

Global shipping trends and the Black Sea market

Constanta, 10th July 2019

8th Black Sea Ports & Shipping 2019

Nishal Sooredoo
Principal Consultant
Nishal.sooredoo@rhdhv.com

Disclaimer

No part of these specifications/printed matter may be reproduced and/or published by print, photocopy, microfilm or by any other means, without the prior written permission of HaskoningDHV UK Ltd.; nor may they be used, without such permission, for any purposes other than that for which they were produced. HaskoningDHV UK Ltd. accepts no responsibility or liability for these specifications/printed matter to any party other than the persons by whom it was commissioned and as concluded under that Appointment. The quality management system of HaskoningDHV UK Ltd. has been certified in accordance with ISO 9001, ISO 14001 and OHSAS 18001.



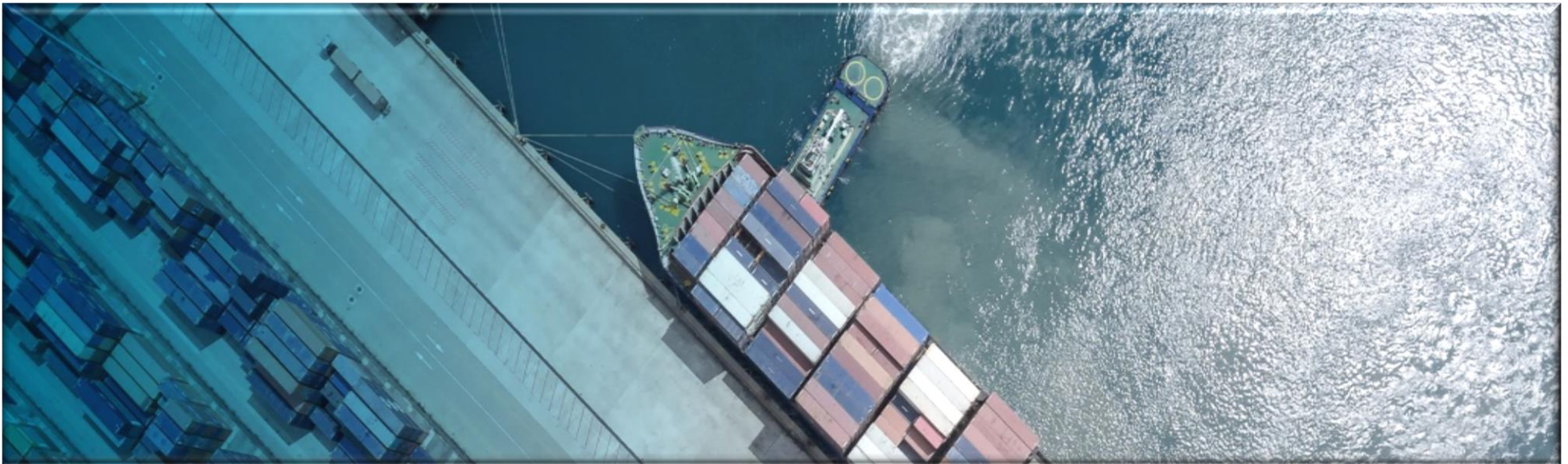
Introduction

Nishal Sooredoo, MSc

Current:



Past:



Introduction

Ocean Shipping Consultants (OSC) is the maritime economic consultancy group of Royal HaskoningDHV, and a leading brand in the maritime sector with more than 35-years of experience

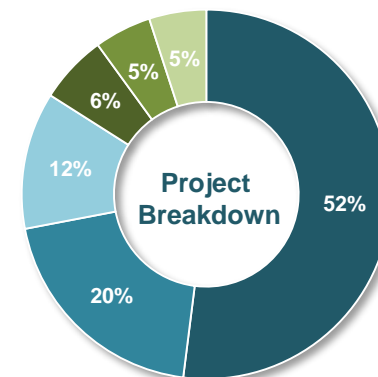
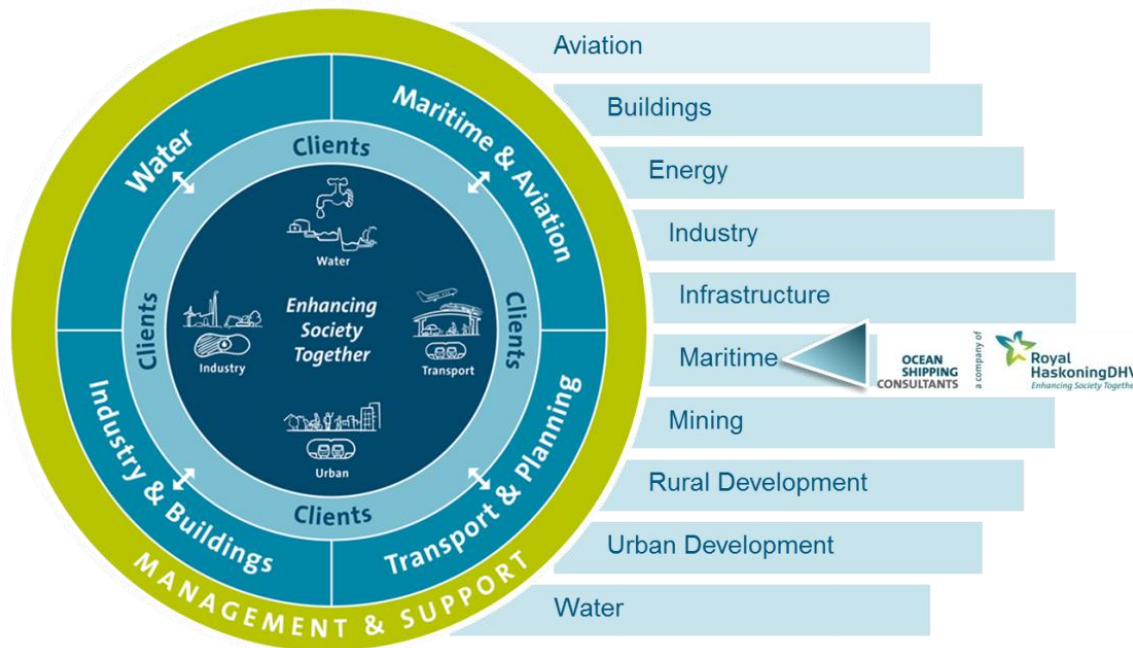
Key profile	Top International Design Firm	Resources
<ul style="list-style-type: none"> - Originally founded in 1881 - 138 years of experience - Turnover €607m (2017) 	<p>Ranked 4th in Top International Design Firms – Marine & Ports by ENR (2018)</p>	<ul style="list-style-type: none"> - 5,700 employees - 100 offices in 35 countries - 650 dedicated ports and maritime professionals

OCEAN SHIPPING CONSULTANTS

With over 350 projects in more than 65 countries successfully completed over the last 5 years, OSC provides global bespoke consultancy services from offices in London, the Netherlands and

Singapore to more than 200 different clients, including port authorities, terminal operating companies, governments, shipping lines, logistics operators and the wider financial community.

These range of services are undertaken for all cargo types and sectors ensuring that clients are able to make appropriate, well informed decisions at all times.



- Market Study
- Due Diligence
- Feasibility Study
- Strategy
- Investment Services
- Other

Examples of recent projects in Romania



Construction Supervision of Constanta Port Breakwater, 2009-18

improve the operating conditions of the Port of Constanta, the National Company Maritime Ports Administration S.A. Constanta implemented the extension of the northern (main) breakwater at the entrance of the port.

RoyalHaskoningDHV provided an experienced Resident Engineer on site and the necessary back stopping (both technical and contractual) services from our offices in the Netherlands and the United Kingdom.

A major and important aspect of the project was the focus on minimizing disruption of daily port activities and operations during the breakwater construction works to ensure the lowest economic impact..



Nikolayev and Romania grain terminal site visits, 2015

Royal HaskoningDHV was involved in the feasibility design of the grain terminal in Ukraine. The Client also asked to assist with the site visits to modern grain terminals with a large share of corn.

Two grain terminals in Romania were visited to gain experience. The key objective was to investigate the issue of corn damage and possible measures to reduce it. Functionality, capital and operational costs were also of interest.



Constantza Grain Terminal Romania, 2012-13

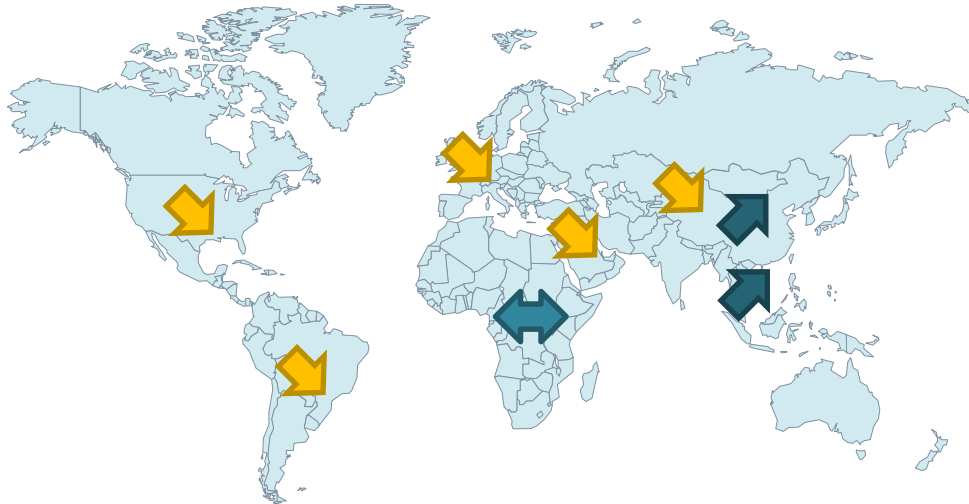
An RHDHV grain terminal expert visited Constantza Port for a Technical Due Diligence of the major infrastructure, superstructure and equipment assets covering quays, pavements and roads, silos and warehouses, rail wagon and truck unloading facilities, workshops etc. Furthermore visual inspection of the marine craft and cargo handling operations was carried out.



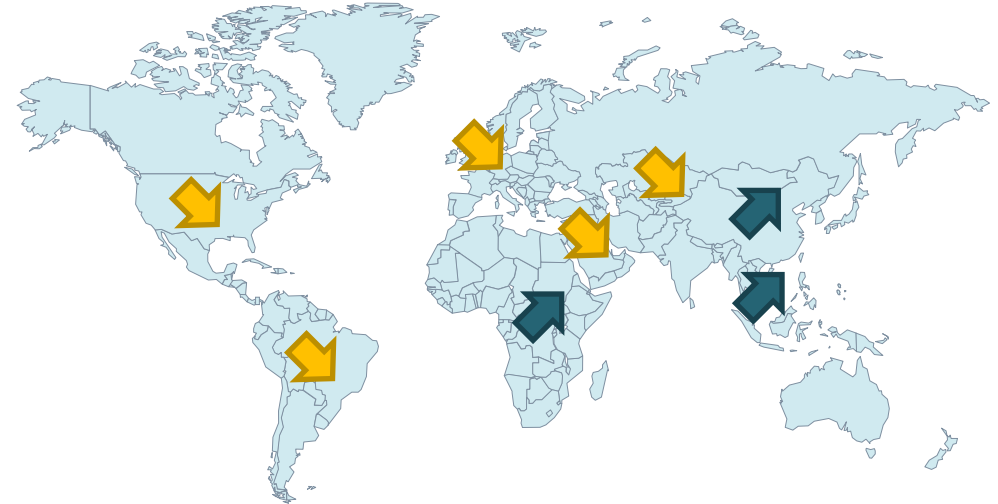
Global Shipping Trends

SE Asia and China are expected to out perform other regional economies in the near future.

Current GDP Performance* by Region (2018)



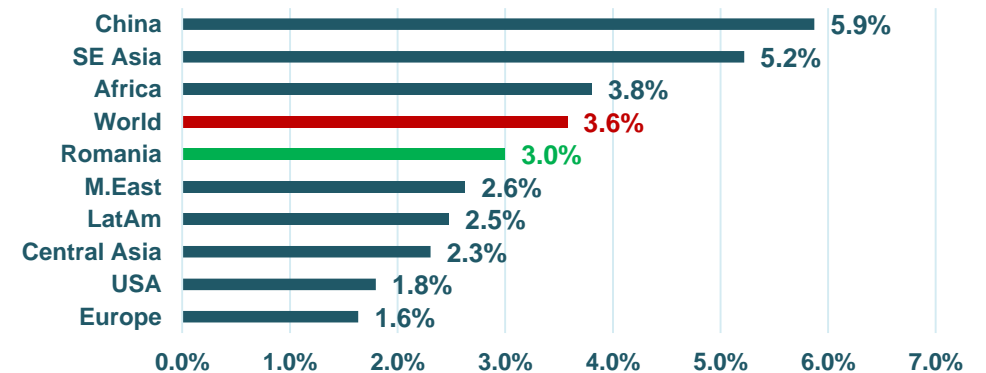
Future GDP Performance* Outlook by Region (2018-2024)



Source: OSC / IMF

*Performance as compared to Average World GDP Growth

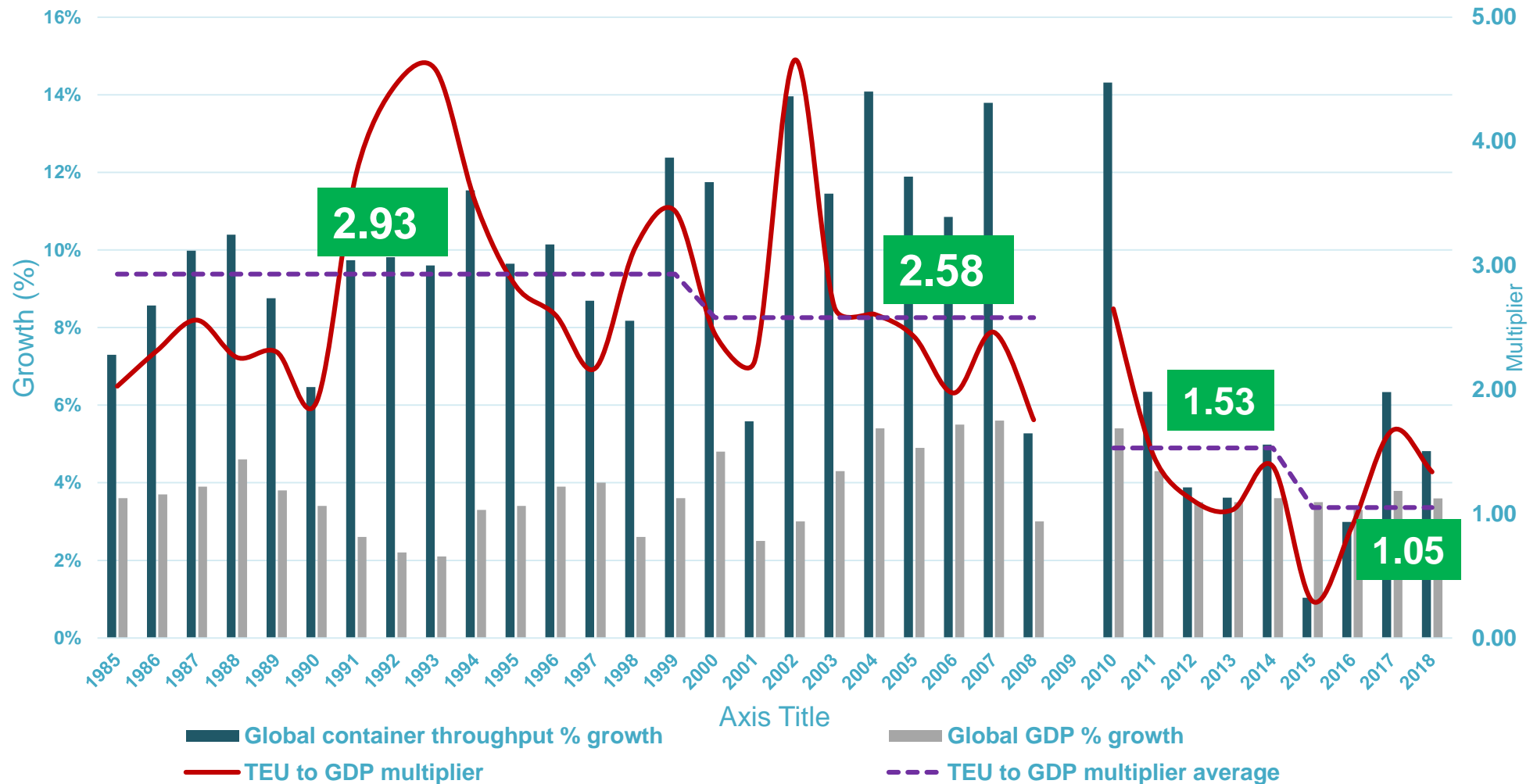
Real GDP forecast CAGR, 2018-2024 (%)



Source: OSC / IMF

Global shipping trends

The declines in the container volume growth is putting pressure on Shipping Lines and Terminal Operators and means lower TEU demand than in past years.



Source: OSC / Clarkson

The declining TEU/GDP multiplier is driven by underlying changes in the market.

Less offshoring, more reshoring:

- Offshoring to lower-cost countries is a onetime effect
- Increased reshoring (e.g. US)
- Chinese economy shifts toward domestic consumption / regional sourcing




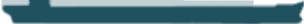
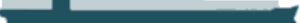
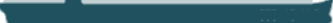



Plateauing in the levels of containerization:

- Most commodities suitable for containerized transportation have already been migrated to containers

Improvement of port facilities to accommodate larger ships:

- More ports can be part of direct main line services
- Cascading of vessels means larger ships deployed on secondary routes
- Reduced need for transshipment

Driven by market share & economies of scale, the ship size revolution has continued

Container Ship Size Evolution		
Early Containerships (1956) 500-800 TEU		LOA (m) : 137 Beam (m): 17 Draft (m): 9
Fully Cellular (1970) 1000-2500 TEU		LOA (m) : 215 Beam (m): 20 Draft (m): 10
Panamax (1980) 3,000-4,000 TEU		LOA (m) : 250 Beam (m): 32 Draft (m): 12.5
Panamax Max (1985) 3,400-4,500 TEU		LOA (m) : 290 Beam (m): 32 Draft (m): 12.5
Post Panamax (1988) 4,000-5,000 TEU		LOA (m) : 285 Beam (m): 40 Draft (m): 13
Post Panamax Plus (2000) 6,000-8,000 TEU		LOA (m) : 300 Beam (m): 43 Draft (m): 14.5
New Panamax (2014) 12,500 TEU		LOA (m) : 366 Beam (m): 49 Draft (m): 15.2
Post New Panamax (2006) 15,000 TEU & Triple E Class (2013) 18,000 TEU		LOA (m) : 400 Beam (m): 59 Draft (m): 15.5
New Generation 22,000 TEU*		LOA (m) : 430 Beam (m): 59 Draft (m): 15.5

Source: OSC, Alphaliner

Effect of Container Shipping Market

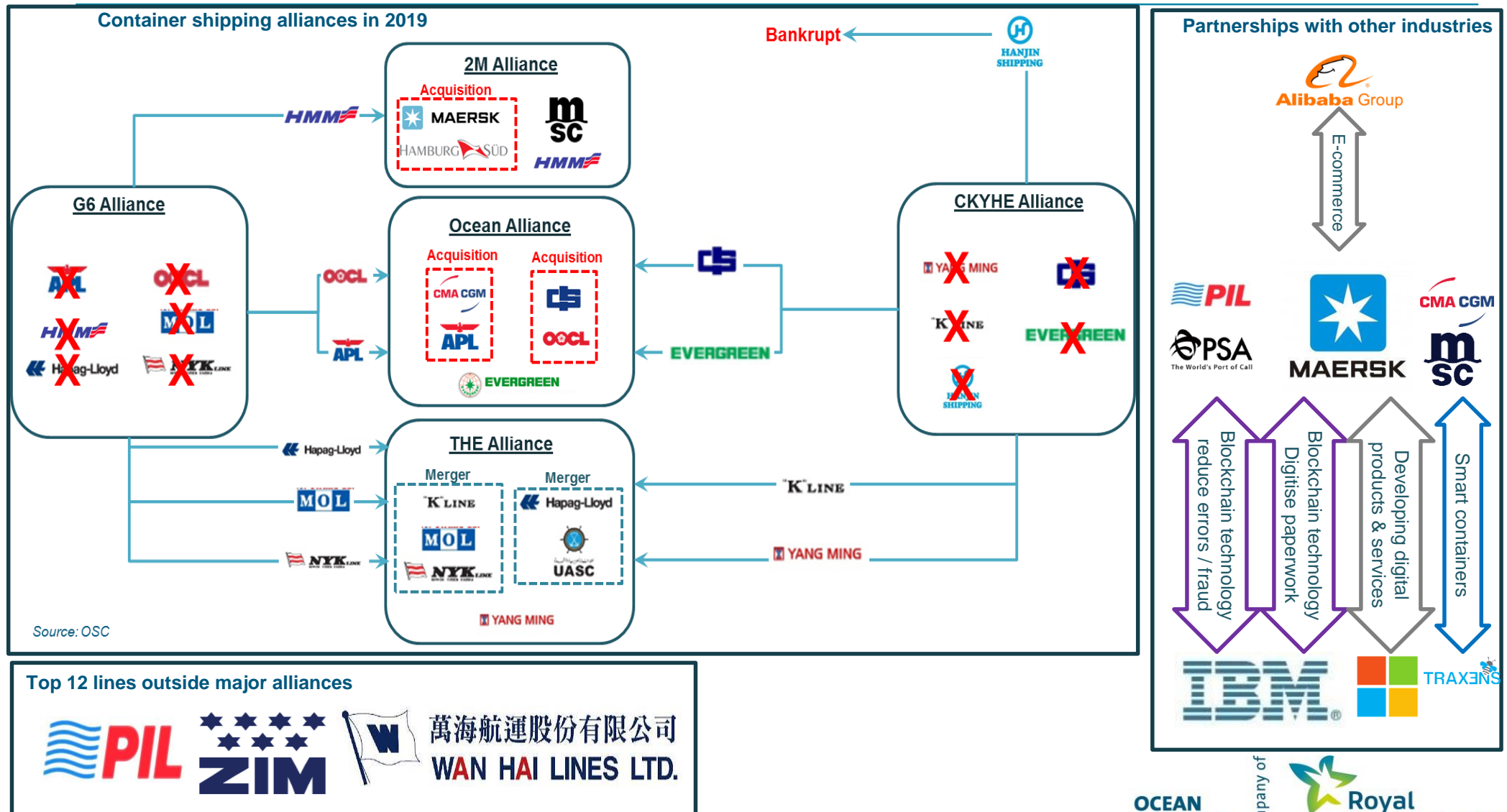
- Larger container volume exchanges on primary trade routes, but with a lower port call frequency
- Cascading of vessels as replaced ships are moved to other Secondary and Tertiary trade lanes
- Formation of fewer, larger alliances in an effort to maximise vessel utilisation

Ship sizes: Container vessel capacity has increased while dimensions (400m by 59m) remain largely unchanged until recently.



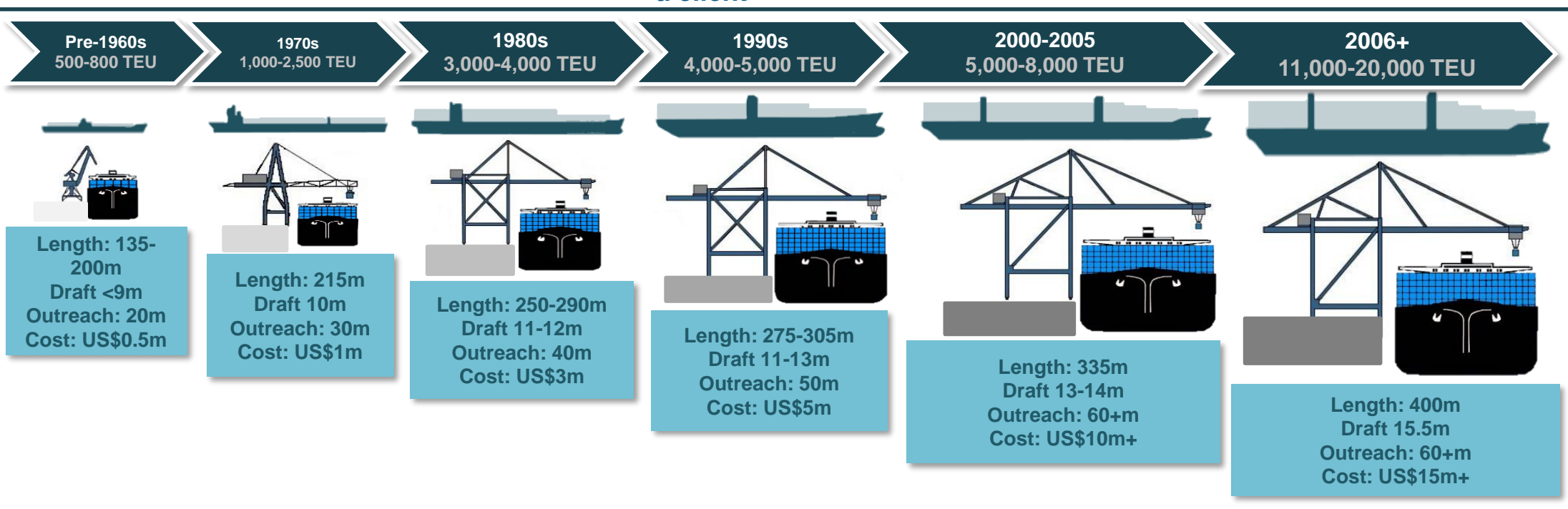
Global shipping trends

Complete reshape of shipping alliances and acquisitions since 2017.

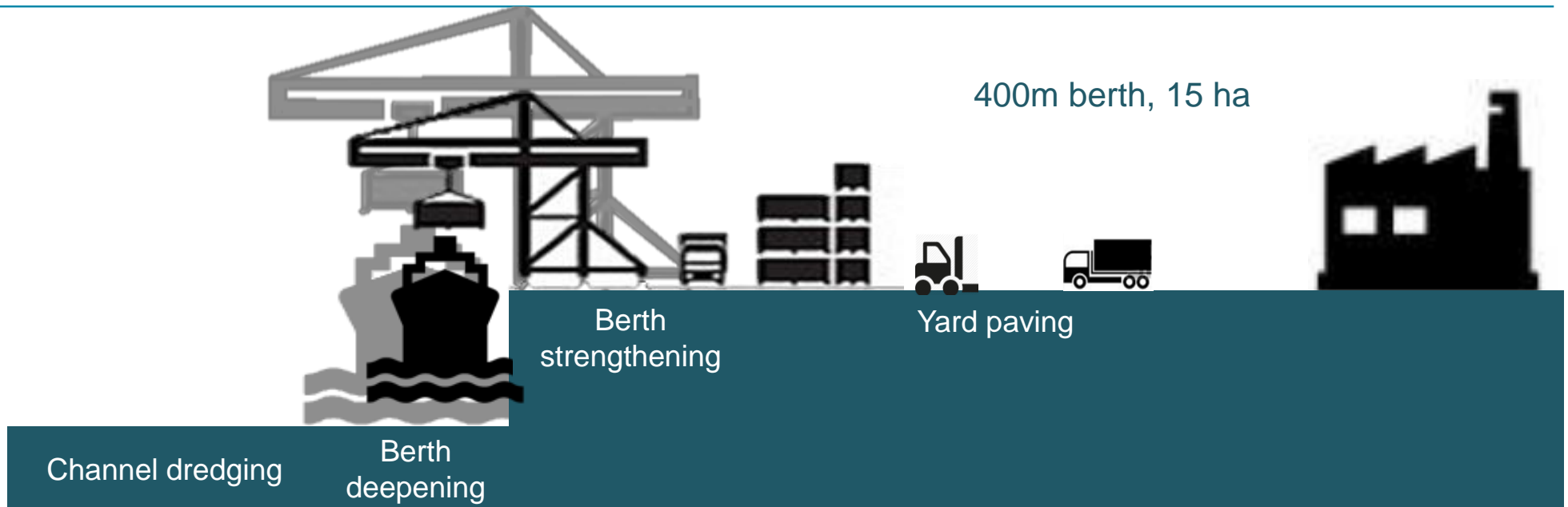


Costs are rapidly increasing for terminals due to larger ships, less frequent calls and larger alliances.

Larger Ships	Less frequent calls	Larger Alliances
<ul style="list-style-type: none"> ■ Larger cranes ■ Additional dredging ■ Other upgrading Quay wall strength, locks, bridges, etc ■ Increased insurance cost 	<ul style="list-style-type: none"> ■ Larger container exchanges Higher peak capacity & productivity required throughout the terminal ■ More flexible labour needed ■ Increased impact when losing a client 	<ul style="list-style-type: none"> ■ Increased bargaining power of Alliances ■ Lower number of port calls consolidated in fewer ports. Shipping lines market, some ports will lose more than others.



The increase in vessel sizes has resulted in port authorities and terminal operators incurring capital expenditure to upgrade their facilities.



Area	Current	New	Estimated cost (US\$ millions)
Channel depth & width	1 km, 242m wide, 15m	295 wide, 16m	4
Berth depth	400m, 15.0m	16.0m	2
Equipment upgrades	4 cranes with 18 rows	4 cranes with 23 rows	40
Yard	15 ha	20ha	30
Total	Will the lines pay for these extra costs?		76

Port operators have responded by slowing or canceling greenfield terminal projects, forming alliances, partnering with shipping lines, or acquiring/merging with competitors.

Slowing or canceling greenfield terminal projects

- Total number of greenfield terminal projects has fallen by almost half compared to 10 years ago

Alliance & Partnerships

- Conference agreement between Port of Miami Terminal Operating Company (Pomtoc) and South Florida Container Terminal (SFCT)
- Co-management Agreement Between COSCO Shipping Ports and HPH of several terminal in Hong-Kong

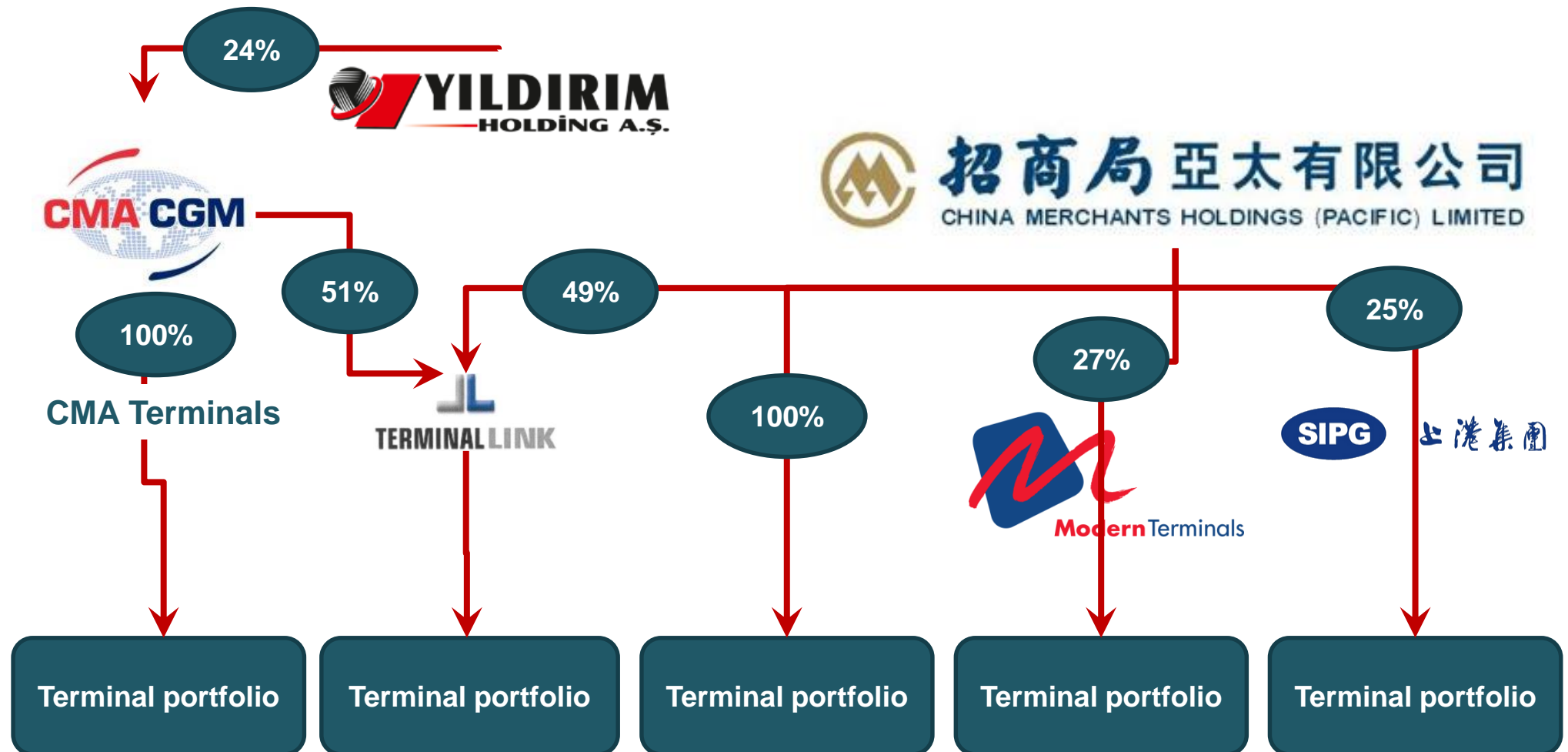
Mergers & Acquisitions

- APM Terminals acquired Grup TCB
- COSCO SHIPPING Ports acquire minority interest in the Vado Terminals in Italy, Euromax Terminal in Rotterdam and in Qingdao Port International (QPI)
- DP World acquired an additional 23.94% stake in Pusan Newport Company (PNC) in South Korea
- DP World creating an investment fund with Caisse de dépôt et placement du Québec (55/45) to jointly

Joint venture deals with shipping lines

- CMA CGM and PSA create a container terminal joint venture in Singapore
- COSCO Shipping and PSA create a container terminal joint venture in Singapore
- MSC and PSA create container terminal in Antwerp

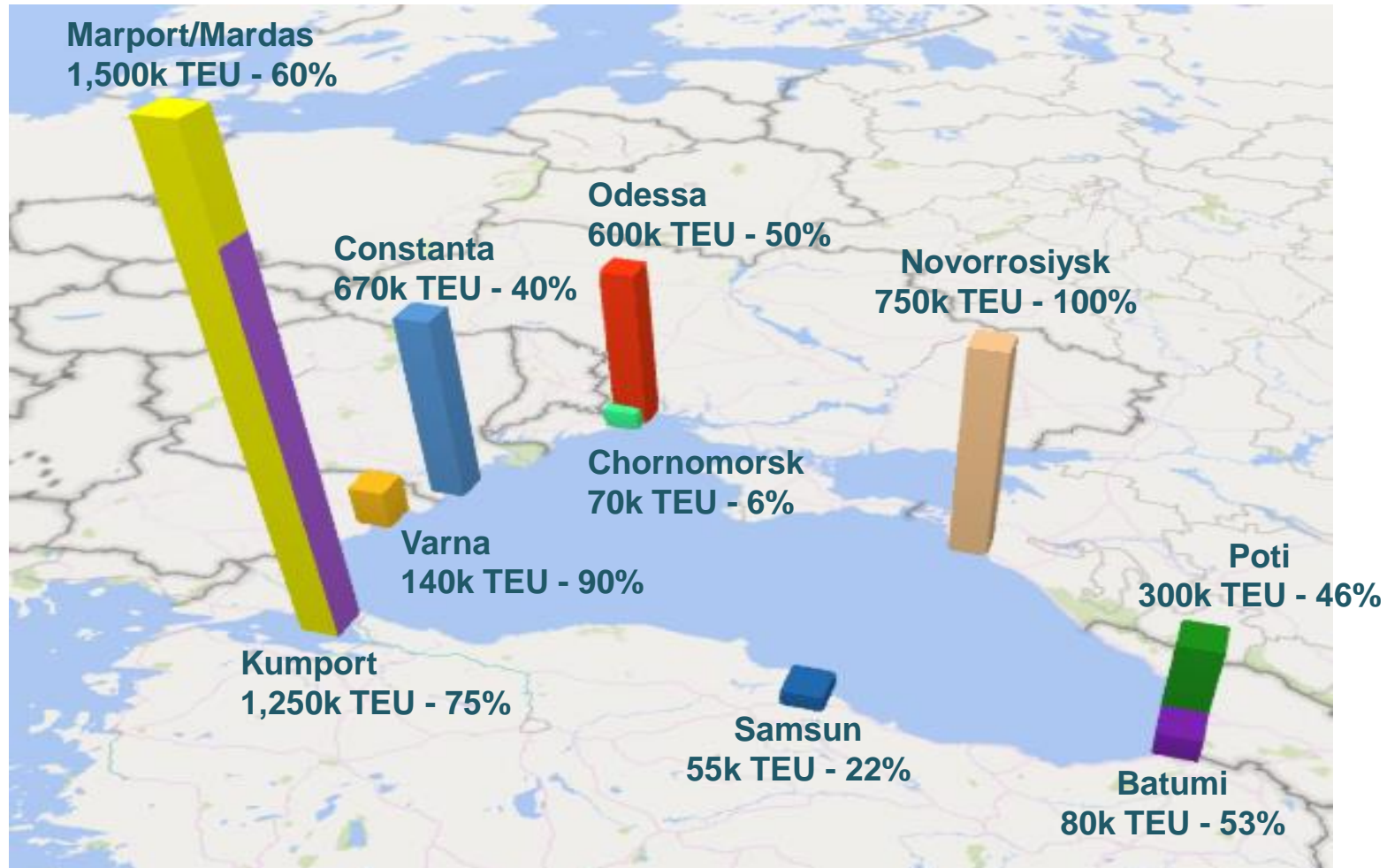
Terminal Operator ownership complexity





Regional Container Shipping Market

Main container ports in the Black Sea (estimated current throughput and utilisation)

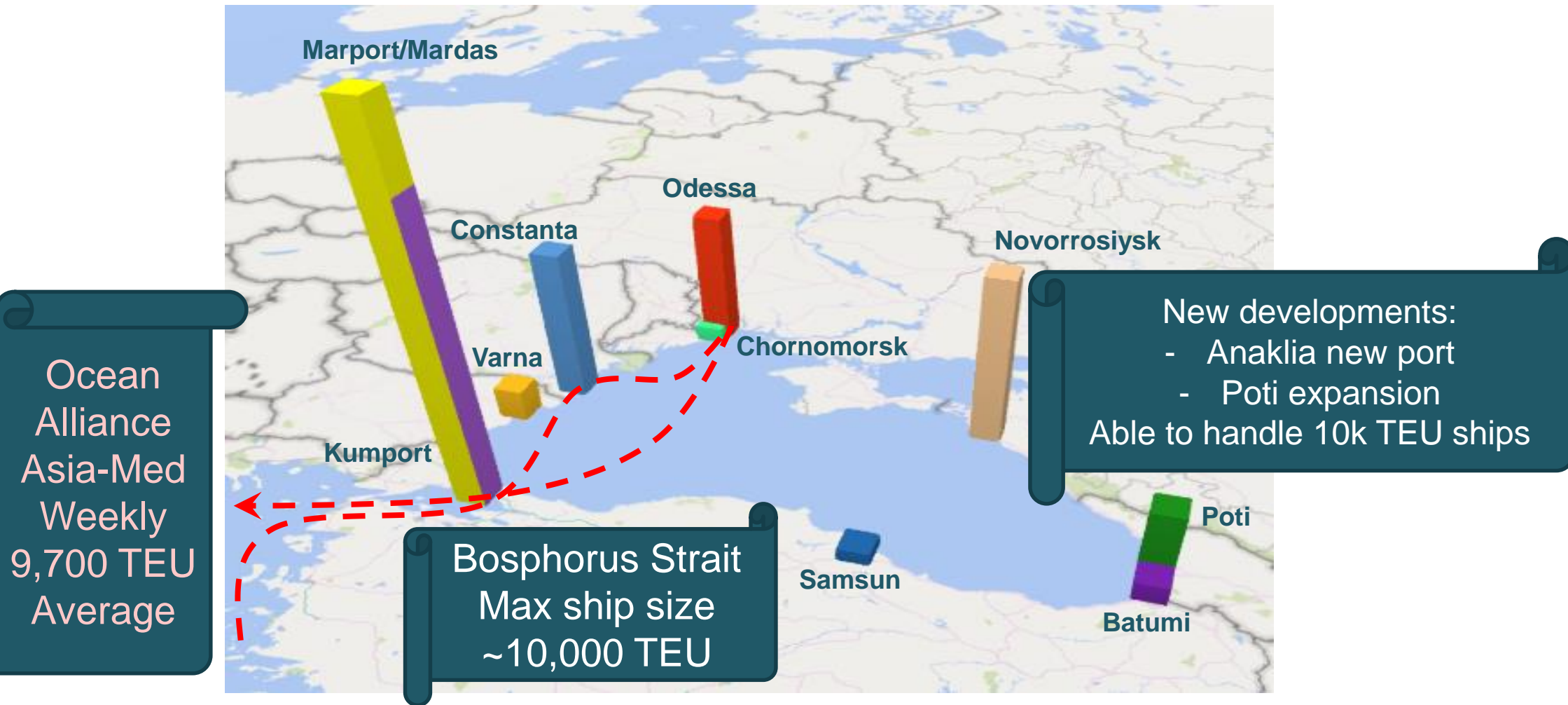


Regional Container Shipping Market

Main container ports in the Black Sea (main ownership)



Main container ports in the Black Sea (shipping lines)



COSCO ship (9,400 TEU) - entrance of Danube river



Contact

Nishal Sooredoo
Principal Consultant
Ocean Shipping Consultants
Nishal.sooredoo@rhdhv.com

