on the amount which is declared in the pro forma invoice, customer goes to the bank to make payment.</p>	<p>2. Customer brings the SPPB to the JICT Billing Office. JICT billing officer inputs the SPPB number to the system for verification/validation and then based on the SPPB data, JICT billing office will issue the pro forma invoice, and based on the amount which is declared in the pro forma invoice, customer goes to the bank to make payment.</p>
<p>3. Customer makes payment to the bank in the amount that is declared in the pro forma invoice.</p> <p>Bank issues payment receipt for customer.</p>	<p>3. Customer makes payment to the bank based on the amount that is declared in the pro forma invoice.</p> <p>Bank issues payment receipt for customer, and sends the payment verification data (online) to the JICT billing office.</p>
<p>4. Customer submits the payment receipt to the JICT Billing Office and after inputting the data and verifying, JICT Billing Office issues SP2 or Container Hand Over Letter and invoice for the customer.</p> <p>Customer receives SP2 and gives the SP2 to the trucking company who will pick up the container in JICT.</p>	<p>4. Customer submits the payment receipt to the JICT Billing Office. JICT billing office checks the bank payment status based on the payment verification data from the bank, and after that JICT Billing Office issues e-ticket, which contains information about the container, ship name, etc., and invoice for the customer.</p> <p>Customer receives e-ticket and gives the e-ticket to the trucking company who will pick up the container in JICT.</p>

<p>5. The driver of the empty truck brings the SP2 and gives the SP2 to the gate officer at the in-gate. Gate officer inputs the data from SP2 and then issues CMS which contains information about the location of the container in the yard (Block, Slot, Row and Tier). When the CMS is created, data from gate is sent automatically to the VMT in the yard for loading process by the RTG.</p> <p>In-gate opens and empty truck goes into the yard.</p>	<p>5. In the Auto Gate System, every truck that will enter the JICT must have the TID (Truck Identification Card), otherwise the truck cannot enter the JICT in-gate.</p> <p>The driver of the empty truck brings the TID and e-ticket to the in-gate.</p> <p>Truck driver taps the TID to the “enclosure machine”, and then the auto gate system will start to capture image from the 5 angles of the truck (front, right side, left side, behind, and upper side)</p> <p>After the image capture process, truck driver taps the e-ticket to the “enclosure machine” and the machine dispenses the CMS (Container Movement Slip). Data from gate is sent to VMT for loading process by the RTG. In-gate opens and empty truck goes into the yard.</p>
<p>6. Loading process in the location of container.</p> <p>Loading process finishes and loaded truck goes to the out-gate .</p>	<p>6. Loading process in the location of container.</p> <p>Loading process finishes and loaded truck goes to the out-gate.</p>
<p>7. Inspector office in the out-gate conducts physical checking/inspection to the truck and container, and inputs the checking/inspection results in the SPK form or Container Inspection Letter.</p> <p>After Inspector finishes conducting inspection and inputs the results into the SPK form, the truck driver receives the SPK from the Inspector and truck driver goes to the customs office in the out-gate to submit the SPK, SP2, and copy of SPPB to the customs officer.</p>	<p>7. Inspector officer in the out-gate conducts a physical check/inspection for the truck and container, and inputs the check/inspection results in the handheld. Data from the handheld is sent to the JICT server online.</p>
<p>8. Truck driver submits the SPK, SP2, and copy of SPPB to the customs officer and customs validates the data.</p> <p>Customs officer gives approval/endorsement in the SP2.</p> <p>Truck driver receives the SP2, which is already approved by the customs officer, and goes back again to the out-gate.</p>	<p>8. Truck driver still has to go to the customs office in the out-gate only to show the copy of SPPB to the customs officer.</p> <p>After showing the copy of SPPB, driver goes back to the out-gate.</p>
<p>9. Truck driver submits the SP2, which is already approved by the customs officer to the gate officer in the out-gate.</p> <p>Gate officer in the out-gate inputs data based on the CMS and SP2 and then issues the EIR.</p> <p>Truck leaves the JICT out-gate.</p>	<p>9. Truck driver taps the TID to the “enclosure machine” in the gate out and the “enclosure machine” dispenses the EIR.</p> <p>Barrier gate in the out-gate opens and truck leaves the JICT out-gate.</p>

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

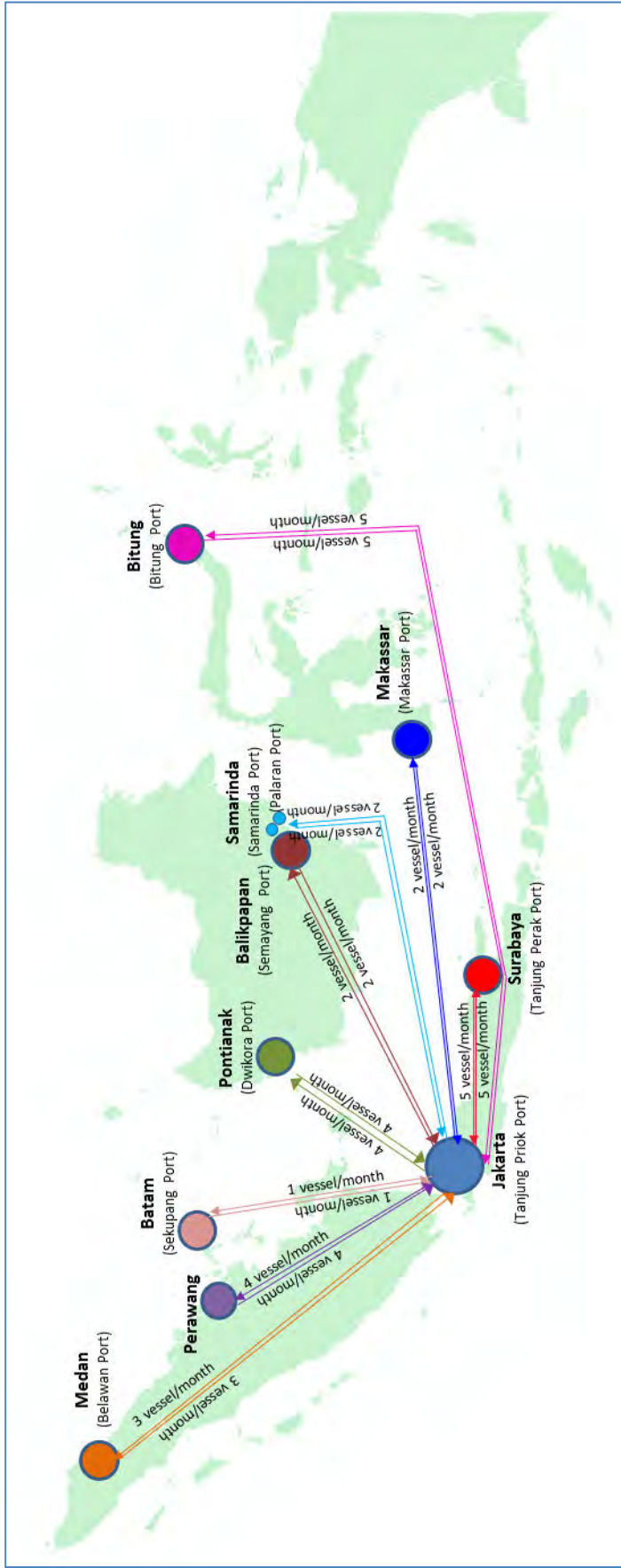
BACKGROUND INFORMATION 7

BACKGROUND INFORMATION 7

A.7.1 MAJOR PATHWAY/NETWORK IN DOMESTIC MARINE TRANSPORTATION

A.7.1 Major pathway/network in domestic marine transportation

The current situation of major pathways/networks in domestic marine transportation are shown in Figure A.7.1.1



Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

Figure 7.1.1 Major Pathways/Networks in Domestic Marine Transportation at Departure and Arrival of Tanjung Priok Port

BACKGROUND INFORMATION 8

BACKGROUND INFORMATION 8

CURRENT SITUATION OF ENTRY AND INVESTMENT FOR TRANSPORTATION AND LOGISTICS SECTOR FROM DOMESTIC AND FOREIGN, AND ISSUES OF RELATED POLICIES

A.8.1 Current Situation for Transportation and Logistics Sector

The recent investment trends for the transportation and logistics sector are shown in Table A.8.1.1. The number of investments is fractionally increasing from 2010 to 2012, but the investment amount in 2012 decreased to half compared with 2010. On the other hand, other sectors, e.g., investment trends for secondary sector, are increasing both the number of investments, 1.7 times, and the investment amount, 3 times.

Table A.8.1.1 Investment Trends from Foreign Countries for Transportation, Warehousing, and Communication

Sector	2010		2011		2012	
	Number of investments	Investment Amount (M\$)	Number of investments	Investment Amount (M\$)	Number of investments	Investment Amount (M\$)
Transportation /Warehouse /Communication	87	5,072	86	3,799	93	2,808

Source: BKPM

According to the investment amounts per investment for the transportation and logistics sector, the investment amount in 2010 was \$5,072 million but it decreased to the amount of \$2,808 million in 2010.

A.8.2 Regulation for Transportation and Logistics Sector

In transportation and logistics, foreign capital cannot go into the following business fields regulated by “Regulation of the President of the Republic of Indonesia, Number 36, 2010”.

Table A.8.2.1 Regulation for Transportation and Logistics Sector

Business Fields	Industry Classification No.
1. Acquisition and Implementation of Land Terminals	52211
2. Implementation and Operation of Weigh Stations	52219
3. Implementation of Motor Vehicle Type Tests	71203
4. Implementation of Motor Vehicle Periodic Tests	71203
5. Telecommunication/Supporting Facility of Shipping Navigation	52221
6. Vessel Traffic Information System (VTIS)	52221
7. Air Traffic Guiding Service	52230

Source: The Study on Efficient and Integrated Transport/Logistics Development in Eastern MPA

In the field of transportation, such as container transportation and general cargo transportation and logistics sector, the upper limit of investment by foreign capital is regulated to 49% in almost fields of transportation and logistics.

A.8.3 Issues of Investment for Transportation and Logistics

Truck transportation from Eastern MPA to Tanjung Priok Port at present is said to be one round trip a day, in general. The situation of one round trip a day per truck creates the difficult situation that the investor cannot retrieve the investment amount for transport machinery. Thus, new investment for transport machinery is difficult in recent years.

As the high limit of foreign capital is regulated to 49%, it is difficult for foreign capital to take the initiative in business management. Difficult situation of entry of foreign capital is considered to be one factor contributing to the decrease of investment amount.

The difficult situation of payback for investment amount creates the difficult situation of entry of foreign capital. This situation is considered to be a factor in the decrease of investment and the small amounts of each investment.