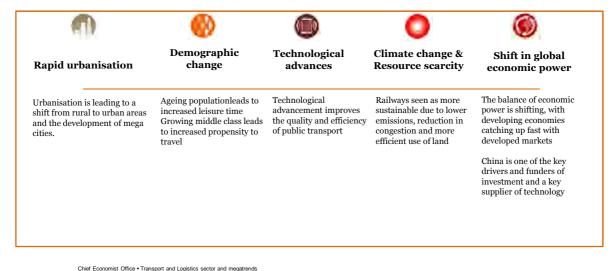


Agenda

- 1. Mega trends and issues
- 2. The projects
- 3. Types of funding
- 4. How will the Luxembourg Protocol help?
- 5. Issues for enforcement of credit

Five megatrends impacting the public transport sector



Chief Economist Office • Transport and Logistics sector and megatrends

PwC

Issues for financing public transport in ASEAN

The concept of PPP not understood in many markets
Government often prefers the simplicity of budget funding
Domestic capital markets too shallow/long tenors not available
Availability of soft development finance/tied aid distorts decisions

Business cases often don't stack up and may not be well prepared
Transport planning is not well developed/many countries have no transport strategy
Transport integration is not well understood and networks not well developed
Quality gap between public and private transport is wider than in Europe

Overview of ASEAN rolling stock market - types of procurement

State railway passenger stock (dependent on government/aid funding)

State railway cargo stock – general

State railway coal and other commodity stock

Metros/LRT – new and extensions

BRT

New High Speed Rail Lines

Private commodity concessions

One Belt One Road

Smaller projects e.g. airport transit, cable cars – sometimes private

Port cranes

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Recent/planned private/IFI financings of rolling stock/railway projects in ASEAN – total >USD50bn

- 1. High-speed Lao-China Railway
- 2. Thai-Chinese Railway
- 3. Thomson-East Coast Line
- 4. North-South Railway Project, Manila, Philippines.
- 5. Hanoi Metro Rail System Project
- 6. Bangkok's Orange Line Electric Rail Line
- 7. Kuala Lumpur-Singapore High-Speed Rail
- 8. Kelana Jaya and Ampang Light Rapid Transit (LRT) Line Extension Project
- 9. Ho Chi Minh City Metro Line No 2

Country illustration – project pipeline in Indonesia

LRTs in Jakarta, Bandung, Surabaya, Palembang – mainly operating concessions bundled with rolling stock

BRTs in other cities

Jakarta- Bandung HSR - TOD with Chinese IFI lending

PT KAI investment programme:

- · Commuter rail
- · Long distance passenger
- · General cargo
- · New coal railways

Private coal railway concessions

Jakarta airport inter-terminal railway and express railway; other airport railways

Bandung cable car

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Section 2 – Status Update

Recent/planned rolling stock procurement in Indonesia > 7000 vehicles!

Train Category	Number of vehicles	Plan Date
Commuter	100 coaches/year	Annually
Commuter	120 units old KRL, 12 coaches formation	2015 (Purchased)
Freight	-50 locomotives	2015-2016
New locomotives	-1312 flat wagons	
• Flat wagon		
K1 (Executive class trainsets)	-75 K1	2015-2016
 K3 (Economy class trainsets) 	-80 K3	
Trans Sumatera	-6 locomotives,	2016-2017
 Passenger 	-26 locomotives, 66 coaches, 629 wagons	
• Freight		
New executive class train	44 trains	Ordered, estimated finished before
		Eid 2016
MRT	16 train sets with 6 coaches each (total 96)	2017/2018
Locomotives	50 locomotives	- 39 units in 2015
		- 11 units in 2016
Soekarno-Hatta Airport Railink	10 train set. (of each consist of 6 coaches)	2016
LRT Jakarta (7 corridors)	Each corridor will passed by 20 trainset	2015 onwards
LRT Cibubur - Bogor	70 set	2017-2018
LRT Palembang	N/A	2017-2018
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THE FUTURE FOR RAILWAY FINANCE IN ASIA

HOW THE LUXEMBOURG RAIL PROTOCOL WILL TRANSFORM THE RAIL SECTOR

Section 2 - Status Update

Recent fleet transactions in the Philippines

	LRT-1	LRT-2	MRT-3
Туре	Rapid transit	Rapid transit / Heavy rail	Rapid transit/Light metro
Stations	20	11	13
Ridership	470,700 (2013 average)	195,700 (2013 average)	450,000 (original capacity)
(average daily)	658,627 (2012 record	269,271 (2012 record	650,000 (2012-2013 record)
Opened	1 December 1984	5 April 2003	15 December 1999
Rolling Stock	BN/ACEC Hyundai Precision/Adtranz Kinki Sharyo/Nippon Sharyo	72 Toshiba/Hyundai Rotem EMUs	73 ČKD Tatra RT8D5
Financing	Publicly financed * Extensions: financing from Official Development Assistance from Japan	Publicly financed *Extensions: private sector will rehabilitate the existing trains	Privately financed - Equity: US\$190m - Debt: US\$ 465m, financed by BTMU, JEIXM, Postal Bank of Czech Republic, Czech Export Agency, local banks - Backed by sovereign guarantee
Track Length	19.65 km	13.8 km	16.9 km

Types of funding/financing for rolling stock

Commercial Lease to state railway

Senior debt/bond raised by state railway

PPP

Operating concession bundled with rolling stock

Own funds of state railway

Government grant to state railway

Development aid

Development loan from IFI

Transport-orientated development (TOD)

Use of existing rolling stock as security for new borrowing

How will the Luxembourg Protocol help the market?

Gives lenders more leverage against state owned borrowers (thereby potentially improving terms and liquidity)

Reduces complexity on international projects like OBOR/SG-KL HSR

Facilitates secondary market (in a limited number of cases)

Facilitates financing of upgrades/fleet extensions/refurbs

Enables security to be granted in advance of delivery thereby allowing funds to be advanced at an earlier date?

BUT – it could become political – e.g. Funders could insist on ratification and countries may see this as a sovereignty issue

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Issues for enforcement of credit (will Luxembourg make a difference?)

Value in use of many fleets may be negative (dependent on PSO)

Secondary market limited or non-existent (gauge, business case, infrastructure spec)

Physical difficulties with repossession

Political difficulties with repossession (especially for IFIs)

Cost of repossession and resale

Effectiveness of judicial system

If the rolling stock is part of a PPP, then step in rights may be more useful – but not always politically acceptable

Wide variety of funding/financing mechanisms