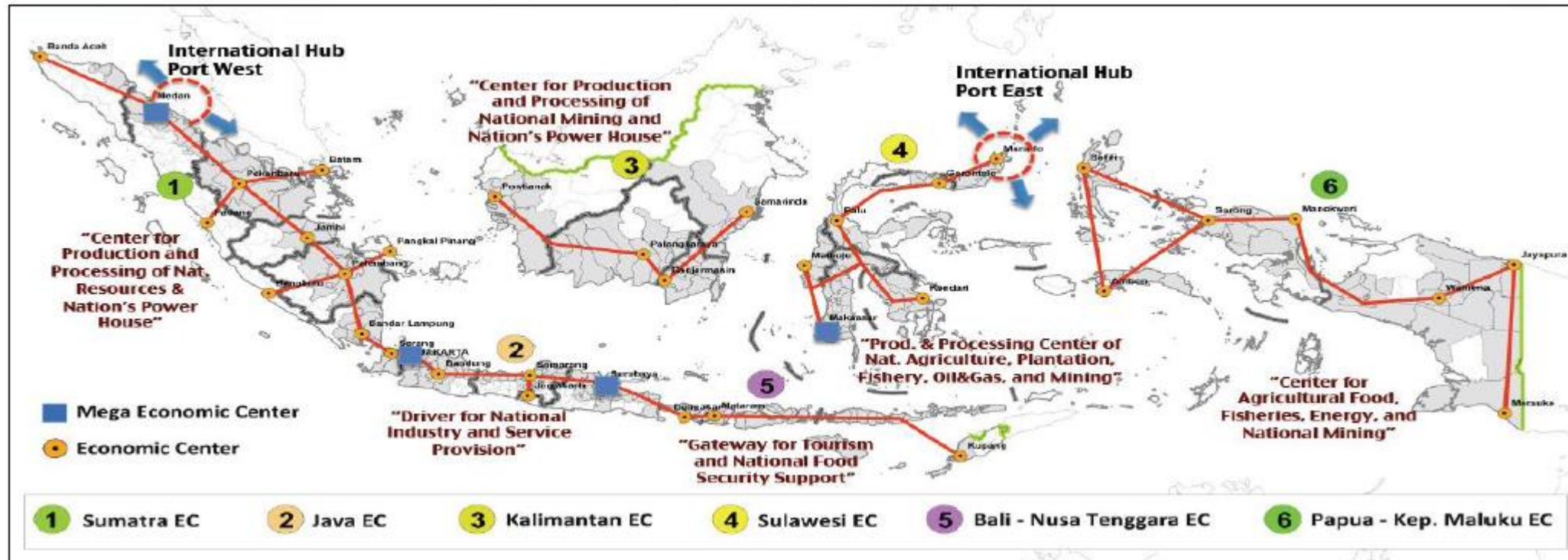


National Connectivity To Develop Economic Corridors



Otto Ardianto

Ministry of Transportation Republic of Indonesia

Seoul, November 2017

Transportation Investment (Project Summary)



Project	Location	Status	Investment
Kuala Tanjung International Hub Port	North Sumatra	Under Preparation	US\$2.8Billion
Kualanamu International Airport	North Sumatra	Under Preparation	US\$1.5Billion
New Priok Port Development Product Terminal (Pt) 1 and 2)	DKI Jakarta	Under Preparation	US\$730Million
New Deep Port Development in Kijing	West Kalimantan	Under Preparation	US\$382Million
Seget Port Development in Sorong	West Papua	Under Preparation	US\$181Million
Cikarang Bekasi Inland Waterways	West Java	Under Preparation	US\$374Million
Bandung Metro Capsule	West Java	Under Preparation	US\$37Million
New Deep Port Development Tanjung Carat	South Sumatra	Under Preparation	US\$463Million
Gilimas New Port	West Nusa Tenggara	Under Preparation	US\$153Million
Lombok International Airport	West Nusa Tenggara	Under Preparation	US\$126Million
Port of Benoa	Bali	Under Preparation	US\$158Million
Makassar New Port	South Sulawesi	Under Preparation	US\$575Million
Makassar – Parepare Railway	South Sulawesi	Under Preparation	US\$376Million
Surabaya Trem	East Java	Under Preparation	US\$870Million



Kementerian Perhubungan Republik Indonesia
DIREKTORAT JENDERAL PERKERETAAPIAN



Building a better
Port of Kuala Tanjung
Gateway to West of Indonesia



Project Brief



Project Name :
Dev. of Kuala Tanjung International Hub Port

Government Contracting Agency : Ministry of Transportation
Implementation : Directorate of Port Affairs, Ministry of Transportation
Preparation Agency : Directorate General of Sea Transportation and The Committee for Acceleration of Priority Infrastructure Delivery (KPPIP)
Estimated Concession Period : under calculation

Estimated Project Cost : USD 2,8Bil

Indicative debt to equity ratio:

Debt : 70
Equity : 30

Implementation Schedule (ETA):

1. Land Acquisition : Q4-2017
2. Pre-qualification : Q1-2018
3. Bidding and Evaluation : Q2-2018
4. Negotiation : Q1-2019
5. Contract Award : Q2-2019

Financial Feasibility:

IRR : 13,4 %
NPV : USD 406 million

Description :

Based on its potential hinterland, Kuala Tanjung Port will be developed as hub port to handle liquid bulk cargo (CPO), dry bulk cargo, general cargo, and container for North Sumatera Province and Nangroe Aceh Darussalam (NAD) Province. The location also fit as outlet/inlet for Sei Mangkei Industrial Area and Belawan Port.

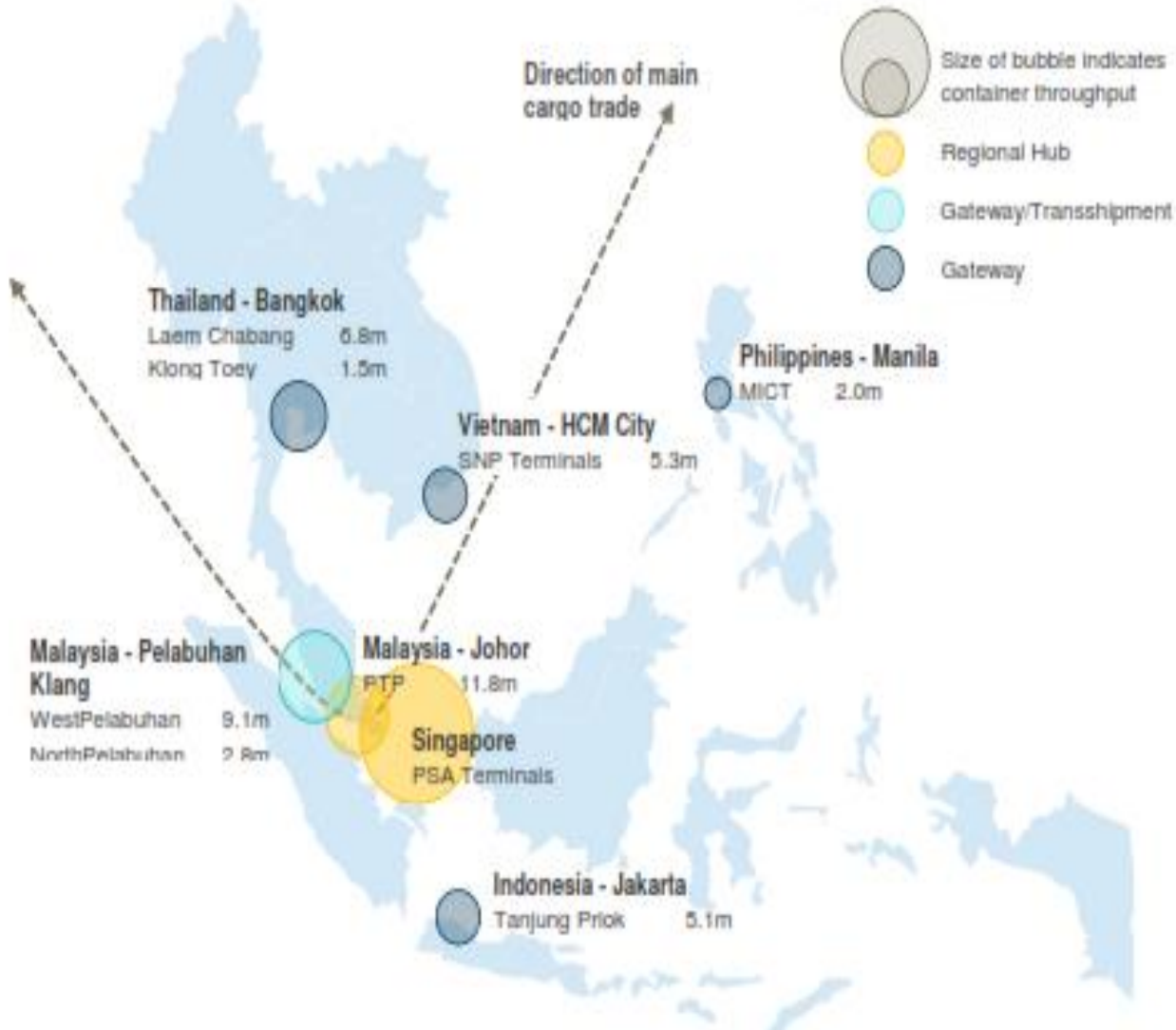
Government Support & Guarantee:
OBC resulting the need of land acquisition and fiscal incentives from the government.

Project Status:

OBC has finished on 2016 through KPPIP Support



Project Background



Industry trends toward Hub, Gateway and Transshipment port development

- Consolidation of shipping lines driving economies of scale
- Increasing demand for “hub and spoke” and “relay” transshipment at the Malacca Strait
- Vessel sizes continue to increase (over 24,000 TEU) with significant port investment required to accommodate the increasing top end of the fleet

Capital & Operational Expenditures

(Financial Analysis)



Capital Expenditures	Scenario #1	Scenario #2	Scenario #3
	In Million US\$		
Birth (including dolphins)	66.6	66.6	44.4
Terminal Structure (Suspended)	1,450.4	4,241.1	4,241.1
Trestle Access	99.9	99.9	99.9
Revetment	4,624.0	33.3	28.7
Dredging	227.3	651.6	567.0
Terminal Works	543.9	1,727.9	1,705.7
Engineering & Project Mgmt.	119.7	341.1	334.3
Industrial Estate	663.4	663.4	663.4
TOTAL	7,796.2	7,824.8	7,684.5

Project Returns	#1	#2	#3	#4
Post Tax Equity IRR	15.24%	15.50%	15.42%	14.51%
Pre Tax Project IRR	13.10%	15.66%	15.62%	14.23%
Post Tax Project IRR	11.23%	13.45%	13.44%	12.30%
NPV – Equity Post Tax (USD Mil)	\$120.60	\$433.30	\$405.90	\$167.60
TOTAL		3,175.8	7,824.8	7,684.6

Conservative assumptions related to demand, construction costs are accommodated in scenario#1

Each scenario give positive NPV and exceed hurdle rates of return (assumed 14%). These show that the project requires no financial support from government supports.

Development Scenario

- ① Small port scenario (base of volume growth case)
- ② Large port scenario (optimist volume including transshipment)
- ③ Large port scenario (optimist volume growth excluding Wilmar and Inalum potential volume)
- ④ Large port scenario with land acquisition costs included (\$1.216mil)

Financial Analysis

(Potential Upsides)



Potential Upside	#1	#2
Base Case	15.24%	15.50%
Reduce Operating Expenses by 20%	16.64%	16.82%
Increase volume by 6.75million TEUS in year 10	16.25%	16.60%
Increase land/space rental tariff to 95% from Jakarta per m ²	16.14%	15.92%
Expand Industrial Estate from 3000ha to 5000ha	16.34%	16.71%
Reduce 30% discount on Dry Bulk tariff	15.44%	15.74%
Increase custom by 20%	15.34%	15.63%

Assumptions for sensitivity analysis on potential upsides:

- 2,700ha leasable land in the real estate;
- 50% are productive or related cargo
- Productive capacity is 2t per m²
- Additional tonnage 6.75m per year after industrial estate occupied

Rental tariff discount to Jakarta rate is reduces from 15% to 5%

- Development Scenario**
- ① Small port scenario (base of volume growth case)
 - ② Large port scenario (optimist volume including transshipment)



Kementerian Perhubungan Republik Indonesia
DIREKTORAT JENDERAL PERKERETAAPIAN

RAILWAY CONSTRUCTION OF SULAWESI SELATAN

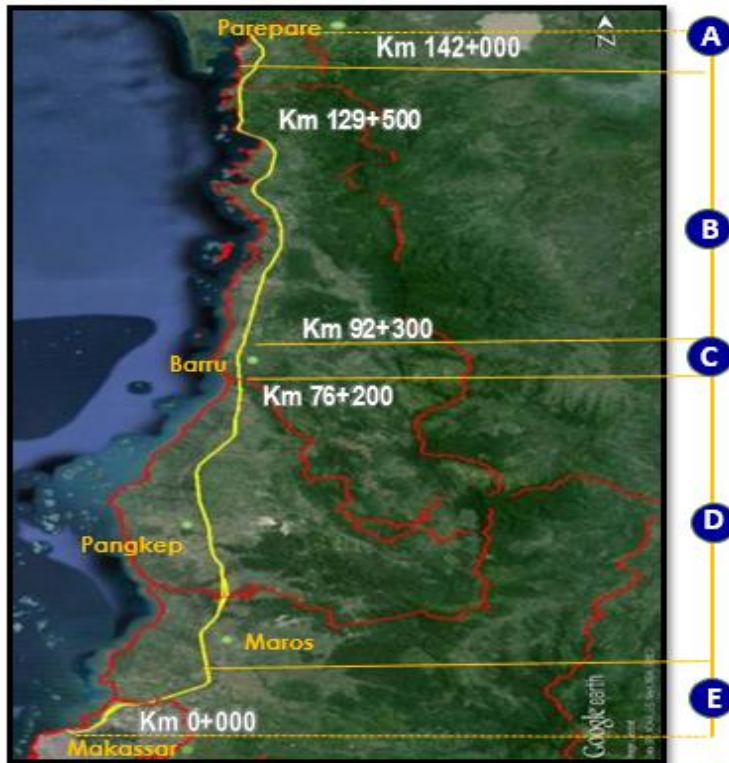
Public Private Partnership Proposition

Seoul, 29 – 30 November 2017





Project Brief



Project Name :
South Sulawesi Railways (Makassar – Parepare)

Government Contracting Agency : Ministry of Transportation
Implementation : Directorate of Railways
Preparation Agency : Directorate General of Railways
and The Committee for Acceleration of Priority
Infrastructure Delivery (KPIP)
Estimated Concession Period : under calculation

Estimated Project Cost : US\$376Mil

Indicative debt to equity ratio:

Debt : 70
Equity : 30

Implementation Schedule (ETA):

1. Land Acquisition: 2015-2017 (85% done)
2. OBC and FBC : Q2 2018
3. Commissioning of Phase I : Q2 2019

Financial Feasibility:

IRR : 14,14 %
Payback Per : 13 Years

Government Support & Guarantee:

Initial study indicates Government involvement required land acquisition should be done by Government

Project Status:

Phase I is under construction (15%)
OBC is under preparation

Description :

Ministry of Transportation intends to invite private sectors to participate in Public Private Partnership (PPP) program with the Build-Own-Operate-Transfer (BOOT) scheme, in order to develop railway system connecting Makassar and Parepare, whose main purpose is to provide environmentally friendly mass transport mode for passenger and freight that may promote industrial, trading, mining and agricultural development, and to contribute in regional economy development of South Sulawesi

PPP Stage and Scope



Phase I

- Segment B, C and D 106 km
- Total investment for infrastructure IDR 6.632 Billion (USD 510.15 Million) and for rollingstock IDR 2,189 Billion (USD 168.38 Million)
- Infrastructure (106 km of track and 13 stations) financed by Gol's budget (APBN)
- Rollingstock, workshop (Maros), depo (Sta. Maros), signaling and telecommunication
- Operation and maintenance of rollingstock and infrastructure (106 km)

Phase II

- Segment A and E 36 km
- Total investment for infrastructure IDR 5,091 Billion (USD 391.62 Million)
- Infrastructure (36 km of track and 3 stations) financed by private sectors
- Rollingstock, workshop (Maros), depo (Sta. Lumpue), signaling and telecommunication
- Operation and maintenance of rollingstock and infrastructure



Increasing Potential of Return on Investment



- Revenue increases
 - PT Semen Tonasa which has not yet confirmed its conveyer belt investment (Production capacity 6.7M ton per year)
 - Additional Coal transports from Gorongkong Port to 4 cement factories
 - TOD at stations in Sulawesi Selatan railway line
 - Freight transport from Makassar Seaport to the northern part of Sulawesi Selatan railway line
 - Integration with Makassar mass transport system will increase number of passengers.
- Uniformity of signaling system may decrease interconnection cost