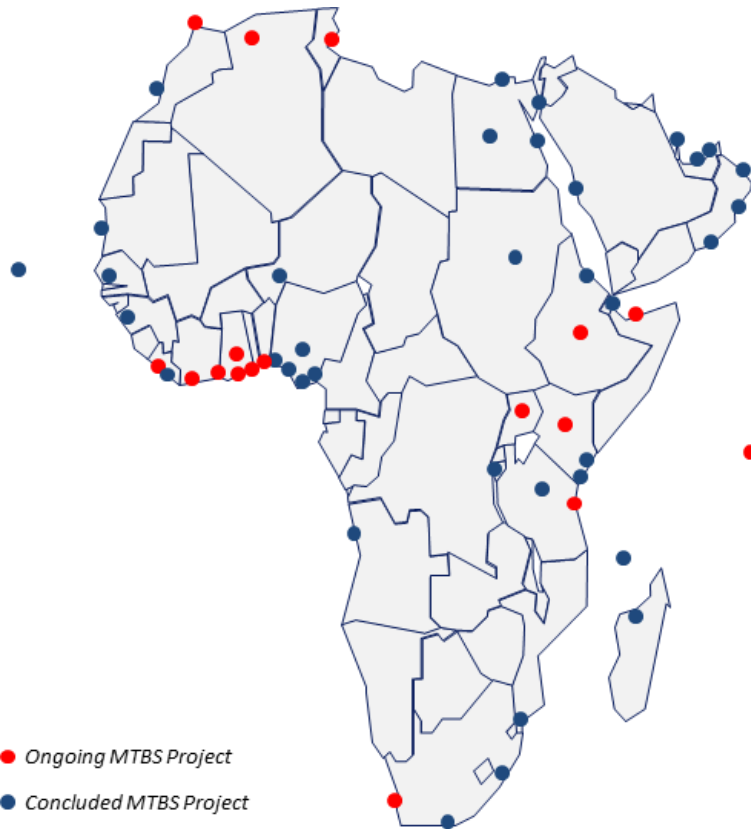


## Port PPP Projects in Emerging Markets

*Focus on critical success factors for Port Project Development*

**26 October 2015**



Introduction to MTBS

Problem Identification

1. Project Feasibility: Value Engineering

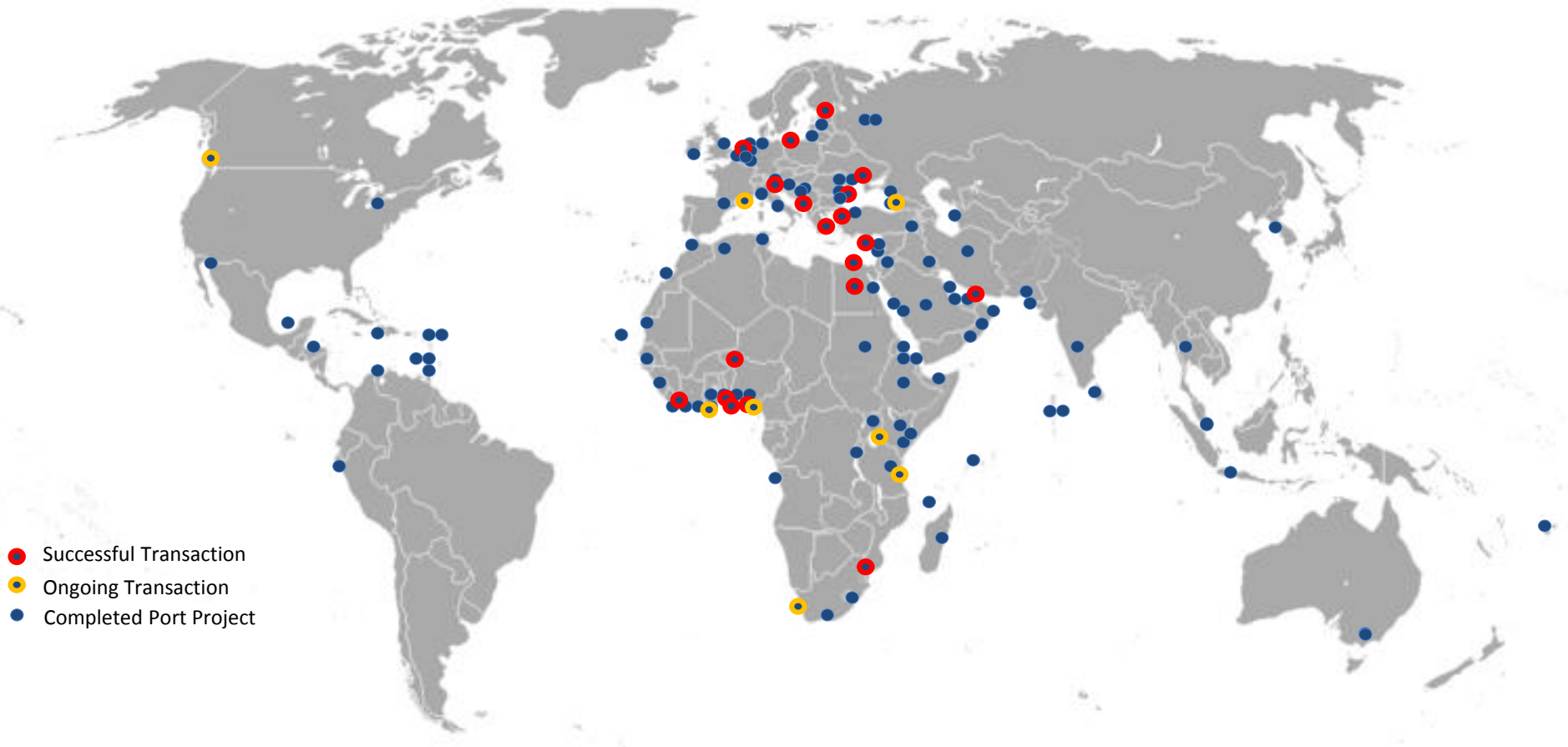
2. Value Optimization: Tailored PPPs

3. Bankability: Early Awareness Critical

Conclusion

# 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 Background

Broad Client Base - Strong Home Market - International Focus

# MTBS: Maritime & Transport Business Solutions

Comprehensive Project approach thanks to a diverse Client Base



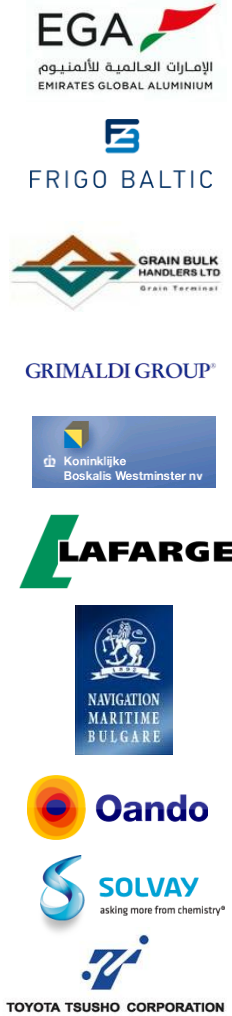
## Authorities



## GTOs



## Industrials



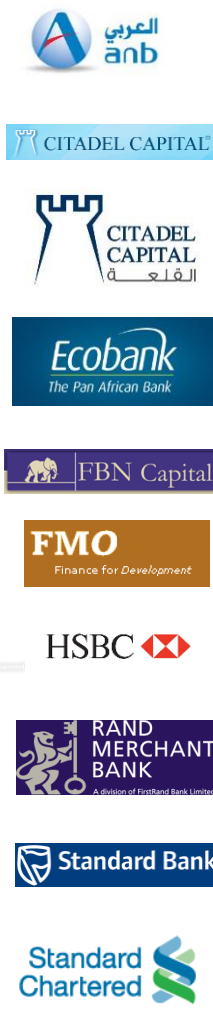
## Governments



## IFIs






































## Banks



# MTBS: Maritime & Transport Business Solutions



## Implementation Driven Approach

<p>Transaction Advisor </p> <p><b>Container Terminal Port of Limassol, Cyprus</b></p> <p>Bid preparation for</p>  <p>INTERORIENT East Med Holdings S.A.</p> <p>Winning bid Deal size confidential 2015 - 2016</p>	<p>Commercial Advisor </p> <p><b>Port of Piraeus, Greece</b> Equity and Concession</p>  <p>For the acquisition of 67% shares in Piraeus Port Authority</p> <p>deal size EUR 368,500 million 2016</p>	<p>Commercial Advisor </p> <p><b>Kumport, Turkey</b> Commercial advisory to</p>  <p>For the acquisition of shares in the terminal</p> <p>Deal size confidential 2014-2015</p>	<p>Transaction Advisor </p> <p><b>Dry Port, Niger</b> Transaction Advisory Services to</p>   <p>for the concession of</p> <p><b>La Concession globale du Port Sec de Dosso et de son antenne à Niamey</b></p> <p>deal size confidential 2014</p>	<p>Financial Advisor </p> <p><b>Standard Chartered Bank Nigeria</b> Lekki Port Lender's Market Consultant</p>    <p>Finance: \$800 million Project size: \$1.5 billion 2012-2013</p>	<p>Transaction Advisor </p> <p><b>Port of Bar, Montenegro</b> bid preparation for</p>  <p>for the acquisition of</p>  <p>deal size EUR 35 million 2013</p>	<p>Transaction Advisor </p> <p><b>Luka Rijeka, Croatia</b> Adriatic Gate Container Terminal Equity Divestment</p>  <p>Concession awarded to International Container Terminal Services, Inc.</p> <p>Deal size EUR 37.5 million 2010-2011</p>
<p>Financial Advisor </p> <p><b>Multi purpose Terminal East-2 Concession Burgas, Bulgaria</b></p> <p>Bid Preparation Navibulgar</p>  <p>Winning Bid Deal size: EUR 100 million 2011</p>	<p>Financial Advisor </p> <p><b>Project Finance Access Channel Maputo, Mozambique</b> for Standard Bank South Africa</p>    <p>Deal size confidential 2010</p>	<p>Financial Advisor </p> <p><b>Brooklyn-Kiev Port Odessa, Ukraine</b> Container Terminal Equity Valuation</p>  <p>European Bank for Reconstruction and Development</p> <p>Deal size US\$ 37 million senior loan Total project cost US\$ 130 million 2009</p>	<p>Financial Advisor </p> <p><b>Project Finance Port project Apapa, Nigeria</b></p>   <p>Market and tariff forecast. Financial model Risk assessment</p> <p>Deal size confidential 2011</p>	<p>Transaction Advisor </p> <p><b>Freeport of Monrovia, Liberia</b> Container Terminal Concession</p>  <p>Concession awarded to</p>  <p>Deal size US\$ 120 million 2009-2010</p>	<p>Transaction Advisor </p> <p><b>Tallinn Port Authority Estonia</b> Muuga Container Terminal Concession</p>  <p>Concession awarded to</p>  <p>Deal size EUR 100 million 2010-2011</p>	<p>Transaction advisor </p> <p><b>Public Water Transport System Dubai UAE</b></p>  <p>Deal Size: US\$ 25 million 2007</p>
<p>Financial Advisor </p> <p><b>DCT Gdansk S.A. Poland</b> Concession Expansion Deepwater Container Terminal Gdansk</p>  <p>Bankable Financial Model PIM Deal size: 200 million EUR 2012-2013</p>	<p>Financial Advisor </p> <p><b>Port of Rotterdam Authority The Netherlands</b> Maasvlakte 2 Greenfield Container Terminal Development</p>  <p>Concession awarded to:</p>      <p>2006-2007</p>	<p>Financial Advisor </p> <p><b>Egypt, Cairo</b> Bid Preparation RTC Fleet</p>  <p>Deal size confidential 2006</p>	<p>Financial Advisor </p> <p><b>Egypt, Cairo</b> Bid Preparation Dry Bulk Terminal El Dekhella</p>  <p>Deal size confidential 2006</p>	<p>Financial Advisor </p> <p><b>West Africa Container Terminal Onne Nigeria</b></p>   <p>Deal size confidential 2004</p>		



Introduction to MTBS

Problem Identification: Lack of PPP Projects

1. Project Feasibility: Value Engineering

2. Value Optimization: Tailored PPPs

3. Bankability: Early Awareness Critical

Conclusion

# Problem Identification: Lack of PPP Projects

Large share of risks allocated to Private Parties



## Why Port PPP Implementation?

- **Risk management:** private parties better positioned to handle risks (e.g. market risks, operational risks, construction risks)
- **Reduce burden on public budgets:** affordability issues of Emerging economies are often one of the main reasons for insufficient infrastructure supply

**These two main arguments result in a tendency to shift a large degree of risks and investments to the Private side**

# Problem Identification: Lack of PPP Projects

Port PPP Projects delayed or cancelled altogether



**A number of high-profile Port PPP Projects have been delayed or cancelled:**

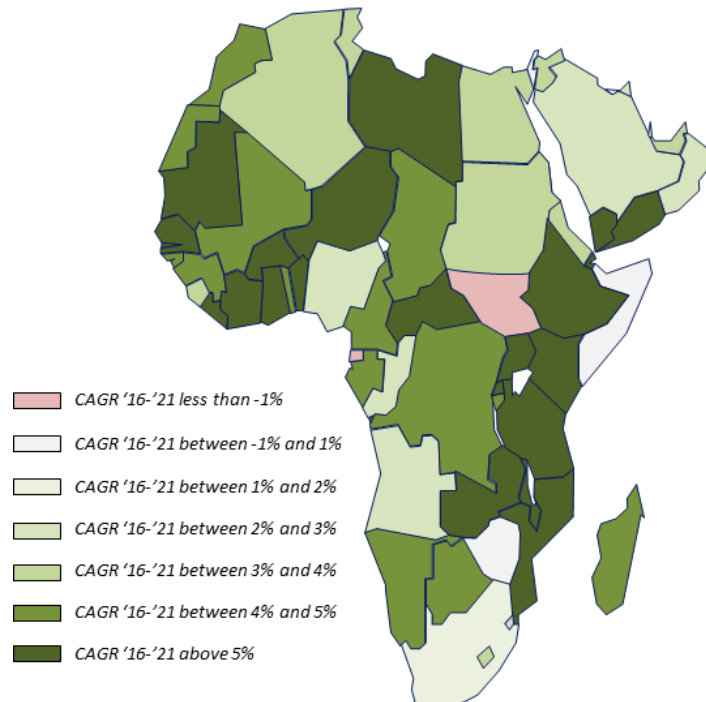
- **Port of Mombasa:** PPP implementation cancelled
- **Durban Dig-Out Port:** Project shelved until further notice
- **Lekki Port:** Project delayed until further notice (although PPP implemented)
- **Bagamoyo Port:** Project shelved until further notice
- **Lamu Port:** Significant delays during construction process
- **Kisumu Port:** Cancelled, too many CPs



# Problem Identification: Lack of PPP Projects

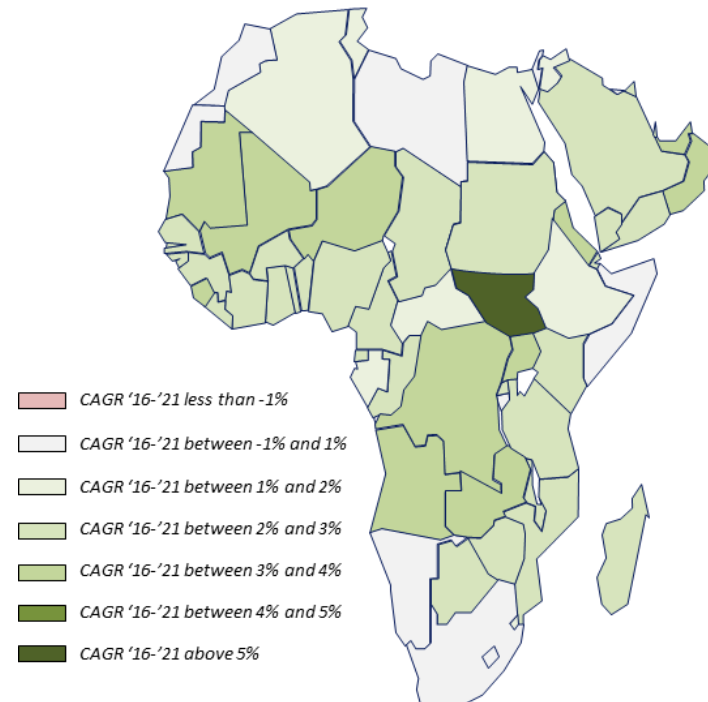
Despite Attractive Market Potential in Emerging Markets

GDP Growth Outlook: 2016-2021



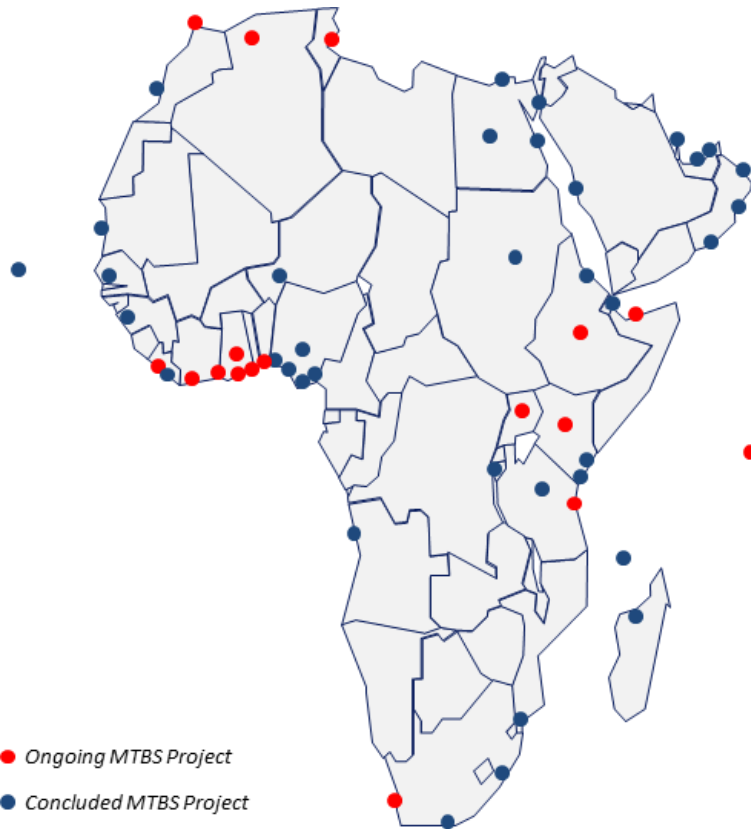
Source: IMF World Economic Outlook (October 2016)

Population Growth Outlook: 2016-2021



Source: IMF World Economic Outlook (October 2016)

## So why do we see so many cancelled Port PPP Projects in Emerging Markets?



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# Project Feasibility: Value Engineering

Port Development Plan should focus on efficiency



## Three key factors in the development of a Port Development Plan:

- **Reduction of phase 1 capex:** the capex of phase 1 is often a deal-breaker, especially when taking into account bankability concerns;
- **Reduction of lead-time:** it is essential to ensure early revenue generation, as long lead-times reduce bankability and erase equity returns;
- **Demand/Supply should lead long-term development plan:** a port should always cater to demand/supply needs. Construction of capacity well ahead of demand reduces bankability and erases equity returns.

### 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:**
  - Tailored to phase 1 market demand?
  - Options for expansion?

**The 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 Projects are over-dimensioned.**

## Important aspects for ensuring early revenue generation:

- **Reduce Phase 1 Scope:** over-dimensioning of ports does not always 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

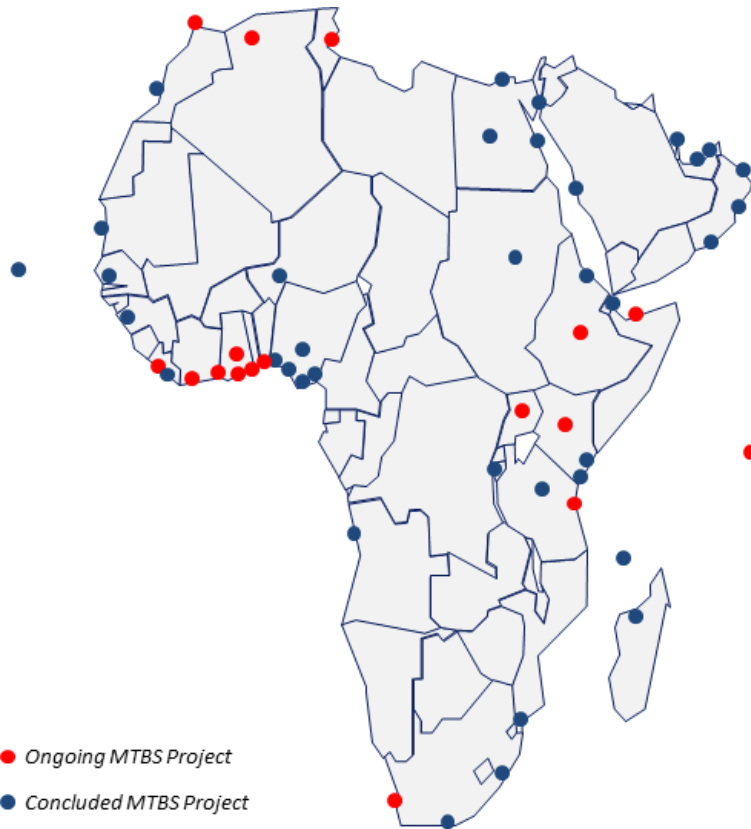
# Project Feasibility: Value Engineering

Demand/Supply should lead long-term development plan



## Demand/Supply is always the basis for Port Development:

- **Capacity in line with Demand:** Construction of capacity well ahead of demand reduces bankability and erases equity returns
- **First exhaust existing Assets:** Development of greenfield initiatives is only sensible if 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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# Value Optimization: Tailored PPPs

Use of Standard PPPs & Tender Procedures not a guarantee for Success



## Three critical issues need to be addressed, in order to ensure Value Optimization of the Project:

- **No one-size-fits-all:** each PPP Contract is a unique arrangement, tailored to the risk management capabilities of the Grantor and the Concessionaire;
- **Risk-adjusted returns:** focus on returns, without adjustment for risks, leads to sub-optimal PPP contract design;
- **Assess market interest in an early stage:** requirements of potential co-investors should be assessed prior to the start of a transaction.



# Value Optimization: Tailored PPPs

PPP Structure should make sense in Local Context



## Various innovative PPP structures have been developed in recent years:

- **Private Port Authorities:** replace the traditional role of Public Authorities
  - More business-oriented approach
  - No economic motives: projects need to be feasible on stand-alone basis
- **Public-Private Port Authorities:** private firm as lead party, public authority to ensure Government lock-in and provide gap funding
- **Integration with Industrial Zones:** an increasing number of port concessions are implemented in conjunction with SEZs/IZs

**These new PPP structures are a response to market dynamics**

# Value Optimization: Tailored PPPs

Shift in Risk Allocation should lead to a shift in distribution of Returns



## Risk-Adjusted returns often neglected:

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

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

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

# Value Optimization: Tailored PPPs

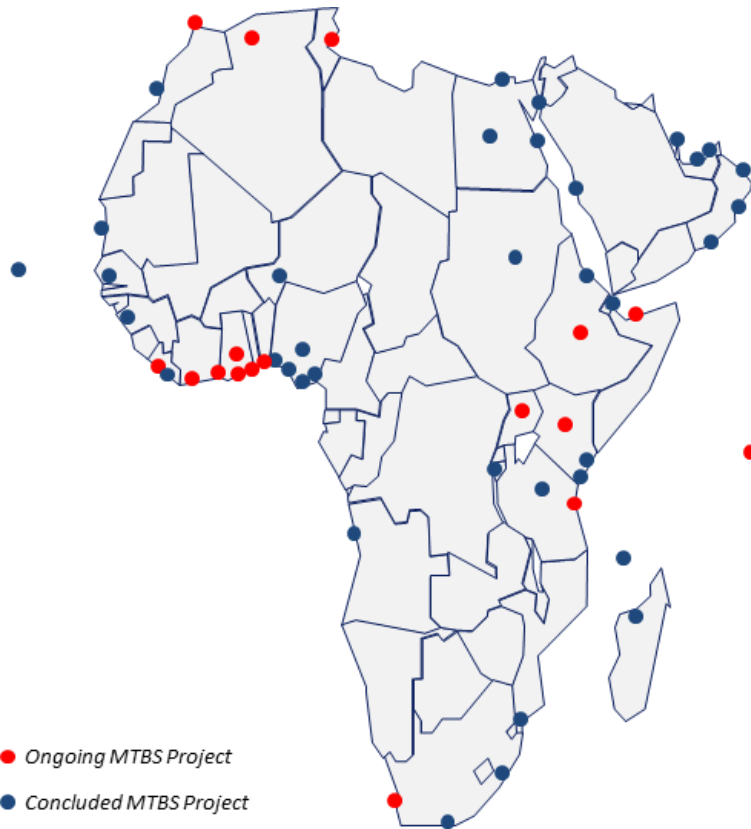
Assess Market Interest in an early stage



## Market Consultations provide helpful insights:

- What do Investors think of demand potential?
- Anticipated operational configuration / capacity requirement?
- Anticipated risk allocation and upfront investment?
- What is the Investors' overall risk perception of the Project?

**Early assessment of the Investors' views allows for a timely inclusion of relevant factors in the PPP Contract**



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# Bankability: Early Awareness Critical

Feasibility does not always imply Bankability

## Exemplary, non-Bankable Project:

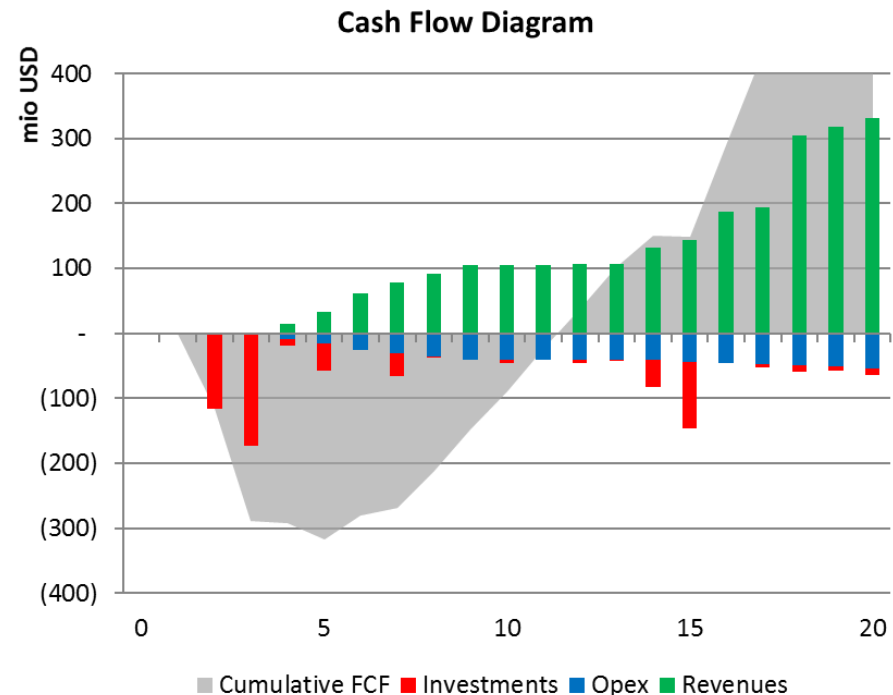
- Healthy Return: IRR at 19%
- Project NPV of 300m USD

### However:

- First positive cash flow: **year 6**
- Pay-back period: **>10 years**

### Project not Bankable:

- Loans often have a tenor of <15 years
- Lenders often require a DSCR of > 1.3



# Bankability: Early Awareness Critical



PPP Structures increase complexity for Bankability

## Recent developments in Port development complicate Port Financing:

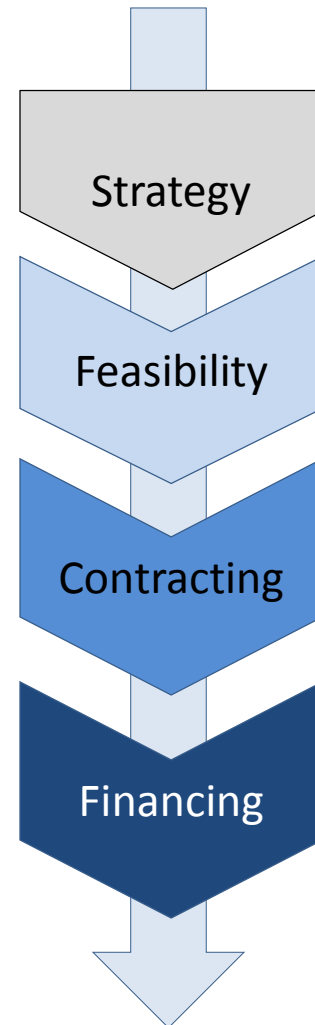
- **Traditional PPP Structures:** introduction of multiple parties increases interface risks and complicate the risk management of the Project, especially in case of Project failure.
- **Off-Balance Sheet Financing:** non-recourse finance structures are more often pursued by Investors, yet this requires increased attention to Project contracts.
- **Private-Private Project Structures:** Port Projects are nowadays also initiated by Private Investors, rather than by Public Authorities. This increases interface risks (buy-in of Governments) and the dependency on capital markets.

# Bankability: Early Awareness Critical

Bankability is often neglected in the early stages of a Project

## Projects often follow a sequential logic in implementation:

1. **Strategy:** determination of need for a port;
2. **Feasibility:** assessment of attractiveness of Port Project;
3. **Contracting:**
  - I. PPP Implementation: signing of Concession Contract;
  - II. EPC Contract signing;
4. **Financing:** attracting debt & equity



# Bankability: Early Awareness Critical

Ensuring Bankability of a Project already starts in the Strategy-phase

## Critical Questions for Bankability need to be asked in each phase:

### 1. Strategy Phase:

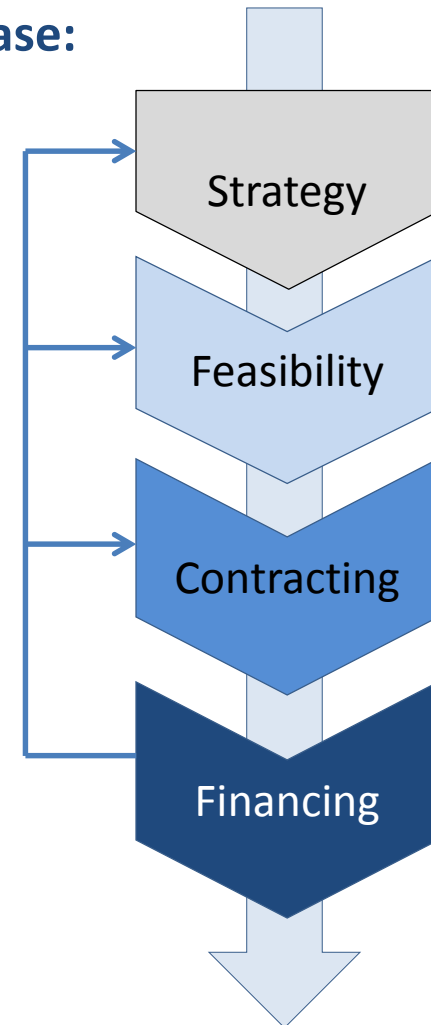
- Demand/Supply development: tailored to the market?
- Long-term development plan: sufficiently flexible?

### 2. Feasibility Phase:

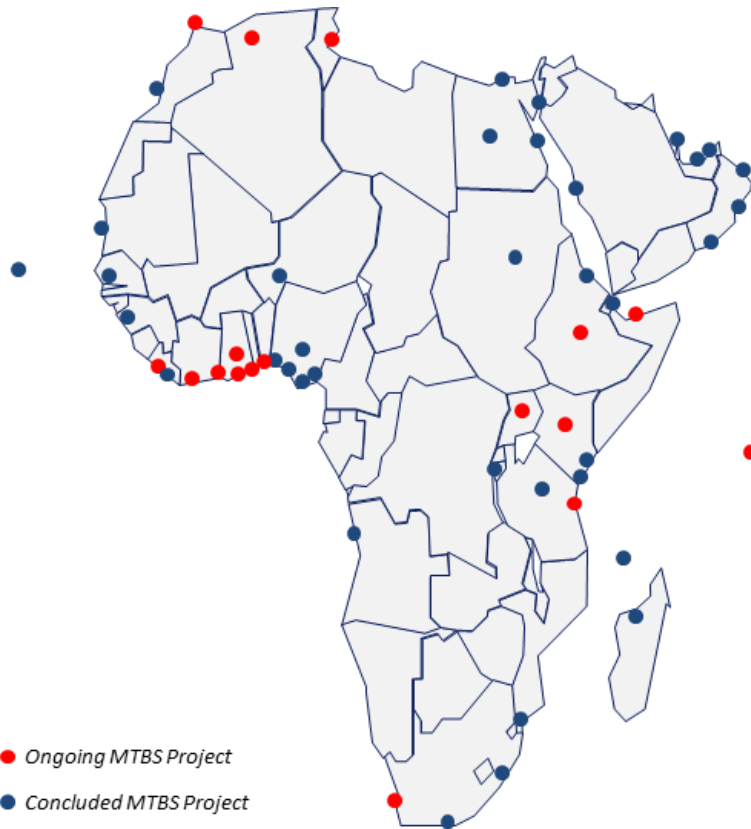
- Robustness of the business case: impact of sensitivities on DSCR?
- Cash flows in first years of operations: sufficient for Debt Service?

### 3. Contracting Phase:

- What are the remaining risks for the Project? Can they be mitigated?
- What about Termination/Compensation Clauses?







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# Conclusion

Value Engineering, PPP Optimization & Early Bankability Checks required



## Three main critical success factors for Port PPP Implementation in Emerging Markets:

### Value Engineering:

- Focus on reduction of phase 1 capex: often a deal-breaker;
- Focus on reduction of lead-time: early revenue generation important;
- Demand/supply should lead long-term port development plan.

### PPP Optimization:

- No one-size-fits-all: PPPs should be tailored to the Project;
- Risk-adjusted Returns: expected returns should be adjusted for risk allocation;
- Early Market Sounding: markets' expectations should be considered when designing (PPP) contracts;

### Early Bankability Checks:

- Assess flexibility of long-term planning in the Strategy Phase;
- Conduct thorough downside risk assessments in the Feasibility Phase;
- Include proper risk mitigation and termination/compensation arrangements in Contracts.

# Conclusion

THANK YOUR FOR YOUR ATTENTION



White House, Rotterdam

## maritime & transport business solutions

maritime strategy & finance advisors

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t | +31 10 2865940

e | [info@mtbs.nl](mailto:info@mtbs.nl)

w | [www.mtbs.nl](http://www.mtbs.nl)

Wijnhaven 3E

P.O. Box 601

3000 AP Rotterdam

The Netherlands