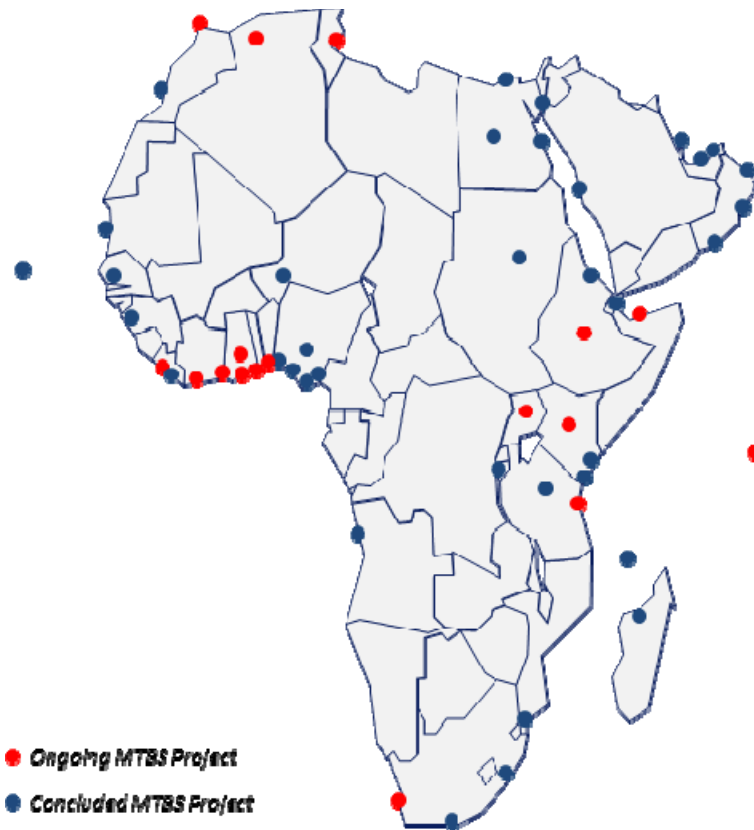




Port Concessioning:
Critical success factors for Port PPP projects

17 November 2016

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Introduction to MTBS

Critical Success Factors

1. Project Feasibility: Value Engineering

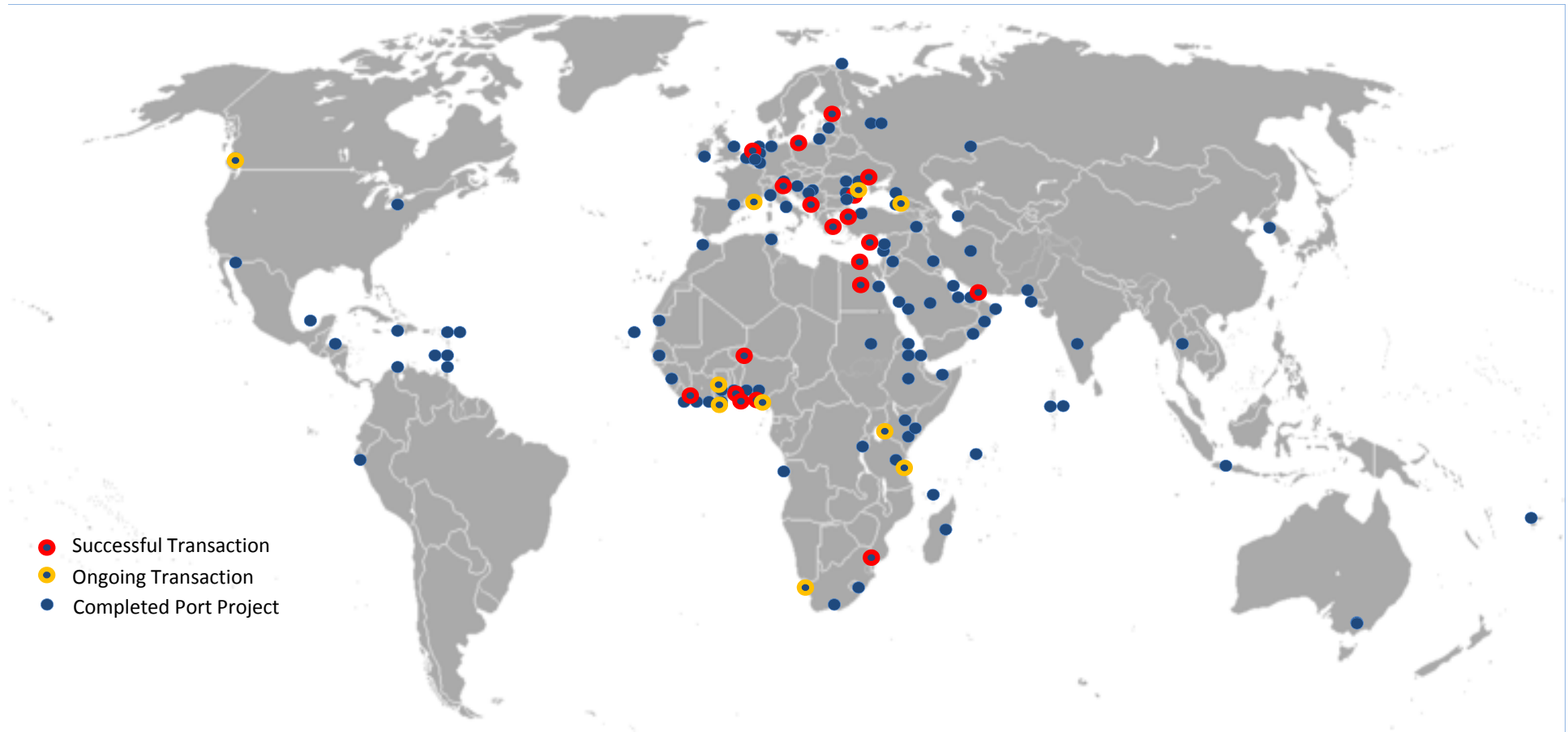
2. Value Optimization: Tailored PPPs

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>Financial Advisor King Abdul Aziz Port of Saudi Arabia Largest Bulk Terminal for the provision of facilities for container</p> <p>2014-2015</p>	<p>Transaction Advisor Chemical Terminal Port of Limassol, Cyprus Implementation for</p> <p>2012-2013</p>	<p>Commercial Advisor Port of Piraeus, Greece for the acquisition of 67% shares in Piraeus Port Authority</p> <p>2013</p>	<p>Commercial Advisor Istanbul, Turkey Commercial advisory to</p> <p>2014-2017</p>	<p>Transaction Advisor Dry Port, Niger Implementation for</p> <p>2014</p>	<p>Financial Advisor Standard Chartered Bank Nigeria Lekki Port Redevelopment Consultant</p> <p>2012-2014</p>	<p>Transaction Advisor Port of Bar, Montenegro pre preparation for</p> <p>2012-2014</p>
<p>Transaction Advisor Luka Rijeka, Croatia Adriatic Seaside Container Terminal Equity Disinvestment</p> <p>2010-2012</p>	<p>Financial Advisor Multi purpose Terminal East-2 Concession Burgas, Bulgaria Pre preparation</p> <p>2011</p>	<p>Financial Advisor Project finance Access Channel Maputo, Mozambique for Standard Bank South Africa</p> <p>2010</p>	<p>Transaction Advisor Tallinn Port Authority Estonia Manage Container Terminal Concession</p> <p>2010-2012</p>	<p>Financial Advisor Project finance Port project Apapa, Nigeria</p> <p>2011</p>	<p>Transaction Advisor Precept of Monrovia, Liberia Container Terminal Concession</p> <p>2008-2010</p>	<p>Financial Advisor Brooklyn-Kiev Port Odessa, Ukraine Container Terminal Equity Valuation</p> <p>2009</p>
<p>Transaction advisor Public Water Transport System Dubai UAE</p> <p>Deal Size: US\$ 25 million 2007</p>	<p>Financial Advisor DCT Gdansk S.A. Poland Concession Expansion Deepwater Container Terminal budarek</p> <p>Deal Size: 200 million EUR 2012-2015</p>	<p>Financial Advisor Port of Rotterdam Authority The Netherlands Marshalling of Container Terminal Development</p> <p>Deal size confidential 2011-2017</p>	<p>Financial Advisor Egypt, Cairo Bid Preparation RTC Fleet</p> <p>Deal size confidential 2006</p>	<p>Financial Advisor Egypt, Cairo Bid Preparation Dry Bulk Terminal El Dekheila</p> <p>Deal size confidential 2006</p>	<p>Financial Advisor West Africa Container Terminal Onne Nigeria</p> <p>Deal size confidential 2004</p>	

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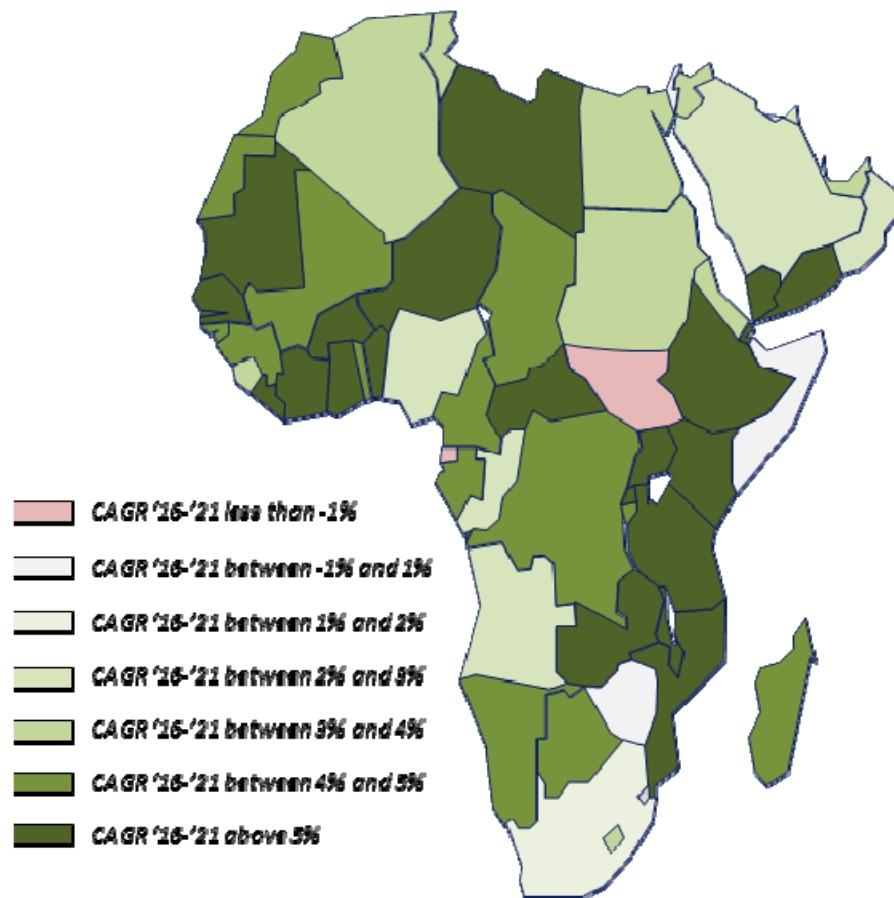
Conclusion

Critical success factors for Port PPP projects

Attractive Market Potential for Port Development throughout Africa

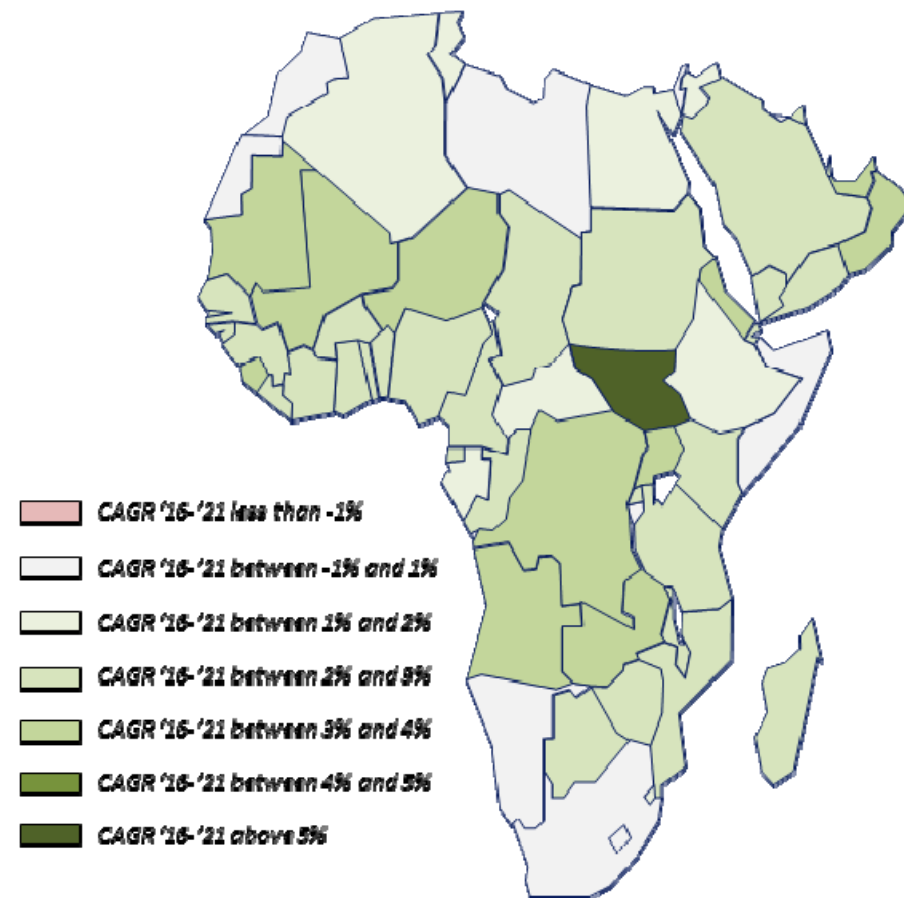


GDP Growth Outlook: 2016-2021



Source: IMF World Economic Outlook (October 2016)

Population Growth Outlook: 2016-2021



Source: IMF World Economic Outlook (October 2016)

Critical success factors for Port PPP projects

Port PPP: 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

Critical success factors for Port PPP projects

Successful Port PPP Project: balanced for all Stakeholders



A basic critical success factor for Port PPP projects:

The project (structure) should be balanced for all Stakeholders

- **Private Sector:** to retrieve a fair return on a bankable investment in line with the risk profile
- **Public Sector:** to optimize port capacity & performance, under a limited risk profile and a reduced burden on public budget
- **Tax payer:** highest project value realised with expenditure of public funds, and economic value added through creation of jobs and lower cost of transport

Critical success factors for Port PPP projects

Optimal structure for Port PPP Project: business case driven approach



Structuring successful Port PPP projects is all about:

1. **Project Feasibility:** Value Engineering
2. **Value Optimization:** Tailored PPPs
3. **Bankability:** Early Awareness Critical

A business case driven approach is crucial to determine the optimal structure for a Port PPP project.

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Project Feasibility: Value Engineering

Port Development Plan should be engineered with a value focus



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.

Project Feasibility: Value Engineering

Reduction of Phase 1 Capex key for Bankability



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, DSCR's are often too low when Projects are over-dimensioned.

Project Feasibility: Value Engineering

Reduction of lead-time: early revenue generation essential



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

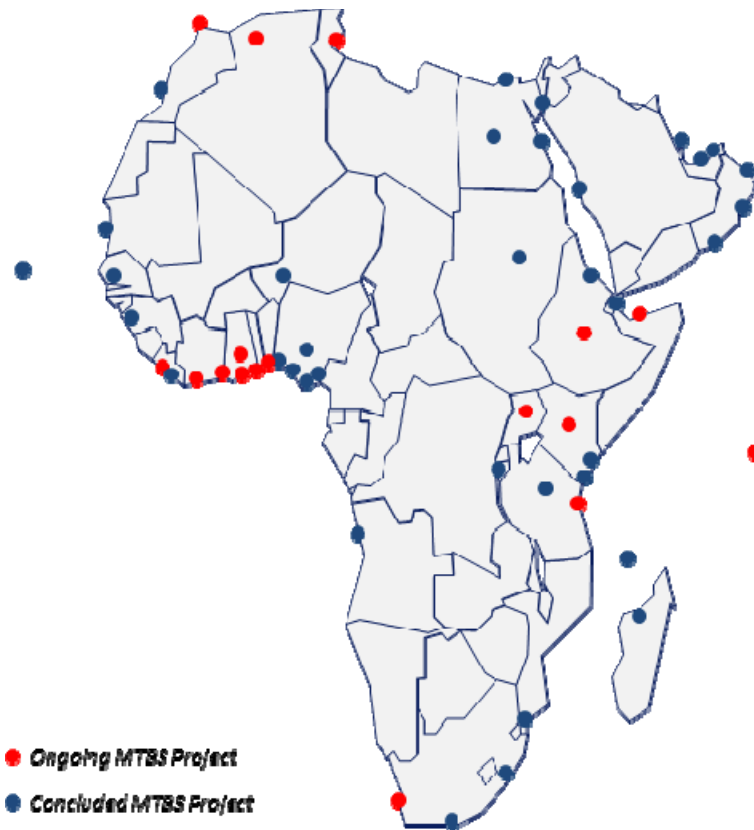
Demand/Supply should lead long-term development plan



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:** (intermodal) hinterland connectivity is 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: early market consultation.

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 (PDMC):** 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

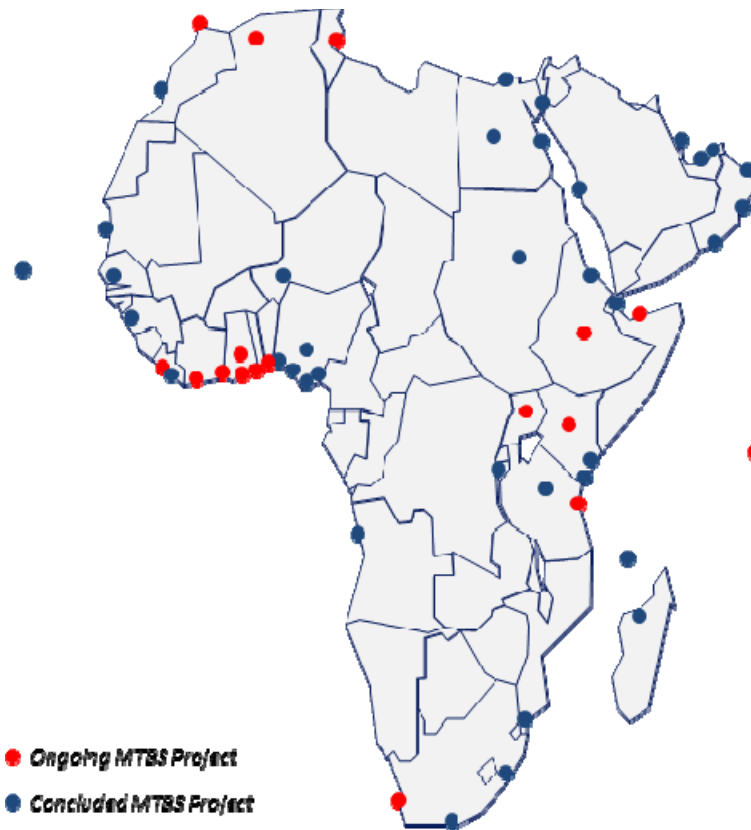


Early Market Consultations provide helpful insights:

- 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:

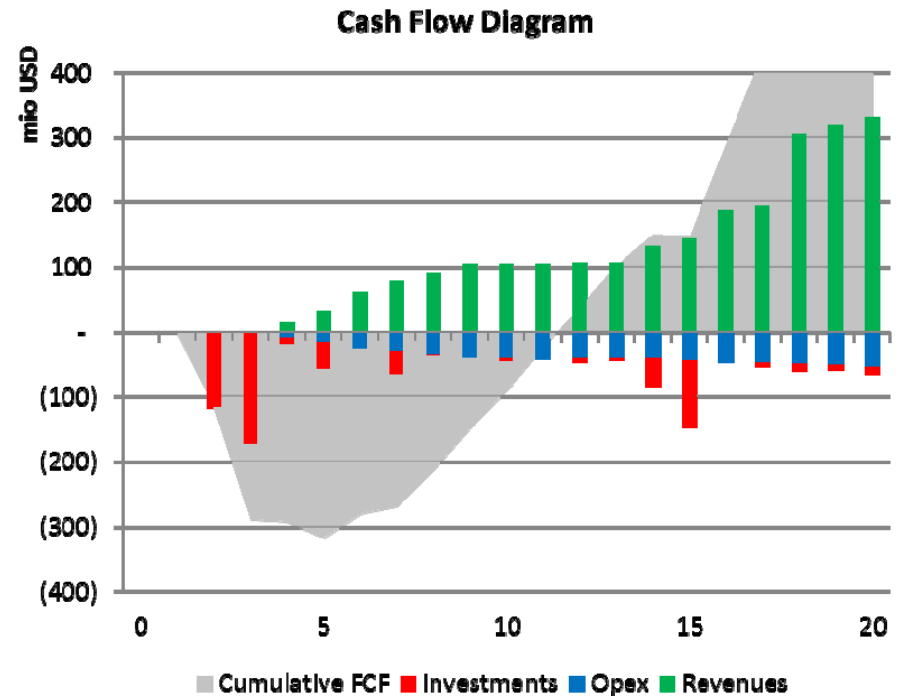
- Healthy Return: IRR at 19%
- Project NPV of 300m USD

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 Concession 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.

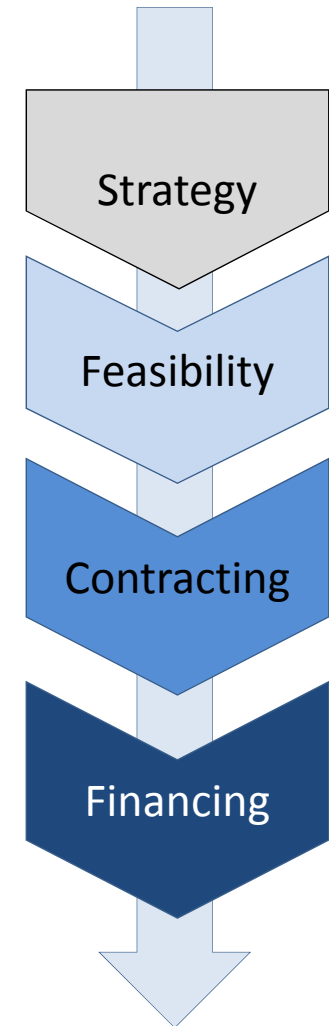
Bankability: Early Awareness Critical

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:

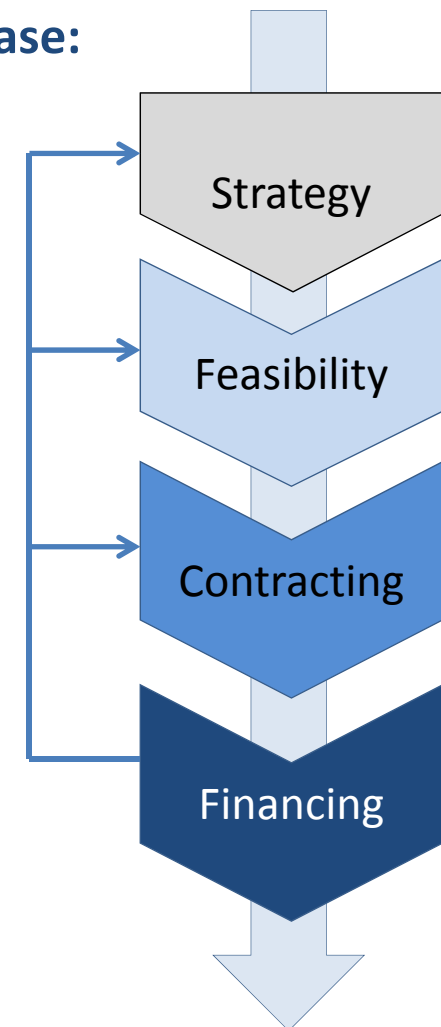
- Demand/Supply development: tailored to the market?
- Long-term development plan: sufficiently flexible?

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



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