Key development trends that are shaping the Red Sea region

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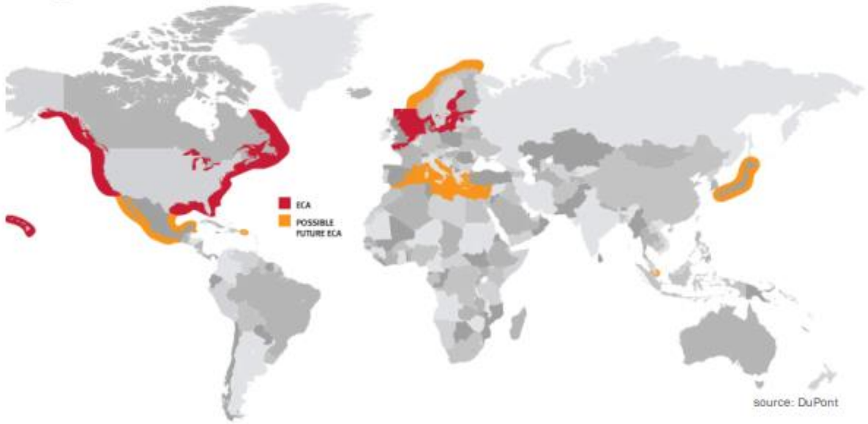
CONTENT

INTRODUCTION

What's happening - Globally

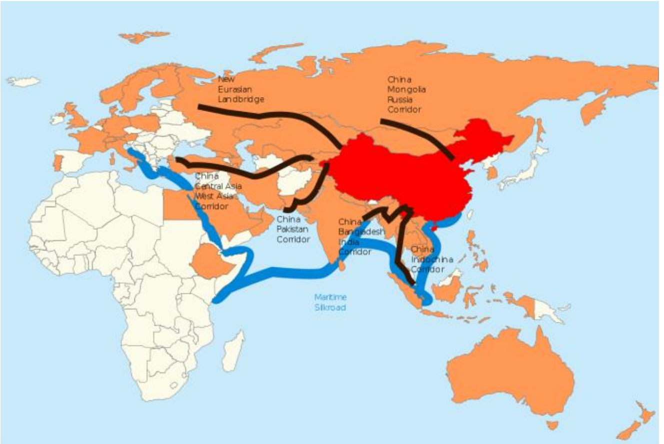
- Tonnage oversupply and cascading, reshaping of alliances
- IMO Sulphur Cap and LNG implications for Bunkering and Trade routing
- Pressure on terminal operators to upgrade facilities and provide high service levels
- Port authorities reshaping less competitive infrastructure
- Trade tariffs creating uncertainty

Existing ECA zones and possible future ECAs



RED SEA REGIONAL MARKET

Current Issues Impacting International Shipping - Middle East



Politics

- Regional political tensions and resolutions
- Continued diversification of economies
- Sea Belt and Road initiative

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Economics

- Petrochemicals remain majority of traded cargo
- Containers increasing share of port throughput
- Transhipment hub expansions along Suez Canal/Red Sea
- Development of Saudi Landbridge and GCC rail system
- IMO new sulphur cap impact on routing
- Rise of manufacturing in South Asia as East Asia develops and deals with tariffs
- Bunkering in Gulf region

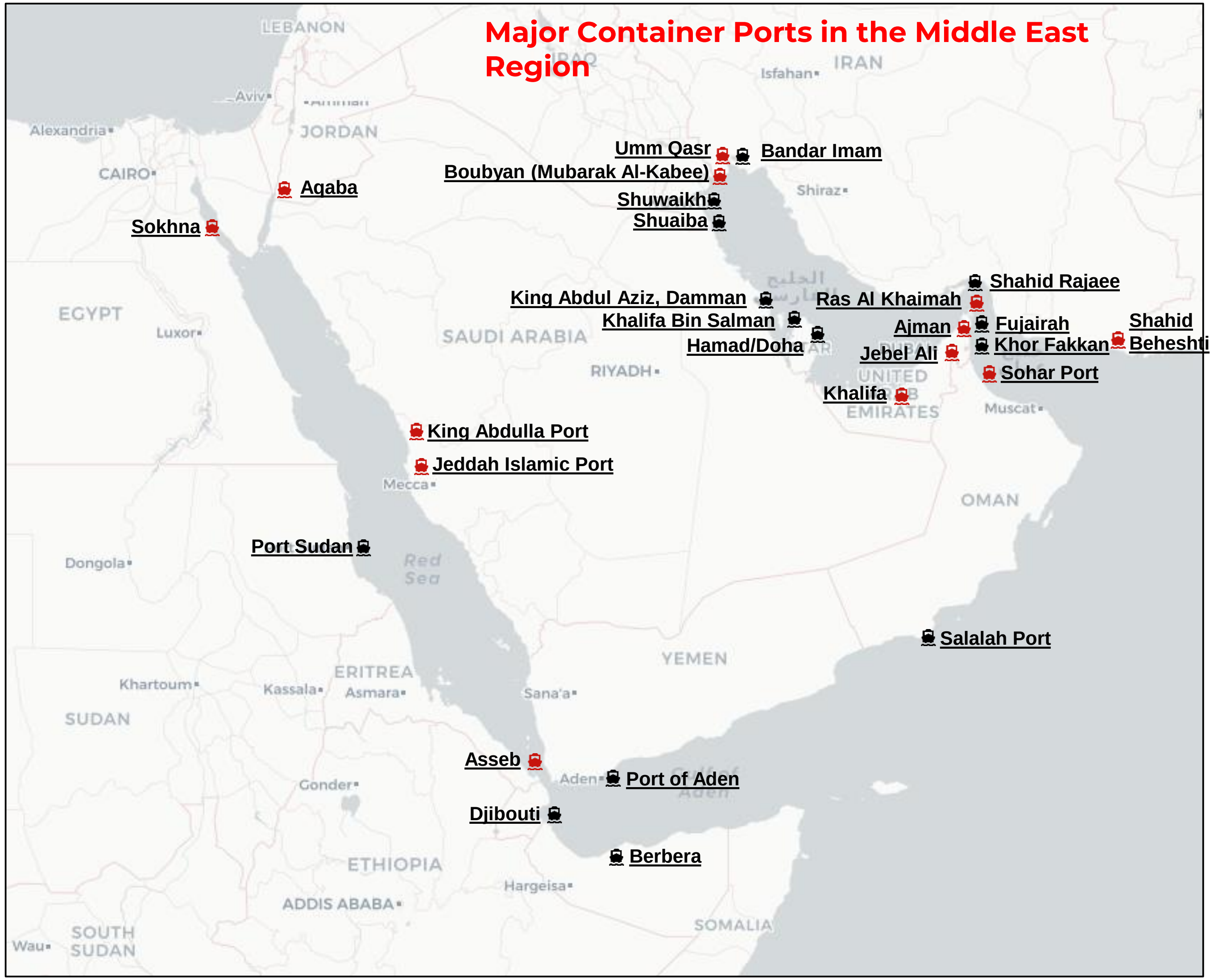
RED SEA REGION SUMMARY

Country	Investment Condition	Primary Container Port	Container Port Developments	Latest Volume (TEUs)	Comments
Djibouti	Unrated	Djibouti	Doraleh Container Terminal	987,000	Uncertainty around developments
Eritrea	Unrated	Asseb	Potential in collaboration with Ethiopia	Unknown	
Egypt	B3 / Positive	Sokhna	Expansion of Sokhna	570,000	
Ethiopia	B1 / Stable	n.a.	n.a.	n.a.	High demand growth forecasted
Jordan	B1 / Stable	Aqaba	Planned expansion along Aqaba	796,087	
KSA	A1 / Stable	Jeddah Islamic Port (JIP)	King Abdulla Port ongoing developments, JIP possible expansion	5,736,000	North Red Sea site could support resort developments (Neom)
Oman	Baa3 / Negative	2: Sohar, Salalah	Sohar likely to develop further	4,785,000	Fujairah and Sohar may compete
Sudan	Unrated	1: Port Sudan		551,000	
Somalia	Unrated	1: Berbera			
Yemen	Unstable	1: Aden	Nil	270,000	Post conflict investment possible

Source: Moody's Investor Service; Port Authority; Alphaliner; WSP

RED SEA REGIONAL DEVELOPMENTS

Port	Country	Development
Ajman	UAE	Offshore terminal development
Aqaba	Jordan	Expansion
Asseb	Eritrea	Development
Boubyan (Mubarak Al-Kabee)	Kuwait	New port development
Duqm	Oman	CT development
Fujairah	UAE	Terminal redevelopment
Jebel Ali	UAE – Dubai	Terminals 4 & 5
Jeddah Islamic Port	KSA	Terminal developments
Khalifa	UAE – Abu Dhabi	MSC and CSP investing in container terminals
King Abdullah Port	KSA	Continued development
RAK & UAQ	UAE	Container development
Shahid Beheshti	Iran	Terminal development
Sohar	Oman	North and South Basins
Sokhna	Egypt	Expansion
Umm Qasr	Iraq	Continued development by various operators



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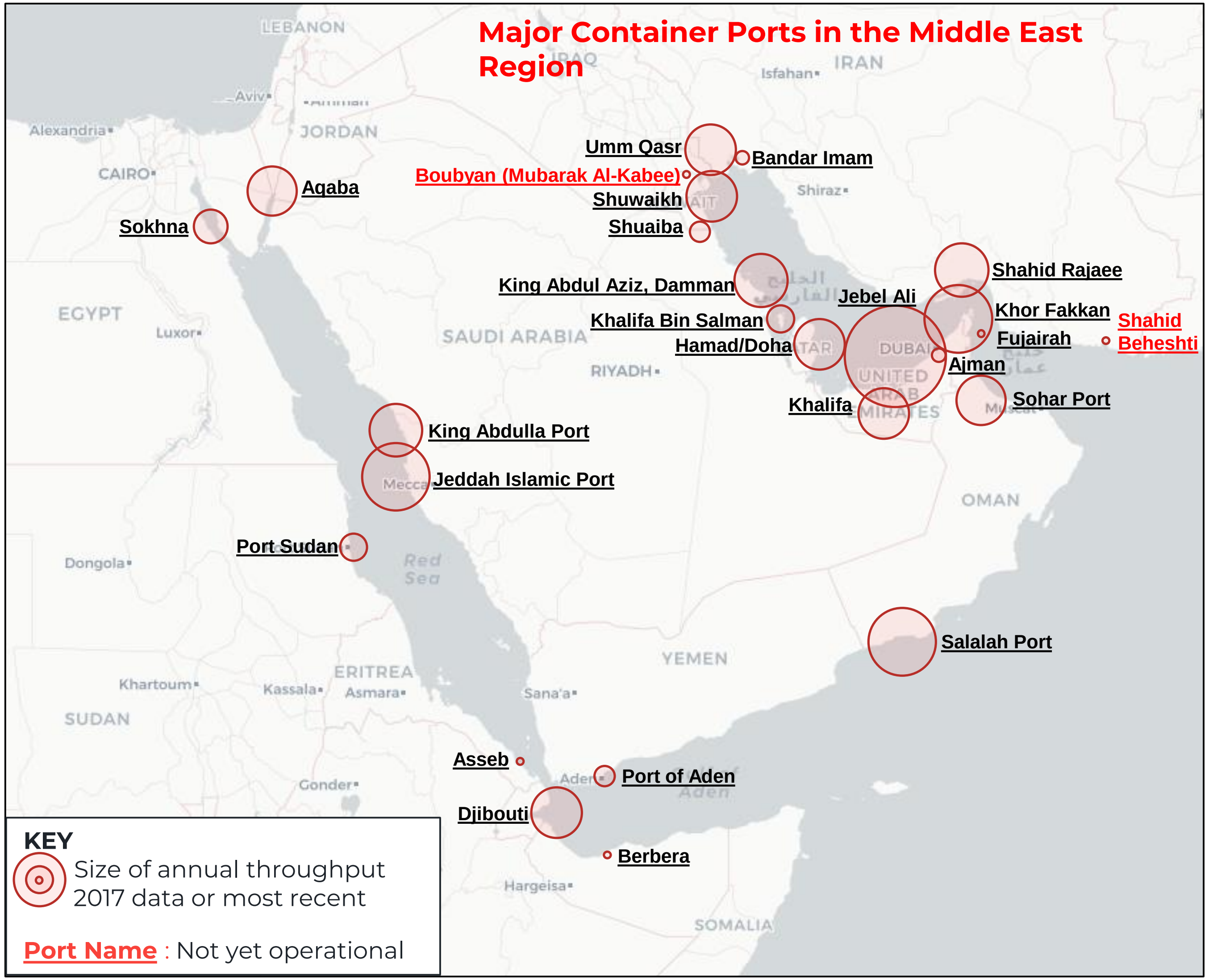
RED SEA REGIONAL DEMAND OVERVIEW

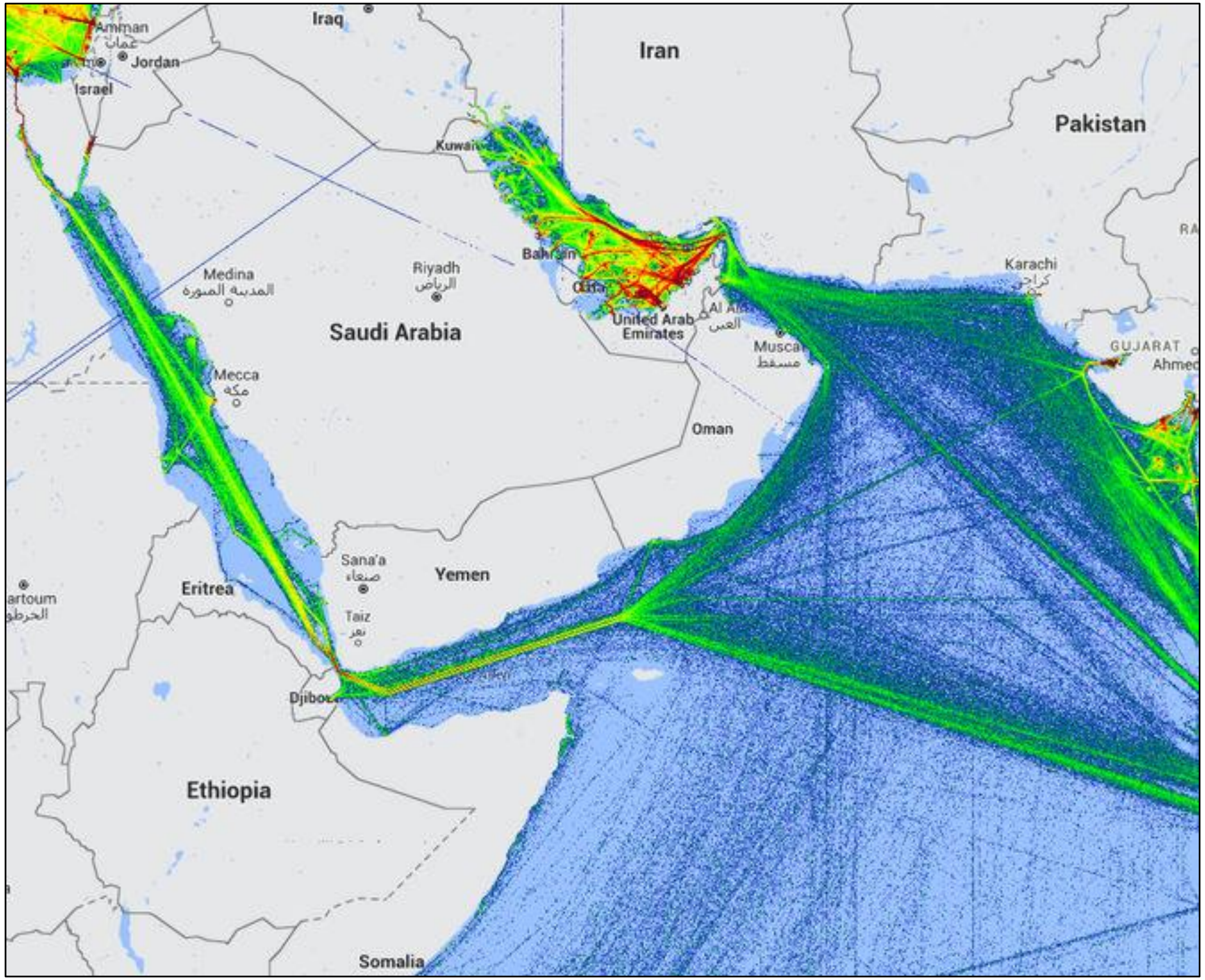
Port	Countr y	Owner/Operator)
Ajman	UAE	Hutchison
Asseb	Eritrea	State
Aqaba	Jordan	ADC
Bandar Iman	Iran	State
Berbera	Somalia	DP World
Djibouti	Djibouti	State
Fujairah	UAE	Abu Dhabi Terminals
Jebel Ali Dubai	UAE	DP World)
Hamad/Doha	Qatar	State
Khalifa Abu Dhabi	UAE	Abu Dhabi Terminals
Khalifa Bin Salman Port	Bahrian	APMT
Khor Fakkan	Oman	Gulftainer
King Abdul Aziz, Damman	KSA	Hutchison
King Abdulla Port	KSA	TIL
Shuwaikh	Kuwait	Kuwait Port Authority
Port of Aden	Yemen	State
Port Sudan	Sudan	Sudan Ports Corp
Salalah Port	Oman	APM
Shahid Beheshti	Iran	India + Iran
Shahid Rajaee	Iran	State
Shuaiba	Kuwait	KGL Ports Int
Shuwaikh	Kuwait	Kuwait Port Authority
Sohar Port	Oman	Hutchison
Sokhna	Egypt	DP World
Umm Qasr	Iraq	Gulftainer, ICTSI, CMA CGM)



REGIONAL SHIPPING ROUTING

Maritime Traffic through region

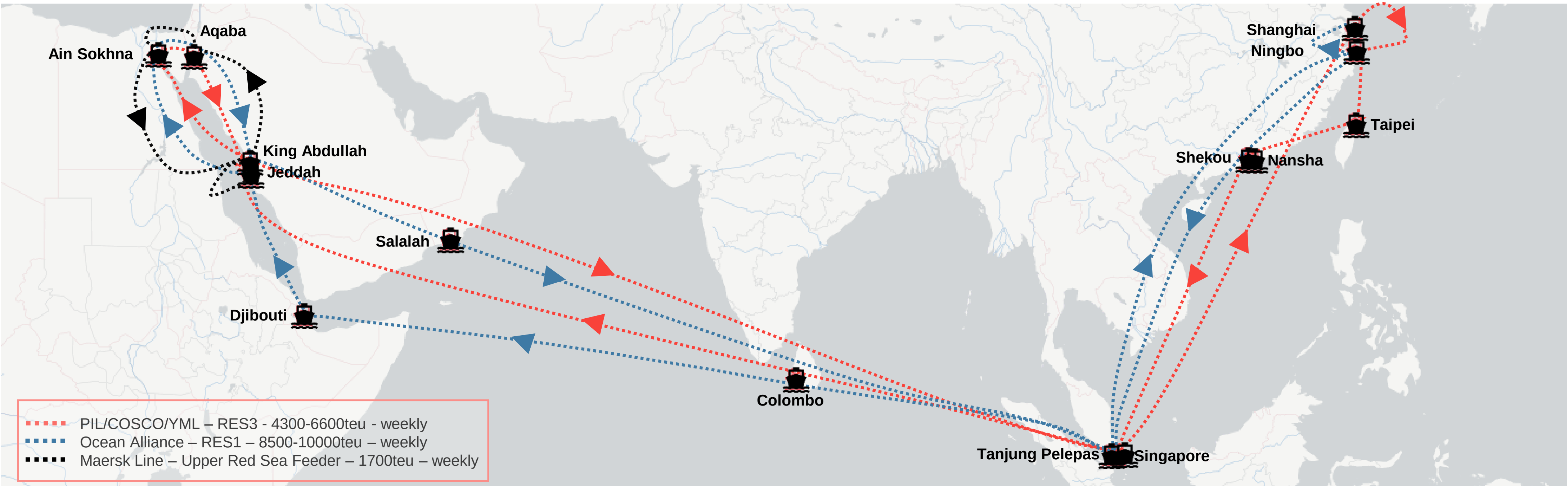
- Note Sudan to KSA traffic
- High density of traffic on Djibouti coast
- High density through Aqaba
- Red Sea regional traffic expected to develop further
- Saudi Land bridge of influence



Source: Marine Traffic Intelligence, 2017

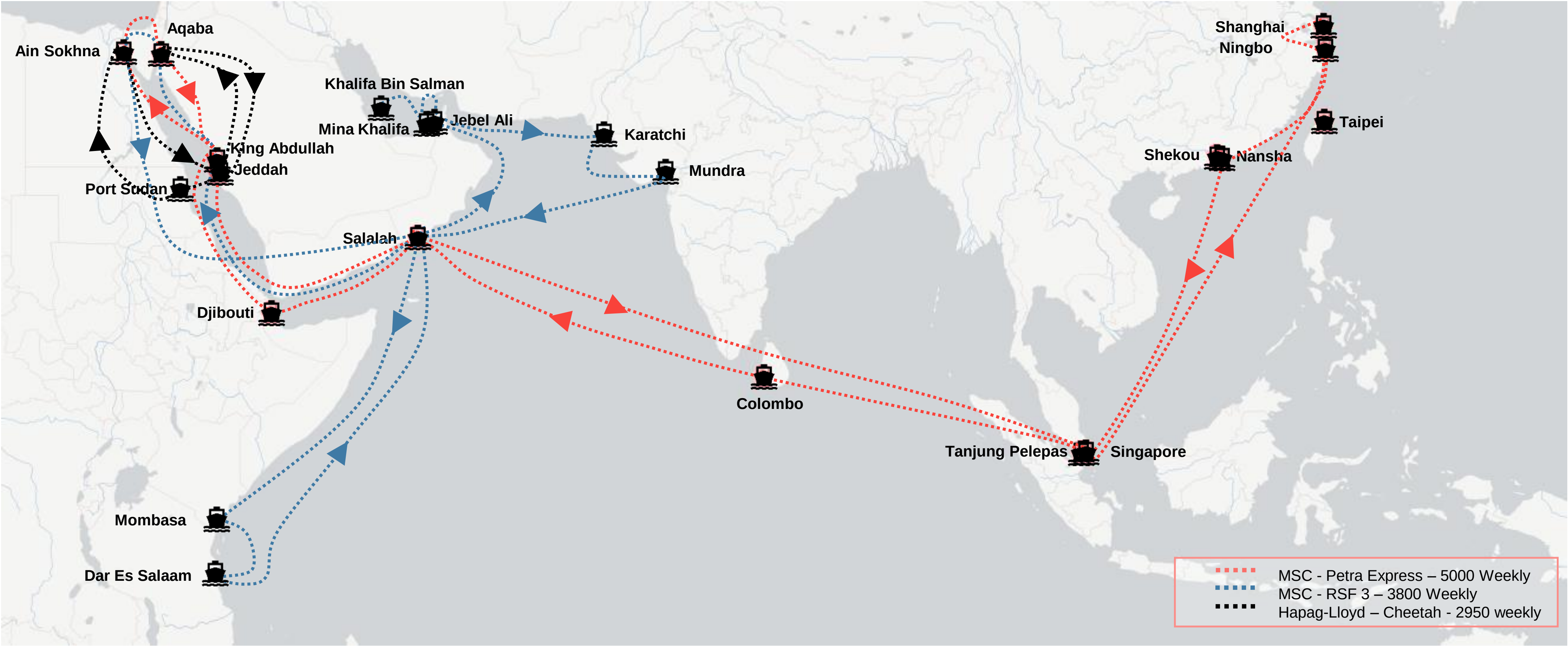
REGIONAL SHIPPING ROUTING

Maritime Traffic through region



REGIONAL SHIPPING ROUTING

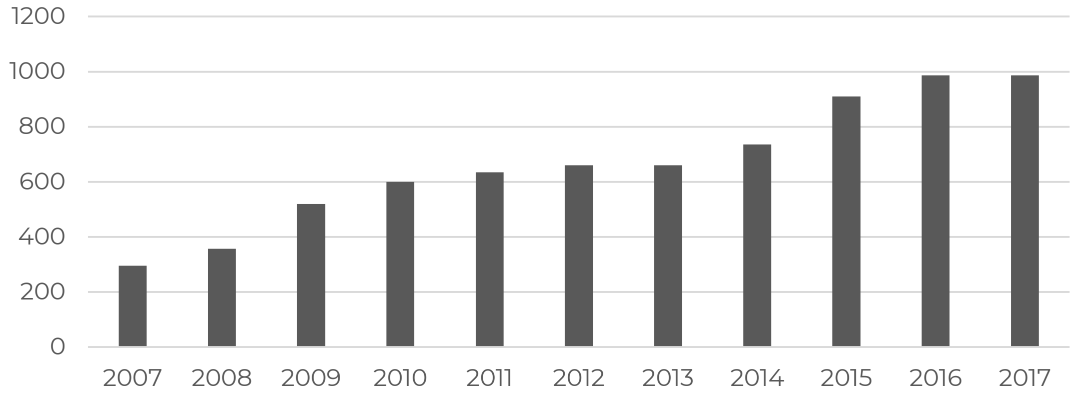
Maritime Traffic through region



RED SEA CONTAINER HISTORICAL DEMAND

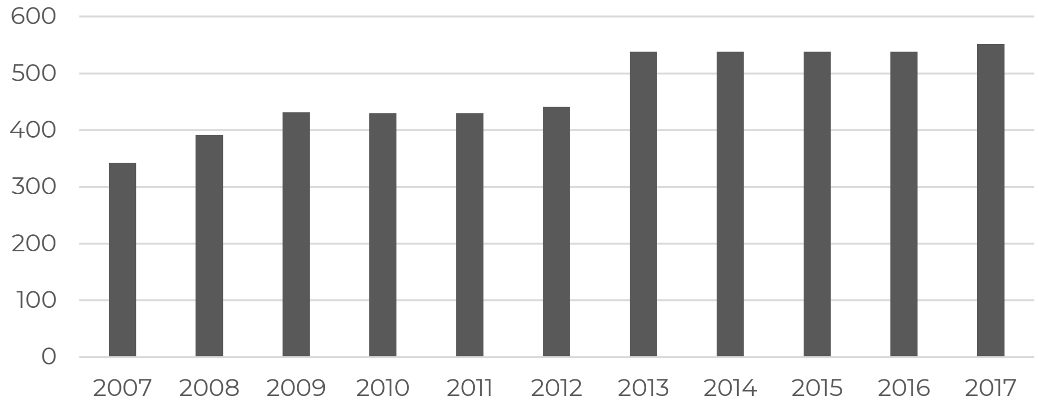
Djibouti and Sudan annual container throughput ('000) TEU

Djibouti total



- Compound annual growth rate: 12.84%
- Djibouti regional potential

Sudan



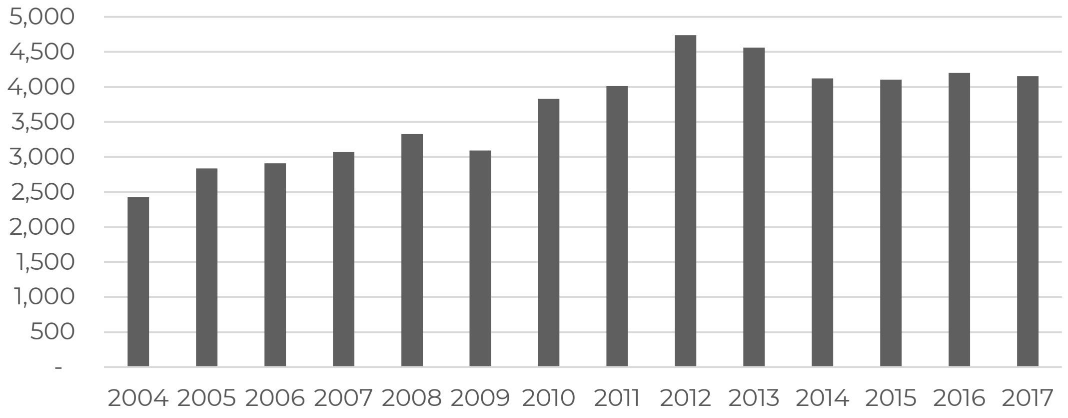
- Compound annual growth rate: 4.90%
- Sudan rise

Source: Port Authorities, Shipping reports, WSP estimates used if gap in data (based on World Bank figures)

RED SEA CONTAINER HISTORICAL DEMAND

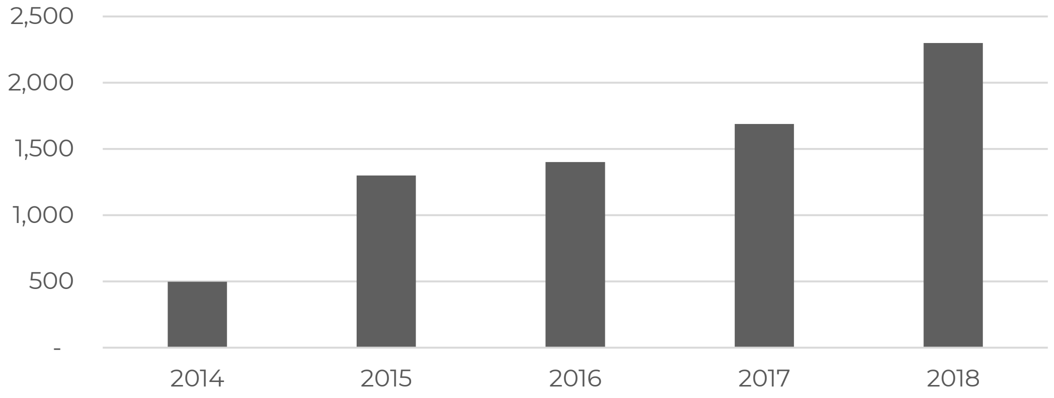
Kingdom of Saudi Arabia (KSA) Red Sea annual container throughput ('000) TEU

Jeddah Islamic Port – KSA



- Compound annual growth rate: 4.22%

King Abdulla Port – KSA



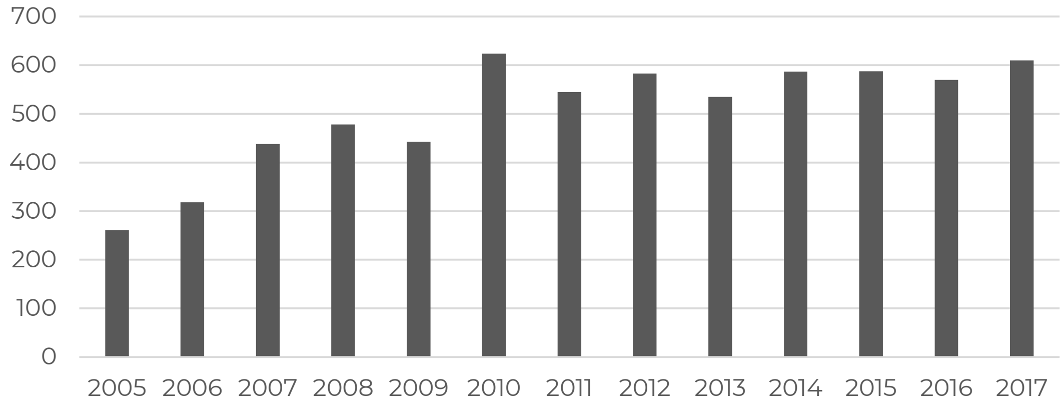
- Compound annual growth rate: 46.70%
- Strong growth of King Abdulla Port (KAP) built in 2013

Source: Port Authorities, Shipping reports, WSP estimates used if gap in data (based on World Bank figures)

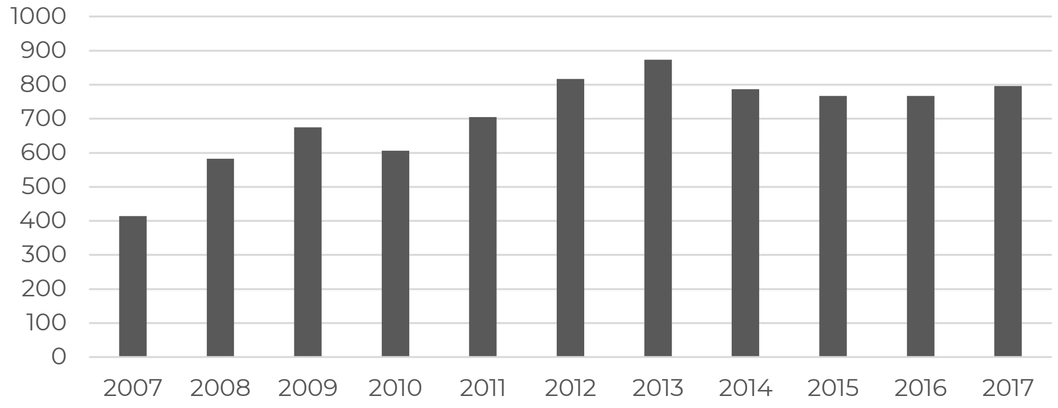
RED SEA CONTAINER HISTORICAL DEMAND

Egypt Red Sea and Jordan annual container throughput ('000) TEU

Sokhna - Egypt



Aqaba - Jordan



- Compound annual growth rate: 7.33%
- Further expansion plans aim to drive annual throughput

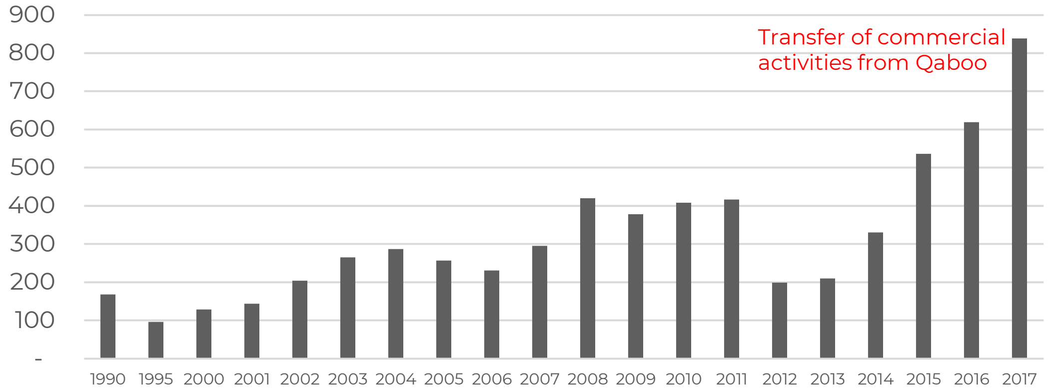
- Compound annual growth rate: 6.76%
- Only sea access of Jordon through Gulf of Aqaba

Source: Port Authorities, Shipping reports, WSP estimates used if gap in data (based on World Bank figures)

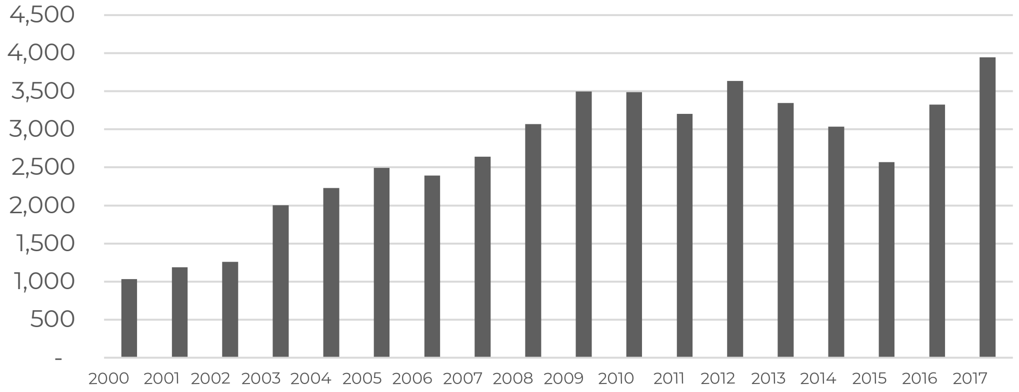
RED SEA CONTAINER HISTORICAL DEMAND

Oman and Yemen total annual container throughput ('000) TEU

Sohar – Oman
Volumes transitioned from Qaboo (Muscat) *volumes combined

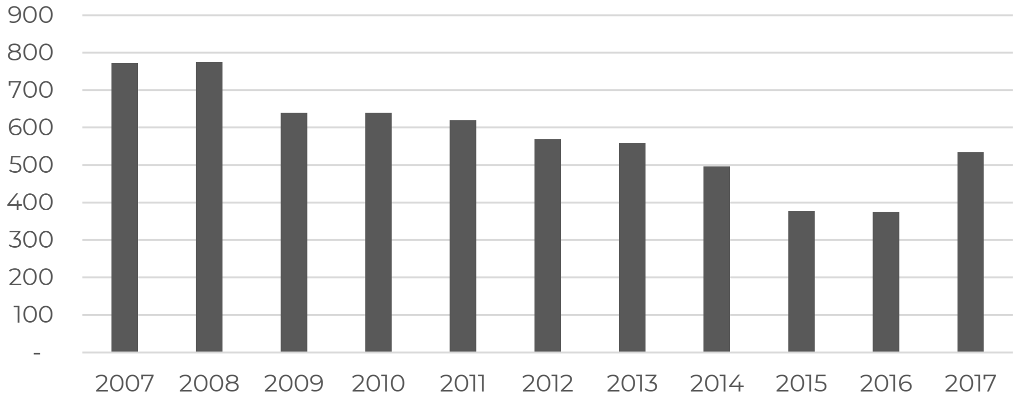


Salalah – Oman



- Sohar compound annual growth rate: 6.14%
- The development of Sohar has encouraged larger ships making direct calls.
- Salalah Compound annual growth rate: 4.11%
- Yemen Compound annual growth rate: -3.61%
- Yemen war political climate has reduced demand for international business

Yemen



Source: Port Authorities, Shipping reports, WSP estimates used if gap in data (based on World Bank figures)

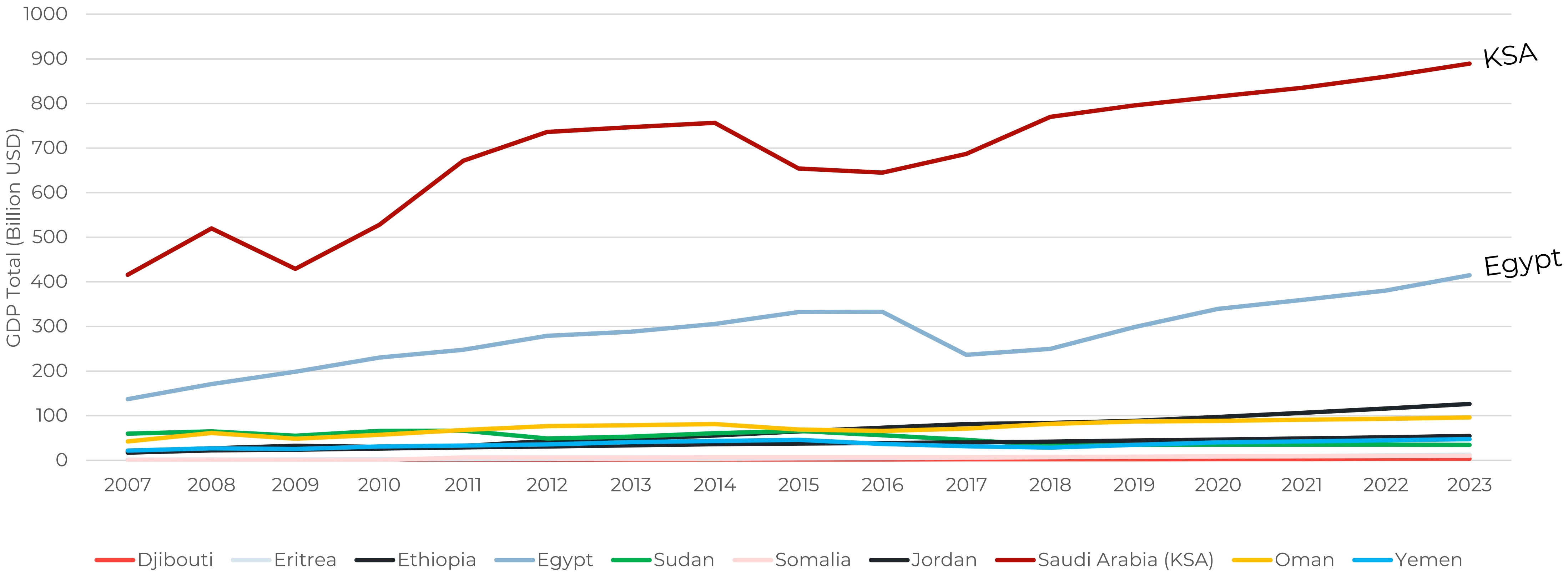
GLOBAL MARKET OUTLOOK

		Overall investment activity	Regions	Commodities	Issues
	Independent global port operators	high	interest in emerging markets & inland distribution	diversified interest	no secured cargo / riskier attracting financing under competitive conditions global brand difficult for non-containers
	Strategic terminal operators/investors (possibly linked to shipping line)	high	around main trade routes & inland distribution	mainly containers	question marks on link to liners some liners have cash constraint and divestments needed vertical integration
	Financial investors / infrastructure funds	medium	established markets	containers, oil and portfolios	limited industry knowledge and risk averse
	Mixed consortia	medium	established markets	mainly containers, oil and portfolios	good mix of expertise but difficult to align
	New entrants: contractors	low	often emerging markets	diversified interest	building up experience

GDP OUTLOOK

Growth Outlook per country

- Total GDP suffered difficulties around 2014 – 2016 (linked to global oil price drop)
- Forecasted to increase in short – medium term

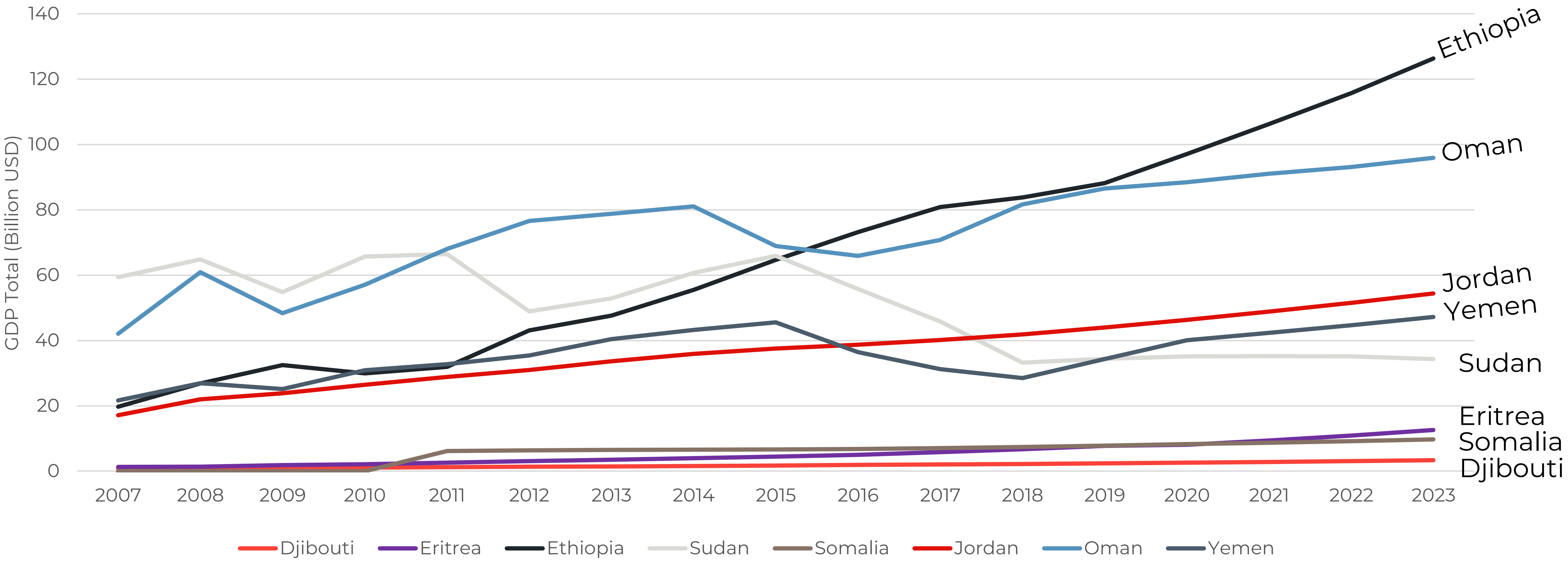


Source: WSP; IMF

GDP OUTLOOK

Growth Outlook per country – Excluding KSA and Egypt

- Ethiopia's GDP forecasted for very positive growth
- Ethiopia reliance on Red Sea port nations will likely increase GDP of neighbouring port-accessible nations

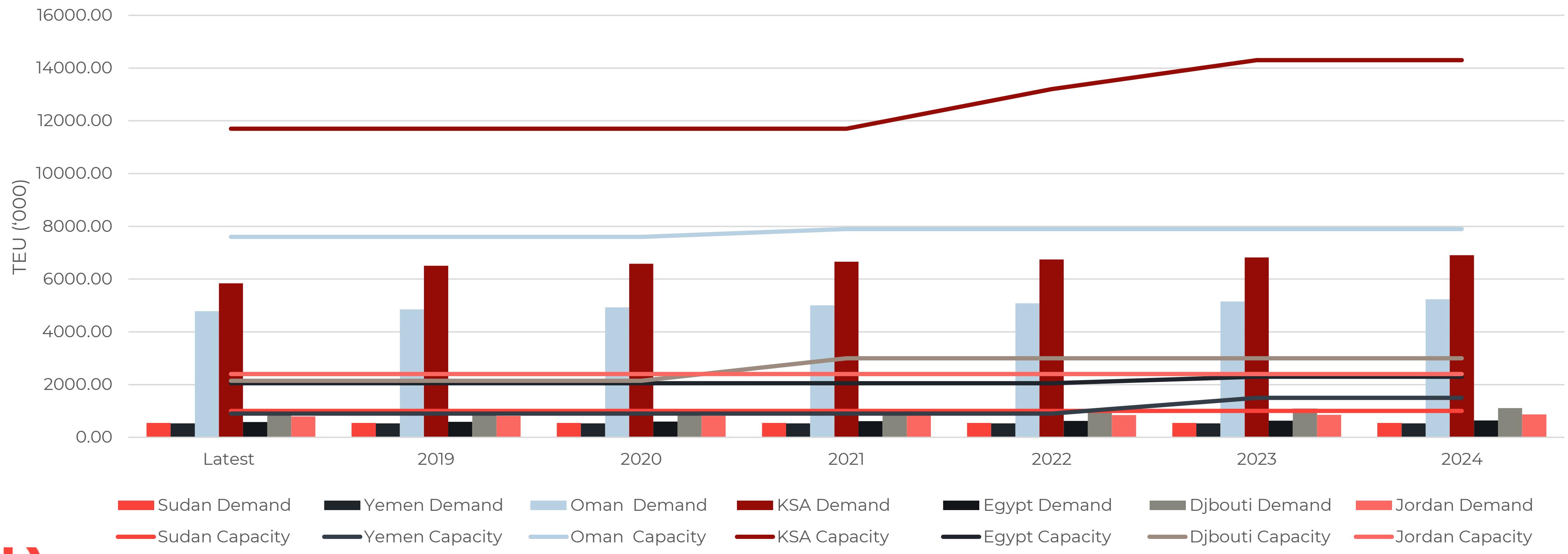


Source: WSP; IMF

RED SEA MARKET VOLUME OUTLOOK

Capacity and Demand Red Sea region

- Almost all major ports in the region are planning major capacity upgrades
- Major overcapacity expected if all projects are realised
- Growth is calculated using WSP industry insights
- Port development timelines are estimates , supply increases are allocated conservatively



Source: WSP estimates; IMF forecast , World Bank

RED SEA MARKET VOLUME OUTLOOK

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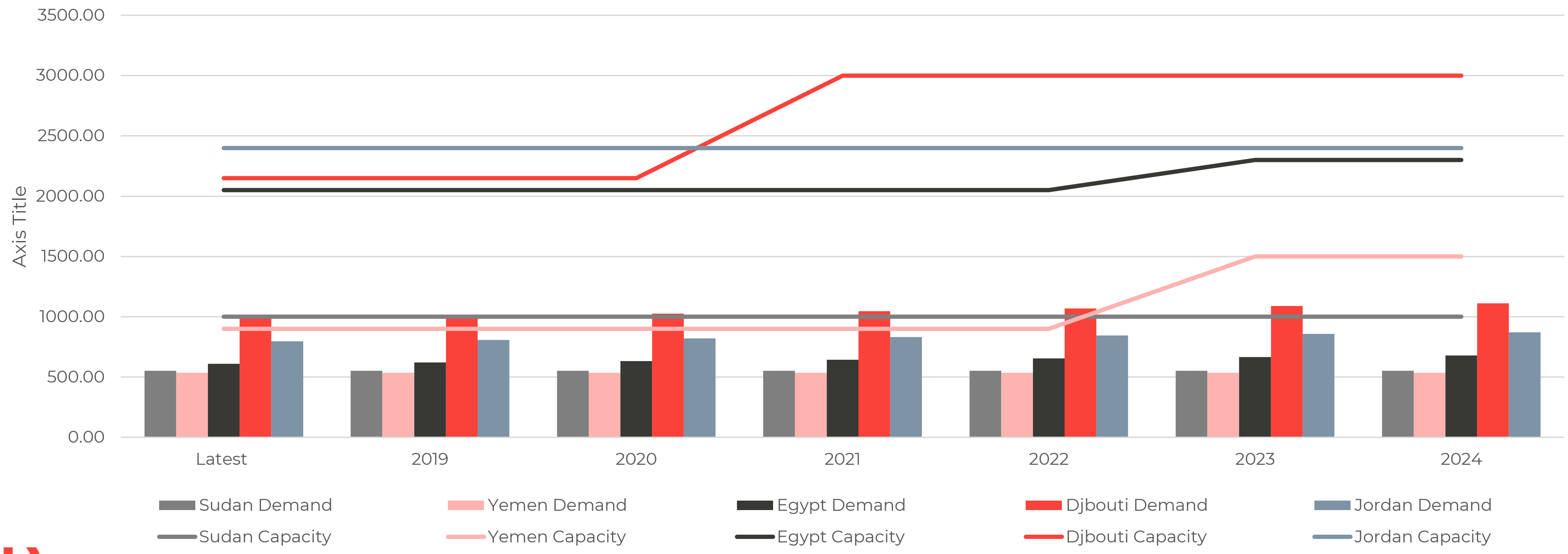


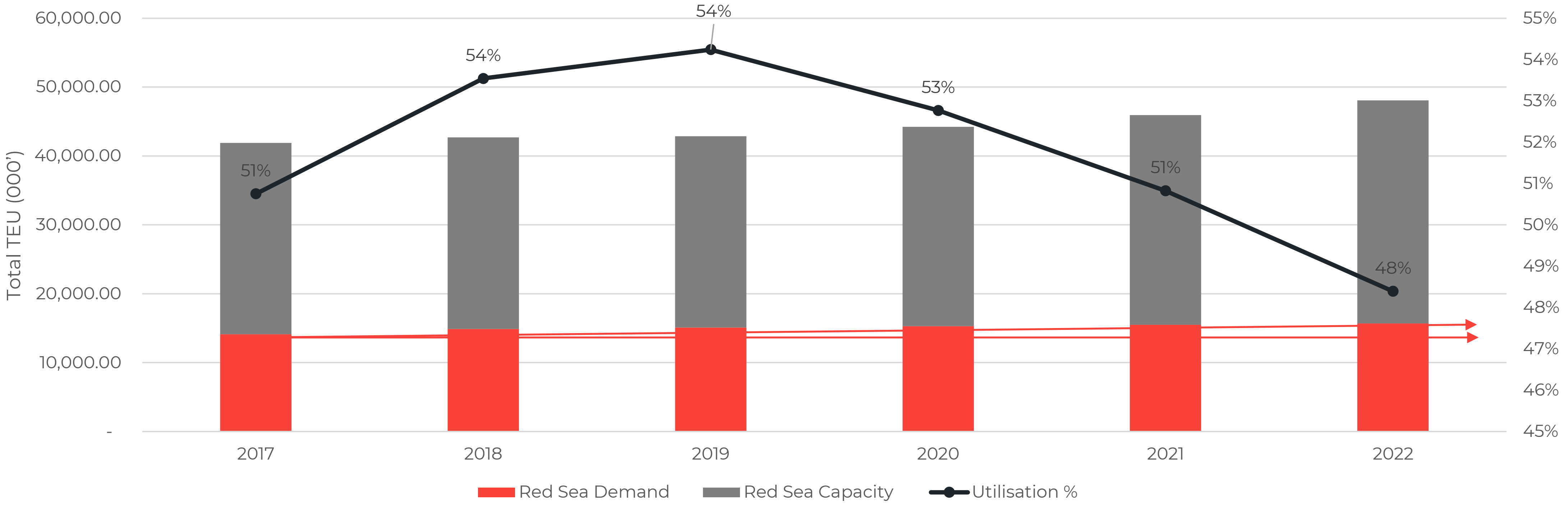
Source: WSP estimates; IMF forecast , World Bank

CONSOLIDATED MARKET OUTLOOK

Demand and Supply of region*

- Almost all major ports in the region are planning capacity increases
- Capacity increases going above demand expectations (GDP linked) - if all projects are realised
- Forecast of demand lags capacity ambition

Red Sea Supply and Demand in Red Sea with Utilisation



*Excluding Somalia, Eritrea, Source: WSP estimates; IMF, World Bank

Thank You!

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