17th Intermodal AFRICA 2017

mtbs
maritime & transport business solutions

Structuring Valuable Port PPP's

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17th Intermodal Africa, 19 April 2017

maritime & transport business solutions

Agenda

MTBS African Portfolio

Introduction to MTBS

Africa's Port Development Need

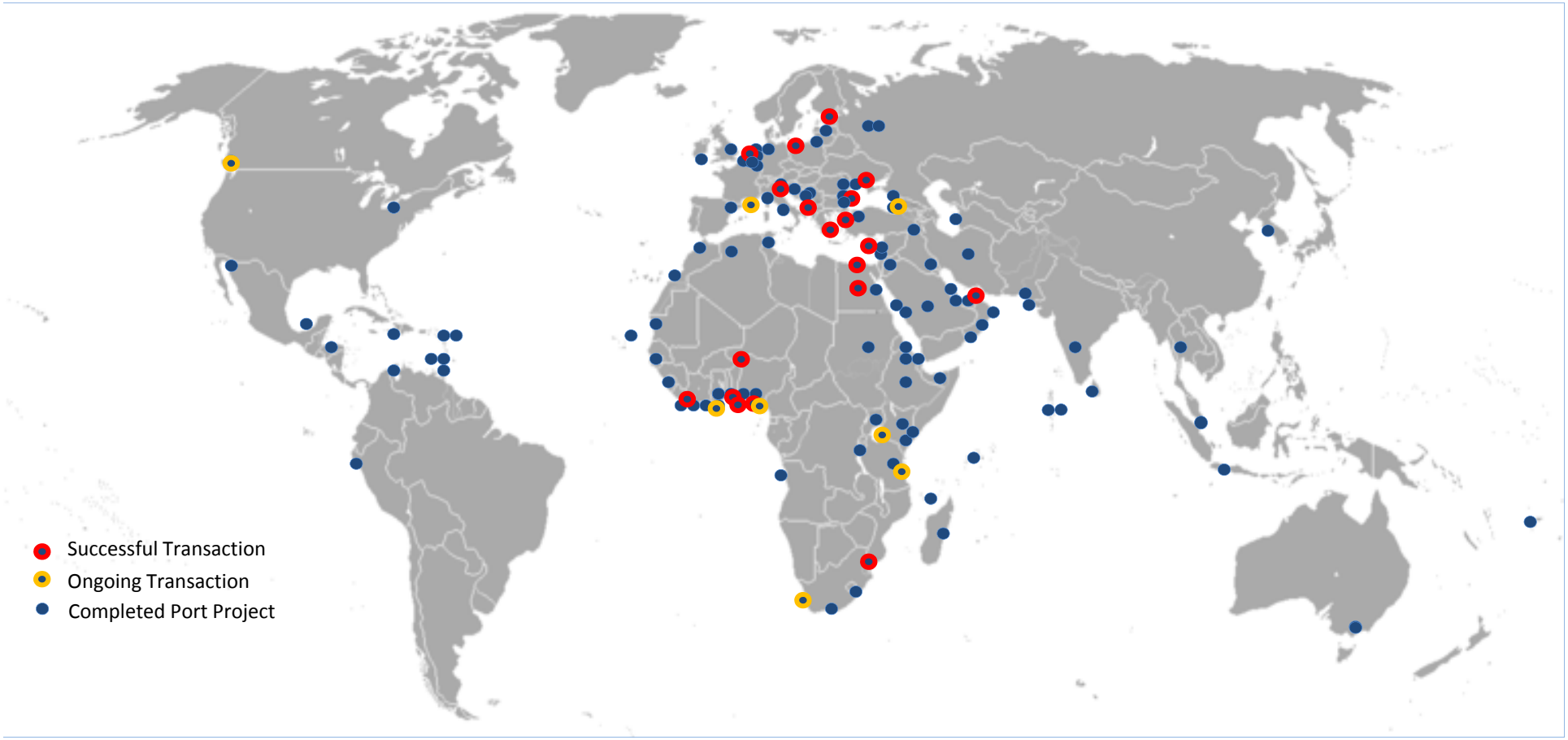
Need for successful Port PPPs

PPP & Bankability: Lessons Learned

- Value Engineering
- PPP Structuring

MTBS: Maritime & Transport Business Solutions

Specialized in Port PPP Projects. Global Portfolio, focus on EMEA Region



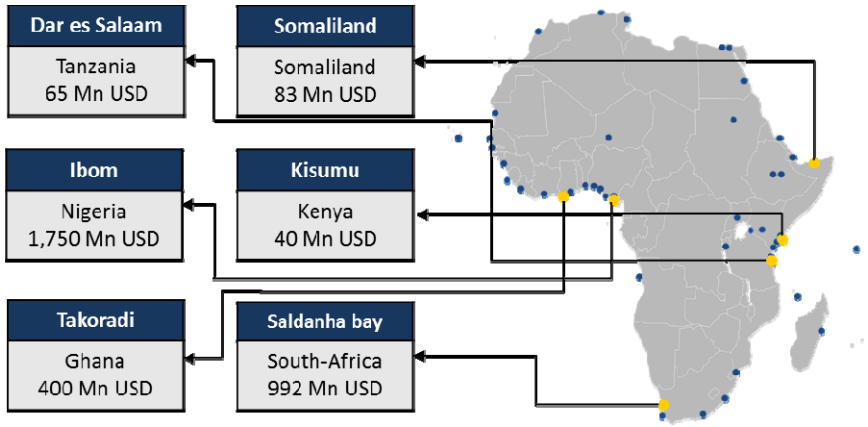
Significant Portfolio Size - 50 Port Projects per Year - Diversified Portfolio

Broad Client Base - Strong Home Market - International Focus

MTBS: Maritime & Transport Business Solutions

Global leader in port transaction advisory

MTBS' Focus on Afcrica



MTBS' services

- Global Leader in Port Business Advisory
- Long track record of closed 4P
- International Sector Focus

MTBS' Clients in the Port & Infrastructure Sector

APM TERMINALS
GHANA PORTS AND HARBOURS AUTHORITY
DCT GDANSK SA
Deepwater Container Terminal Gdansk
KARACHI PORT TRUST
GATEWAY TO PAKISTAN
Ecobank
The Pan African Bank
GLOBAL PORTS HOLDING
European Bank for Reconstruction and Development
HHLA
LUKA KOPER
Port of Koper
European Investment Bank
International Container Terminal Services, Inc.
Port of Melbourne Corporation
HELLENIC REPUBLIC ASSET DEVELOPMENT FUND
Port of Rotterdam
IFC
TRANSNET
ROSMORPORT
Standard Bank
UCL HOLDING
UNIVERSAL CARGO LOGISTICS HOLDING B.V.
PORT METRO vancouver
THE WORLD BANK
RED SEA GATEWAY TERMINAL
King Abdullah Port
ZonesCorp
DP WORLD
ABU DHABI PORTS COMPANY
GOVERNMENT OF ABU DHABI
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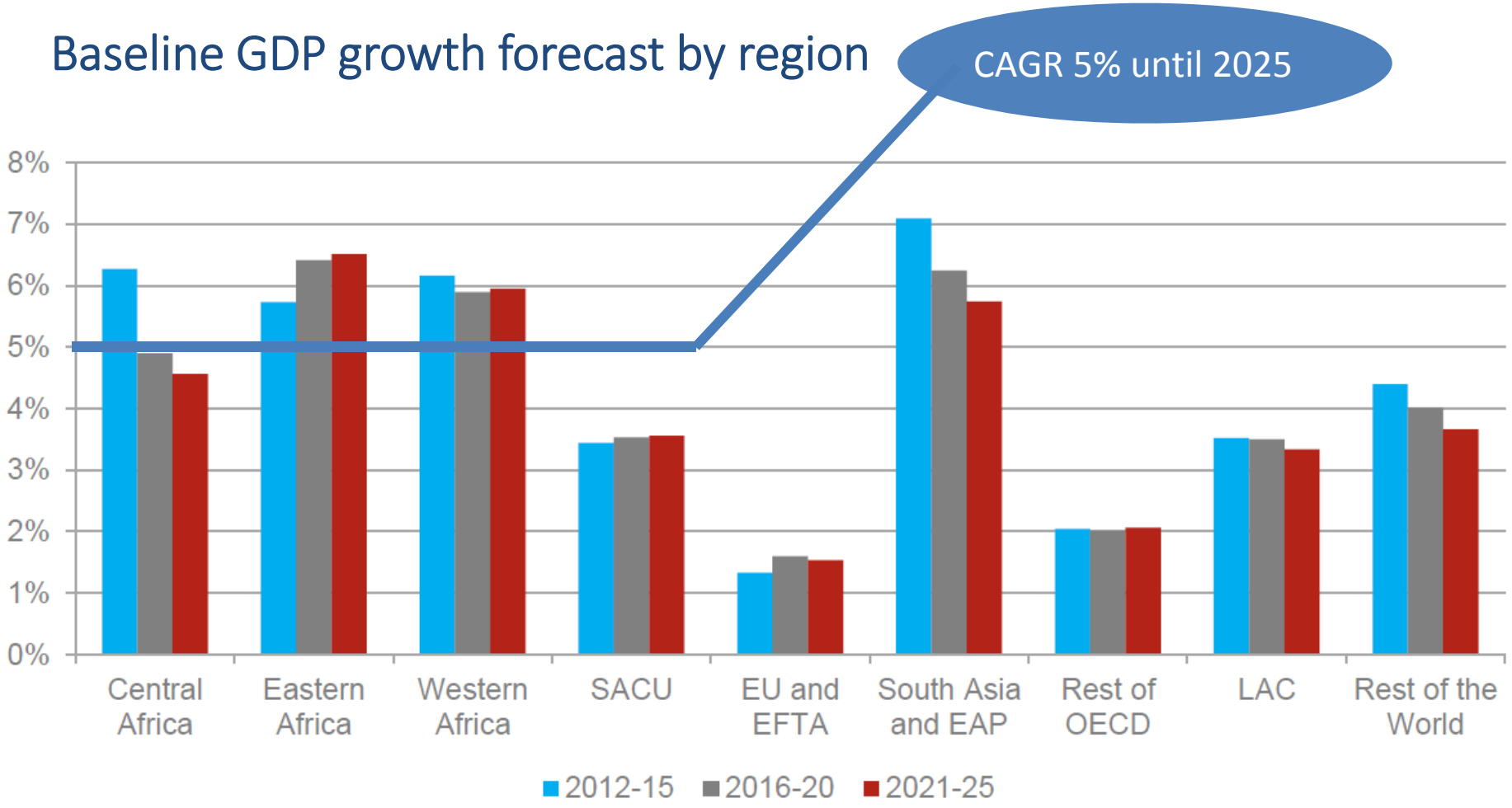
Strong GDP growth forecasted in Africa

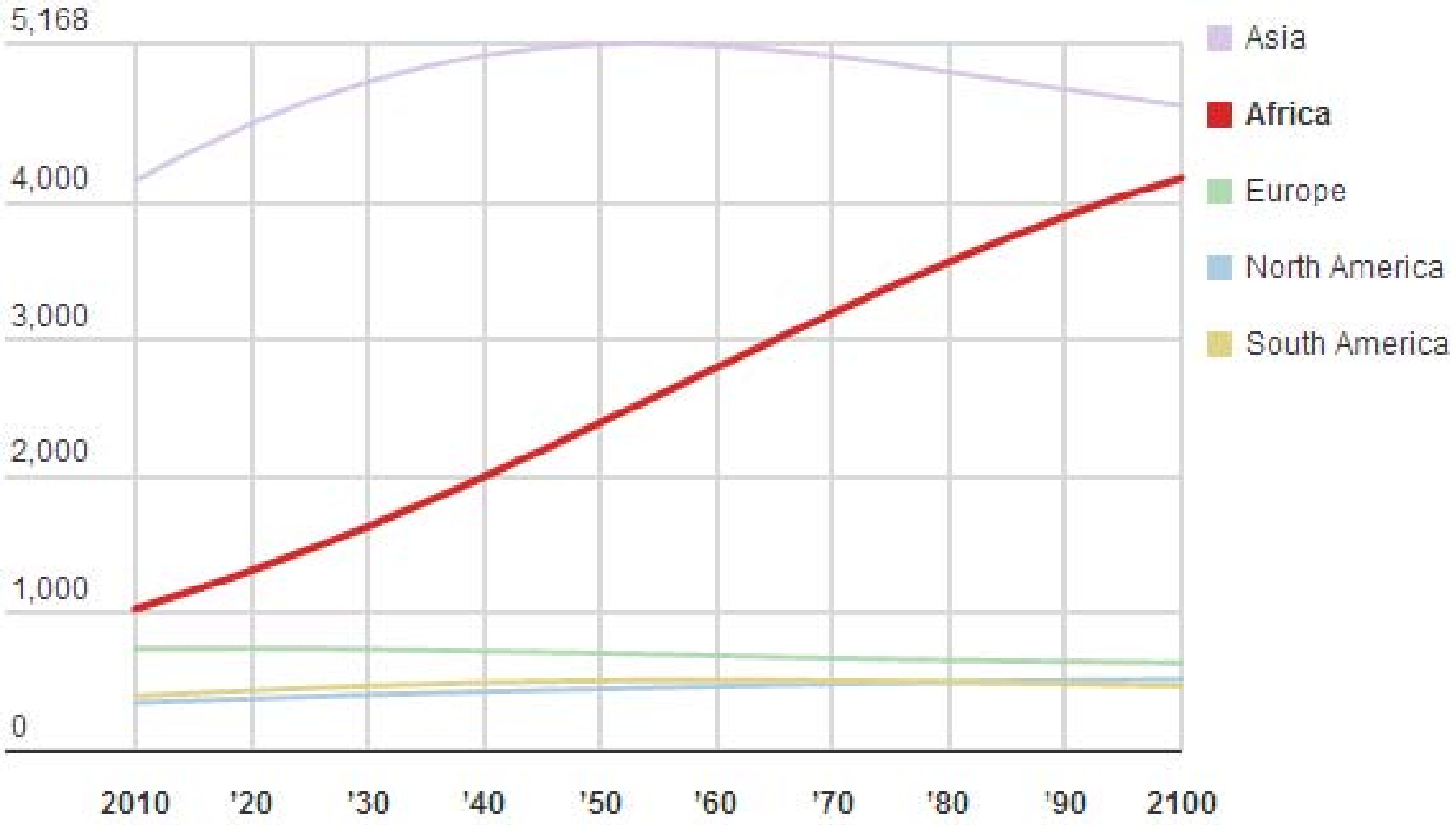
Baseline GDP growth forecast by region



Strong population growth in Africa

Outcomes from the U.N. Panel on Population

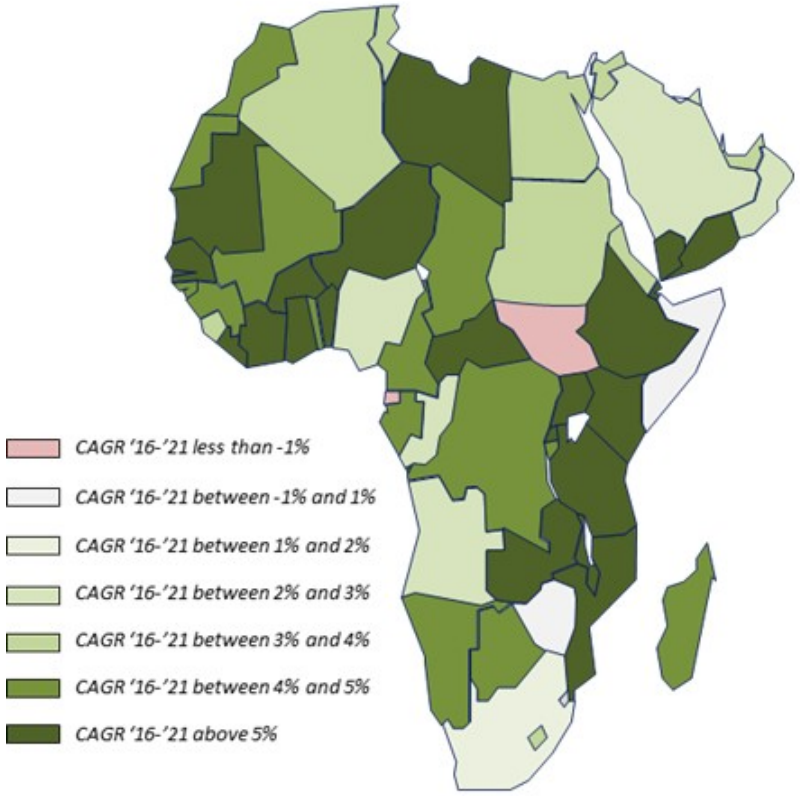
Predicted population by continent in millions, 2010-2100



Strong growth on African continent forecasted

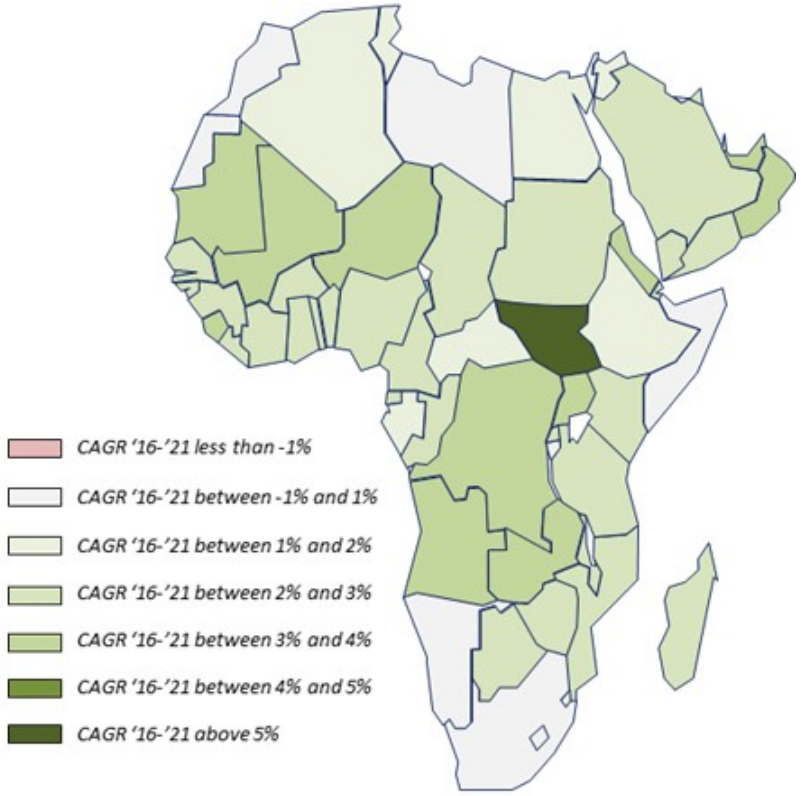
Attractive Market Potential in Emerging Markets

GDP Growth Outlook: 2016-2021



Source: IMF World Economic Outlook (October 2016)

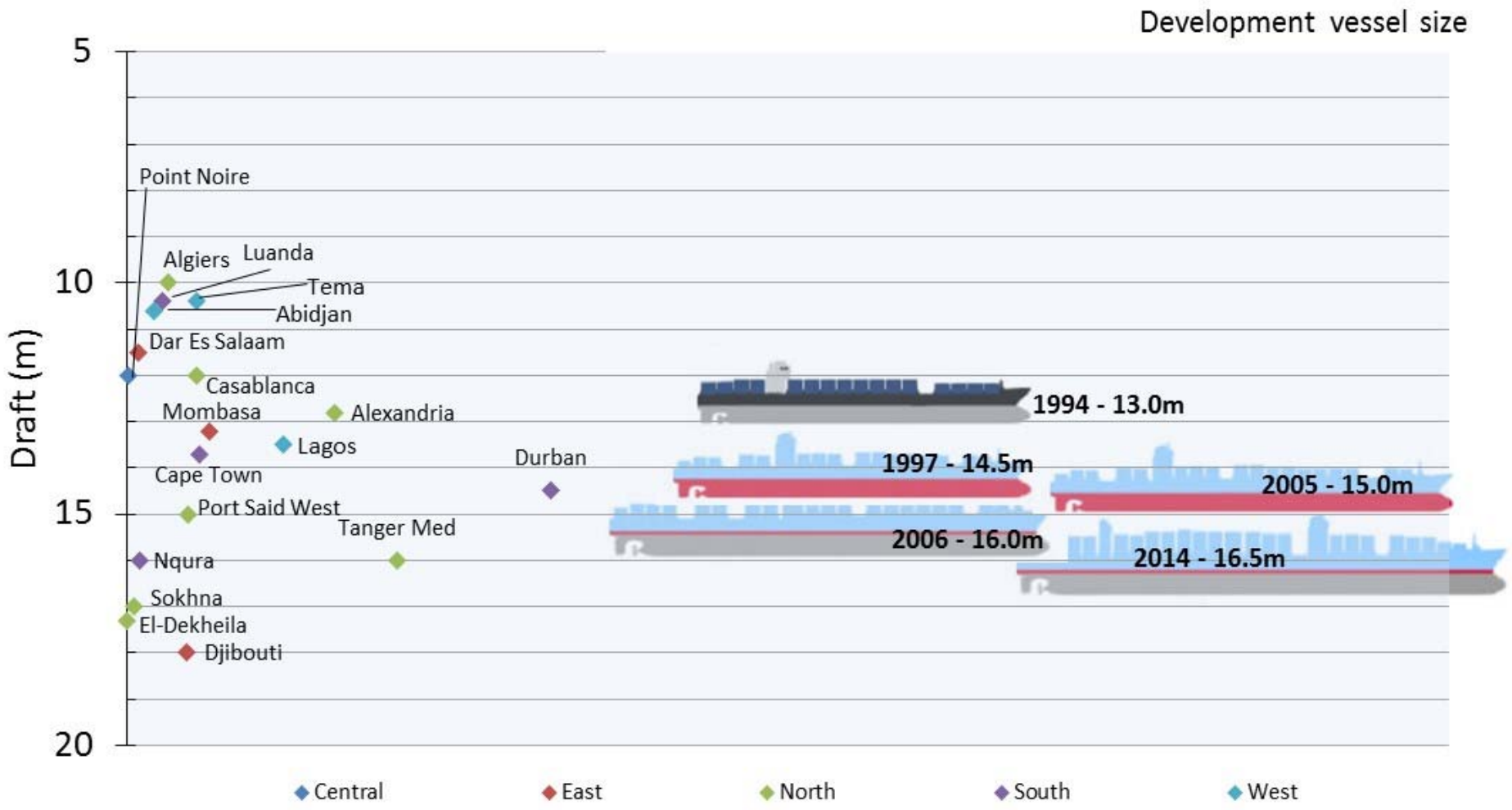
Population Growth Outlook: 2016-2021



Source: IMF World Economic Outlook (October 2016)

Ports need to accommodate larger vessels

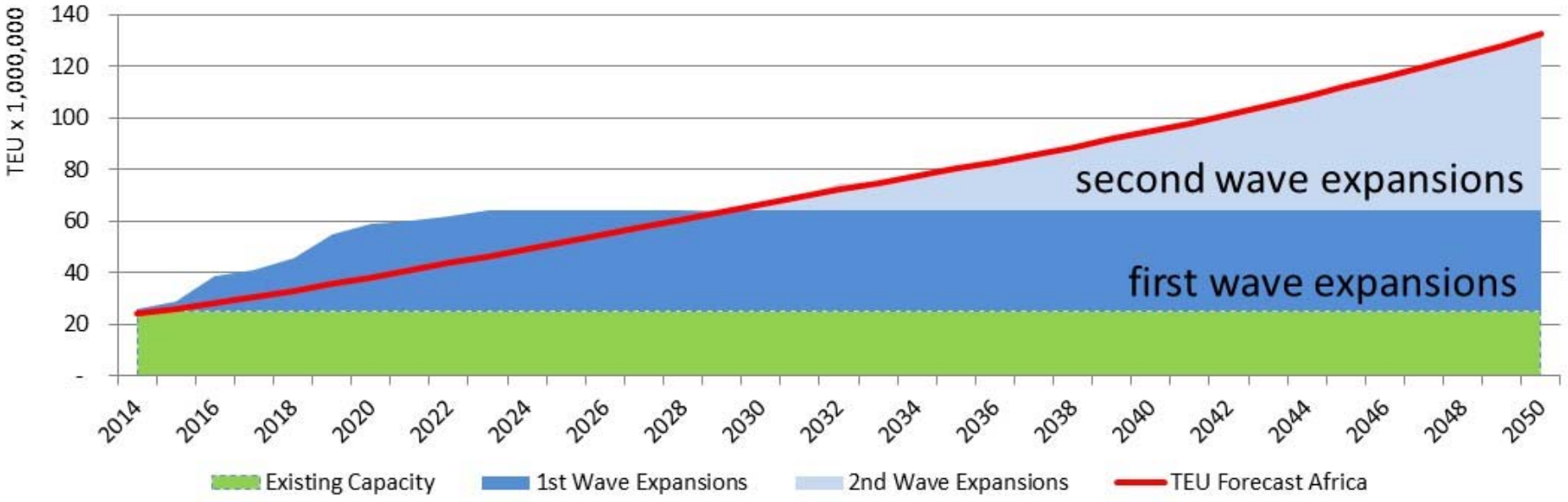
Current port dimensions in Africa are no longer adequate…



Growth: Capacity vs Demand

Africa: Substantial investments in ports required on medium/long term

- Container demand increasing to **130 mTEU** (2050)
- Existing Capacity: appr. **30 mTEU**
- 1st Wave Expansions: appr. **35 mTEU**
- Capacity Gap by 2030 (requiring 2nd Wave Expansions): appr. **65 mTEU**



MTBS identified a large number of planned projects

First wave of port expansions: 35 mTEU in coming decade

Total projects

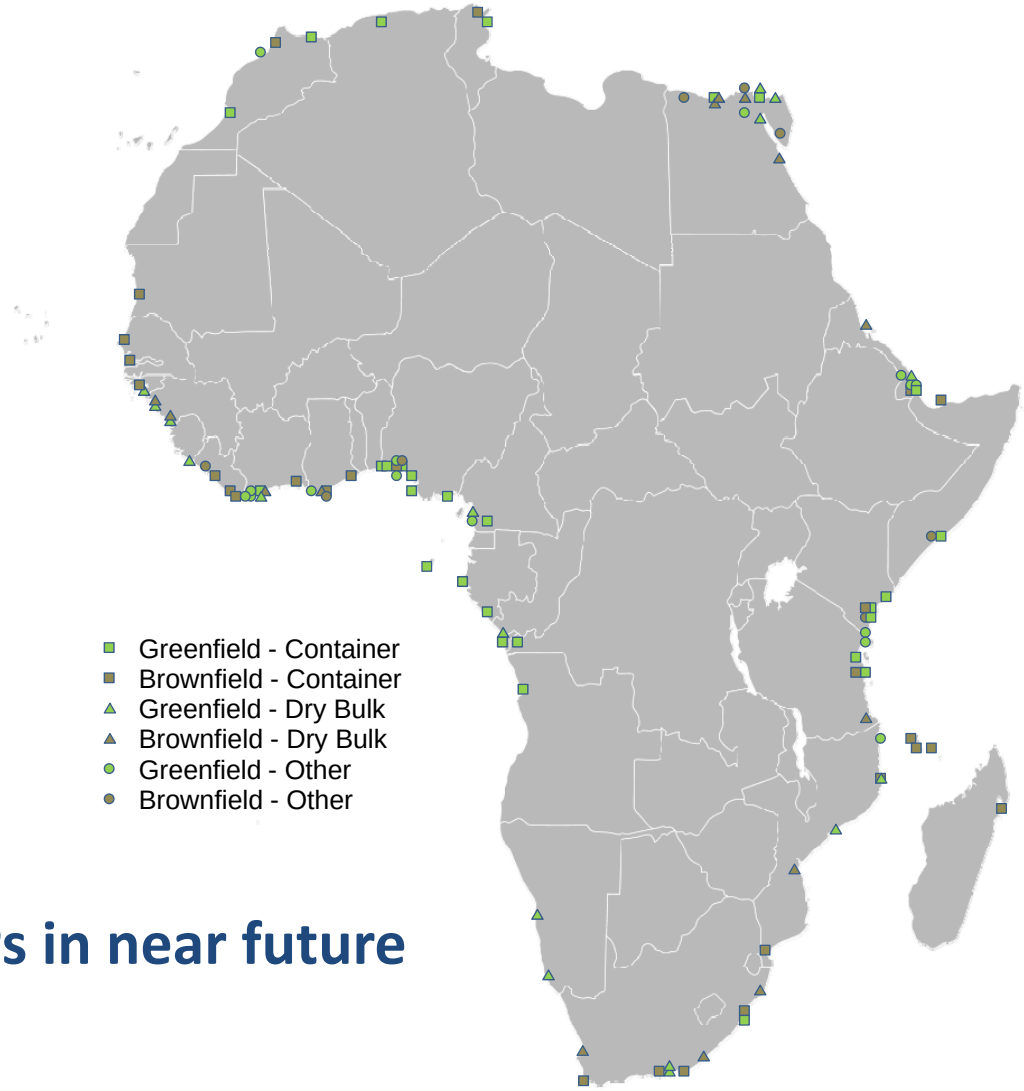
#	114 projects	$	> 79 billion USD

Container projects

#	57 projects	$	> 40 billion USD

Dry bulk projects

#	31 projects	$	> 27 billion USD



Need for successful Port PPPs in near future

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Need for successful Port PPPs

PPP & Bankability: Lessons Learned
- Value Engineering
- PPP Structuring

Why Port PPP Implementation?

- **Risk management**: **private parties better positioned to handle specific risks** (e.g. market risks, operational risks, construction risks)
- **Reduce burden on public budgets**: tool to finance large scale port projects
- **Increase operational performance** of terminals

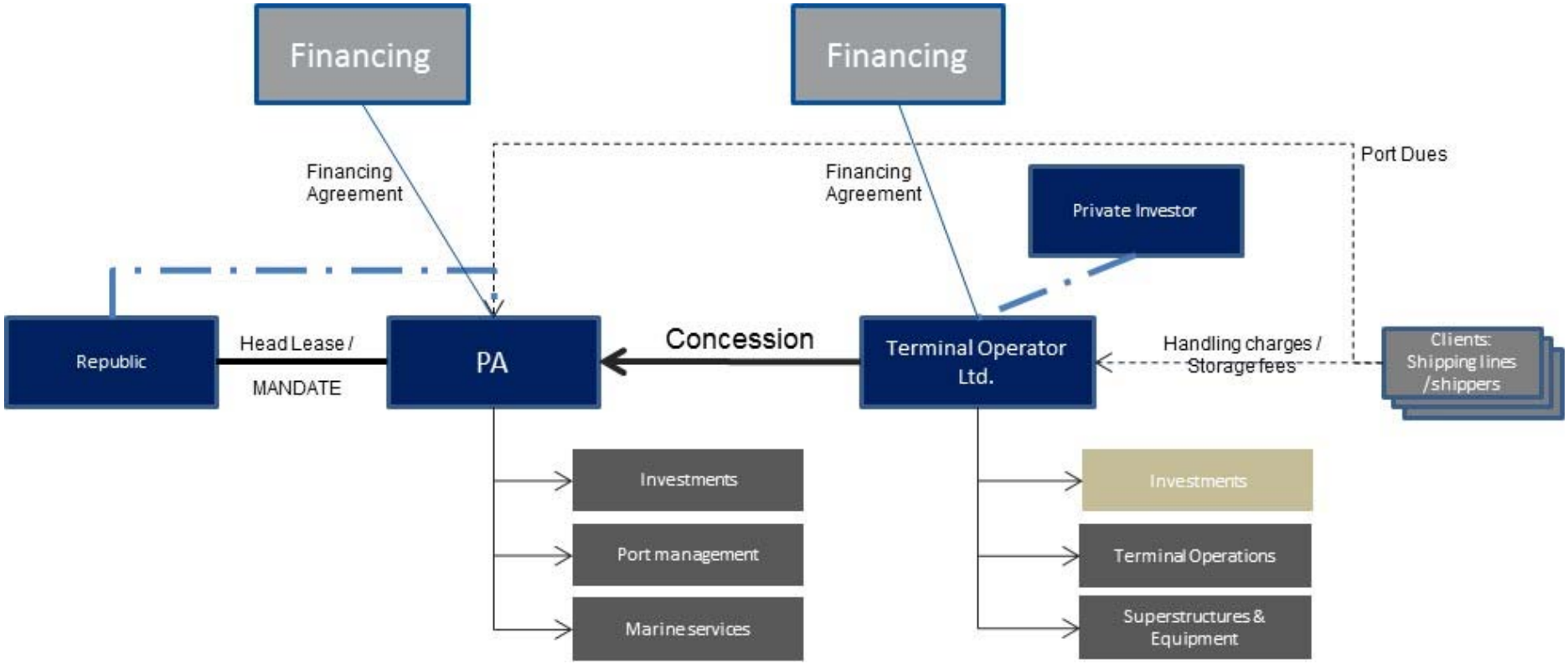
PPPs are not ‘one-size-fits-all’

A number of high profile PPPs have been delayed or cancelled in Africa

- Public authorities and Investors should embrace the **tailor-made nature of PPPs**
- **Tendency to shift a large degree of risks and investments to the private side**
- **Hastily or insufficiently prepared PPPs**
- Result: A number of high-profile **Port PPP Projects have been delayed or cancelled in Africa**

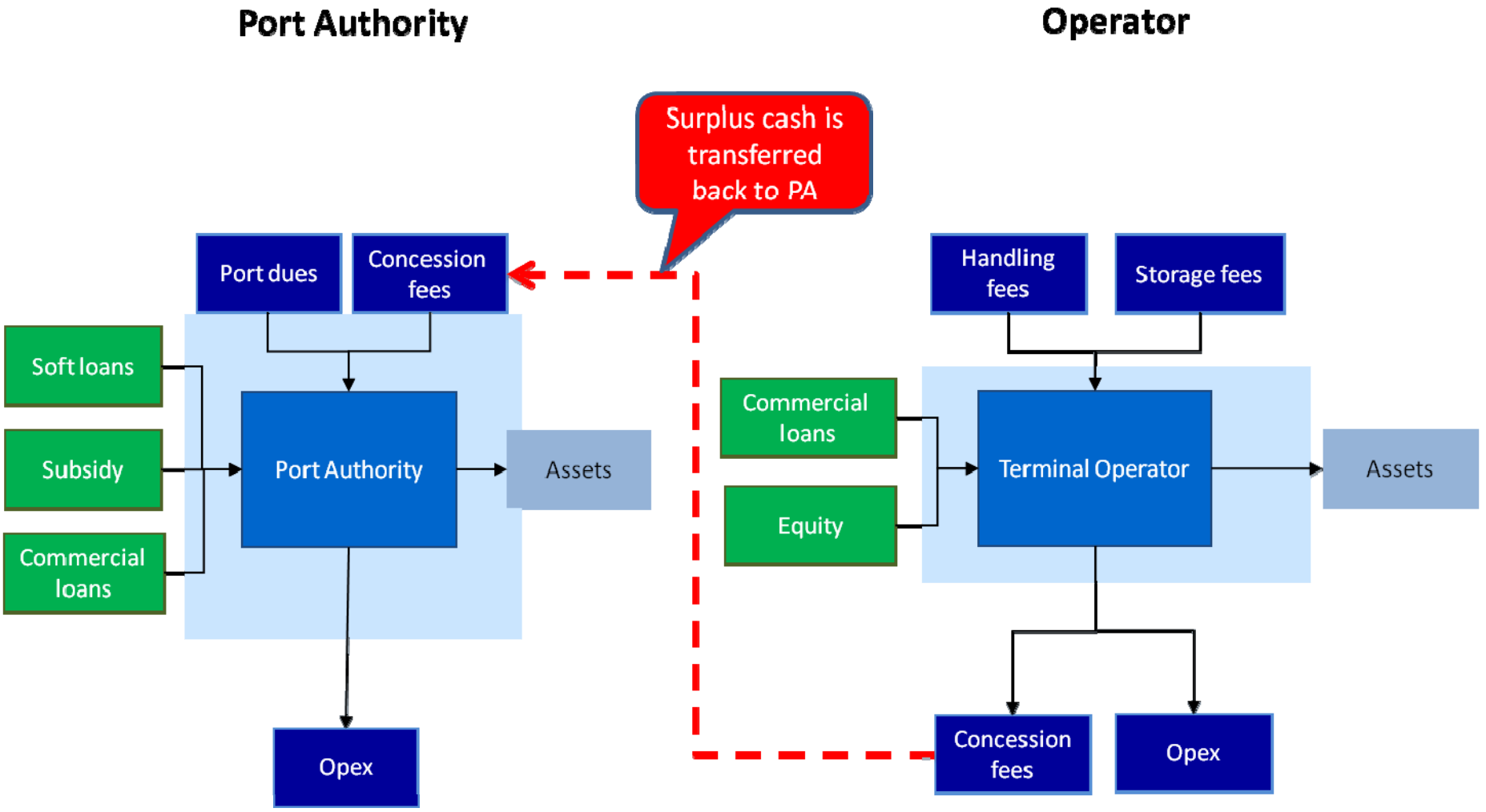
Basic PPP structure in Ports

Optimal allocation between public and private responsibilities
Bankable and enforceable concession agreement



Value of the PPP

The better the PPP structure, the more value there is to divide…



Business Case driven PPP Implementation

Use of financial model is key

Exogenous Factors

Traffic scenario: base case

Traffic during construction: no traffic

Inflation: 6%

Endogenous Factors

Concession duration: 11 years

Tariff revision: every 3 years

Tariff increase: 5.0%

Concession fee: concession fee

Fee possible: 2,109,457

Fee used: 4,000,000

Financing

Margin rate: 5.0%

Repayment schedule: Annuity

Risk Analysis

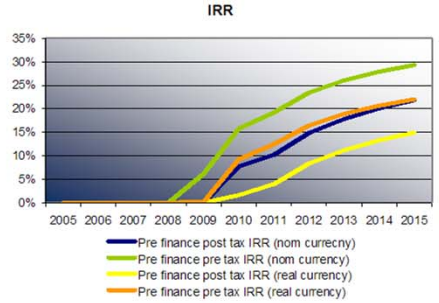
Variation of traffic growth + / - : 3%

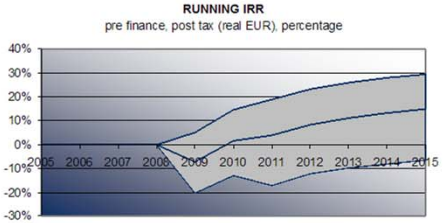
Variation of inflation + / - : 3%

optimize finance & calculate sensitivity

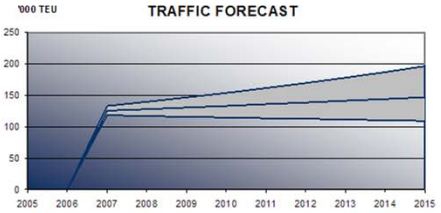
Project Profitability

	IRR	Payback period
Post tax, nominal	21%	5 yrs, 1 months and 18 days.
Pre tax, nominal	29%	4 yrs, 6 months and 28 days.
Post tax, real	15%	5 yrs, 9 months and 10 days.
Pre tax, real	22%	4 yrs, 11 months and 25 days.

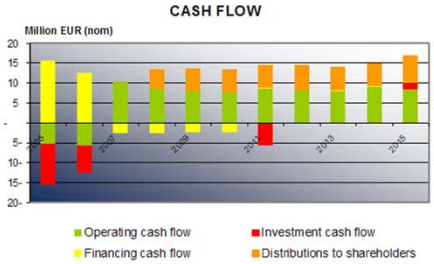




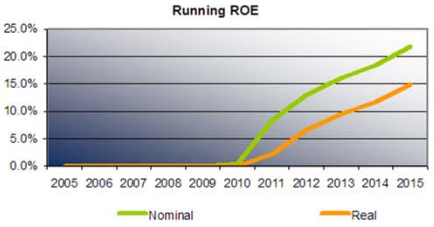
Traffic Scenario



Cash Flow



Return on Equity



Sources and Uses of Cash

Sources of cash

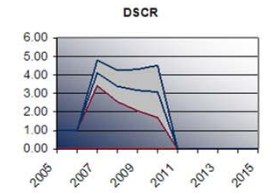
Revenues	215,607,277
Equity	21,647,942
Debt	9,894,292
Total	247,149,511

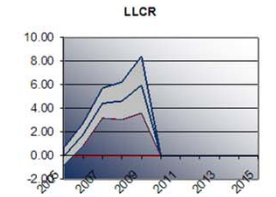
Uses of cash

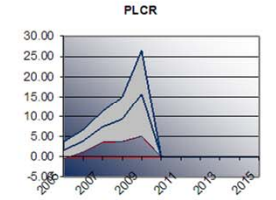
Investments	21,172,718
OpEx (excl. concession fees)	64,371,113
Concession fees	59,886,571
Taxes	28,450,889
Debt repayment	9,894,292
Interest	2,054,262
Dividend	61,319,667
Total	247,149,511

Financing

	min.	ave.
DSCR	1.00	2.62
LLCR	0.08-	3.35
PLCR	1.53	7.54







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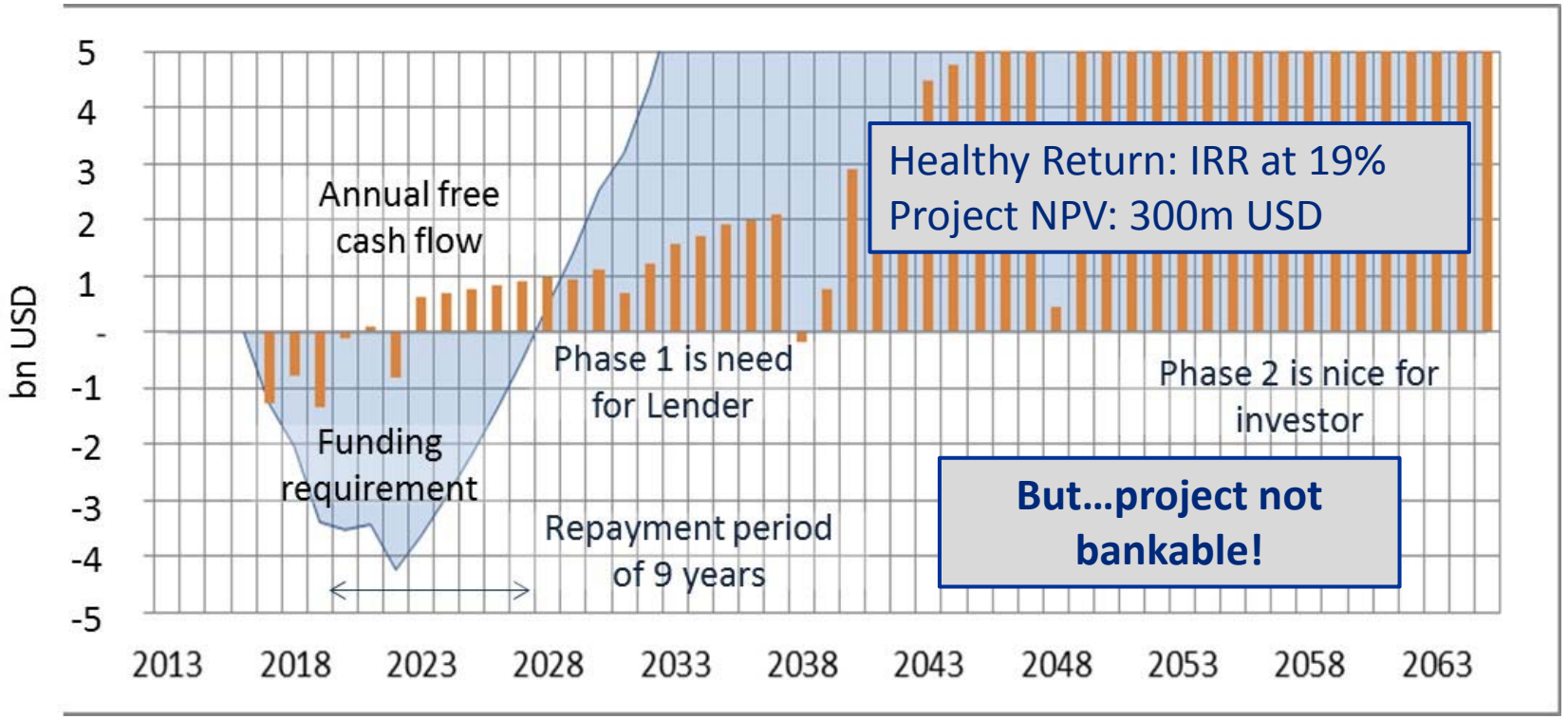
Bankability: Early Awareness is Critical

Feasibility does not always imply Bankability

- **Magnitude of the funding requirement**
- **Duration and risks associated with construction period** (here first 3 years)
- **Ramp-up period for revenues leads to long pay-back period**



Value Engineering: Reduction of Phase 1 Capex

Increase DSCRs

Phase 1 Capex is essential for bankability:

- **while Project Feasibility may be attainable with a high Phase 1 Capex**
- **DSCRs are often too low when Project (Phase 1) is over-dimensioned.**

Critical questions to be asked in order to ensure optimal Phase 1 Capex:

- **Breakwater & access channel design:**
  - Is it possible to phase construction of the breakwater?
  - Is it possible to start with a one-way access channel?
  - Is it possible to achieve a balance in sand-usage?

- **Terminal dimensions (Phase 1):**
  - Tailored to Phase 1 market demand?
  - Options for expansion in future?

Value Engineering: Reduction of Project Lead-Time

Early revenue generation

Important aspects for ensuring early revenue generation:

- **Reduce Phase 1 Scope: over-dimensioning of ports** does not only create a high capex, but also **increases the lead-time of a Project**;
- **Phased Handover:** in case of multi-berth terminals, a phased handover can provide an **opportunity for early revenue generation**.

Early revenue generation should also be supported by effective Contracting:

- **Clear Timelines with longstop dates:** Grantors, Concessionaires and Contractors should have a **firm timeline for Project Development**
- **Include Penalties where relevant: delays should be compensated** via penalties/liquidated damages

Value Engineering: Capacity in line with Demand

Demand/Supply basis for long-term development plan

Demand/Supply is always the basis for Port Development:

- **Capacity in line with Demand: improves bankability and equity returns**
- **First exhaust existing Assets:** Development of **greenfield initiatives** is only sensible **when potential of existing assets is reasonably exhausted**
- **Port Capacity supply does not stop at Port's Boundary:**
  - **Hinterland connections** are increasingly important
  - **Lock-in of Public Authorities** to support the Project's development is essential

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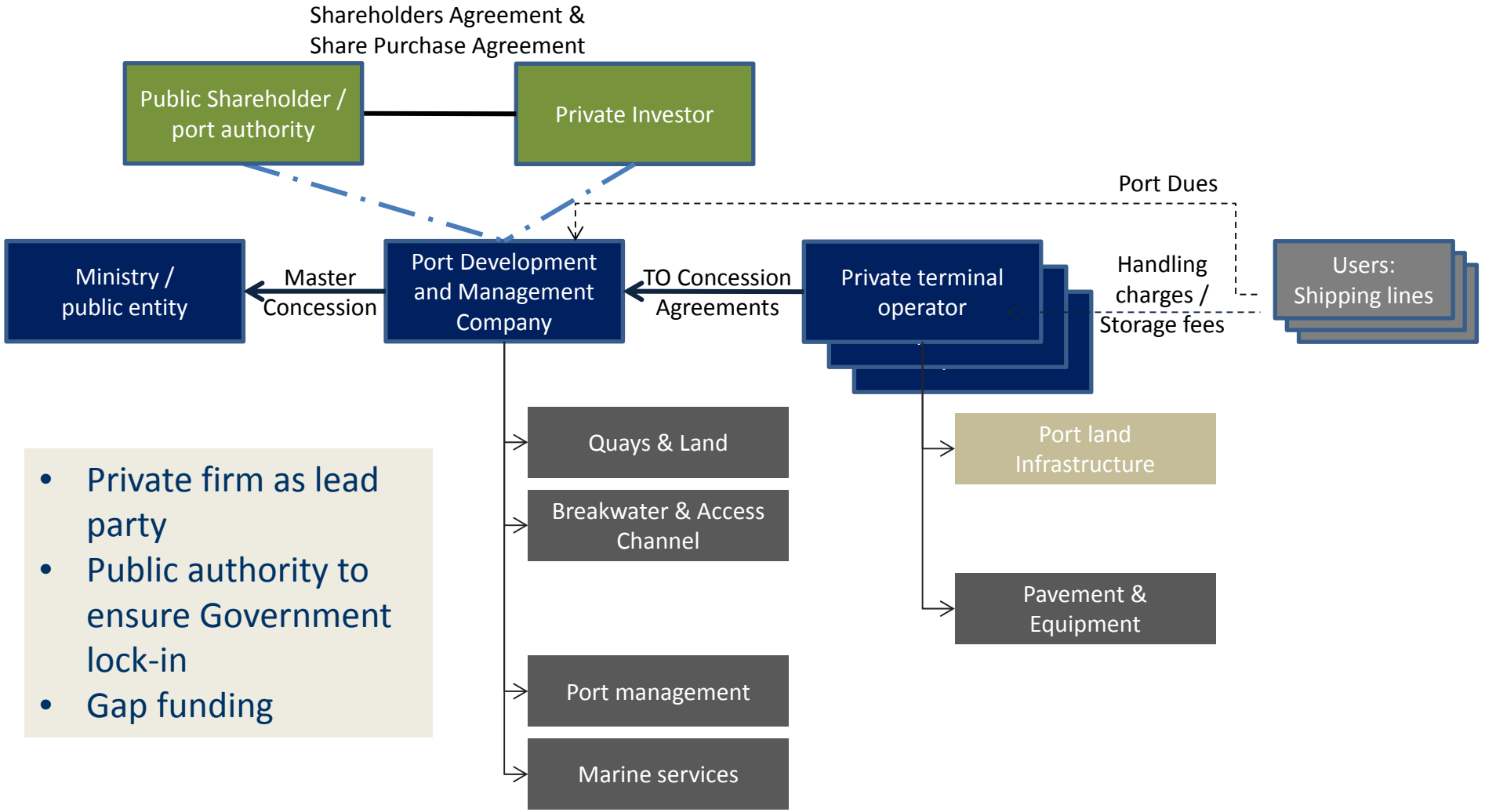
PPP Structuring: tailor-made Port PPP Contracts

Various innovative PPP structures have been developed in recent years



- Private firm as lead party
- Public authority to ensure Government lock-in
- Gap funding

PPP Structuring: Risk-Adjusted Returns

Shift in risk allocation should lead to a shift in distribution of returns

Risk allocation is the primary determinant for the required return of a Project.

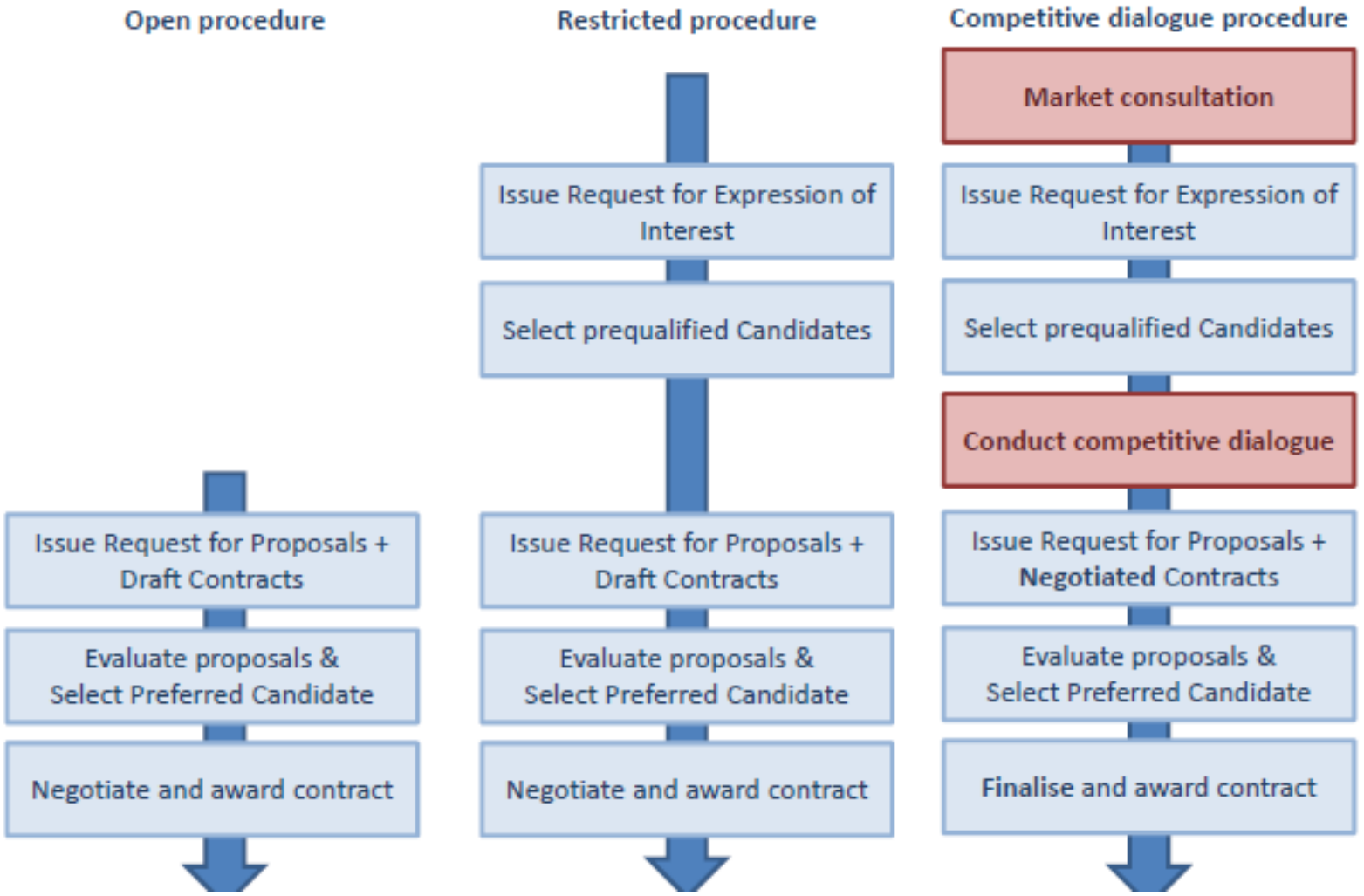
Risk-Adjusted Returns often neglected:

- **Grantors push away risks:** Concession Grantors are often interested to allocate a share of the risk to the concessionaire
- **While maintaining the same return requirement:** Concession Grantors expect a similar return for a Project with lower overall risk

A shift in the risk allocation within the PPP contract should always lead to a shift in the distribution of returns of a Project.

PPP Implementation: Early Market Involvement

Early involvement of bidders to optimize deal structure



Structuring Valuable Port PPPs

Conclusions

- **Early market involvement of bidders** creates highest value
- **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**:
  - PPP Structuring: **Valuation, Risk Allocation and Value Engineering and Documentation**
  - Transaction Management: **First Time Right and Commit to Timelines**

THANK YOU FOR YOUR ATTENTION

PLEASE CONTACT US

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