



Structuring Valuable Port Concessions in Iran

4th Trans Middle East Exhibition and Conference

Tehran, January 2017

MTBS is a global leader in port transaction advisory services



MTBS, independently based in Rotterdam, has a unique value proposition

MTBS specializes in ports and terminals, and provides leading expertise in the areas of **strategy, valuation, transactions** and **finance**. The firm combines its market sector knowledge and state-of-the-art financial competences into one 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

Financing

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



Valuation

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

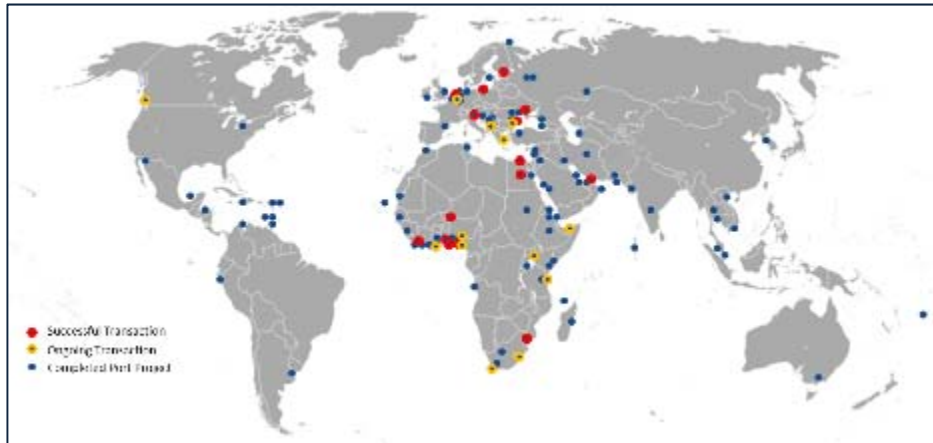
Transaction

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

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 provides port finance and PPP training solutions

PORT INVESTMENTS & PPP COURSE	PORT & TERMINAL CONCESSIONING COURSE	PORT INVESTMENTS & PPP COURSE
SINGAPORE	DUBAI	LONDON
8-10 March 2016 Millennium Place, Sheikh Zayed Road, Dubai	8 & 9 March 2017 Millennium Place, Sheikh Zayed Road, Dubai	26-28 June 2015 De Vries Venues West One, Central London
Organized by: Port Finance International Hosted by: mtbs	Organized by: Port Finance International Hosted by: mtbs	Organized by: Port Finance International Hosted by: mtbs
BOOK YOUR PLACE NOW	BOOK YOUR PLACE NOW	BOOK YOUR PLACE NOW

How do we unlock value?

Focusing on the Trans Middle East region



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

Free Cash Flows

Growth

De-Risking

Strategic access across the entire Persian Gulf

All of Iran's major points enjoy superb access to the Persian Gulf



- Iran's major ports are strategically situated across the **Persian Gulf, Strait of Hormuz and Gulf of Oman** to handle traffic, particularly containers and petrochemicals
- Up until now, Iran's ports were served mainly by vessels ranging from 200 to 2,500 TEU vessels
- Earlier this month, **Maersk Line** added **Bushehr** to its Iranian coverage with a **3,000 TEU**
- As of April, **Ocean Alliance** will start calling at **Bandar Abbas** on FE – ME services with **10,000 TEU vessels**

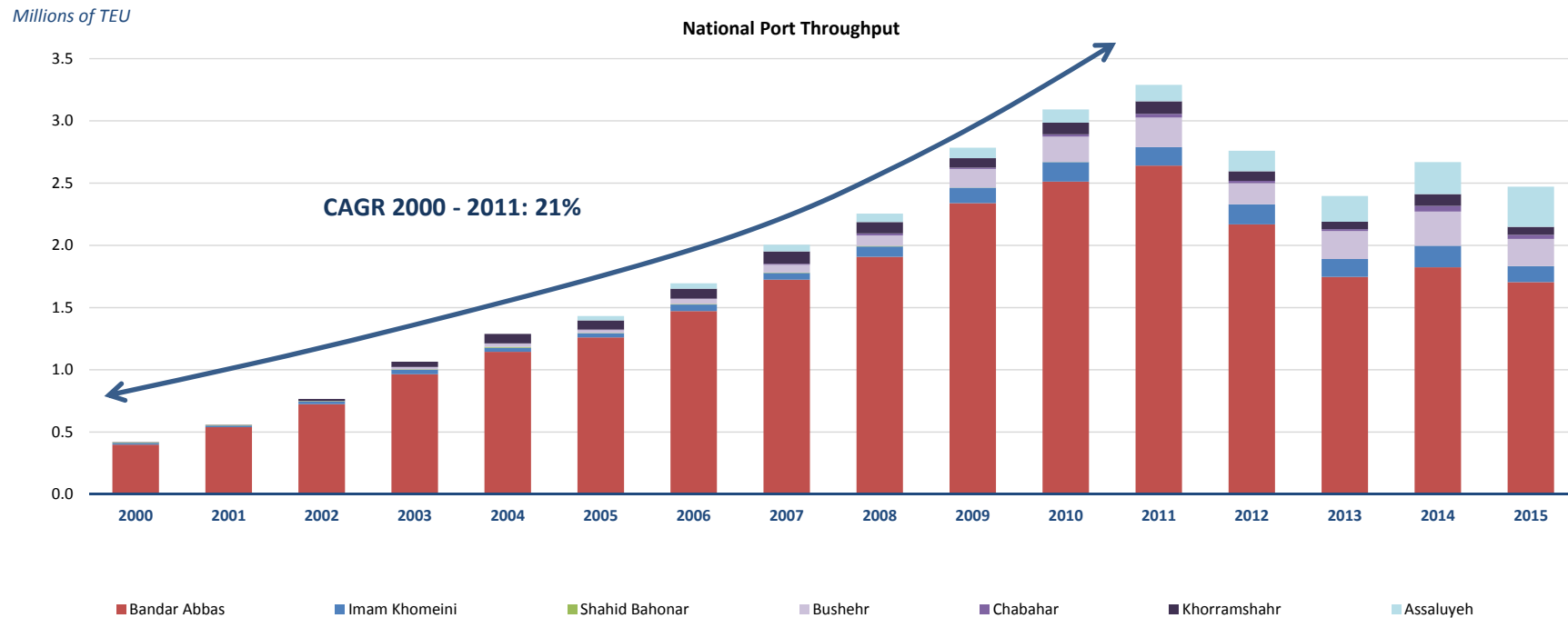


Iranian ports have shown strong growth

Total throughput boasts a 21% annual growth between 2000 and 2011



- Shahid Rajaei (“**Bandar Abbas**”) has historically been the **dominant** port in Iran
- In recent years, **Bandar Imam Khomeini**, **Bushehr** and **Assaluyeh** have been providing **growing competition**
- Despite a slowdown after the introduction of the sanctions, **overall CAGR of 12% between 2000 to 2015** is still substantial

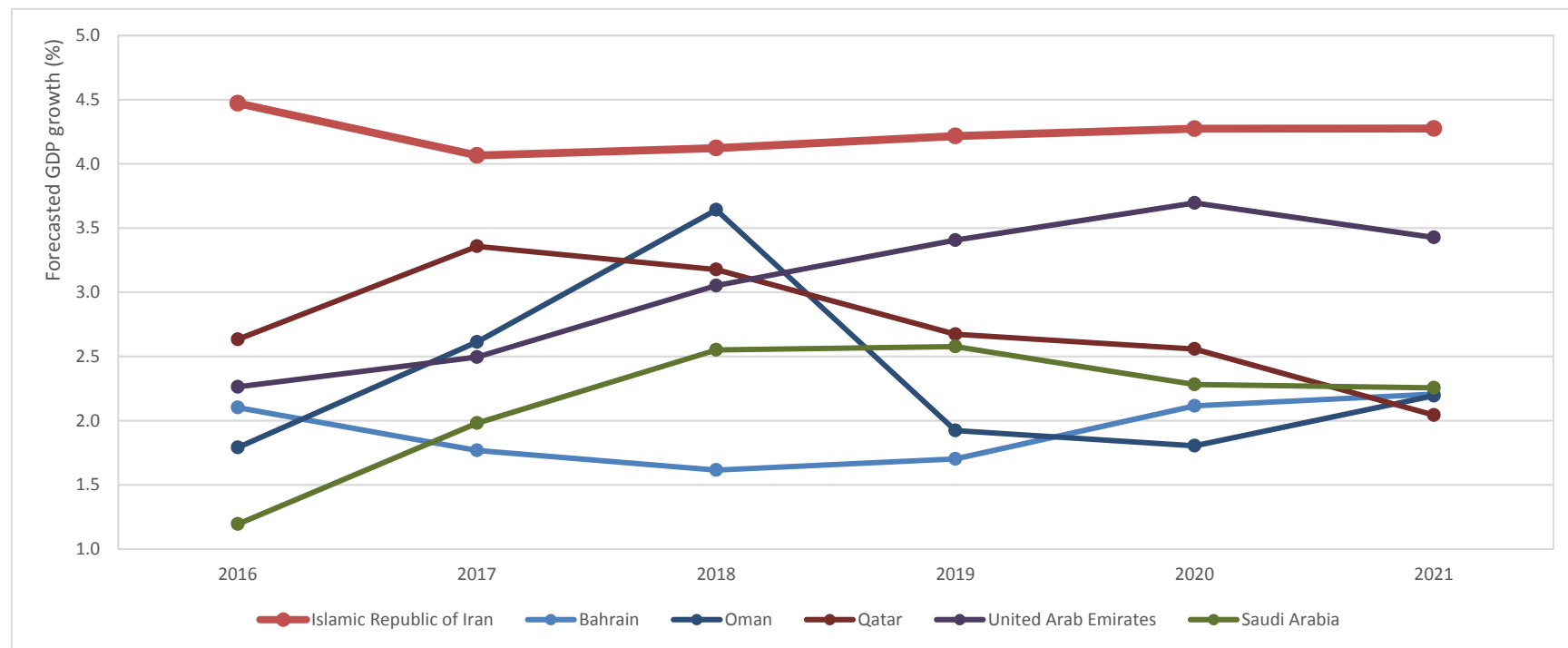


Iran has the highest forecasted GDP growth

Compared to its regional peers



- Iran is expected to outpace its regional and global peers in GDP growth up to 2021:
 - **Iran** **4.2%**
 - *Middle East and North Africa* **3.5%**
 - *World:* **3.6%**
 - *European Union:* **1.8%**



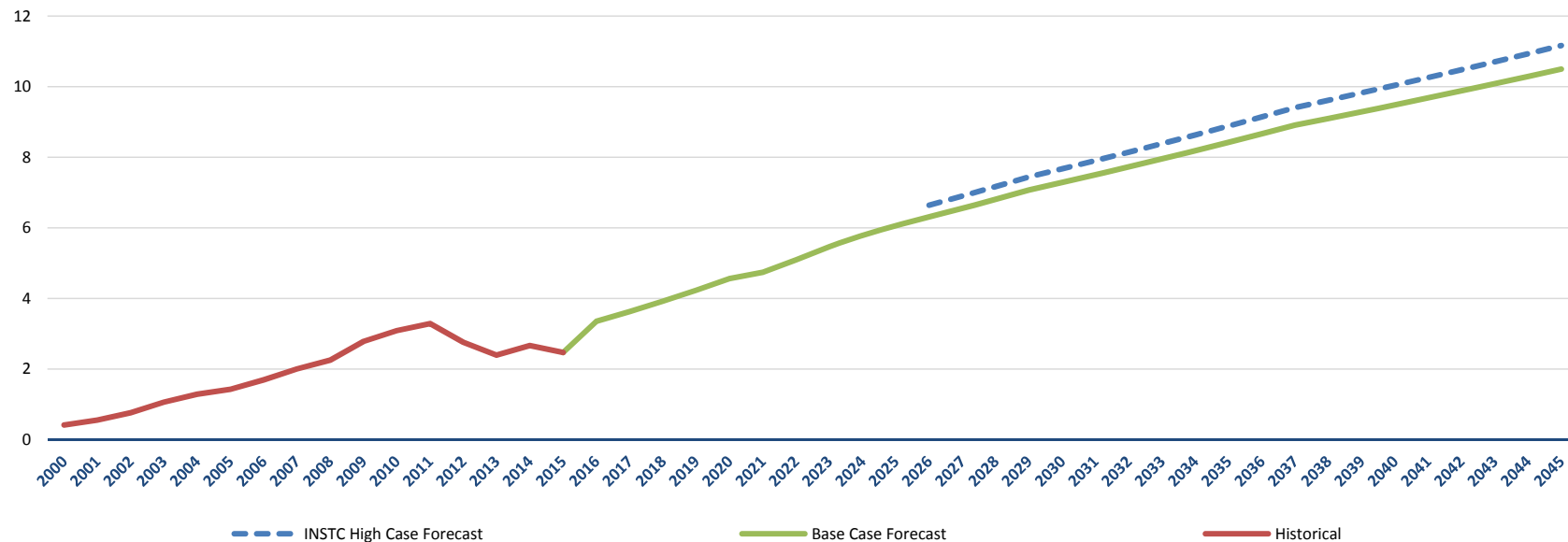
Regional demographics point to a growing market

A projected annual population growth of almost 2% will attract demand

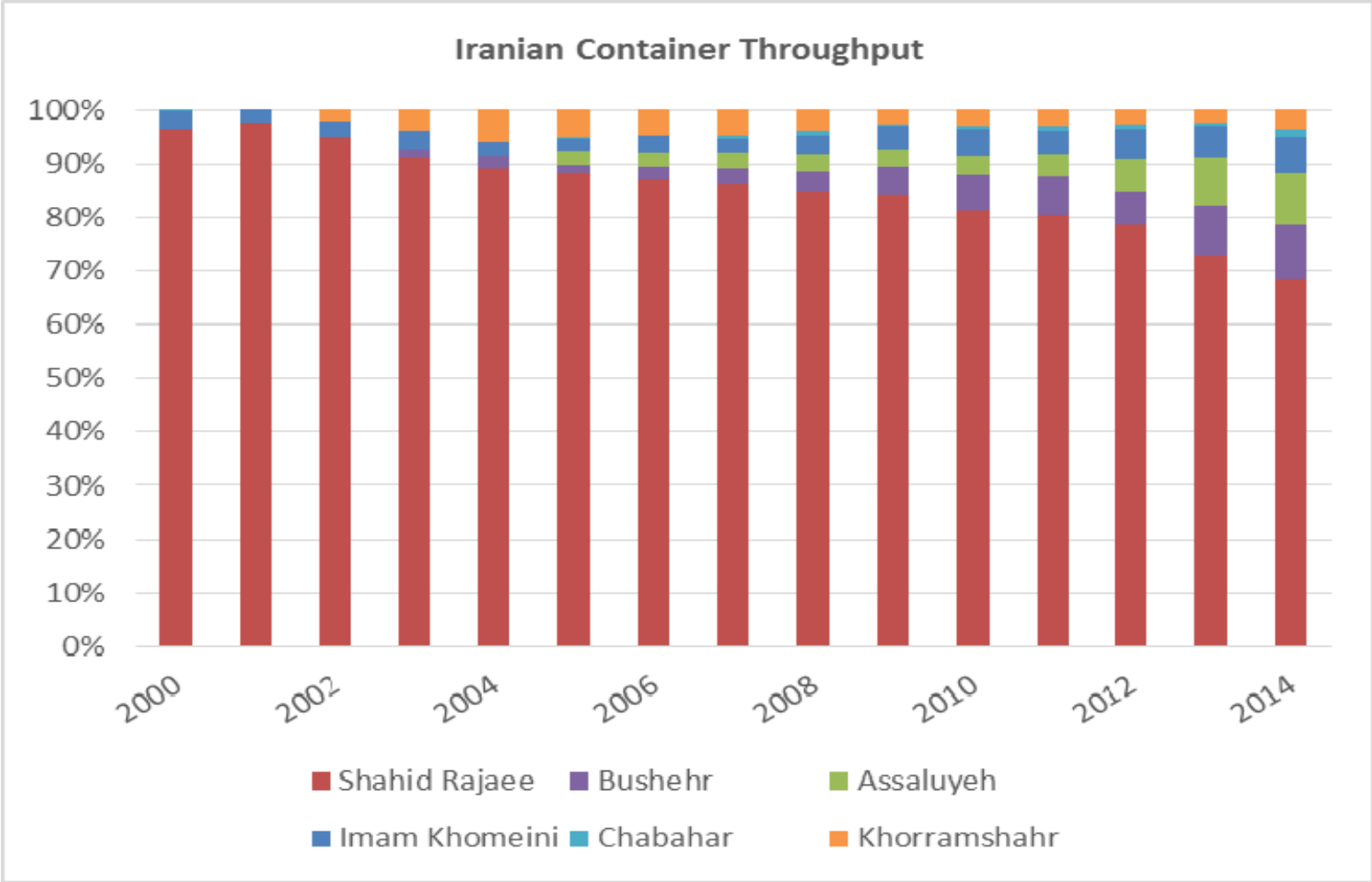


- Regional **GDP** and **population** forecasts are positive stimuli for **growing trade**
 - Next to GDP, Iran's **population** is also expected to outgrow that of its peers with an annual growth of **1.1%** until 2021 compared to **0.8%** regionally
 - Iran is the largest regional consumer market after Egypt at **80 million** people
- By 2045, total throughput is expected to reach **10.5 million TEU**, with a potential **annual upside** worth **0.5 – 1.0 million TEU** due to the International North South Transport Corridor

Millions of TEU



Market Share Containers Iranian Ports



Natural port hinterlands



Iran provides rich investment opportunities

In upgrading and expanding current facilities and capacity

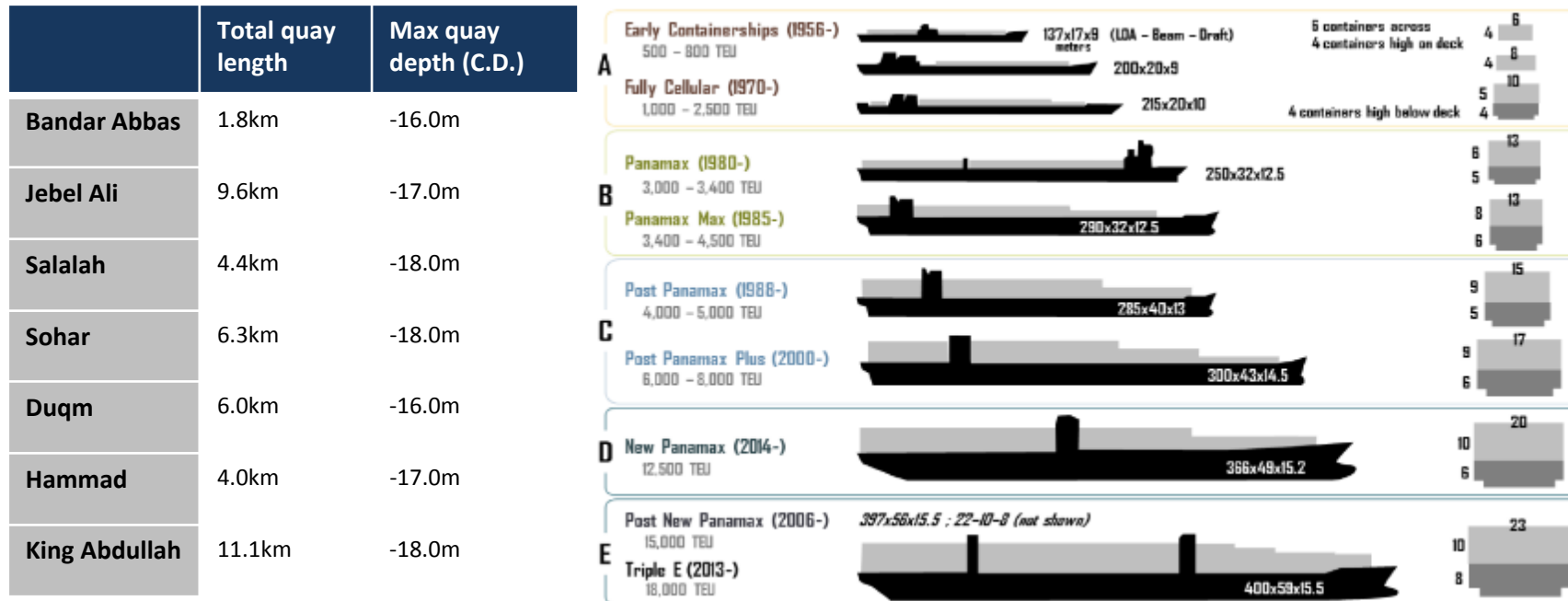


- Current facilities are mostly under-utilized

	Bandar Imam Khomeini	Bandar Abbas	Bushehr	Khorramshahr	Assaluyeh	Chabahar
Access channel	Length: 55km Max. depth: -17.0m	Length: 5km Max. depth: -17.0m	Length: 13.1km Max. depth: -12.5m	Length: 93km Max. depth: -10.0m	None (deep water port)	Length: 2.8km Max. depth: -12.5m
Depth alongside quay	-13.5m to -15.0m C.D.	-15.0 to -16.0m C.D.	-12.0m C.D.	-4.2m C.D.	-10.0 to -15.0m C.D.	-9.3m C.D.
Quay length	1,050m	1,800m	388m	1,300m	750m	700m
Terminal capacity (TEU)	Official: 0.7 million Estimated effective: 0.3 million	2.8 – 3.5 million	Estimated effective: 0.3 million	Future estimated effective : 0.3 million	Estimated effective: 0.2 million	Estimated effective: 0.1 million

Regional competitors are already investing

Physical characteristics are essential to catering to future services



- Iran’s container ports **need upgrades** to **compete** with regional and international **best practices** and to align with the development of **vessel sizes**

Converting potential into realised value..

Is one of MTBS' core assets



- Substantial growth expected in the MENA region for the coming decades
- Iran will need 7 million TEU extra capacity over the next decades
- This requires direct Capex of USD 5.0 bn; equivalent to USD 690 / TEU

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

$$NPV(i, N) = \sum_{t=0}^N \frac{FCF_{t,g}}{(1+i)^t} = USD\ 3B$$

Problem identification: why the lack of PPPs?

A large share of the risks is allocated to private parties



Why Port PPP Implementation?

Risk management

- Private parties are better positioned to handle risks (e.g. market risks, operational risks, construction risks)

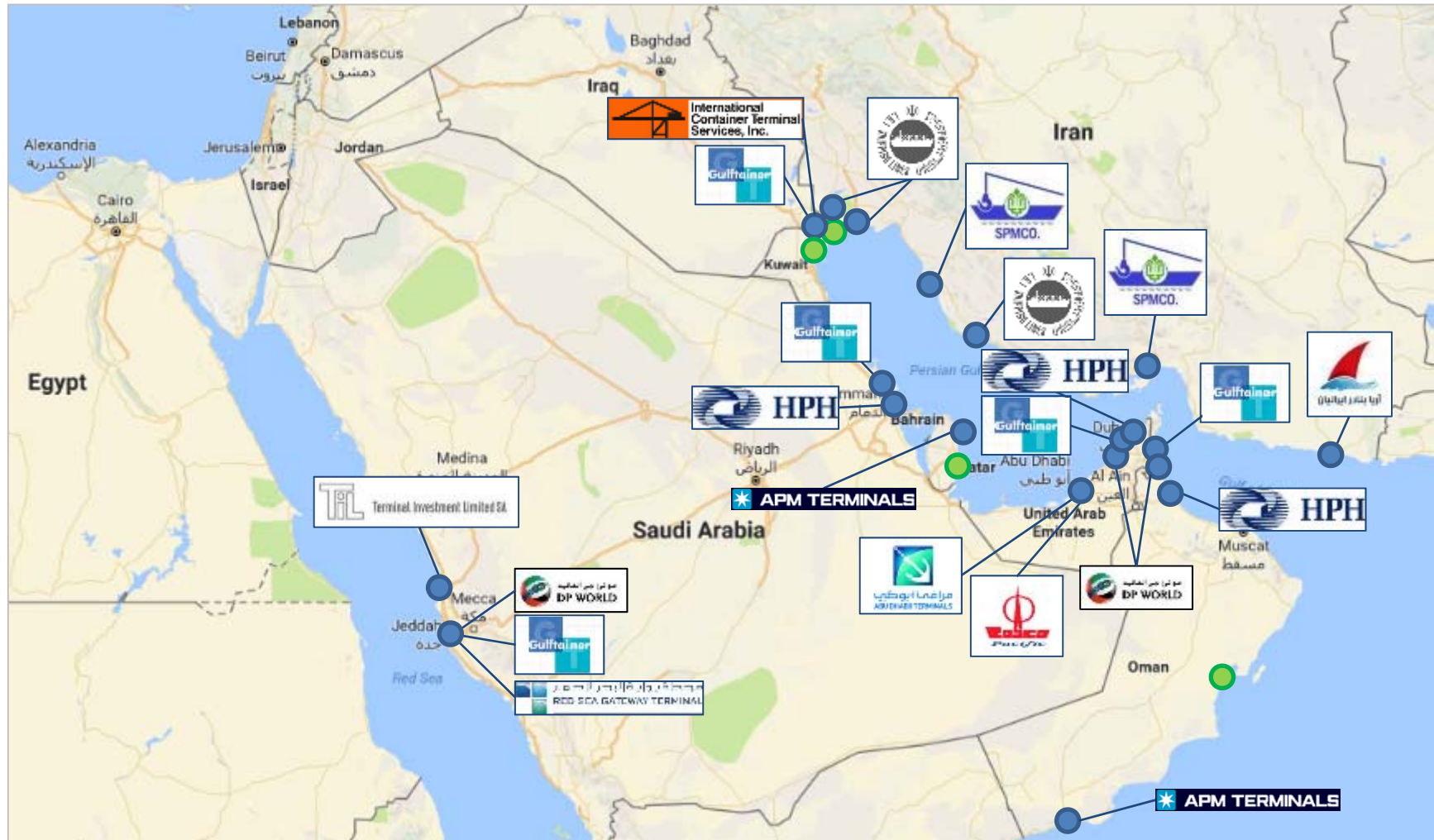
Reduce burden on public budgets

- 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

PPPs with ITOs are abundant in the region

While ITOs court the not yet operational Greenfield projects



Lessons Learnt: Importance of PPP & Transaction Advisory

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



- **PPP Structuring: balancing risks between public and private sector and business case driven**
 - Focus on Financing, Bankability
- **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
 - Handback conditions
 - Capacity management (national port masterplanning)

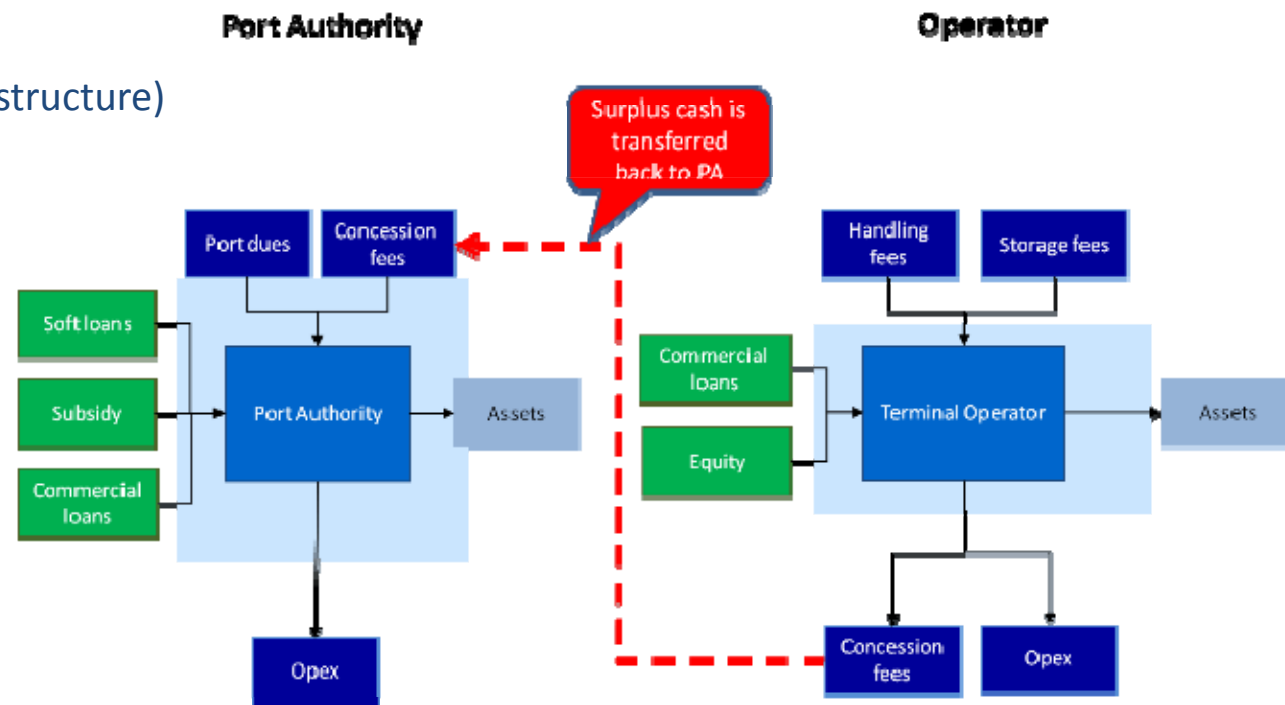
Next to risk, value must also be defined

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



Value Drivers:

- Revenues & Revenue Growth (PxQ)
- Cost reductions (EBITDA)
- Investment planning (CAPEX)
- Financing (WACC)
- De-risking (guarantee structure)



Lessons Learnt: Structure

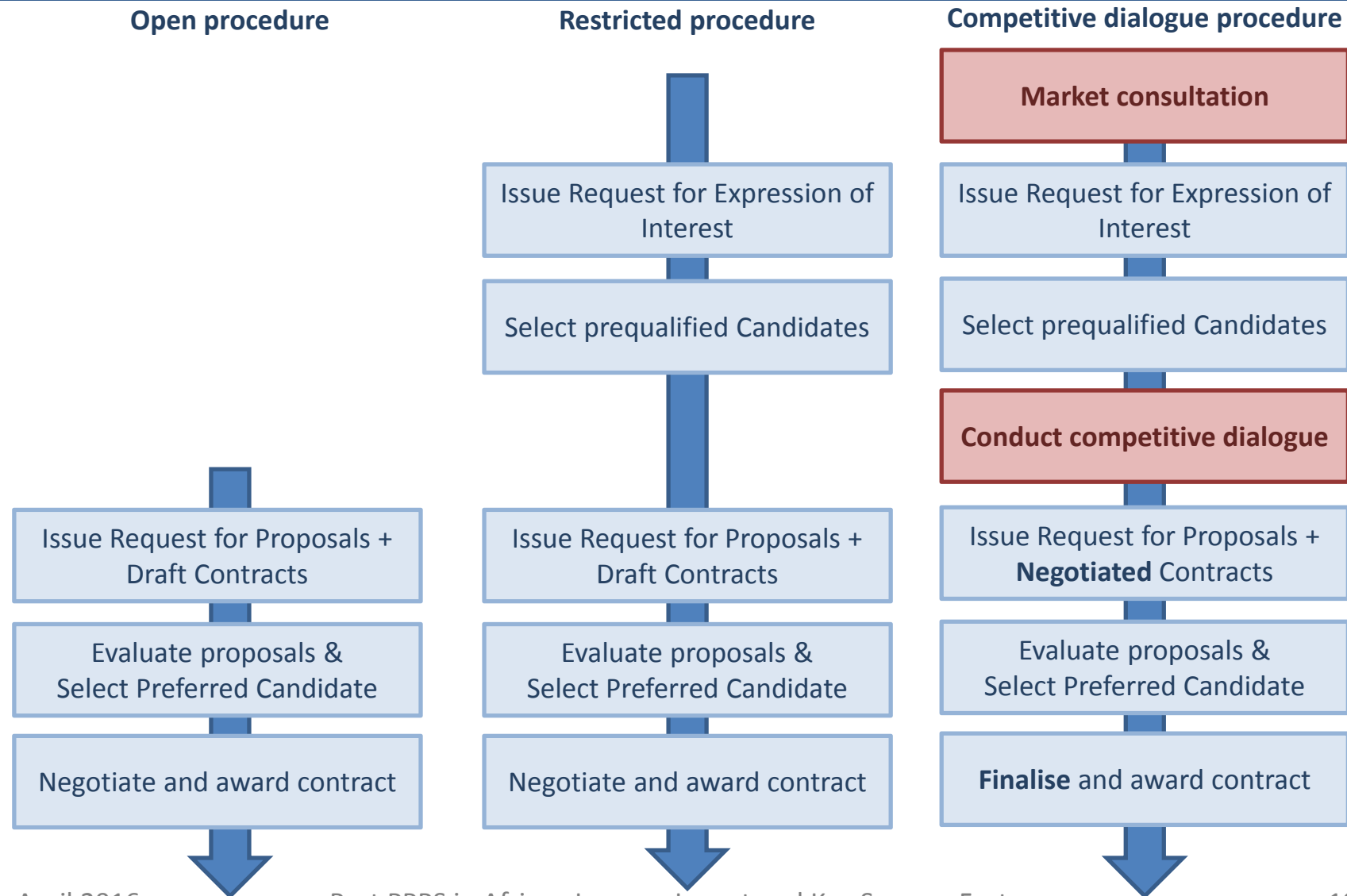
Choosing the Optimal Port Management Model



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



Recommendations for successful tender procedure



- National Port Master Plan
- Transaction to be carried out by credible and fully authorized Concessioneering Authority.
- Competitive Dialogue Procedure creates most value: Early involvement of bidders
- Tender should be business case driven. Focus on long term value rather than closing the deal. Focus on Bankability
- 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



White House, Rotterdam

maritime & transport business solutions

maritime strategy & finance advisors

t | +31 10 2865940
e | info@mtbs.nl
w | www.mtbs.nl

Wijnhaven 3E
P.O. Box 601
3000 AP Rotterdam
The Netherlands