12th Intermodal AFRICA 2014

mtbs
maritime & transport business solutions

Implementing Port & Terminal Projects

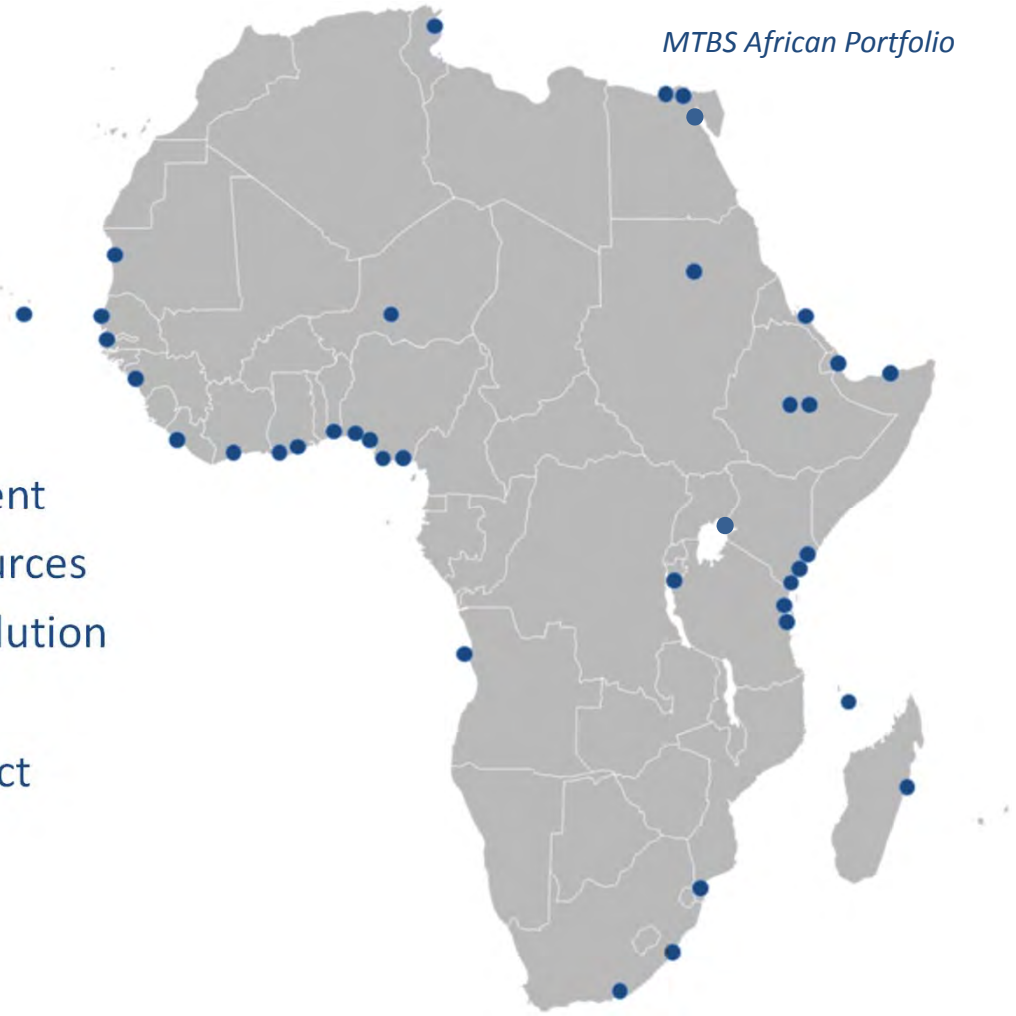
Unlocking PPPs Effectively in Africa

12th Intermodal Africa *23 October, 2014*

Introduction

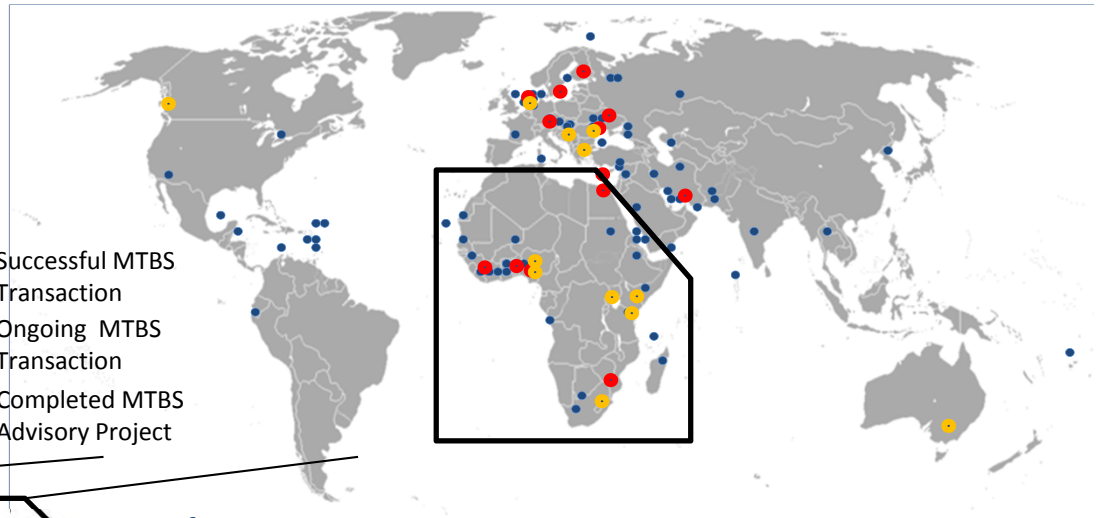
- Introduction MTBS
- Africa's port demand and supply
- Benchmark assessment of:
  - Traditional public port development
  - Traditional with tied financing sources
  - The PDMC model: PPP with PF solution
- Case study: Ibom Deep Sea Port project

MTBS African Portfolio



MTBS: A Focus on Africa

Established in 2002
Independent Advisor
Port Sector
Financial & Strategy
Transactions
Rotterdam The Netherlands



MTBS African Portfolio

Takoradi
Ghana
750 MUSD

Ibom
Nigeria
1,750 MUSD

Somaliland
Somaliland
83 MUSD

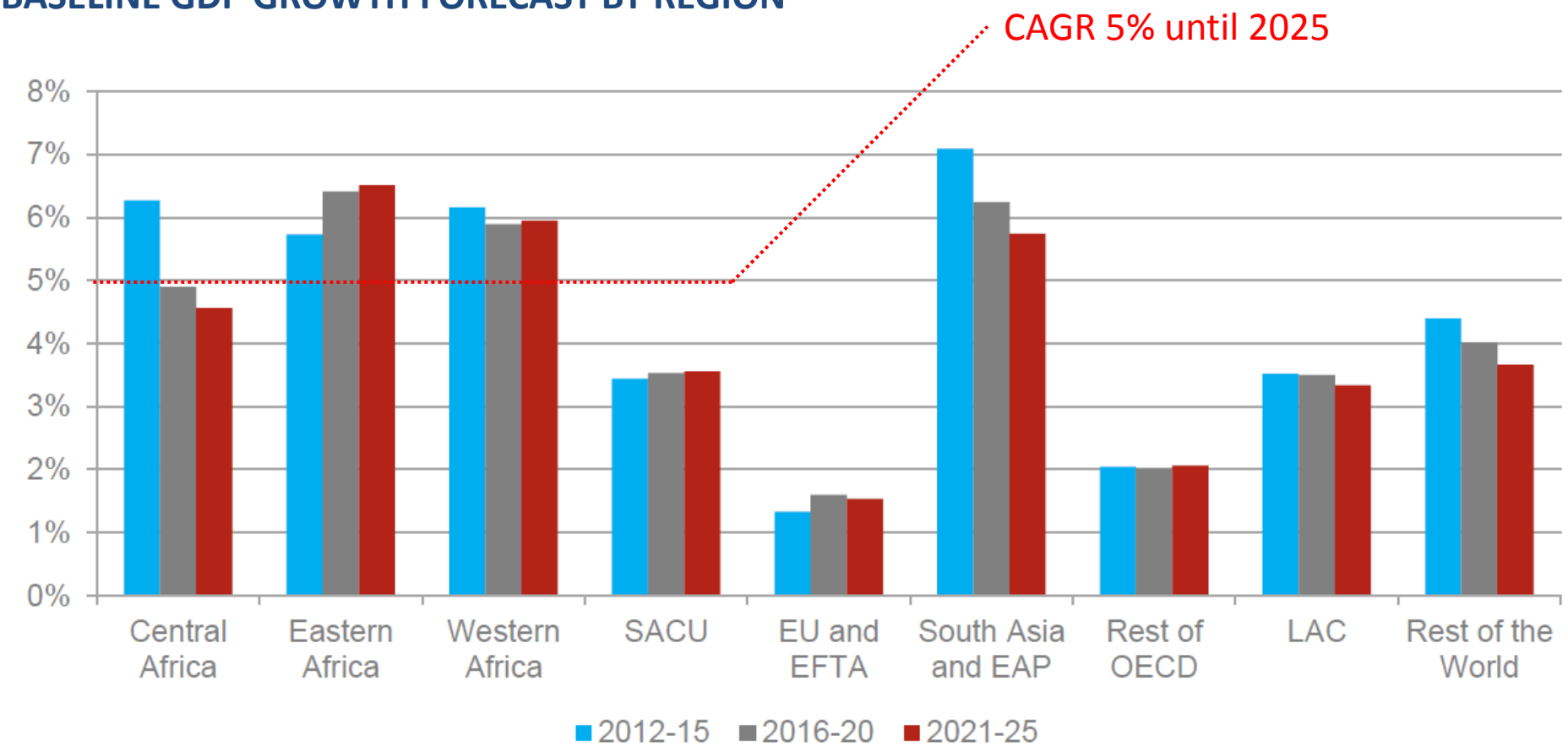
Kipevu
Kenya
400 MUSD

Durban (Phase 1)
South-Africa
2,500 MUSD

Growth: GDP

Growth driven by socio-economics

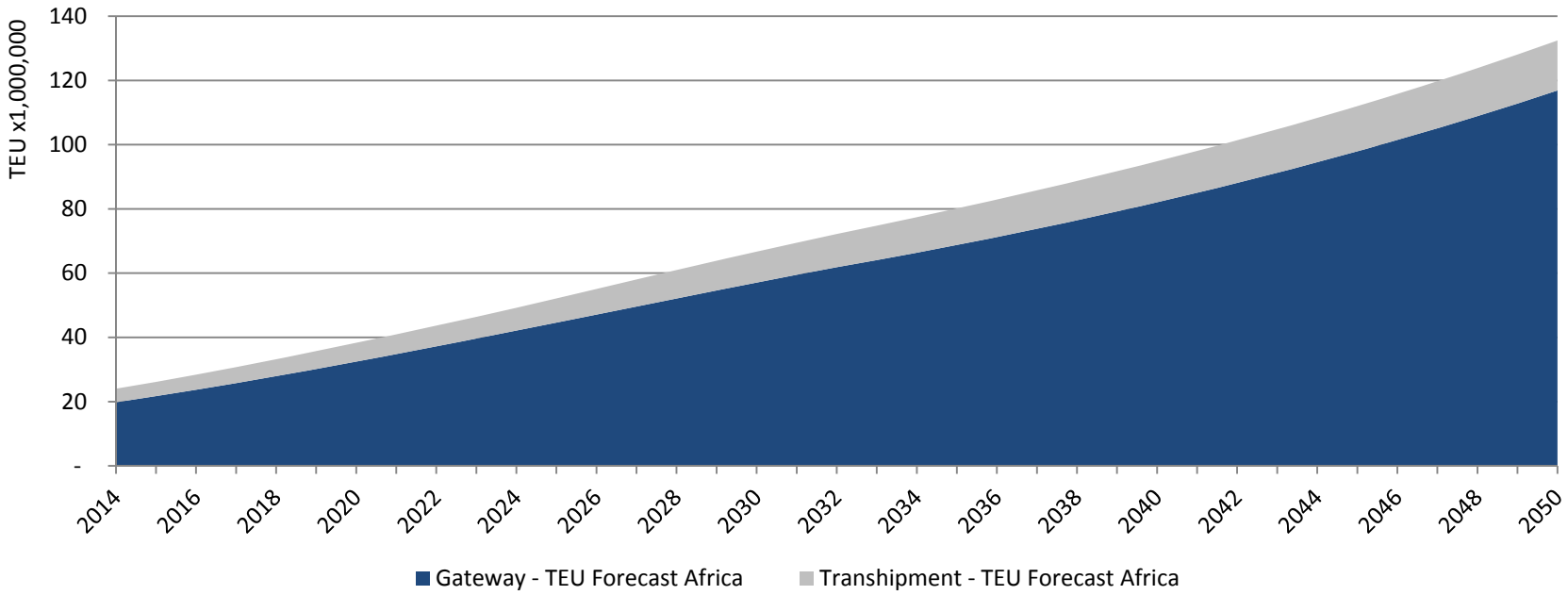
BASELINE GDP GROWTH FORECAST BY REGION



Source: International Trade Centre: "Africa's Trade Potential" (2012)

Substantial increase in demand for port capacity

Example containers

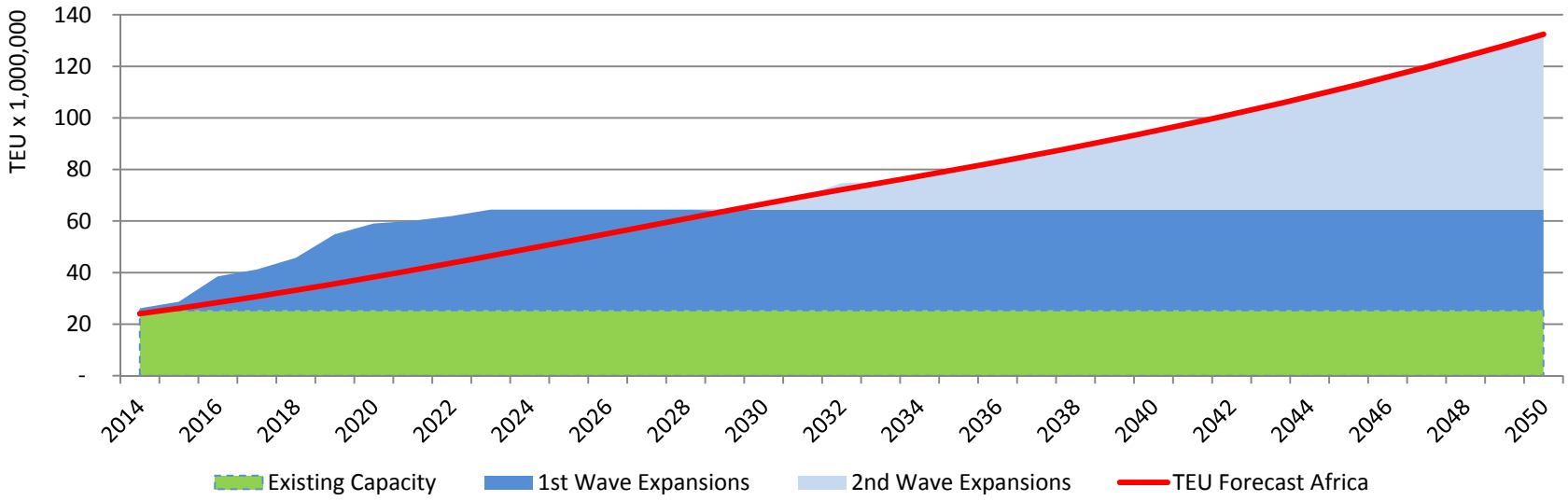


- Throughput from 22mTEU (2013 est.) to 132mTEU (2050)
- GDP Growth: 5% /annum, decreasing to 3% /annum
- Gateway TEU annual growth rate: 10% to 3.6%
- GDP- Gateway TEU multiplier: 2.0, decreasing to 1.2
- Transhipment TEU annual growth rate: 5.5%, decreasing to 2.00%

Port capacity expansion to serve demand

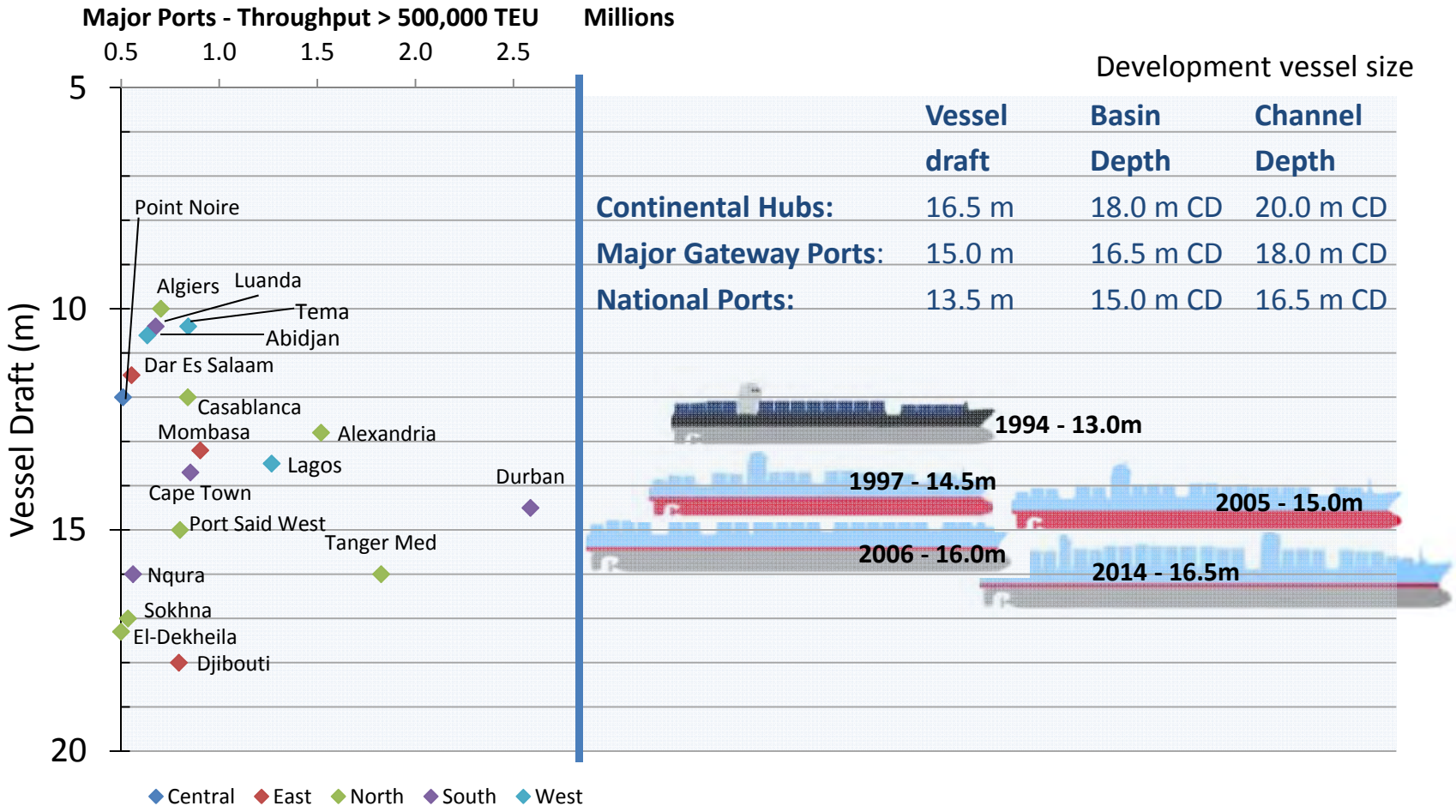
In particular on the short to medium term

- Container demand increasing from 24 mTEU (2014) to 132 mTEU (2050)
- Existing Capacity: 25 mTEU (existing trade +5%)
- 1st Wave Expansions: approx. 40 mTEU
- Capacity Gap by 2050 (requiring 2nd Wave Expansions): approx. 70 mTEU



Ports need to accommodate larger vessels

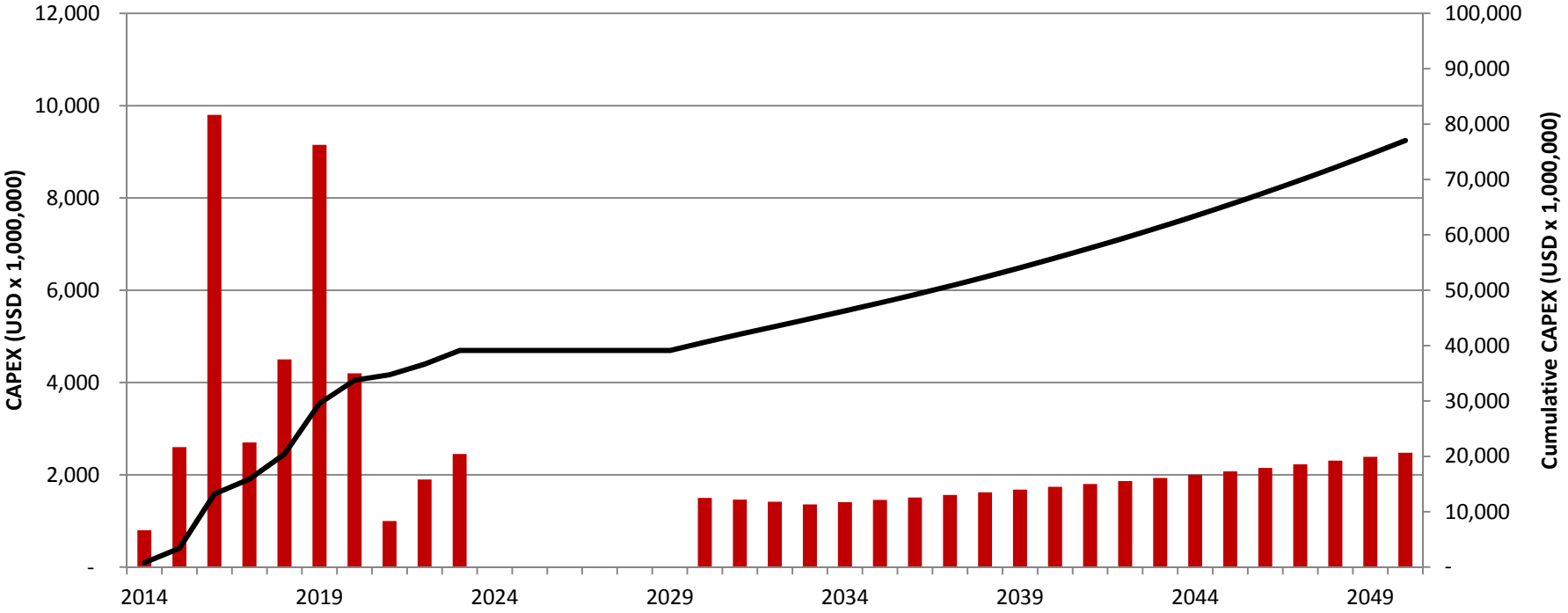
Current port dimensions are no longer adequate



Substantial investments are needed

Funding is needed for these investments

- First Wave Capex: USD 40bn until 2025-30
- Second Wave Capex: USD 35bn until 2050



- Capex: USD 1,000 /TEU capacity (Greenfield projects) created in first wave;
- Approx. USD 500 /TEU (brownfield) for second wave

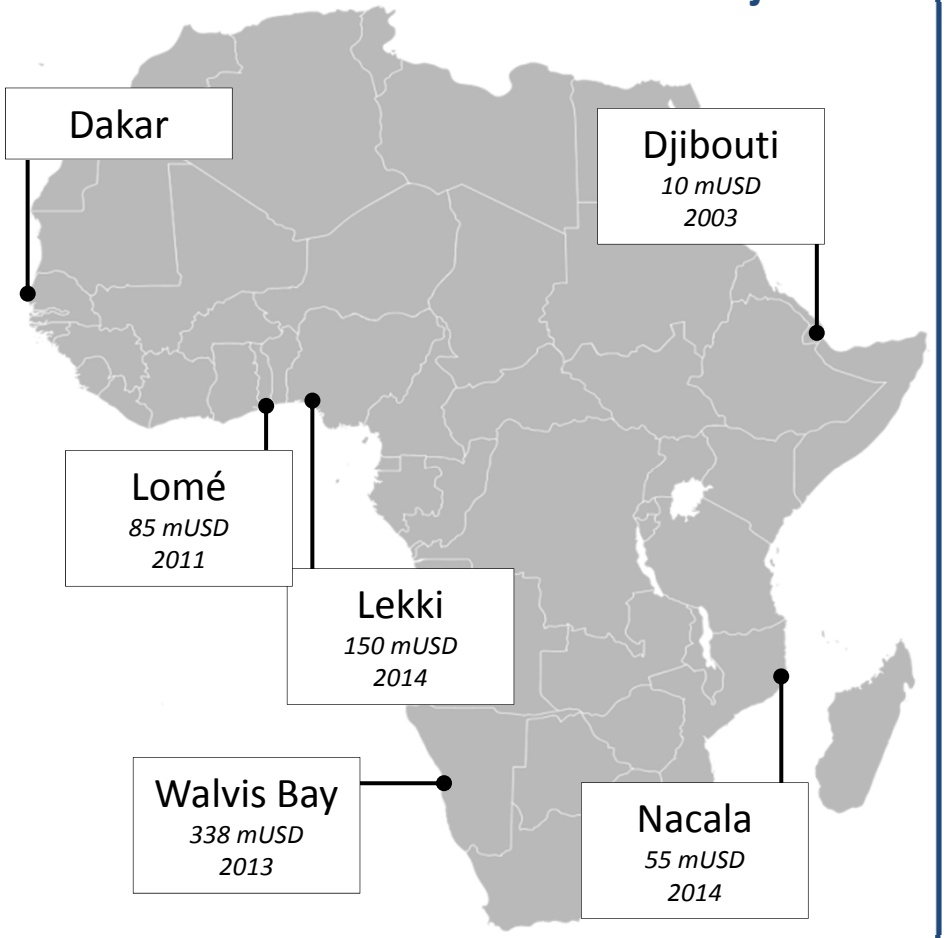
IFIs are prepared to address the funding requirements

AfDB engaged MTBS: Financing ports in Africa – potential for PPP

MTBS Assigned to Identify and Package Port Projects for AfDB

"MTBS has been contracted by the African Development Bank to identify future port PPP projects and prepare proposals for both financing and advisory services."

AfDB Financed African Port Projects



We have identified a large number of planned projects

First wave of port expansions set to render 40 mTEU in coming decade

Total projects

114 projects $ > 79 billion USD

Container projects

57 projects $ > 40 billion USD TEU 40 million TEU

Dry bulk projects

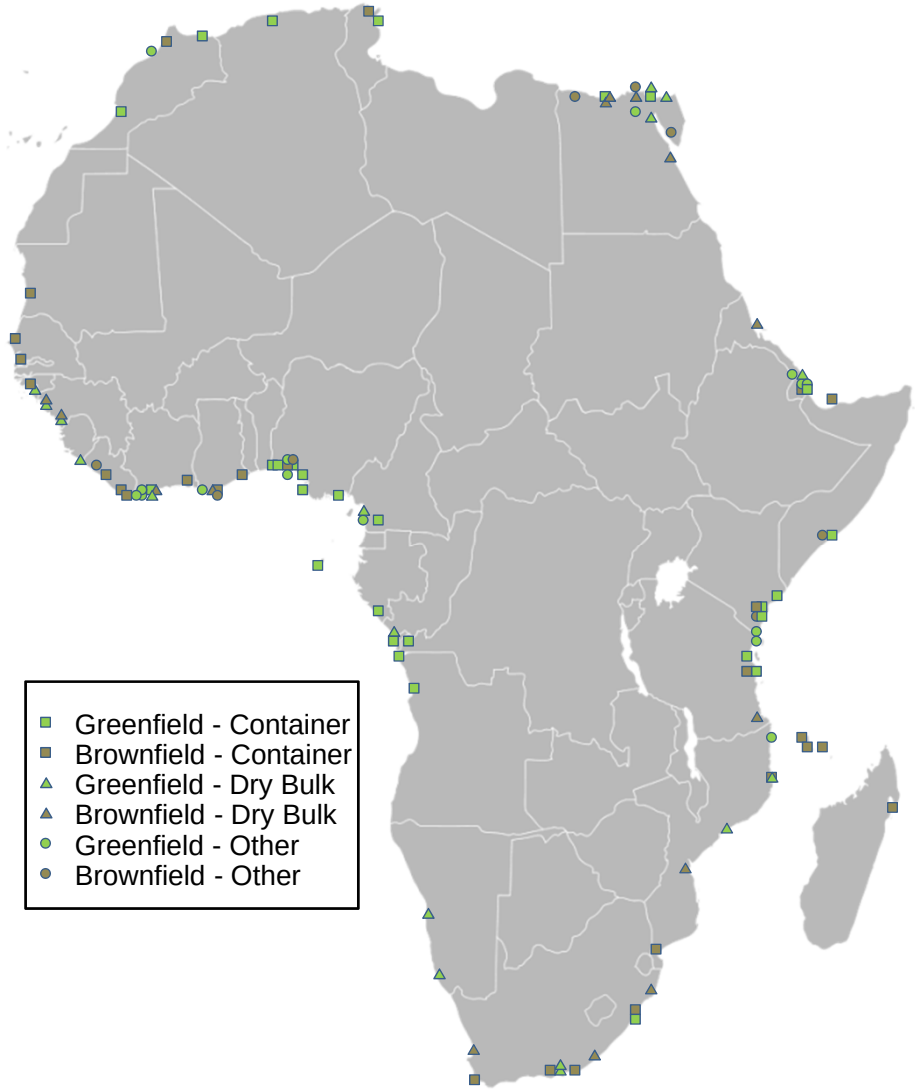
31 projects $ > 27 billion USD

Total projects – planned start construction before 2017

67 projects $ > 55 billion USD

Total projects – planned start construction after 2017

17 projects $ > 20 billion USD



Project structure

Three funding and project structures compared

PUBLIC BENCHMARK

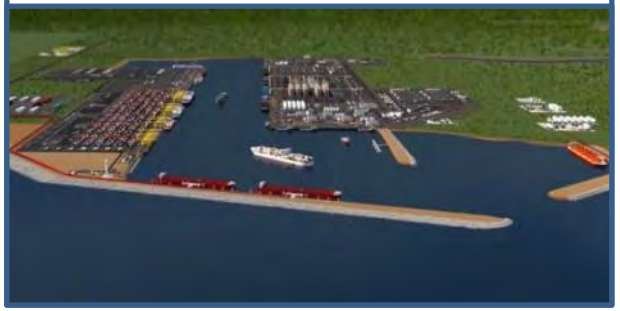
- Public port or landlord
- Substantial public investments: 65% - 100%

BILATERAL CONCESSIONAL

- Bilateral Concessional financing
- Landlord (transition)

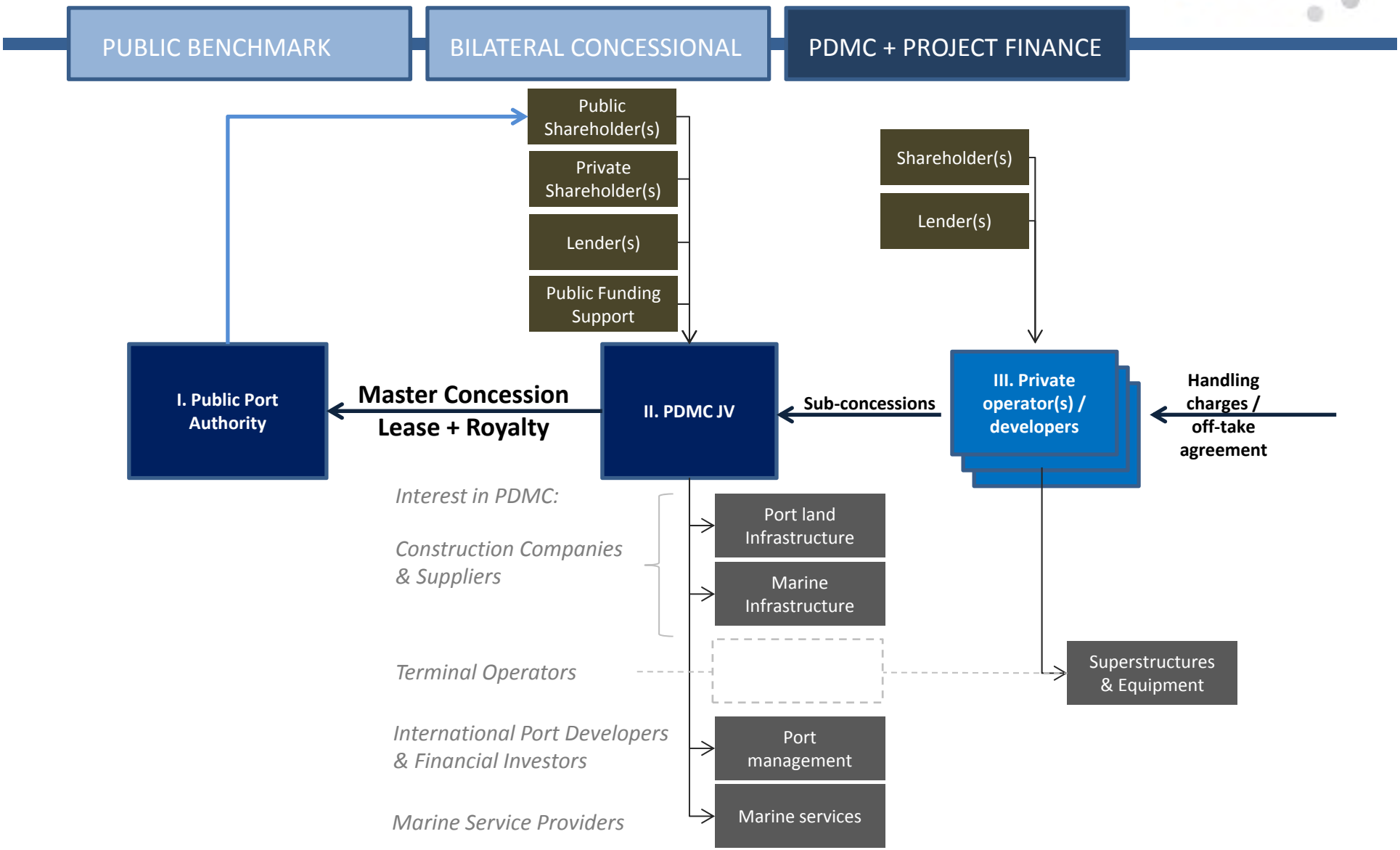
PDMC + PROJECT FINANCE

- Public private JV at port level
- Possibly sub-concessionaires
- Limited public investment: <25%
- Project financing
- Example: Ibom



PDMC: Africa's Port Management Model

Especially for Greenfield ports



Challenge in project implementation

Maximise value and realise financing by selecting the optimal structure

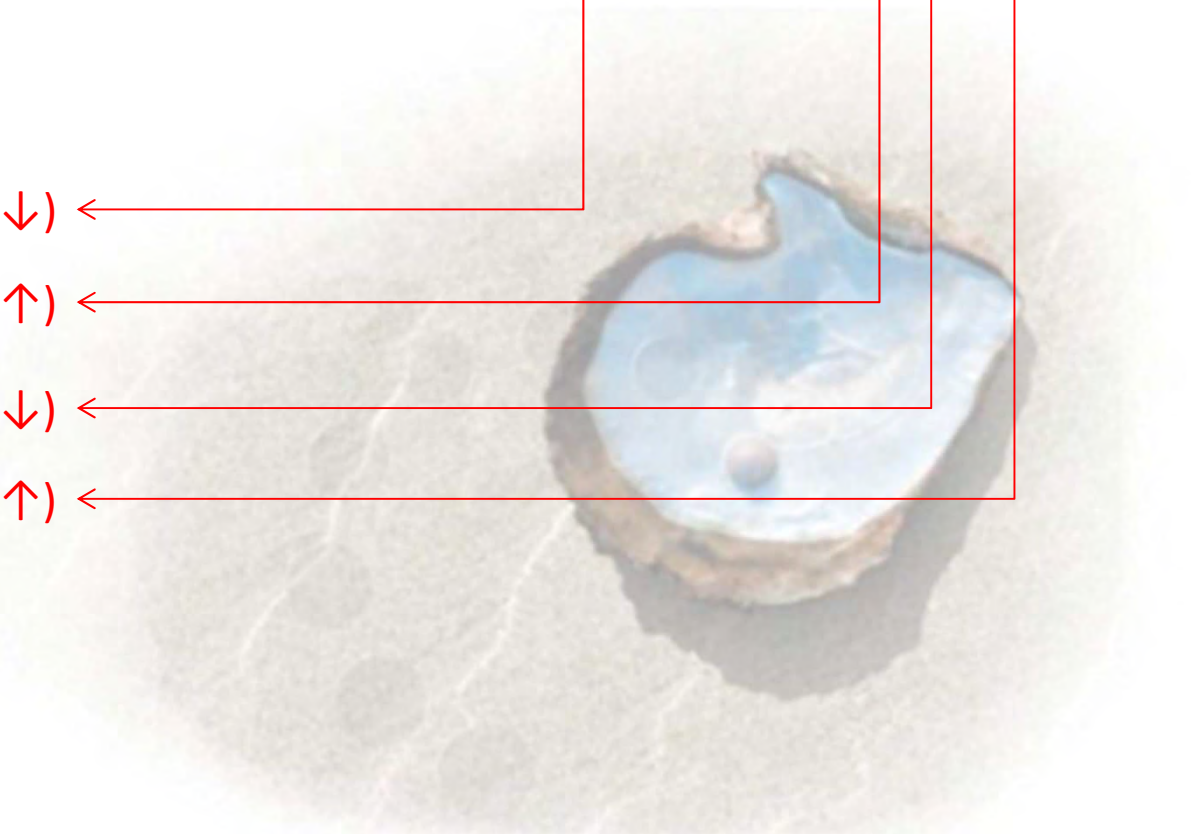
$$Value = \sum_{t=0}^{N} \frac{FCF_{t,g}}{(1+i)^t} = -Investment + \frac{FCF}{i-g}$$

Capital expenditures (↓)

Revenues – Opex (↑)

Funding costs (↓)

Growth (↑)



Project structure

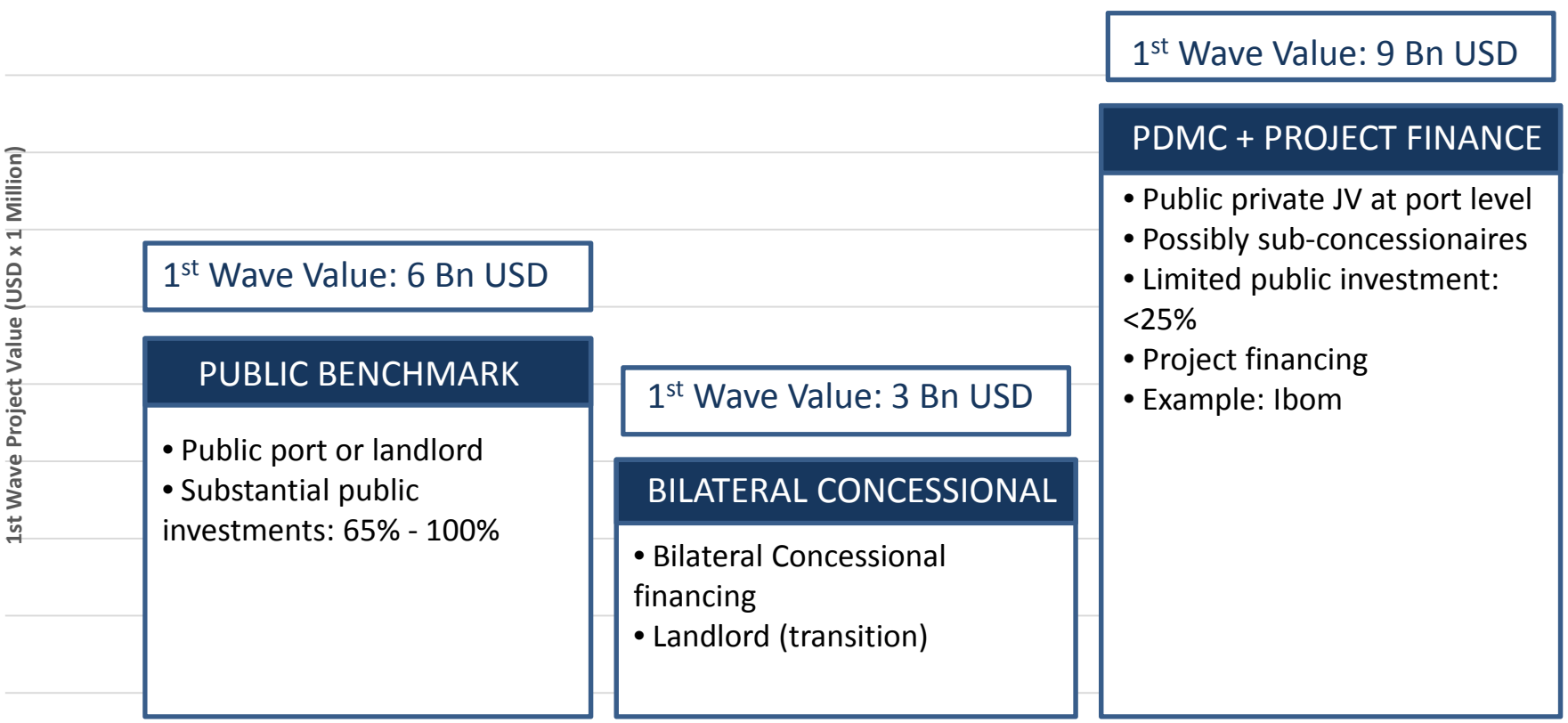
Three funding and project structures compared

Project Structure	Public Benchmark	Bilateral Concessional Funding	PDMC and Project Finance
Investments			
Opex			
Funding Costs			
Revenues			
Growth			
Total Value			
	• Public port or landlord • Substantial public investments: 65% - 100%	+ Lower funding costs - Inefficient investments (higher Capex) - Constrained growth	+ Efficient investments (lower Capex) + Improved operational performance (lower Opex) + Additional growth - Higher funding costs

Benchmark assessment

Comparison of project value 1st wave of investments

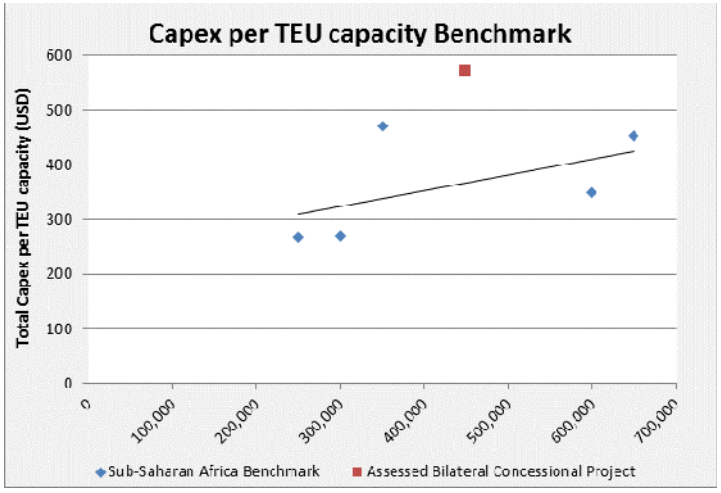
$$Project\ Value = \underbrace{\sum_{t=0}^{N} \frac{FCF_{t,g}}{(1+i)^t}}_{2014\ -\ 2030} + \underbrace{\frac{FCF_{2030}}{i-g}}_{>\ 2030}$$

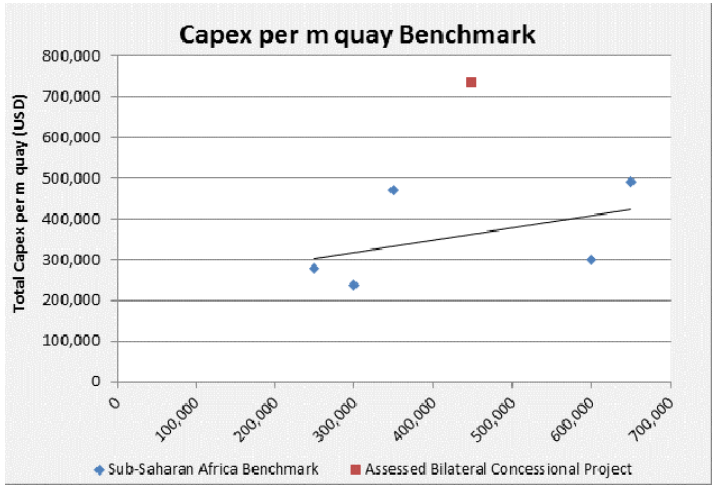


Bilateral concessional funding

Importance of competitive forces and scope optimization for infrastructure development

- Introduction of competitive forces for infrastructure development may lead to optimized Value for Money
- Scope optimization also leads to improved value for money

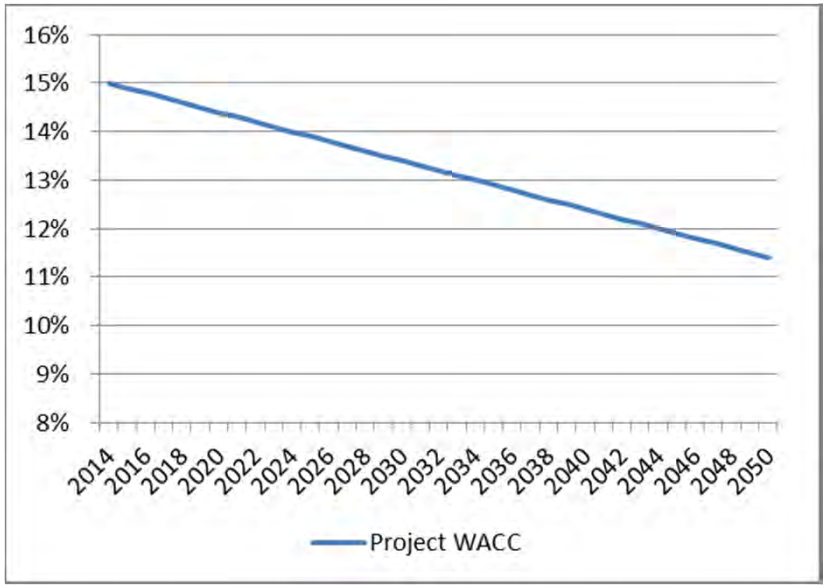




De-Risking

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

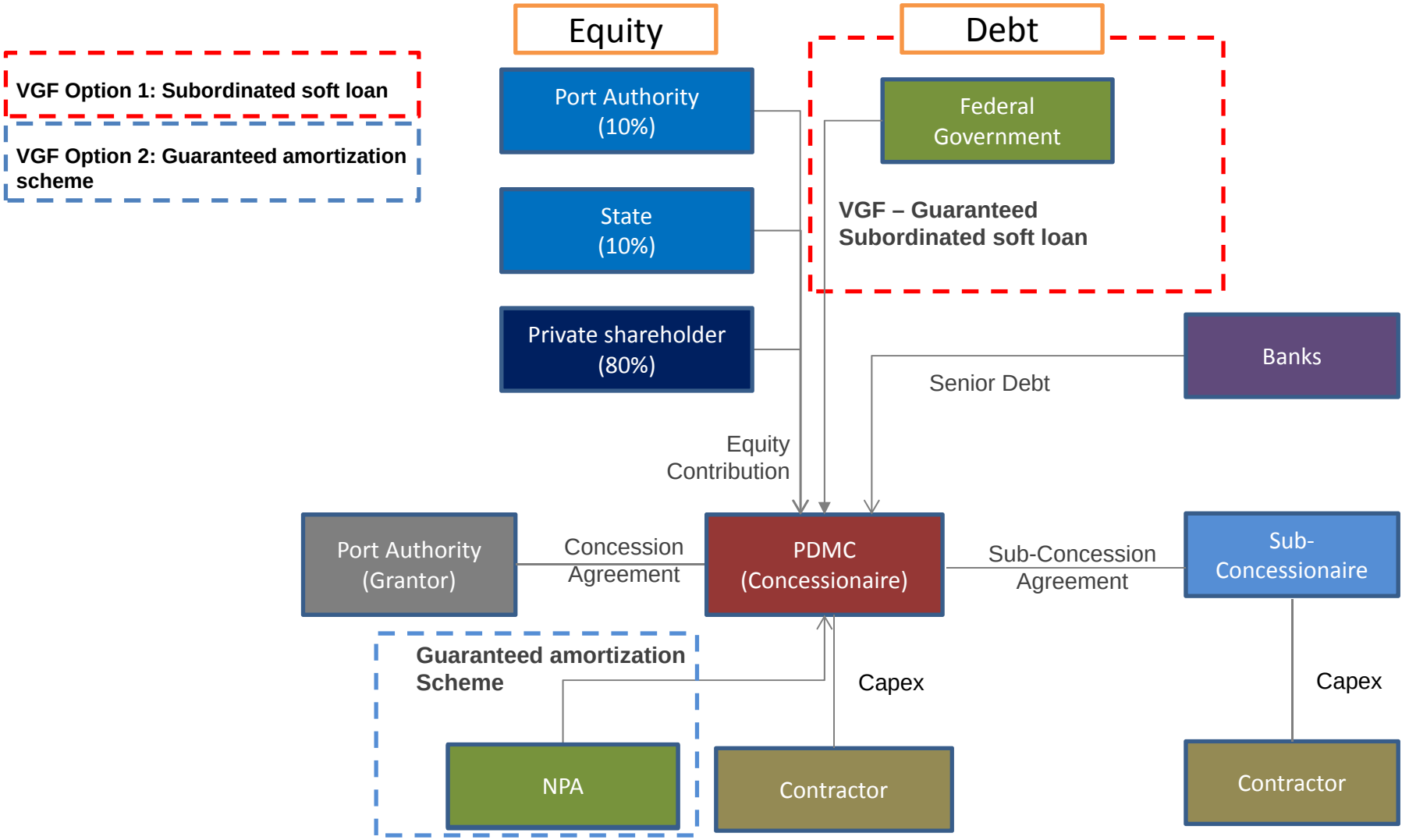
- **PPP Structuring: PDMC**
  - Procurement risks
  - Financial/commercial risks
  - Project realisation risks
- **PPP Procurement Processes**
  - Realistic transactions
  - Process embedded in legislation
  - Non-contestable outcomes
- **PPP Contract: Valuable & Enforceable & Bankable**
  - Tenor
  - Step-in
  - Clear termination compensation regime
  - Freedom to set tariffs
  - Handback conditions
  - Capacity management (national port masterplanning)



PDMC Financing Structures

Comparison of three PDMC Structures

PUBLIC BENCHMARK | BILATERAL CONCESSIONAL | PDMC + PROJECT FINANCE

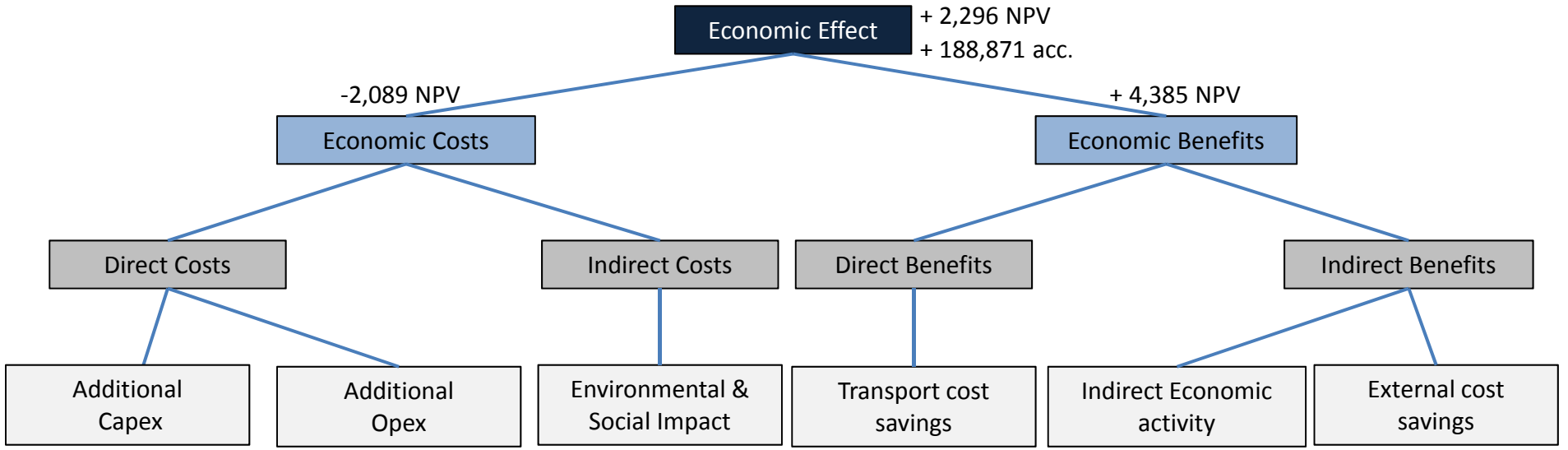


PDMC Viability

Adequate Governmental commitment is required

PUBLIC BENCHMARK | BILATERAL CONCESSIONAL | PDMC + PROJECT FINANCE

- Governmental commitments are justified by positive economic effects of the PDMC model



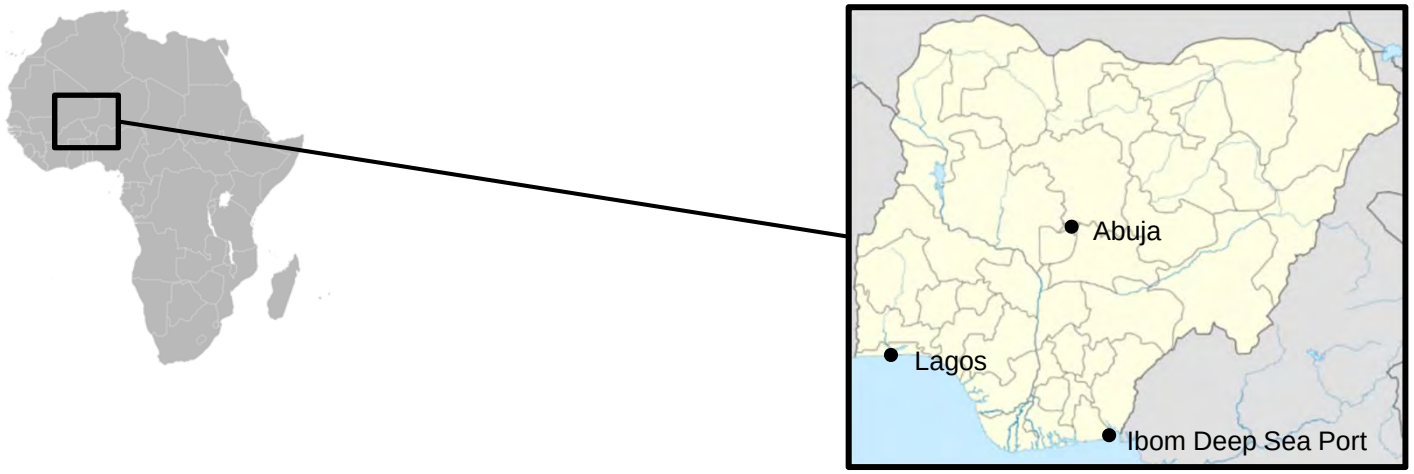
Conclusions

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

- Africa is getting prepared for this century's port development boom
- Be careful accepting and committing to cheap (bilateral) funding in an early stage
- PDMC is a strong model for major port capacity expansions benefitting from
  - Better lifecycle maintenance
  - Private sector's commercial strength and knowledge
  - More efficient procurement
  - But, in order to make PDMCs viable, adequate governmental commitment is required (viability gap funding / sovereign guarantee)
- A well-prepared and well-implemented port PPP transaction process is key
- Africa is moving towards international best practices in procurement of port PPP

Case Study: Ibom Deep Sea Port

The Eastern Gateway of Nigeria



Case Study: Ibom Deep Sea Port

Project Organisation

Project Initiators

- Nigerian Federal Ministry of Transport
- Akwa Ibom State Government

Project Supervisors

Ministerial Project Development and Steering Committee on Ibom Deep Sea Port

- Nigerian Federal Ministry of Transport (MoT)
- Akwa Ibom State Government (AKSG)
- Nigerian Ports Authority (NPA)
- Infrastructure Concession Regulatory Commission (ICRC)
- Nigerian Export Promotion Council (NEPC)

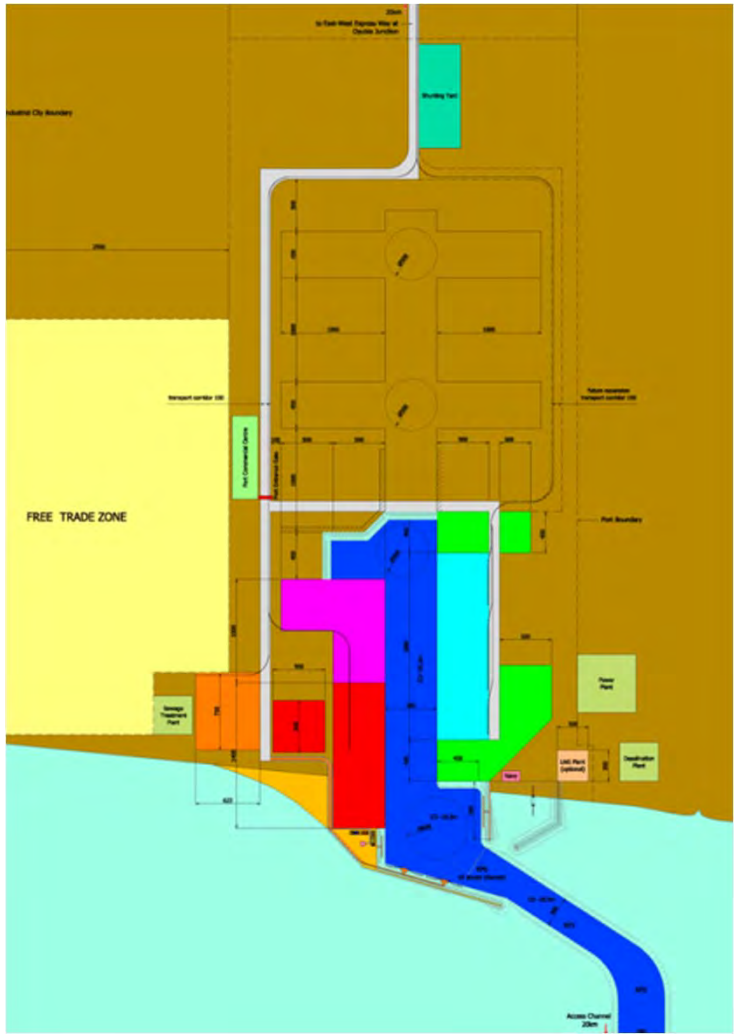
Project Transaction Advisors

- Felak Concept Limited (Abuja)
- Maritime and Transport Business Solutions (Rotterdam)

Case Study: Ibom Deep Sea Port

Project Characteristics

- Large Greenfield
- Channel depth: -18m
- Concession area: 5,000 hectares
- 20 km infrastructure corridor (road/rail/pipe)
- Trades:
  - Containers
  - General cargo
  - RoRo
  - Liquid bulk
  - Dry bulk
  - Offshore supply base
- Adjacent Free Trade Zone & Ibom Industrial City
- Phased development: Dig-Out Concept
- Initial investments: USD 1.7bn - USD 2.6bn



Case Study: Ibom Deep Sea Port

Timeline

Project Development

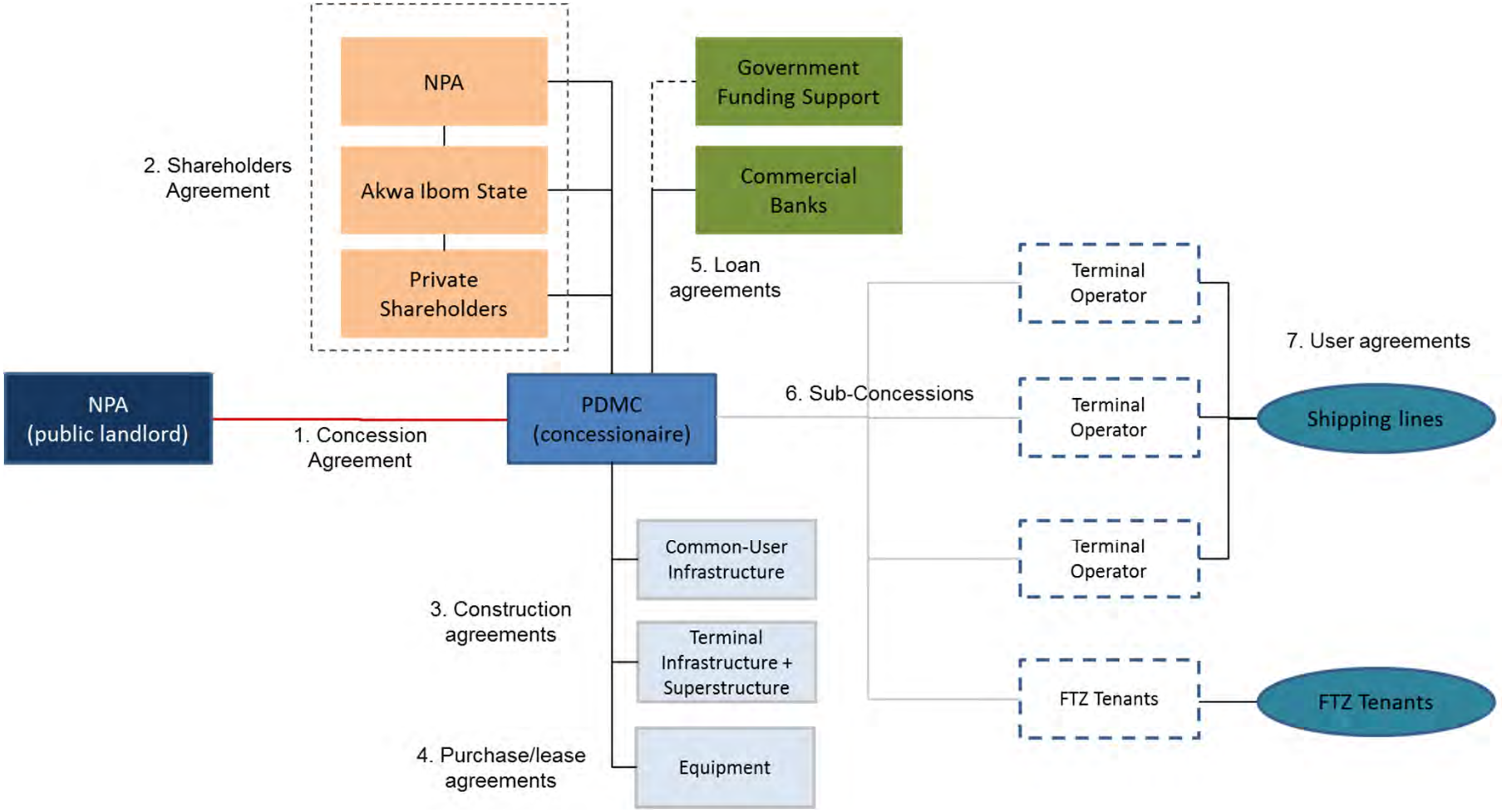
2012	2013	2014	2015	>2015
• Project Initiated by NFG & AKSG • Initial Due Diligence	• Outline Business Case • Procurement Preparation	• ICRC Approval • FEC Approval	Procurement: • PDMC • Sub-concessionaires • Contractors	• Construction • Operations

PPP Tender: ICRC compliant

Q1 2015	Q2 2015	Q3 2015	Q4 2015
• Registration of Candidates • Request for Qualifications (RfQ)	• Request for Proposal (RfP)	• Evaluation • Bid Optimisation	• Contracting • Start CP Period

Case Study: Ibom Deep Sea Port

PDMC structure is the only viable PPP implementation model



thank you for your attention

White House, Rotterdam

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Case Study: Ibom Deep Sea Port

Artist's Impression – Concession Area

Case Study: Ibom Deep Sea Port

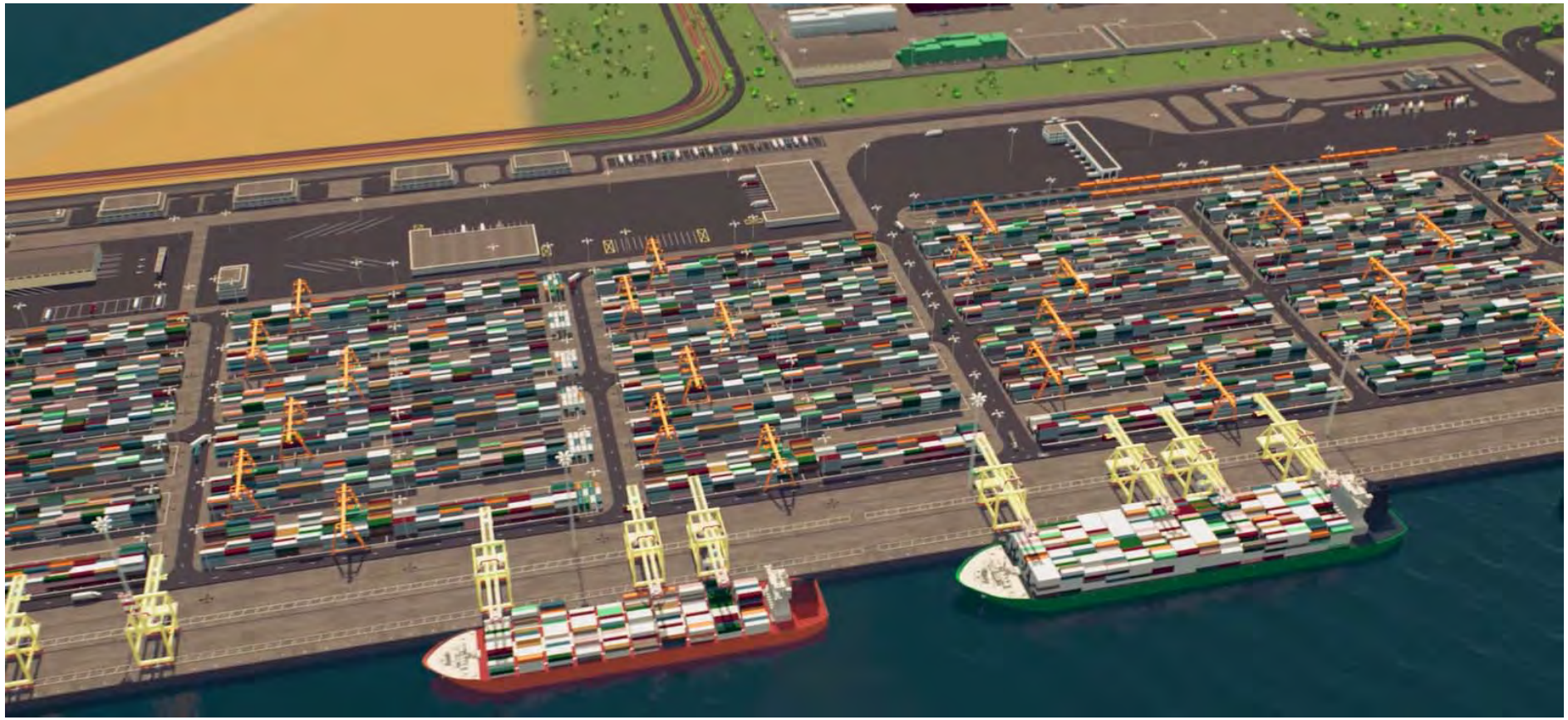
Artist's Impression – Ibom Deep Sea Port

Case Study: Ibom Deep Sea Port

Artist's Impression – Nautical Dimensions

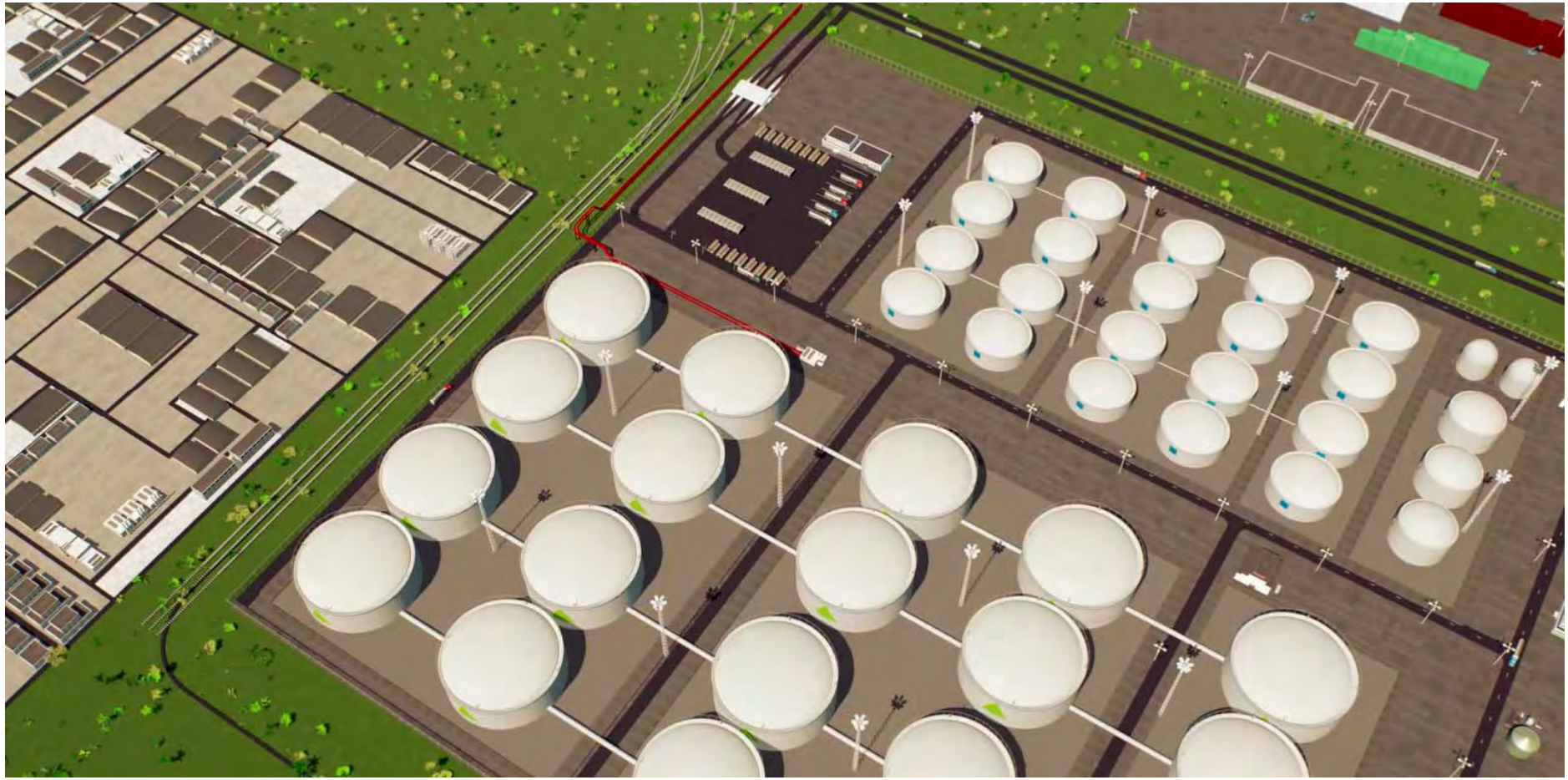
Case Study: Ibom Deep Sea Port

Artist's Impression – Container Terminal



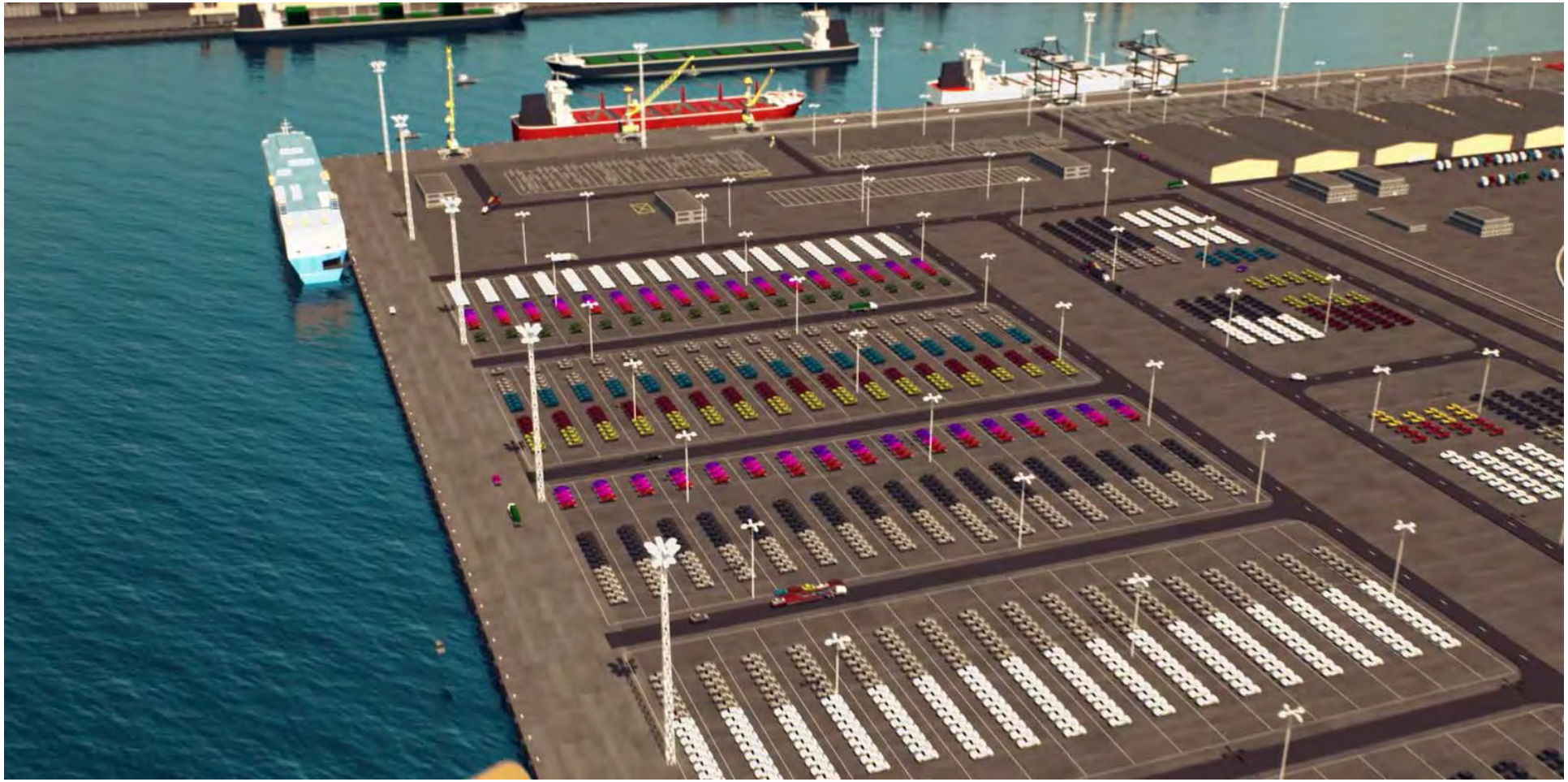
Case Study: Ibom Deep Sea Port

Artist's Impression – Petroleum Products Terminal



Case Study: Ibom Deep Sea Port

Artist's Impression – RoRo & Breakbulk Terminal



Case Study: Ibom Deep Sea Port

Artist's Impression – Dry Bulk Terminals

Case Study: Ibom Deep Sea Port

Artist's Impression – Offshore Supply Base

Case Study: Ibom Deep Sea Port

Artist's Impression – Dry Cargo Terminals