



Port Development and Growth Trends In the ASEAN region

13th ASEAN Ports and Shipping, Indonesia

June 2015

maritime & transport business solutions

Agenda



Introduction to MTBS

ASEAN Market & Port
Developments

Need for Tailored PPPs

Appendix:

- Relevant International Experience
- MTBS Transaction Methodology

MTBS is a leader in port business advisory services



- MTBS is a leading international finance and strategy advisory firm in the maritime & transport sector
- Based in Rotterdam
- Independent
- MTBS specializes in ports and terminals
- The firm’s value proposition: “4P: innovative solutions for Port Public Private Partnerships”

Strategy

Value & Business Strategy
 Port Sector Reform
 Port Policy
 Public Private Partnerships
 Institutional & Regulatory Change
 Organizational Reform & Alignment

Financial Structuring
 Project Finance
 Due Diligence
 Procurement of Finance
 Investment/ Divestment
 Merger & Acquisition

Financing

Valuation

Value Creation & Protection
 Financial Modeling and Analysis
 Feasibility
 Project Structuring & Packaging
 Business Case
 Risk Valuation, Allocation, Mitigation

Transaction Strategy
 Transaction Management
 Documentation & Contracts
 Tendering & negotiated Solutions
 Financial Solutions
 Legal Solutions

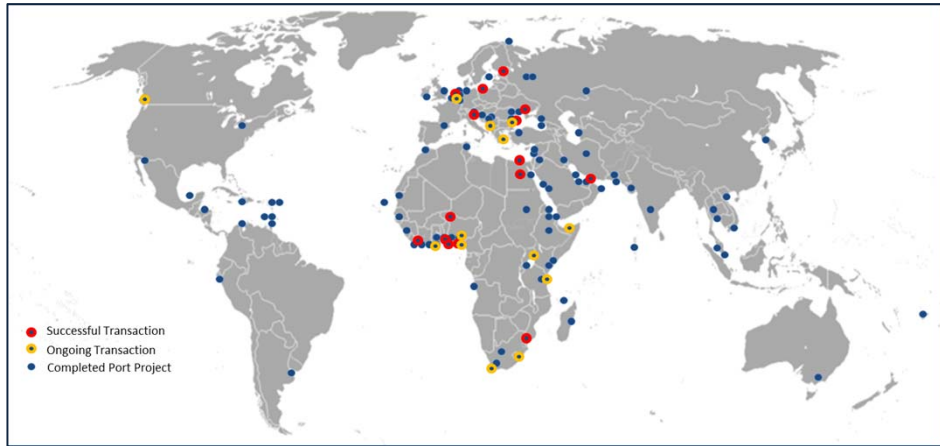
Transaction



MTBS is a global leader in port transaction advisory services



MTBS's experience in the Port & Infrastructure Sector



MTBS's Clients in the Port & Infrastructure Sector



MTBS's characteristics

- Global Leader in Port Transactions
- Experienced and Qualified Team
- International Sector Focus
- Aspiration to Develop its services in the ASEAN Market

Relevant International Experience



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Value Optimization through
Tailored PPPs

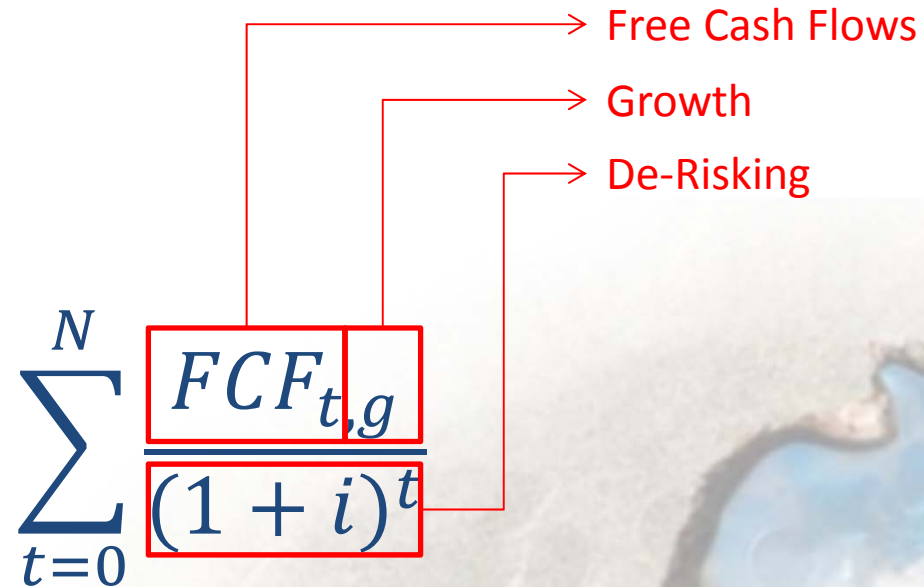
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Challenge



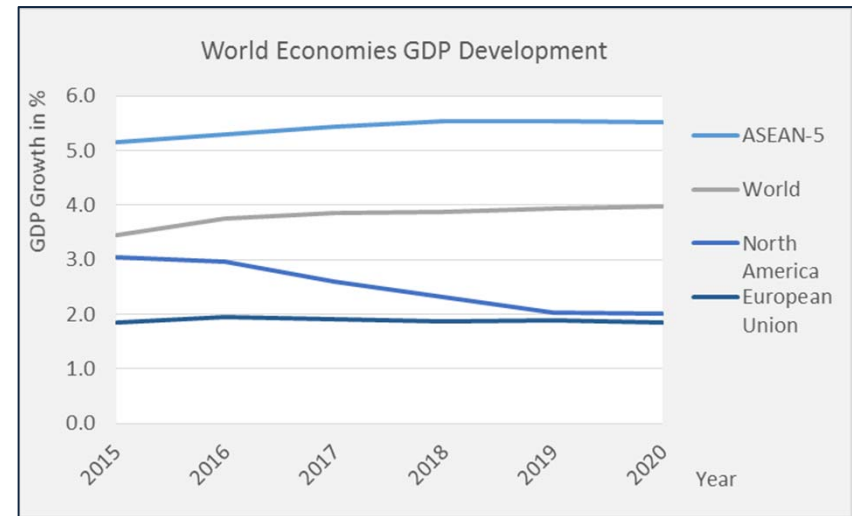
Unlocking Value in the **ASEAN** Maritime & Transport Industry



ASEAN region: Healthy growth prospects



- High GDP growth up to 2020 (IMF):
 - **ASEAN – 5: 5.5%**
 - *European Union: 1.9%*
 - *North America: 2.0%*
 - *World: 4.0%*
- Total Container throughput in Southeast Asia:
 - *2000: 34.5 million TEU*
 - *2013: 89.3 million TEU*
 - *Container CAGR (2000-2013): 7.6%*
- Population Growth ASEAN countries:
 - *1,28% per year on the long term*



Economy	2007-2013 CAGRs in percentage	TEU / Population ratio
ASEAN - 5	6.90%	0.10
European Union	2.15%	0.20
North America	0.13%	0.14
World	4.86%	0.09

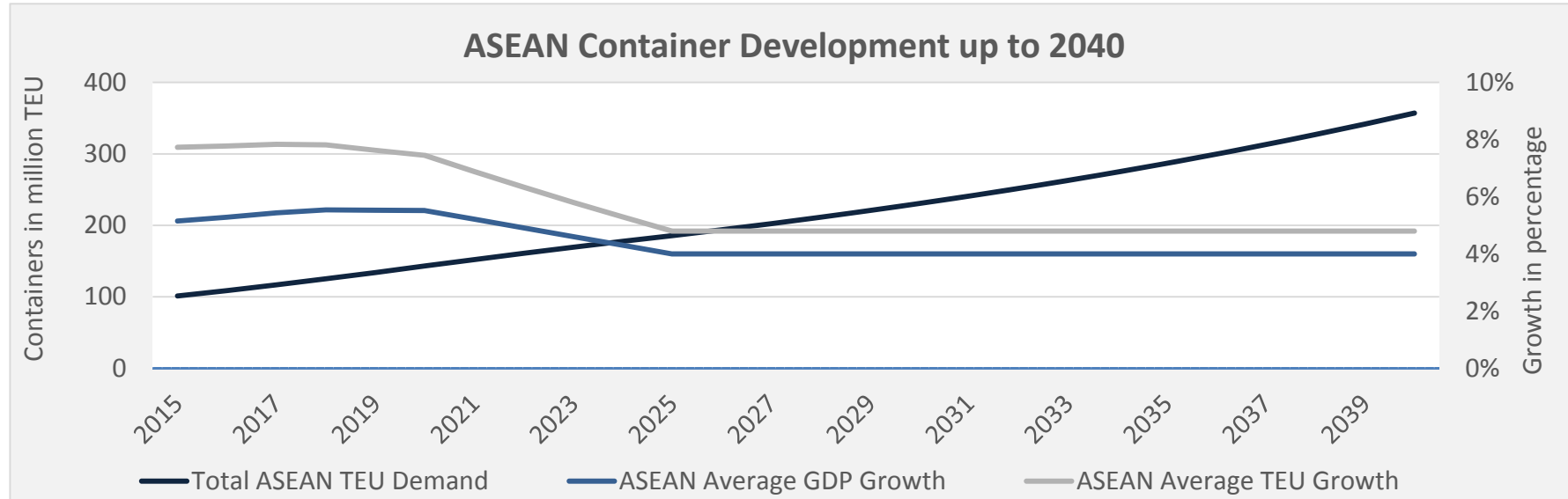
Growth: Container Demand (estimation)



Substantial demand increase expected for ASEAN region

Growth Assumptions:

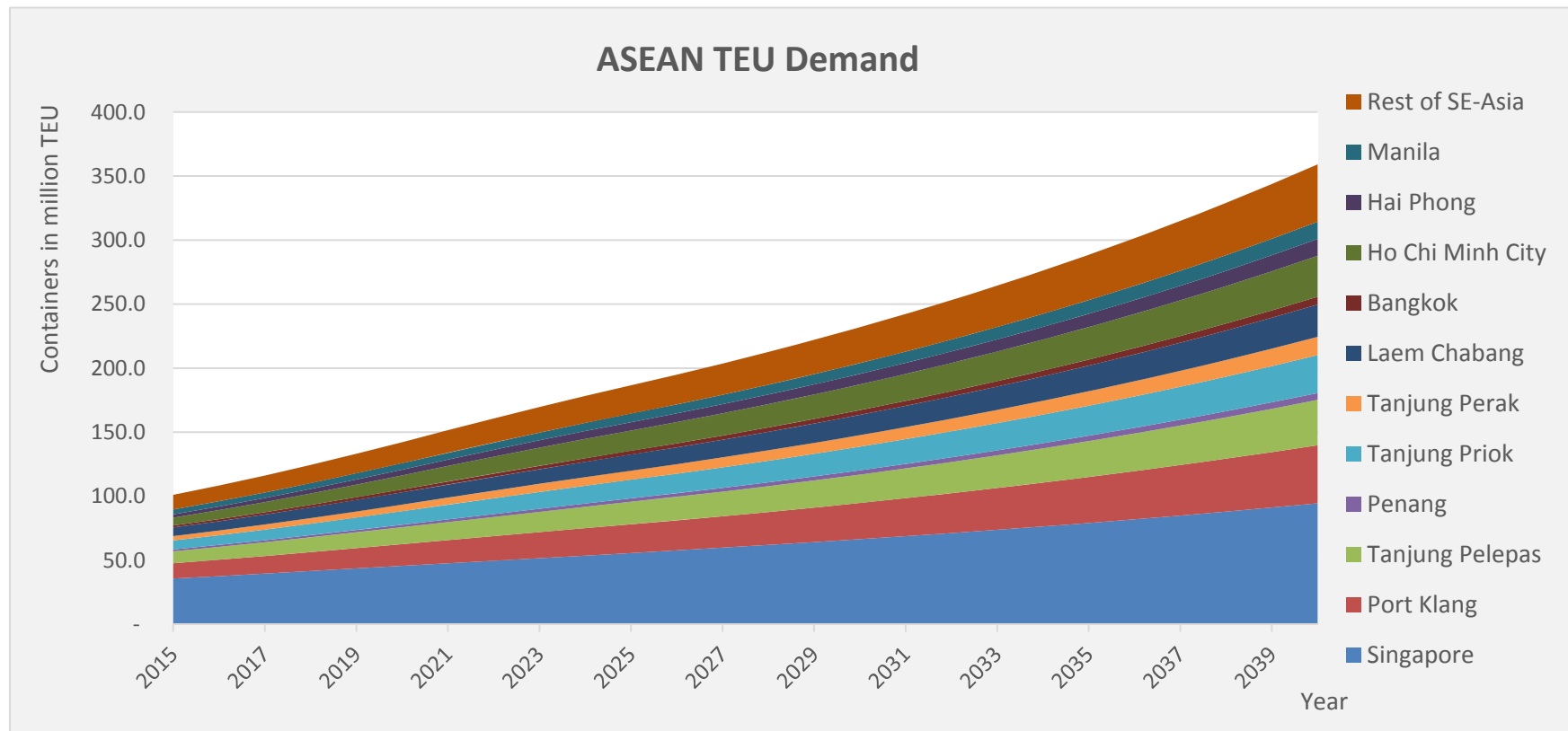
- **GDP Growth:**
 - Up to 2020 IMF forecast (individual countries)
 - After 2020 decreasing to a stable 4%
- **GDP – TEU multiplier:**
 - Varies from 0.8 to 2.4 → develop to a stable 1.2



Growth: Container Demand (estimation)



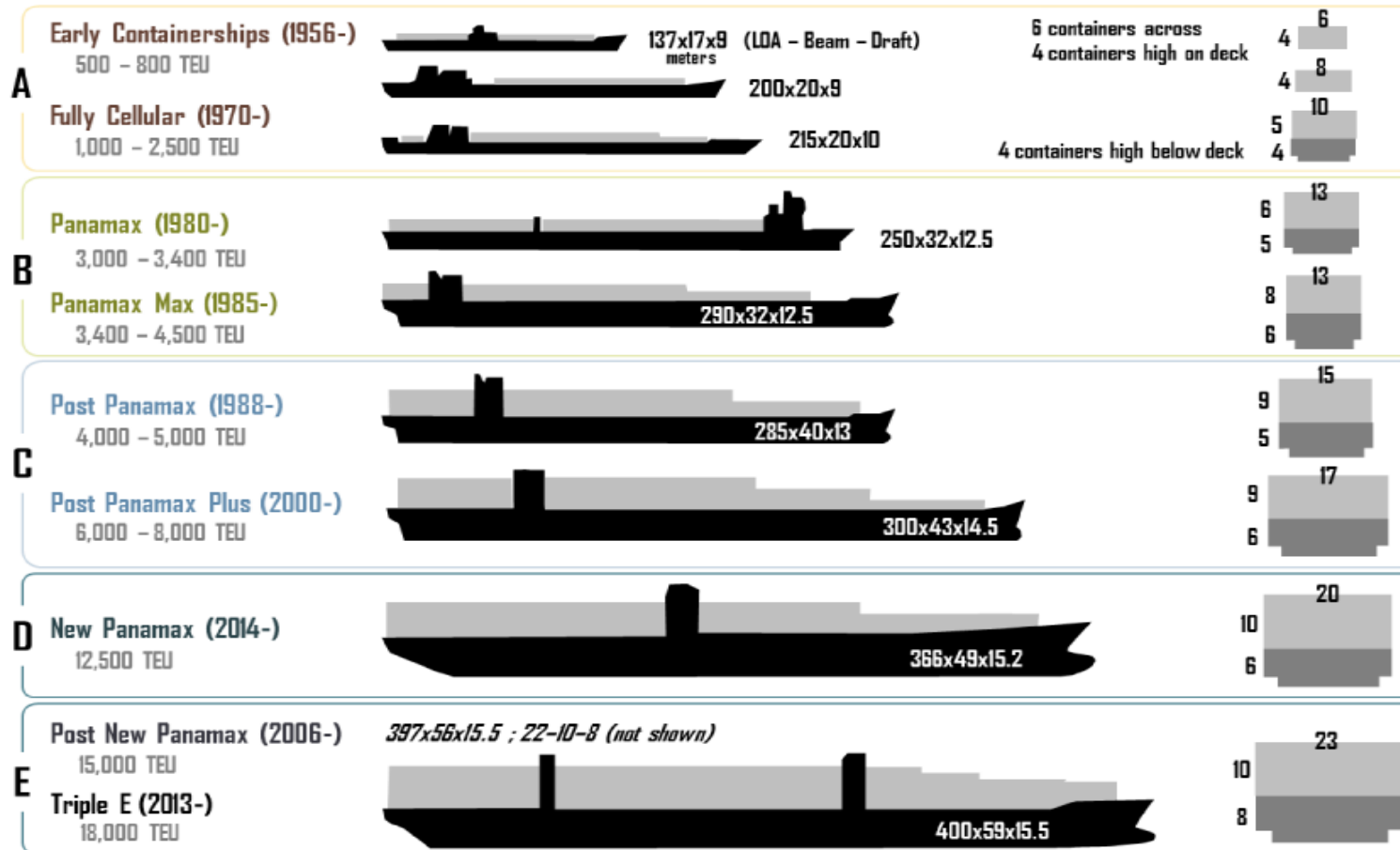
ASEAN TEU Demand per Port



Growth: Vessel Dimensions (example: containers)



Existing Ports Unable to accommodate modern trades: Greenfields



Growth: Port Expansions

Substantial investments in port assets scheduled in coming decades



Work on Tuas mega port starting soon

Teluk Lamong's international terminal to operate next month

HPH to begin expansion at Laem Chabang Terminal D within a year

Feasibility study on 3rd terminal at Port Klang to be completed in 2015

Port expansion at Pasir Panjang being accelerated

Penang sees 'huge' growth potential

03 Apr 2015

ICTSI expanding main Manila port

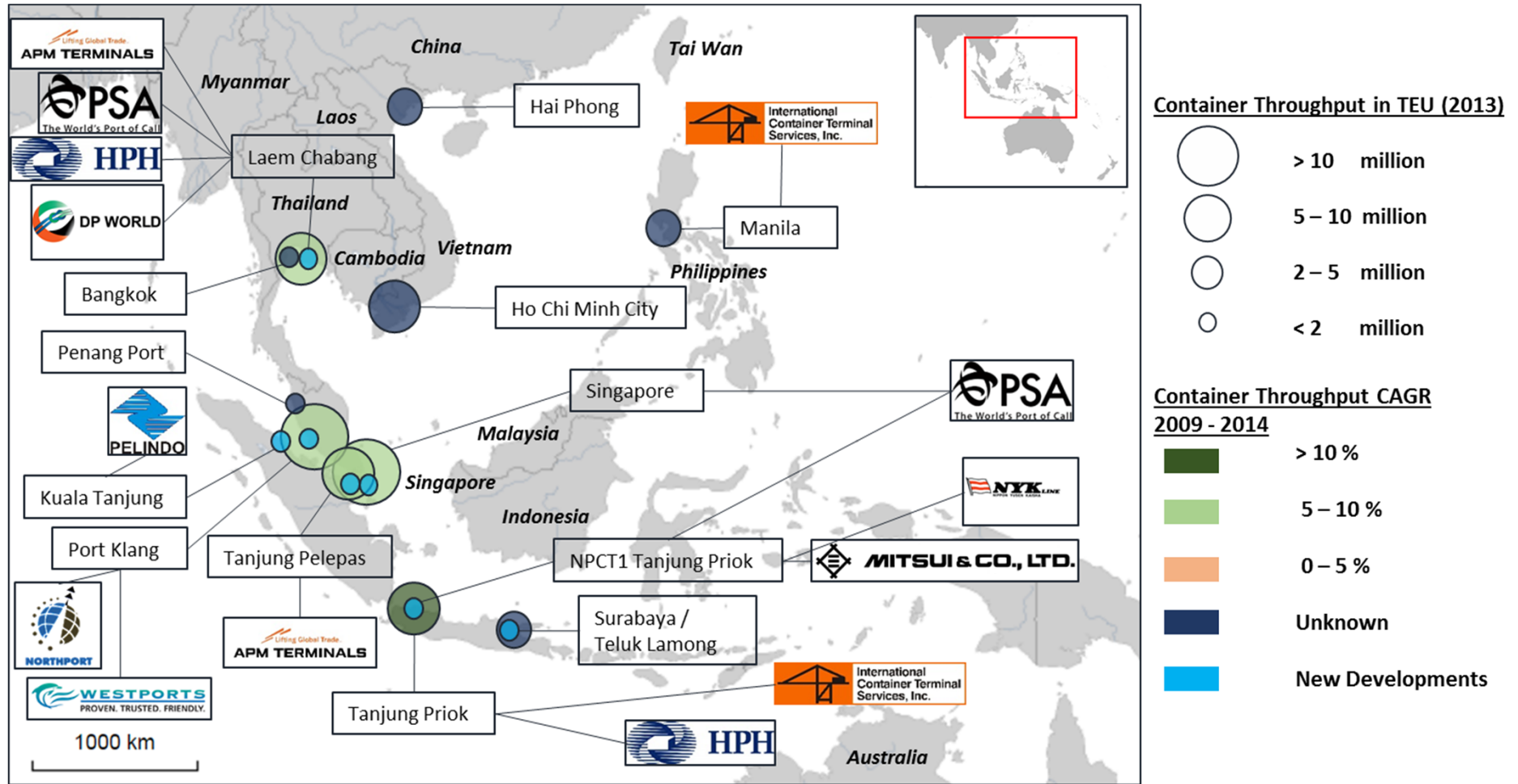
Vietnam launches new bid to bring more private investment into its 19 seaports

Large port extensions at Tanjung Priok Port, Jakarta, Indonesia

ASEAN Ports & Developments



Port Developments



ASEAN Current Ports & New Port Developments



Current Infrastructure

Port	Country	Throughput in M TEU		Capacity in M TEU
		2013	2014	
Singapore	Singapore	32,6	33,9	35,0
Port Klang	Malaysia	10,4	10,9	19,6
Tanjung Pelepas	Malaysia	7,6	8,6	10,0
Penang Port	Malaysia	1,2	1,3	2,0
Laem Chabang	Thailand	6,0	6,6	10,8
Bangkok	Thailand	1,5	1,6	1,3
Ho Chi Minh City	Vietnam	4,3	5,4	*15,0
Hai Phong	Vietnam	2,0	*2,2	2,5
Manila	Philippines	3,8	3,7	2,5
Tanjung Perak (Surabaya)	Indonesia	3,0	3,2	*3,5
Tanjung Priok	Indonesia	6,5	6,6	6,6

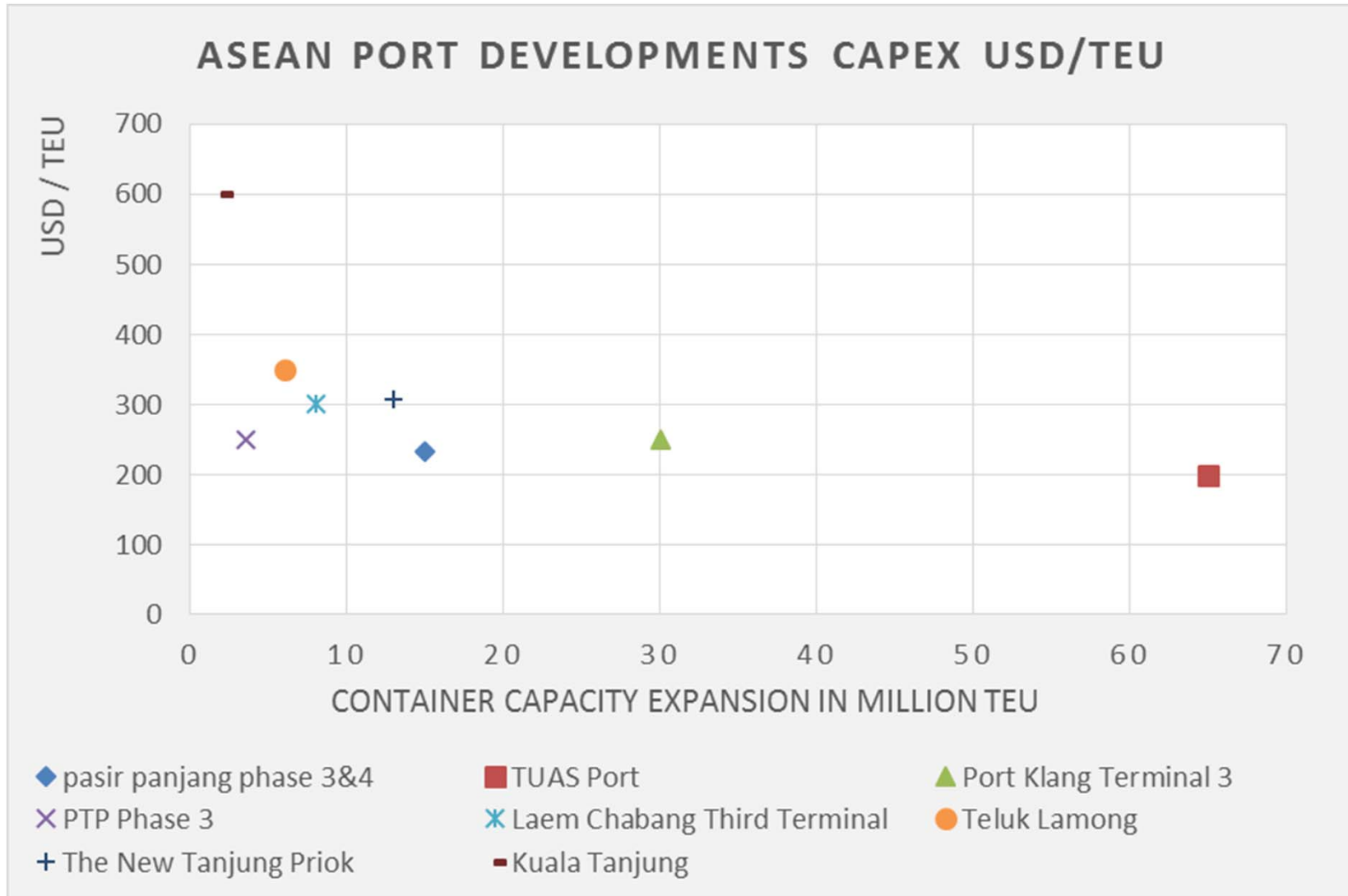
* Estimated

Planned Infrastructure

New Terminals	Country	Planned Capacity in M TEU	Planned Year of completion
Pasir Panjang phase 3 & 4	Singapore	15,0	2017
TUAS Port	Singapore	*65,0	2030
Port Klang Terminal 3	Malaysia	*30,0	2030
PTP Phase 3 Expansion	Malaysia	3,5	2019
Laem Chabang thrid basin	Thailand	*8,0	2020
Teluk Lamong	Indonesia	1,6 (5,5)	2015 (2019)
The New Tanjung Priok	Indonesia	1,5 (13,0)	2015 (2023)
Kuala Tanjung	Indonesia	2,0	2019

* Phased Expansions

ASEAN Current Ports & New Port Developments

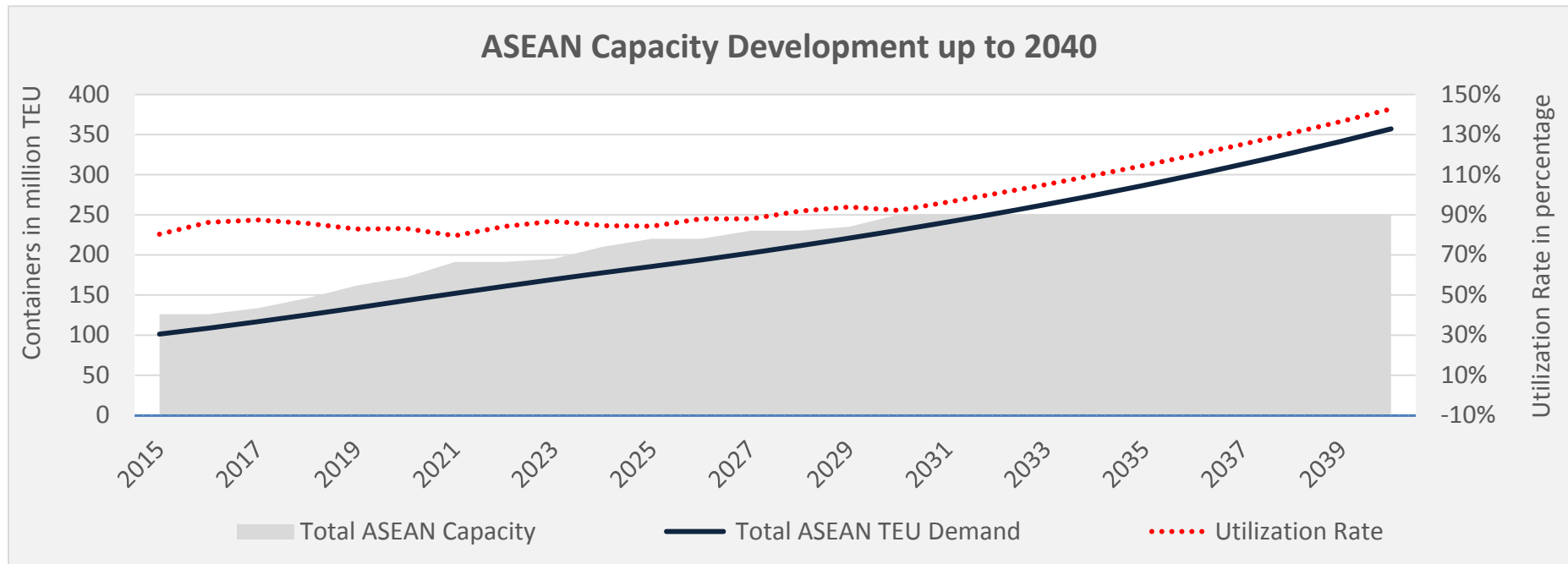


ASEAN Port Market Outlook



Healthy growth and sufficient capacity

- Container demand increasing from 101 M TEU (2015) to 357 M TEU (2040)
- Existing capacity approximately 125 M TEU
- Port expansions: phased over time
- Need for 4P solutions

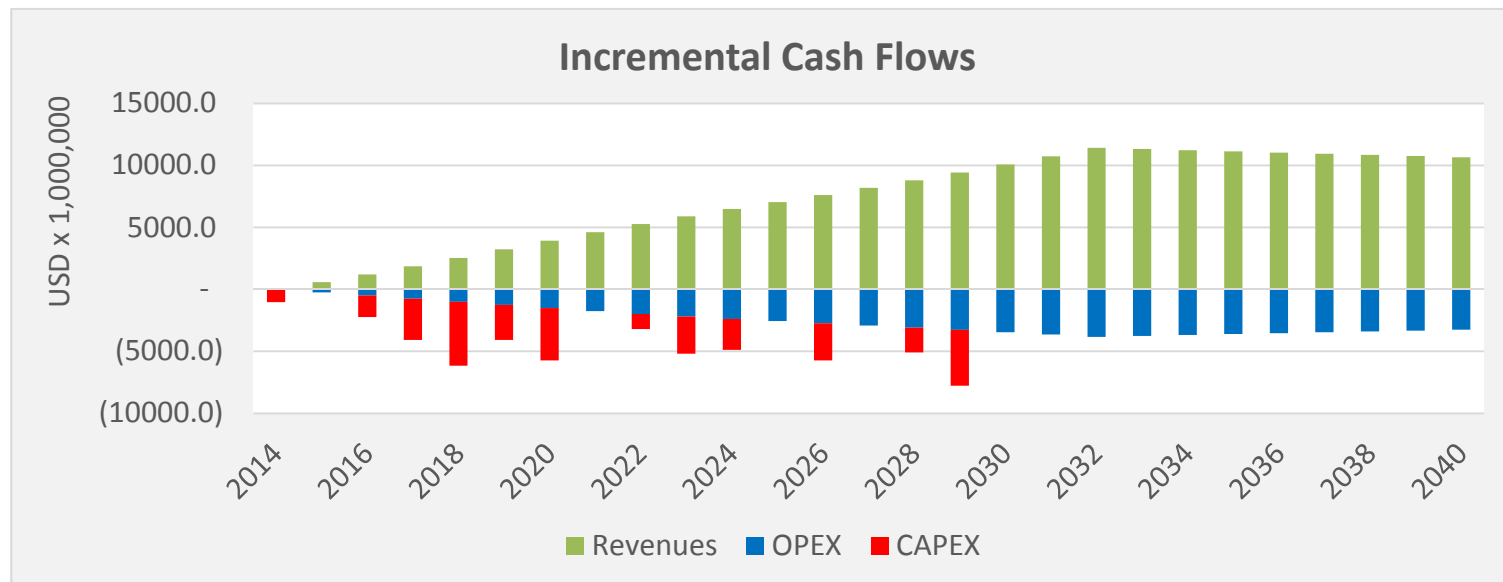


Cash Flows



Established on rationalized per-TEU figures for capex, opex and revenues

- CAPEX: Based on published project CAPEXes; or estimated between USD 200-600 / TEU capacity, depending on project: USD 35 billion until 2030
- OPEX: USD 35-55 / TEU handled; decreasing by 2% per annum
- Revenues: Handling Charges & port dues
 - Handling charge: USD 75-95 / TEU handled; decreasing by 1% per annum
 - Port dues : USD 10 / TEU handled



Value Summary



Unlocking Value in the **ASEAN** Maritime & Transport Industry

- Substantial growth expected in the ASEAN region for the coming decades: doubling in next 10 years.
- Capacity expansions: 2015-2030; CAPEX USD 35 billion; 127 million TEU pa
- 15-20 Billion USD pa Revenue business

Port Authorities need to develop carefully designed and executed PPP Concessions with Private Operators through Transparent and IBP Tenders

$$NPV(i, N) = \sum_{t=0}^N \frac{FCF_{t,g}}{(1+i)^t} = USD\ 18.3b$$

NPV@WACC 10%: USD 18.3b

NPV@WACC 15%: USD 4.7b

IRR 20.0%

ASEAN Market & Port Developments



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Value Optimization through
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Importance of PPP & Transaction Advisory



De-risking strategies drive down cash flow volatility & cost of capital

- **PPP Structuring: balancing risks and business case driven**
 - Procurement/Project realisation risks
 - Project risk: commercial, financial, operational, political etc
 - Financial/commercial risks

- **PPP Procurement Processes**
 - Professional and realistic transactions: timeframes, consultations, documentation, evaluation.
 - Business case driven
 - Process embedded in legislation
 - Non-contestable outcomes

- **PPP Contract: Valuable & Enforceable & Bankable**
 - Tenor
 - Step-in
 - Clear termination compensation regime and guarantees
 - Freedom to set tariffs
 - Handback conditions

De-Risking: Structure



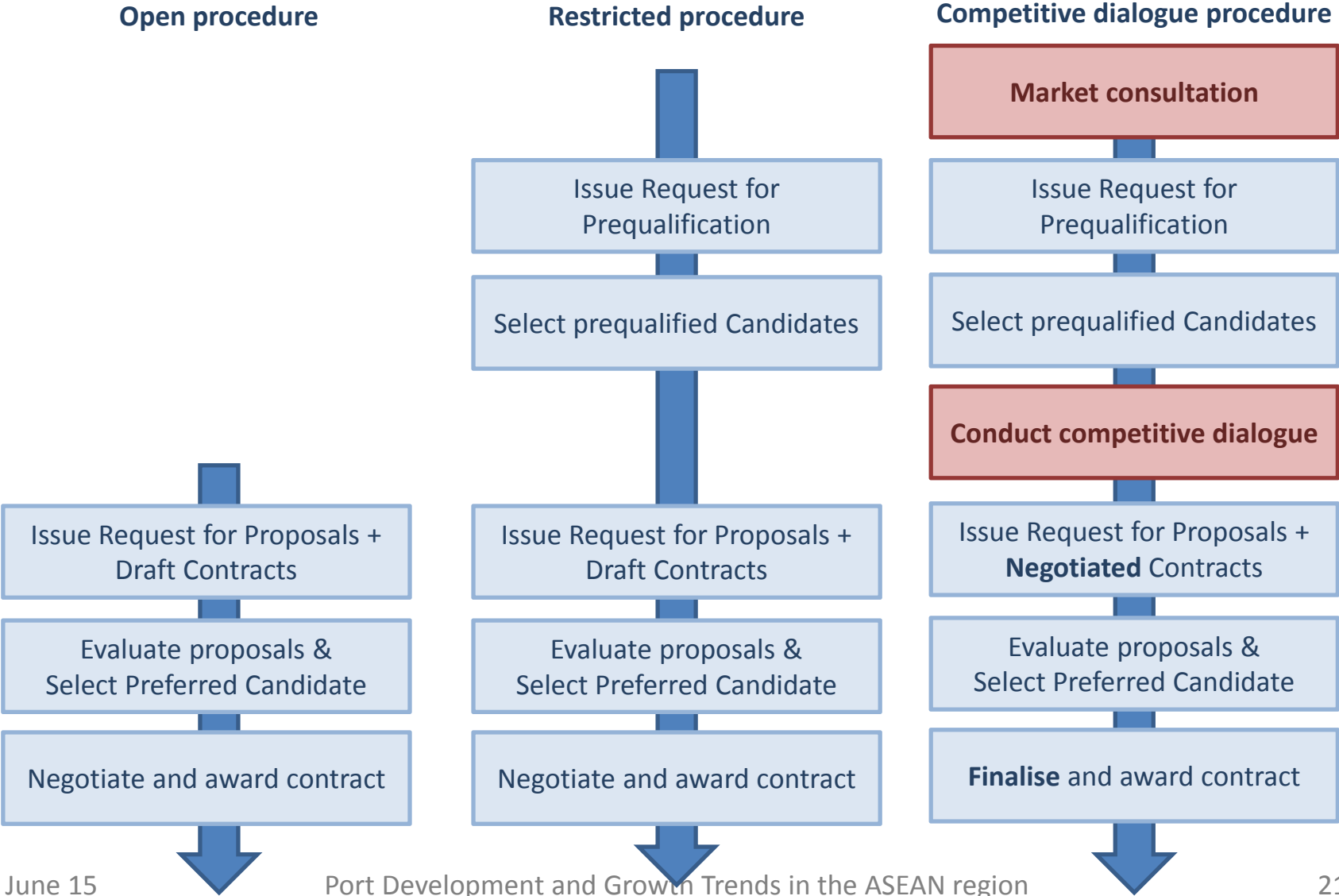
Choosing the Optimal Port Management Model

Structure	Characteristics	Examples
<p>1. Landlord</p>	<ul style="list-style-type: none"> PA acts as traditional landlord Substantial investments and financing is required, but only for base infrastructure 	<ul style="list-style-type: none"> Rotterdam, Antwerp, Hamburg Best practice port reform in African ports
<p>2. Landlord with DB(F)M</p>	<ul style="list-style-type: none"> PA acts as traditional landlord Construction contract is tendered out as a DB(F)M, which implies that construction and maintenance (and financing) is the full responsibility of the infrastructure contractors 	<ul style="list-style-type: none"> No DBFM contract in ports up to date: currently under implementation in a North American port For Rotterdam MV2 it was concluded to apply DBM
<p>3. PDMC</p>	<ul style="list-style-type: none"> PA enters into Master Concession with PDMC (PA as co-shareholder) PDMC tenders individual terminal concessions and the construction contract PDMC attracts investors and arranges debt financing for investments (based on securities from anchor clients) 	<ul style="list-style-type: none"> Busan, S-Korea – Hyundai, Bouygues, BusanPA, Macquarie, Kukje, KCTC Maputo, Mozambique – CFM, DP World, Grindrod Durban, South-Africa Ibom Deep-Sea Port, Nigeria
<p>4. Full BOT concession tender</p>	<ul style="list-style-type: none"> Private consortium is responsible for port development and investments Appetite restricted by size of the investments Limited control PA 	<ul style="list-style-type: none"> Monrovia, Liberia – APMT Mersin, Turkey – PSA & Afken

De-risking: Awarding Procedures



overview



Recommendation for Successful competitive procedure



-
- Competitive Dialogue Procedure creates most value: Early market involvement of bidders
 - Tender should be business case driven. Focus on long term value rather than closing the deal.
 - Feasible Business Case for both PA and TO translated into valuable concession contract
 - Concession contract: valuable, enforceable and bankable
 - Transaction Preparation Phase is Crucial:
 - Transaction Structuring: Valuation, Risk Allocations and Value Engineering, Documentation
 - Transaction Management: First Time Right and Commit to Timelines

thank you for your attention



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ASEAN Market & Port Developments



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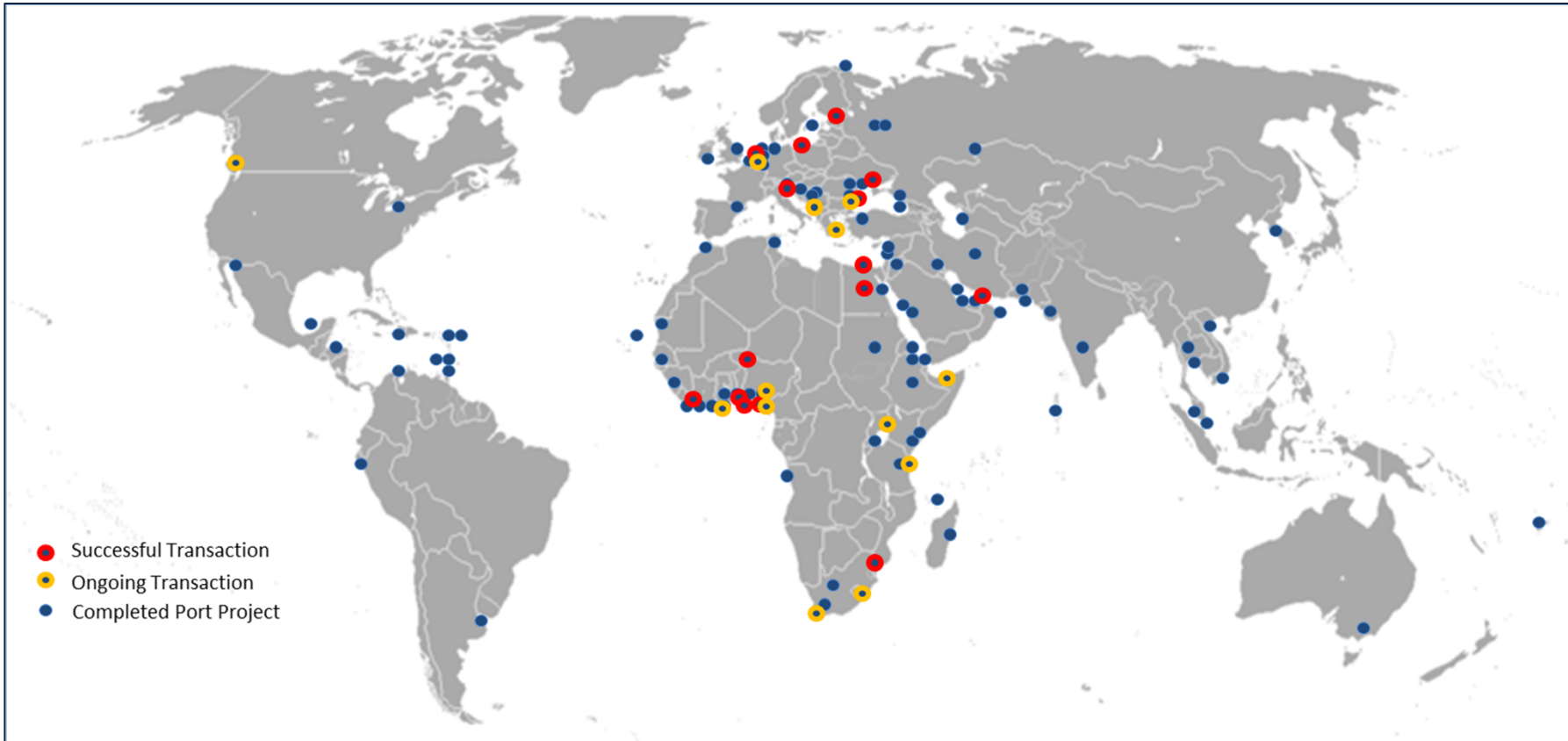
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Appendix:


- Relevant International Experience
- MTBS Transaction Methodology

... with a global track record of port projects...




... with significant recent Port Transaction Success Stories ...




Transaction Advisor 

Port of Bar, Montenegro

bid preparation for



for the acquisition of



deal size EUR 35 million
2013

Financial Advisor 

Standard Chartered Bank Nigeria


Lekki Port Lender's Market Consultant






Finance: \$800 million
Project size: \$1.5 billion

2012-2013

Financial Advisor 

DCT Gdansk S.A. Poland

Concession Expansion Deepwater Container Terminal Gdansk



Bankable Financial Model PIM
Deal size: 200 million EUR

2012-2013

Transaction Advisor 

Luka Rijeka, Croatia
Adriatic Gate Container Terminal Equity Divestment




Concession awarded to




Deal size EUR 37.5 million

2010-2011

Financial Advisor 


Multi purpose Terminal East-2 Concession Burgas, Bulgaria

Bid Preparation Navibulgar






Winning Bid
Deal size: EUR 100 million


2011

Financial Advisor 


Project Finance Access Channel Maputo, Mozambique
for Standard Bank South Africa


Deal size confidential
2010

Transaction Advisor 

Tallinn Port Authority Estonia
Muuga Container Terminal Concession




Concession awarded to





Deal size EUR 100 million

2010-2011

Financial Advisor 

Project Finance Port project Apapa, Nigeria





Market and tariff forecast
Financial model
Risk assessment


Deal size confidential
2011

... with significant recent Port Transaction Success Stories ...




Transaction Advisor 

**Tallinn Port Authority
Estonia**
Muuga Container Terminal Concession



Concession awarded to



Deal size EUR 100 million
2010-2011


Financial Advisor 

**Project Finance
Port project
Apapa, Nigeria**





Market and tariff forecast
Financial model
Risk assessment


Deal size confidential
2011

Transaction Advisor 

Freeport of Monrovia, Liberia
Container Terminal Concession



Concession awarded to



Deal size US\$ 120 million
2009-2010

Financial Advisor 


**Brooklyn-Kiev Port
Odessa, Ukraine**

Container Terminal Equity Valuation



European Bank
for Reconstruction and Development

Deal size US\$ 37 million senior loan
Total project cost US\$ 130 million
2009

Financial Advisor 

Egypt, Cairo

**Bid Preparation Dry Bulk Terminal El
Dekheila**



Deal size confidential
2006

Transaction advisor 

**Public Water Transport System
Dubai
UAE**



Deal Size: US\$ 25 million
2007

Financial Advisor 

**Port of Rotterdam Authority
The Netherlands**


Maasvlakte 2
Greenfield Container Terminal Development




Concession awarded to:



2006-2007

Financial Advisor 

**West Africa Container Terminal
Onne
Nigeria**

Deal size confidential
2004

... a portfolio of ongoing port transactions ...

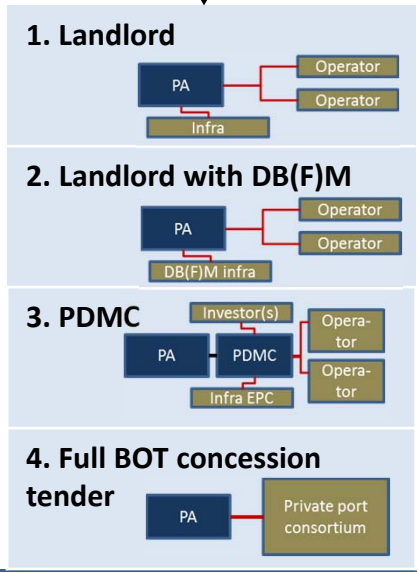
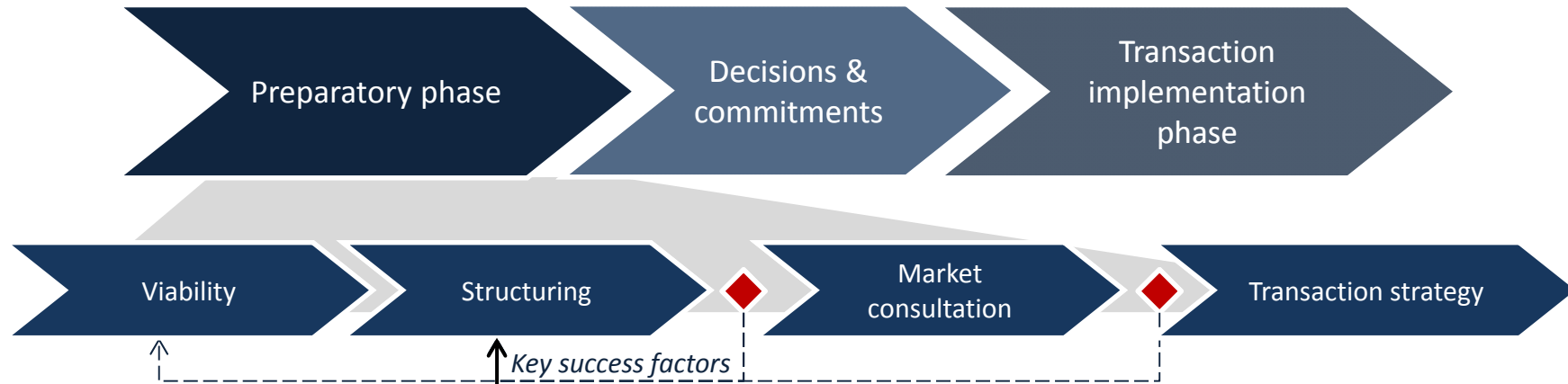


Port of Vancouver, Canada	Port of Durban, South Africa	Port of Dar es Salaam, Tanzania	Port of Moerdijk, Netherlands
Financial Advisor	Transaction Advisor	Transaction Advisor	Transaction Advisor
Commercial advisory services	PPP-scheme Durban Dig-out port	Concessions Berth 5-7 and 13&14	Concessions terminal
Concession	Concession	Concession	Concession
Sell Side	Sell Side	Sell Side	Sell Side

Ibom Deep Sea Port, Nigeria	Takoradi, Ghana	Kisumu, Kenya	Port of Burgas, Bulgaria
Transaction Advisor	Transaction Advisor	Transaction Advisor	Transaction Advisor
Concession greenfield Deep Sea Port	Concessions Takoradi Port PPPs	Concessions port of Kisumu PPP Project	Equity transaction Navibulgar container terminal
Concession	Concessions	Concession	Management Contract Shareholders Agreement
Sell Side	Sell Side	Sell Side	Private deal

The MTBS Transaction Methodology

Tailoring of the optimal PPP structure is an important step in transaction preparation

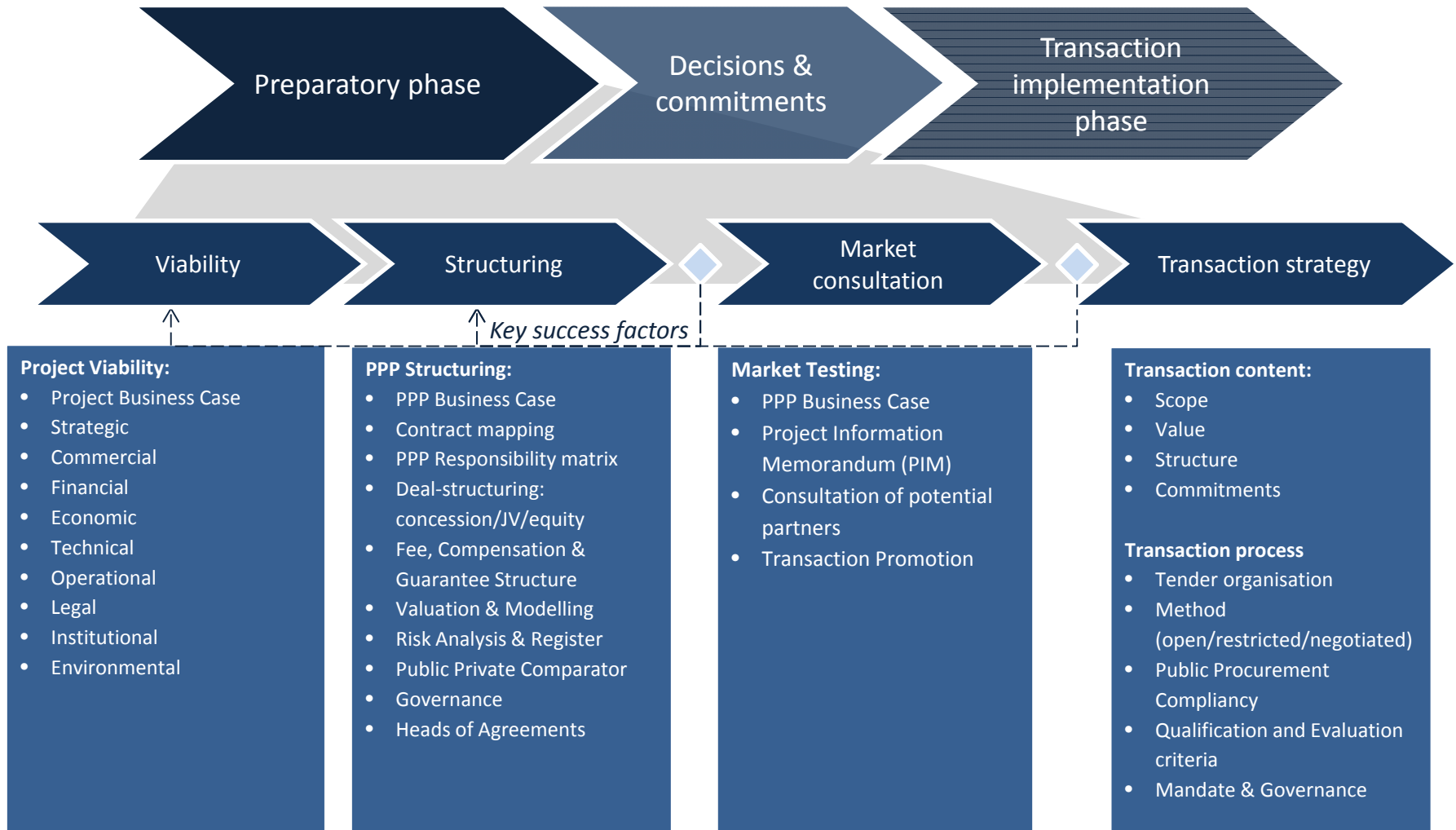


The MTBS Transaction Methodology

Business Case Approach secures project feasibility, PPP Structure and Bankability

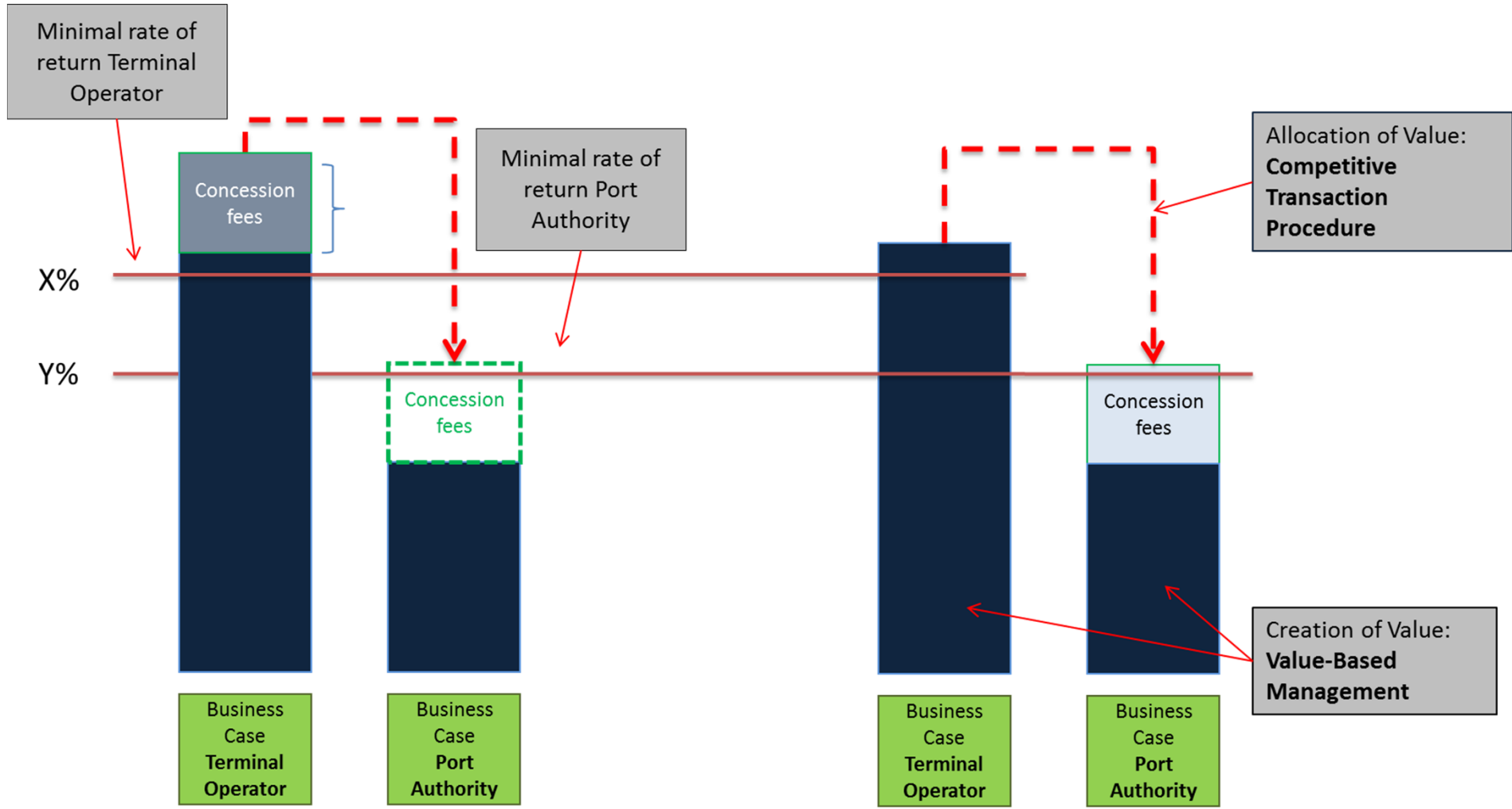


PPP Transaction Advise Process - Sell side



The MTBS Transaction Methodology

Risk allocation and competitive tendering lead to optimal value creation



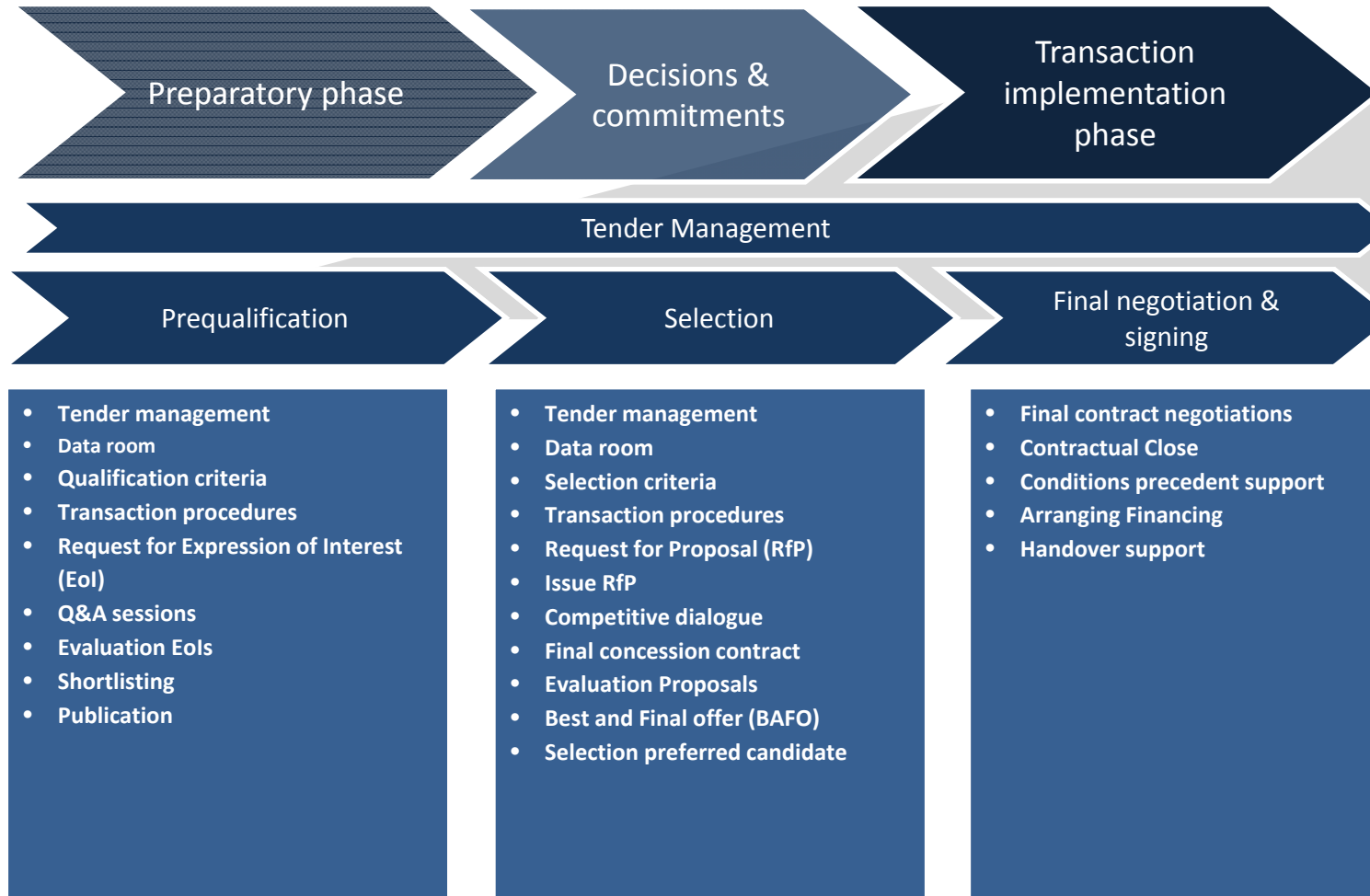
PPP Transaction Advise Process - Sell side



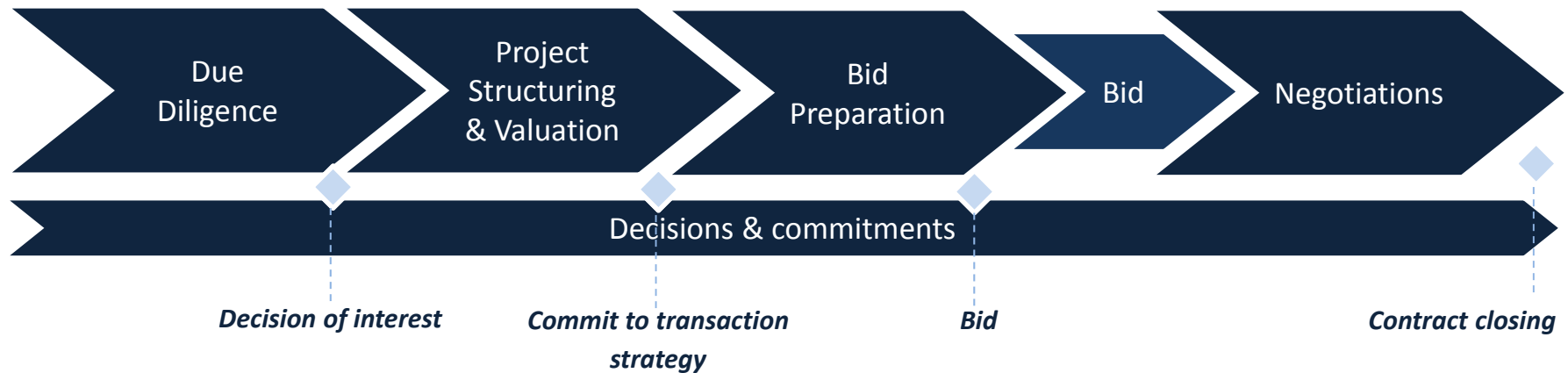
The MTBS Transaction Methodology



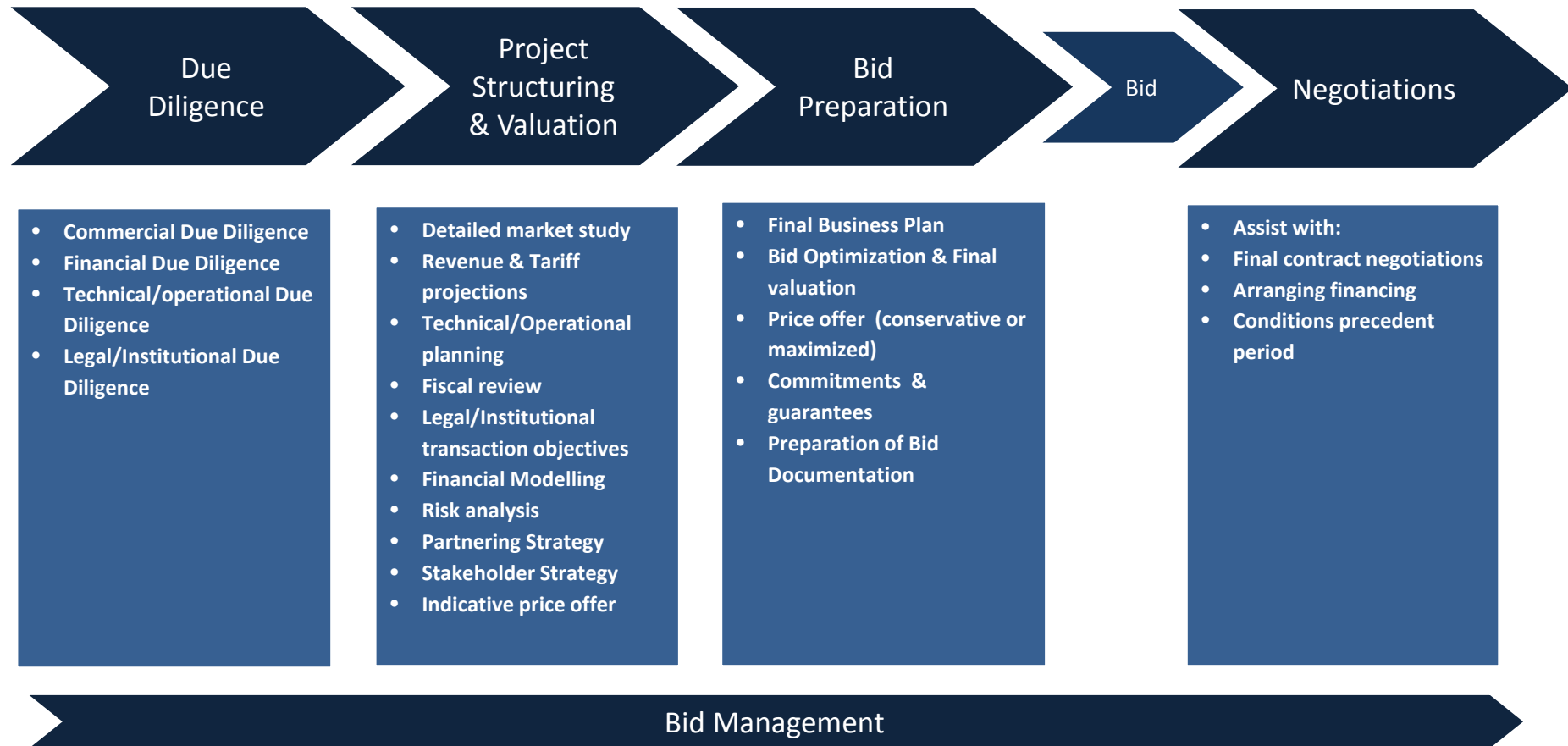
PPP Transaction Advise Process - Sell side



PPP Transaction Advise Process Buy side



PPP Transaction Advise Process - Buy side



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