

Global Maritime Trade Flows and New Opportunities for Middle Eastern Ports

Stefan Haid & Viktoriya Bondarets
@ Trans Middle East Bahrain 2022

Bahrain, June 1, 2022

We are looking forward to discussing maritime trade flows and new opportunities for Middle Eastern ports with you

- A.** About Roland Berger
- B.** Snapshot of Global Maritime Trade Flows
- C.** New Opportunities for Middle Eastern Ports



A. About Roland Berger

Thank you for participating in this session, we are looking forward to a vivid discussion – Please contact us in case of further questions

Contacts



Stefan Haid

Partner

Global Strategic
Infrastructure Practice,
Germany



Stefan.Haid@rolandberger.com



+49 160 744 8842



Viktoriya Bondarets

Partner

Performance
Improvement Practice,
Ukraine

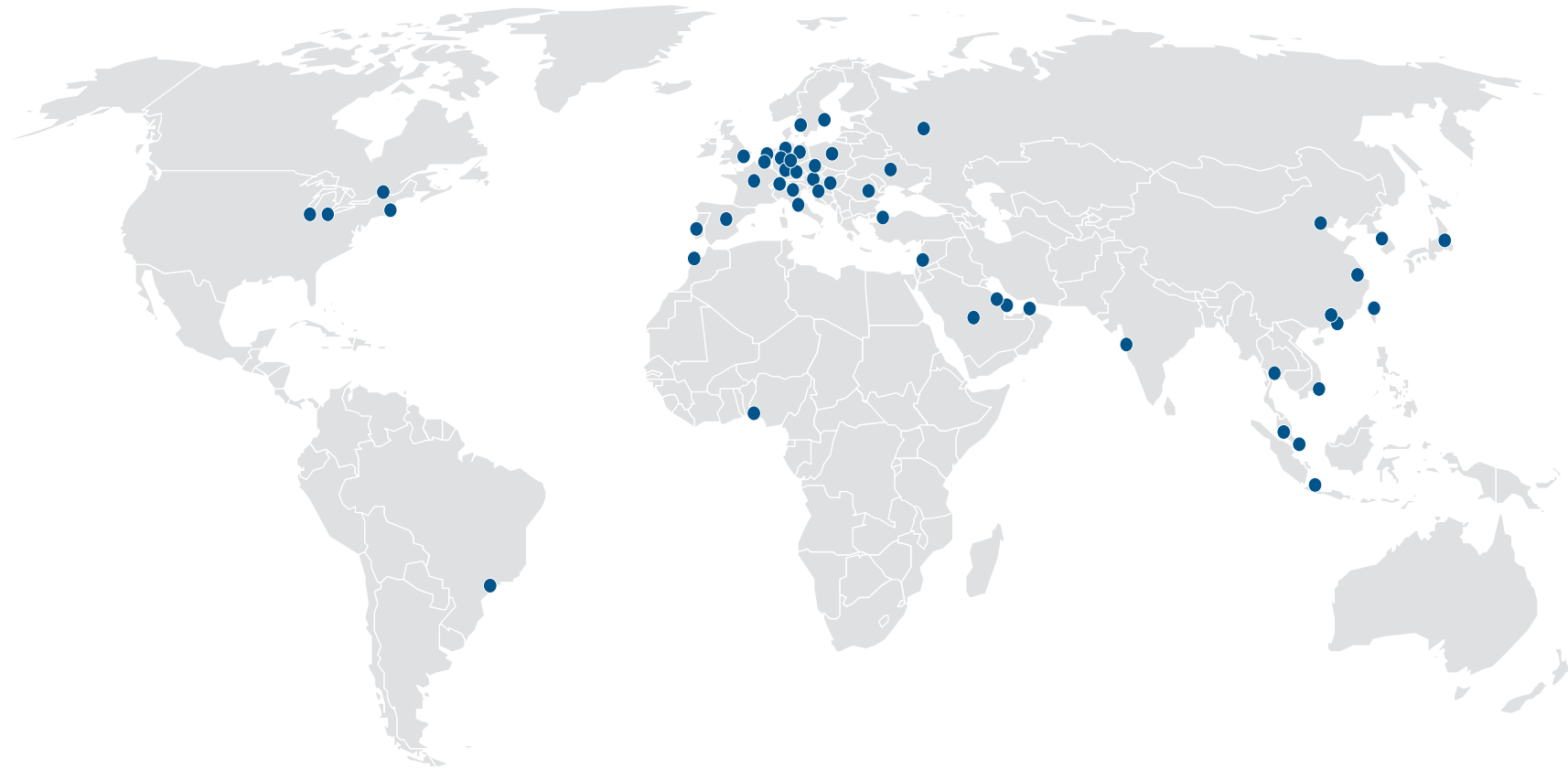


Viktoriya.Bondarets@rolandberger.com



+380 67 4651023

As a leading strategy firm, we successfully operate in all major international markets with a strong footprint in Middle East



Roland Berger

50+ offices in **35** countries,
with approx. **2,400**
employees

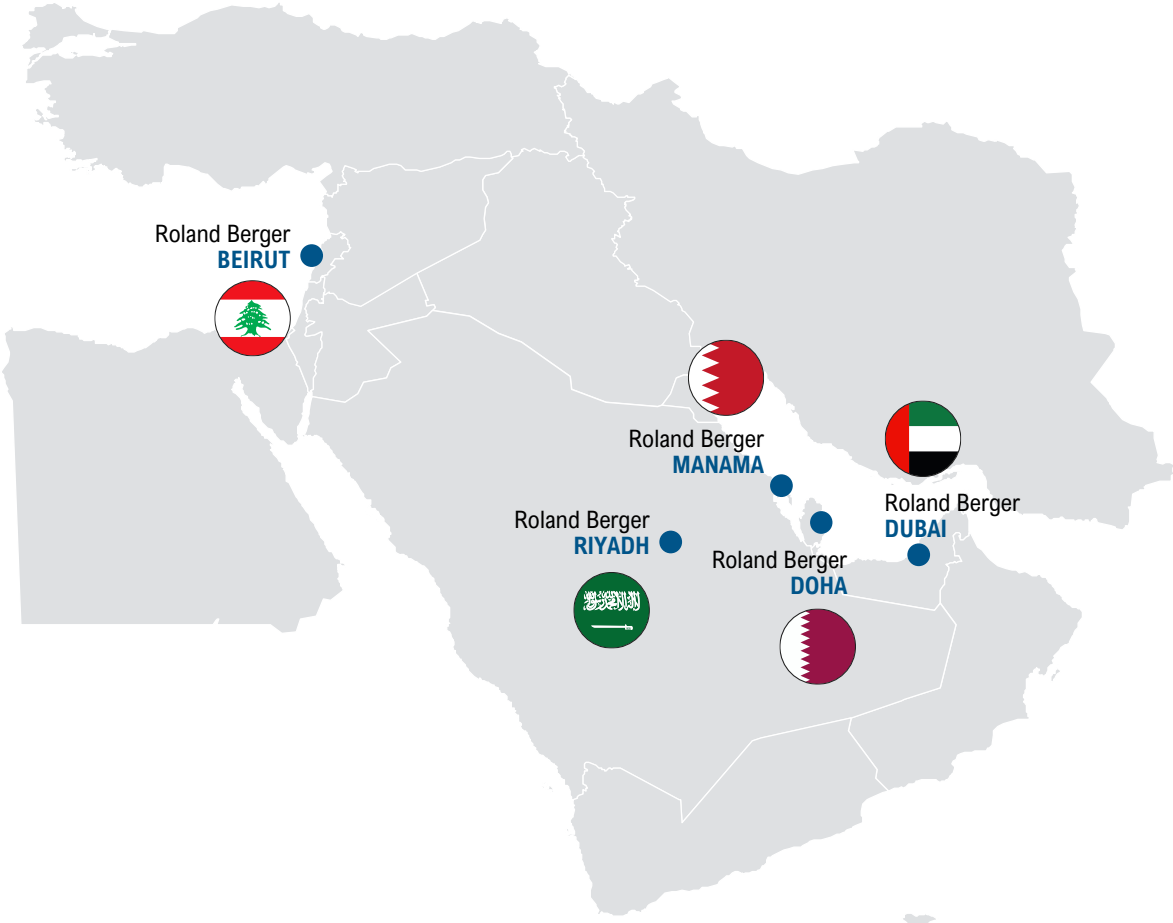
Over **230** partners with
specific expertise organized
in **8** global platforms

Serving over **1,000**
international clients

Founded in **1967** in
Germany by
Prof. Roland Berger

We have a strong presence in the Middle East with offices in Bahrain, KSA, UAE, Qatar, and Lebanon

Roland Berger presence in the Middle East



We have successfully completed **several hundred projects for clients** in the Middle East

Selected clients in the Middle East



We have deep experience and wide expertise in supporting maritime development around the world

Roland Berger maritime clients

Ports / Port Authorities



Shipping / Shipyards



We are proud to be a top 5 player in the global strategy market



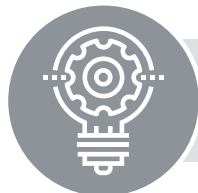
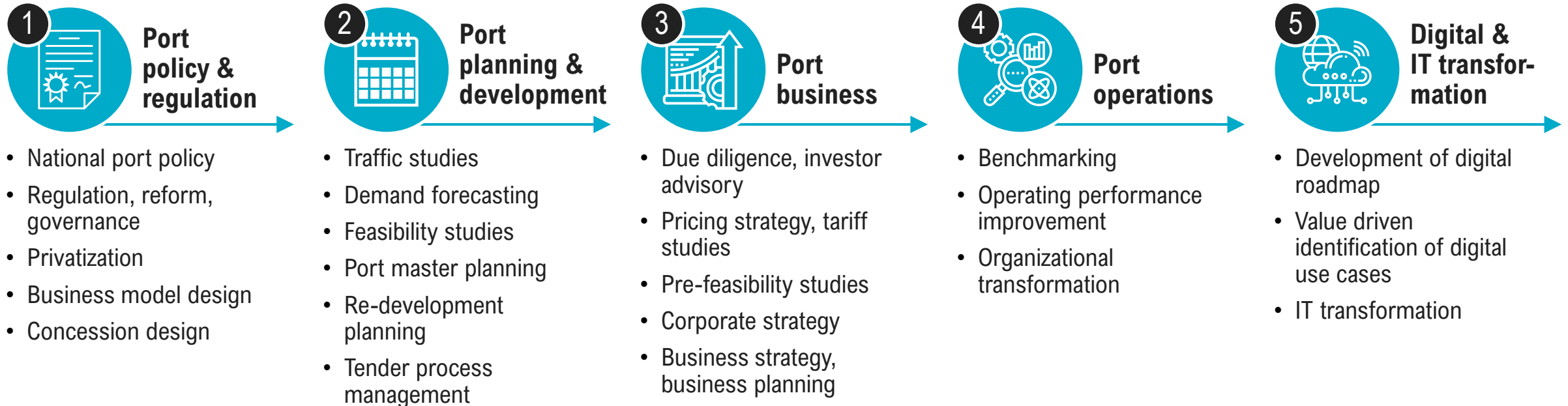
We have deep global port planning and development experience



We have a Global Ports and Shipping Practice

We offer an integrated approach and specialized consulting services across the entire ports value chain

Roland Berger service offering



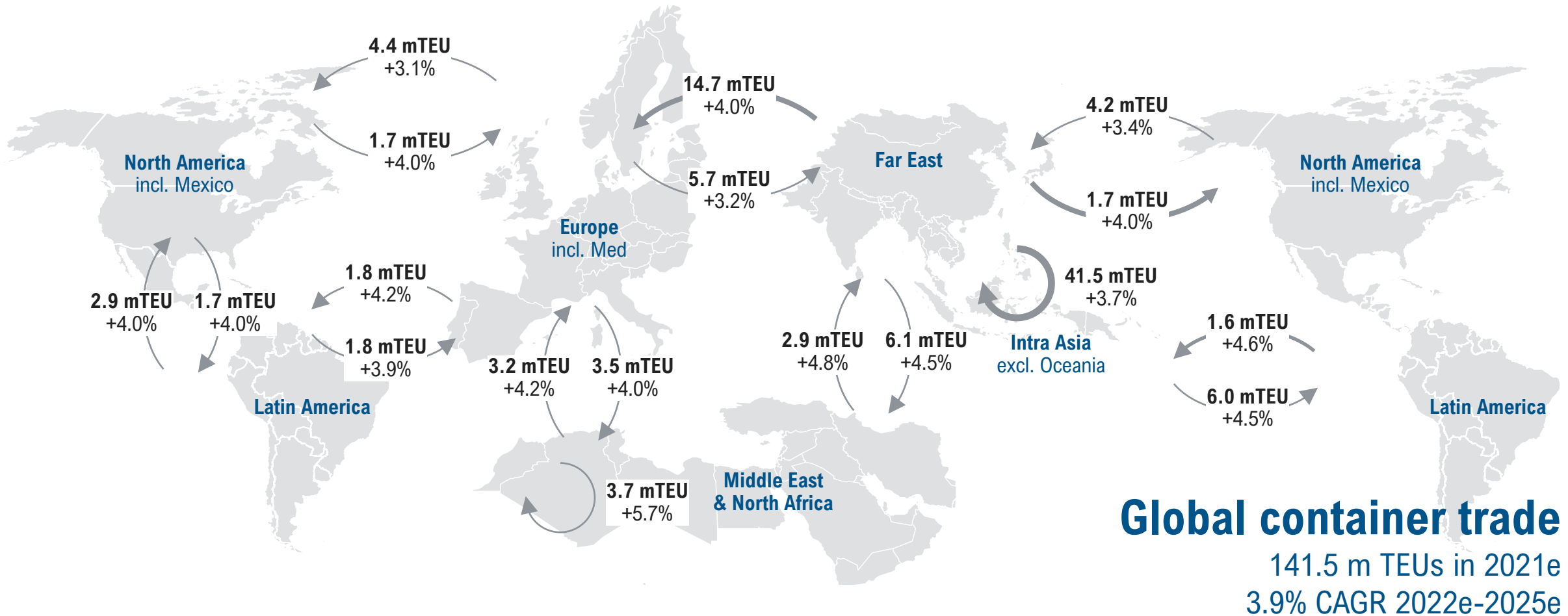
For each assignment, we put together a dedicated and highly experienced team. We use specialized legal, financial, engineering and port planning partners where relevant



B. Snapshot of Global Maritime Trade Flows

The global container trade accounts for >140 m TEU with an expected future growth of 3.9% CAGR 2022-2025

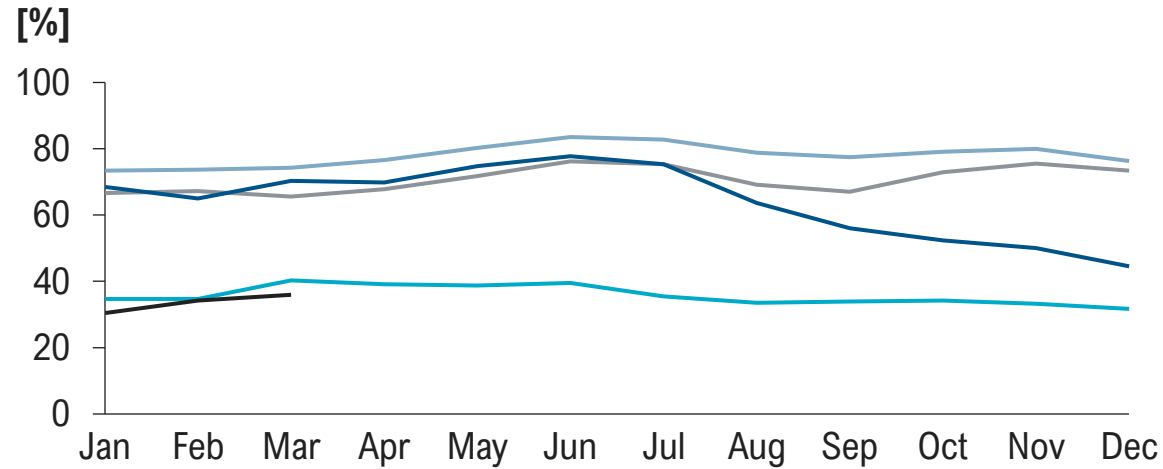
Market volume of global container trade



The global schedule reliability is still below previous years – Also the global average delays for late vessel arrivals is significantly above previous years

Global schedule reliability and average delays of late vessels

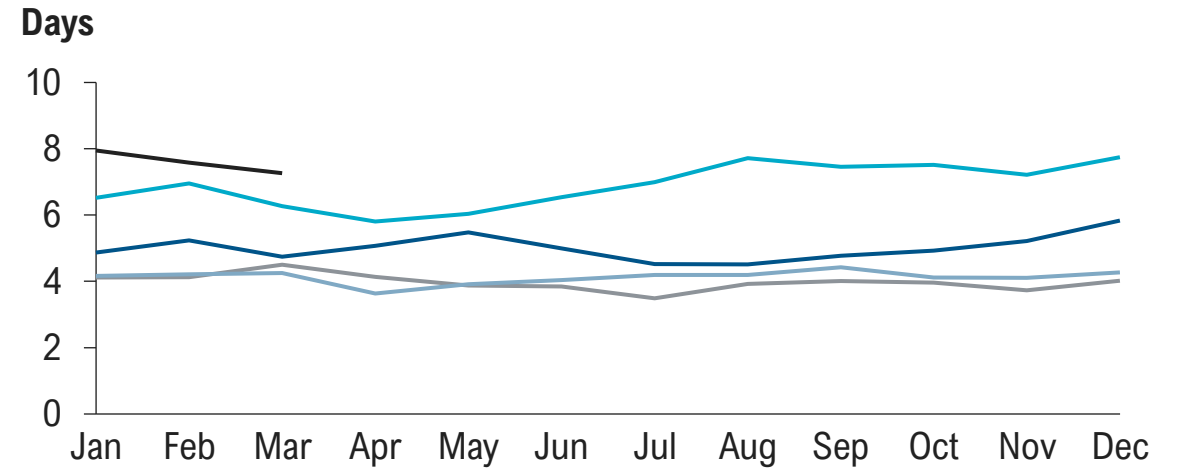
Global schedule reliability [%]



- Global schedule reliability continues to increase slowly during the first months of 2022, reaching a reliability of 36%
- However, on a year-to-year perspective, reliability in 2022 and 2021 lack significantly behind pre-COVID years

— 2018 — 2019 — 2020 — 2021 — 2022

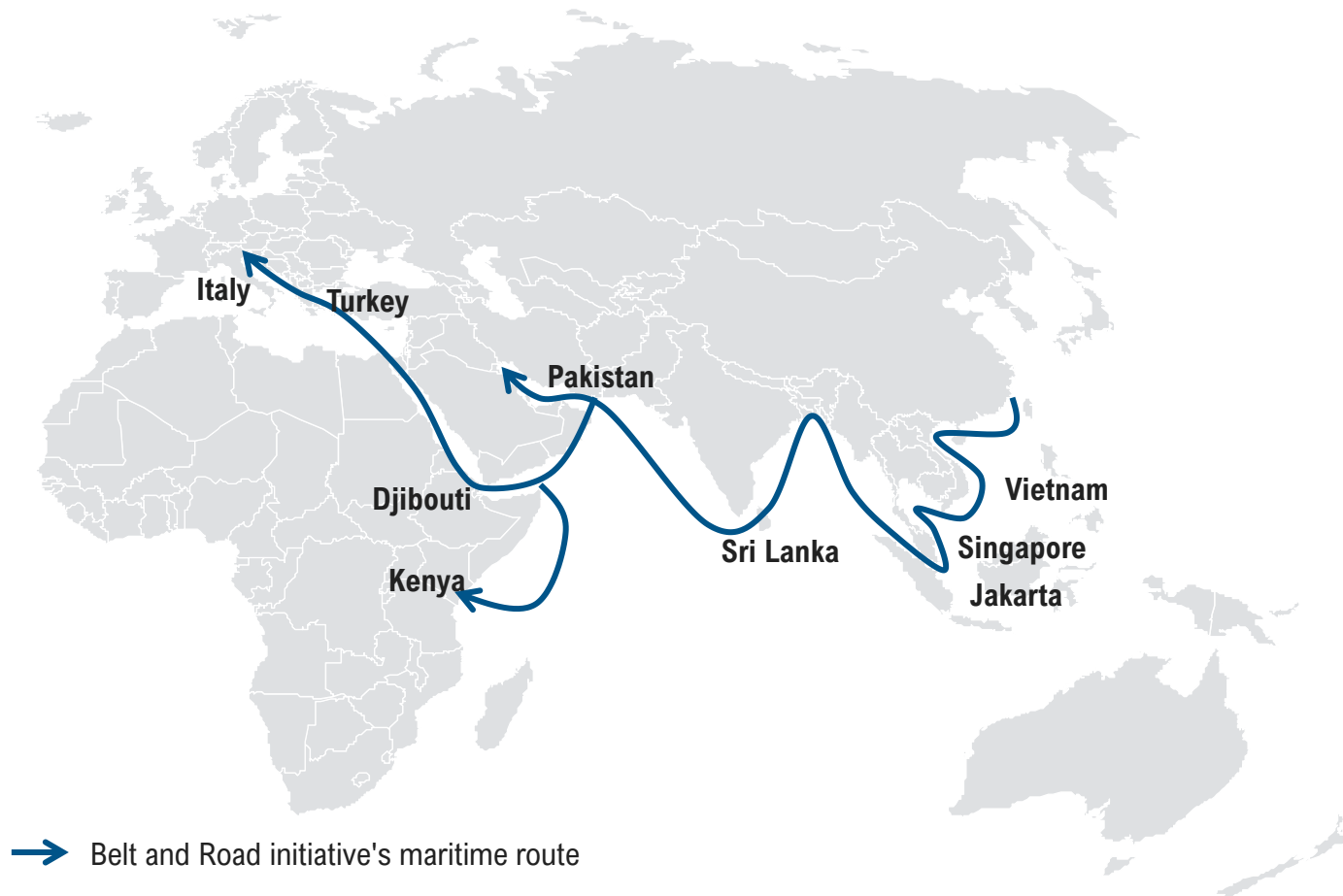
Global average delays for late vessel arrivals



- The average delay for late vessel arrivals decreased during the first month of 2022 to 7.26 days in March
- However, a year-to-year perspective, average delays for late vessel arrivals in 2022 and 2021 are significantly above pre-COVID years

China's Belt and Road Initiative aims to connect China with Asia, Africa and Europe – trade volumes along maritime route amount to ~25 m TEU

Zoom on Belt and Road Initiative



Insights

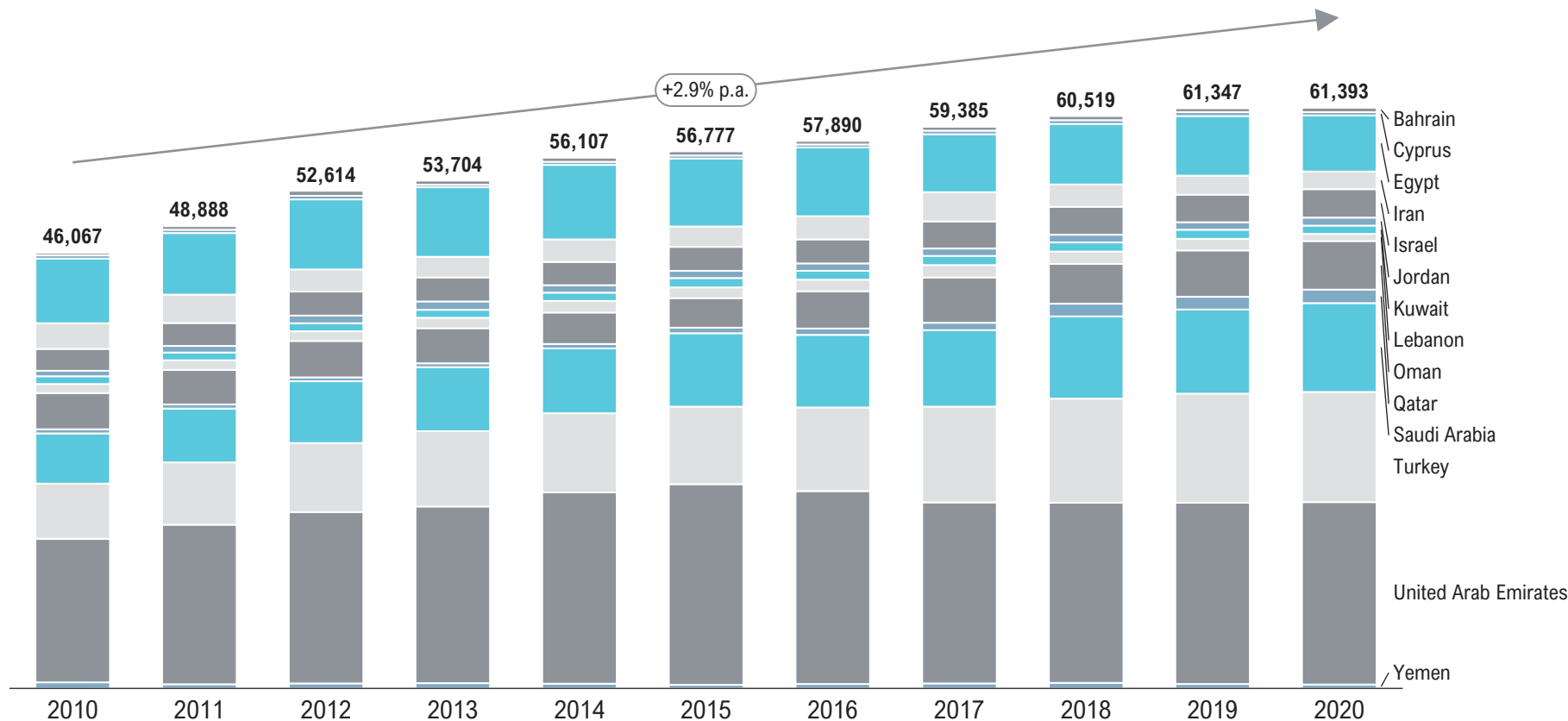
- Belt and Road Initiative is a transcontinental passage connecting China with Asia, Africa and Europe via land and maritime routes
 - It is a political investment tool that guides the strategy of Chinese companies such as COSCO, and China Merchants Group
- Traffic passing northbound through the Suez Canal to the Mediterranean and Europe and from Indian Subcontinent/Gulf to the Americas adds up to ~25 m TEU (against of ~30 m of total ship capacity) in 2021
- About ~15% of total global container trade (in northbound direction) passes through the Red Sea – underlining the importance of Red Sea as a trade route



C. New opportunities for Middle Eastern Ports

The Middle East market has shown a steady growth during the last decade, also being a vital transport gate connecting Asia to Europe

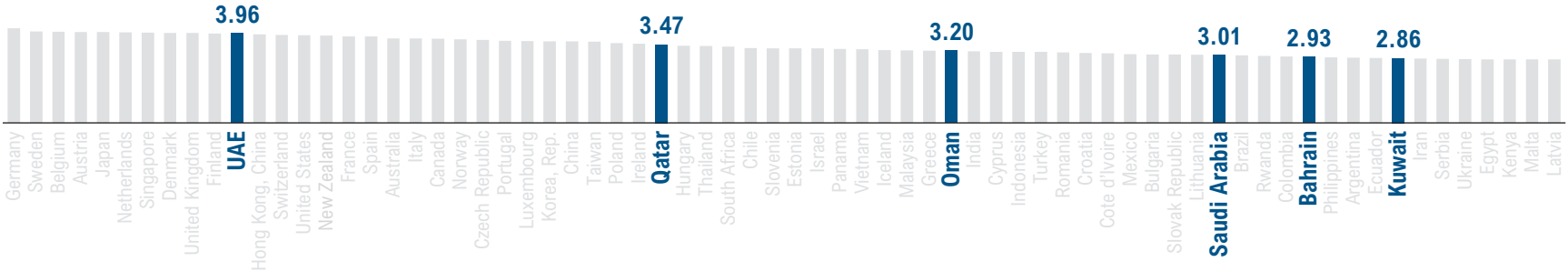
Middle East maritime trade [TEU k; 2010-2020]



- Middle East region container trade volumes have been **growing at a CAGR of 2.9%** from 2010 through 2020
- The **United Arab Emirates** are fundamental in many 'air-sea' strategies in the region and play the role of **important regional hub**
- **Turkish** share of the regional shipping **volume** has gone from 13% in 2010 to almost **20% in 2020**
- The regional maritime trade is vulnerable to **security constraints** and **exposure to Suez canal** – about 12% of the world's trade and over 17,000 ships a year pass through the canal

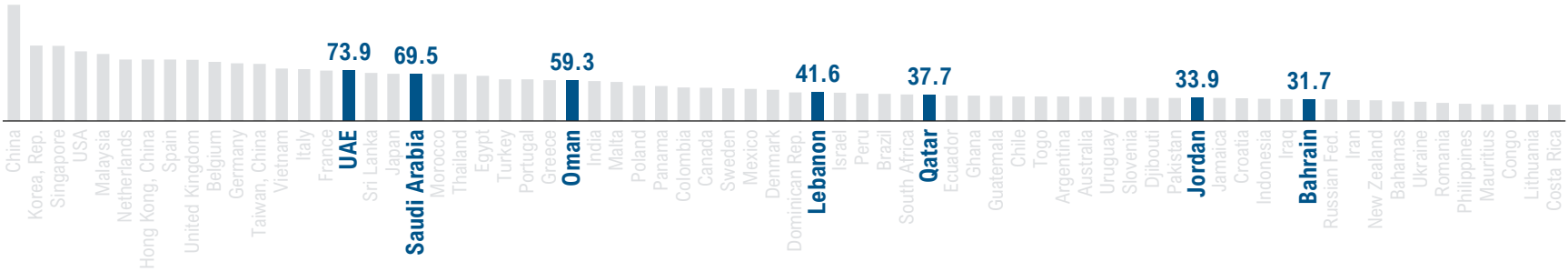
Logistics performance and shipping connectivity in the Middle East still lacks behind international leaders

Logistics Performance Index¹⁾ (2018) – Top 70



UAE with leading position of logistics performance in Middle East – Other GCC countries still with major gaps towards international best practices

Liner Shipping Connectivity Index²⁾ (Q4 2021) – Top 70



Shipping connectivity also to considered best in the region in UAE – Saudi Arabia as close follower

1) Logistics Performance Index (LPI) is based on six dimensions: Customs | Infrastructure | International shipments | Logistics competence | Tracking and tracing | Timeliness
 2) Liner shipping connectivity index (LSCI) is based on six dimensions: Ship calls | TEU capacity | Regular liner shipping services | Liner shipping comp. | Avg. size in TEU by the scheduled service with largest average vessel size | Number of other countries that are connected to the country through direct liner shipping services

The high importance of the shipping sector in the Middle East leads to significant private investments and ambitious port expansion projects

Investments into port sector in the Middle East












High importance of shipping sector

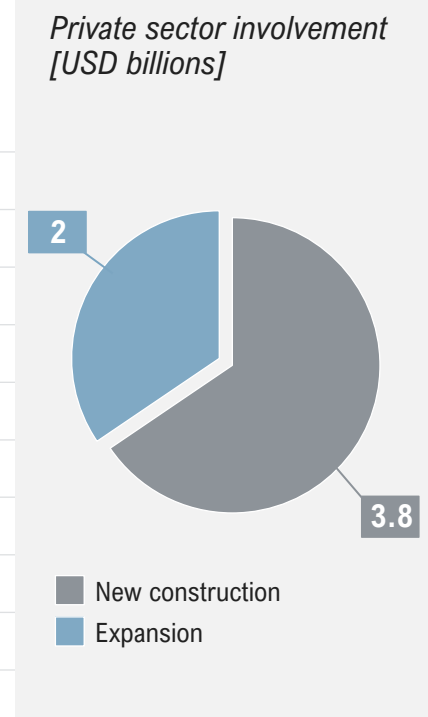
- Container shipping is vitally important to the Middle East region
- Geographically located as a bridge between Europe and Asia, the region's ports handle a significant amount of globally traded goods
- Almost double the investment went into new port and terminal construction in the region during the 20 years to 2020 (USD 3.8 bn) than in the expansion of existing port facilities (USD 2 bn)

Significant private investments

- Ports in the Middle East have attracted huge amounts of investment over recent decades
- Further ongoing port projects in e.g. Oman and Jordan, underline attractiveness
- Private investment is increasingly common for previously often state-owned ports

Number and value of port construction projects and total container traffic, 2000–19

	Total container traffic [m TEUs]	Total number of port construction projects
	283	24
	102	13
	63	14
	36	4
	15	2
	13	5
	9	4
	8	7
	8	3
	5	3
	3	2



Risk of overcapacity and low productivity at container terminals across the region

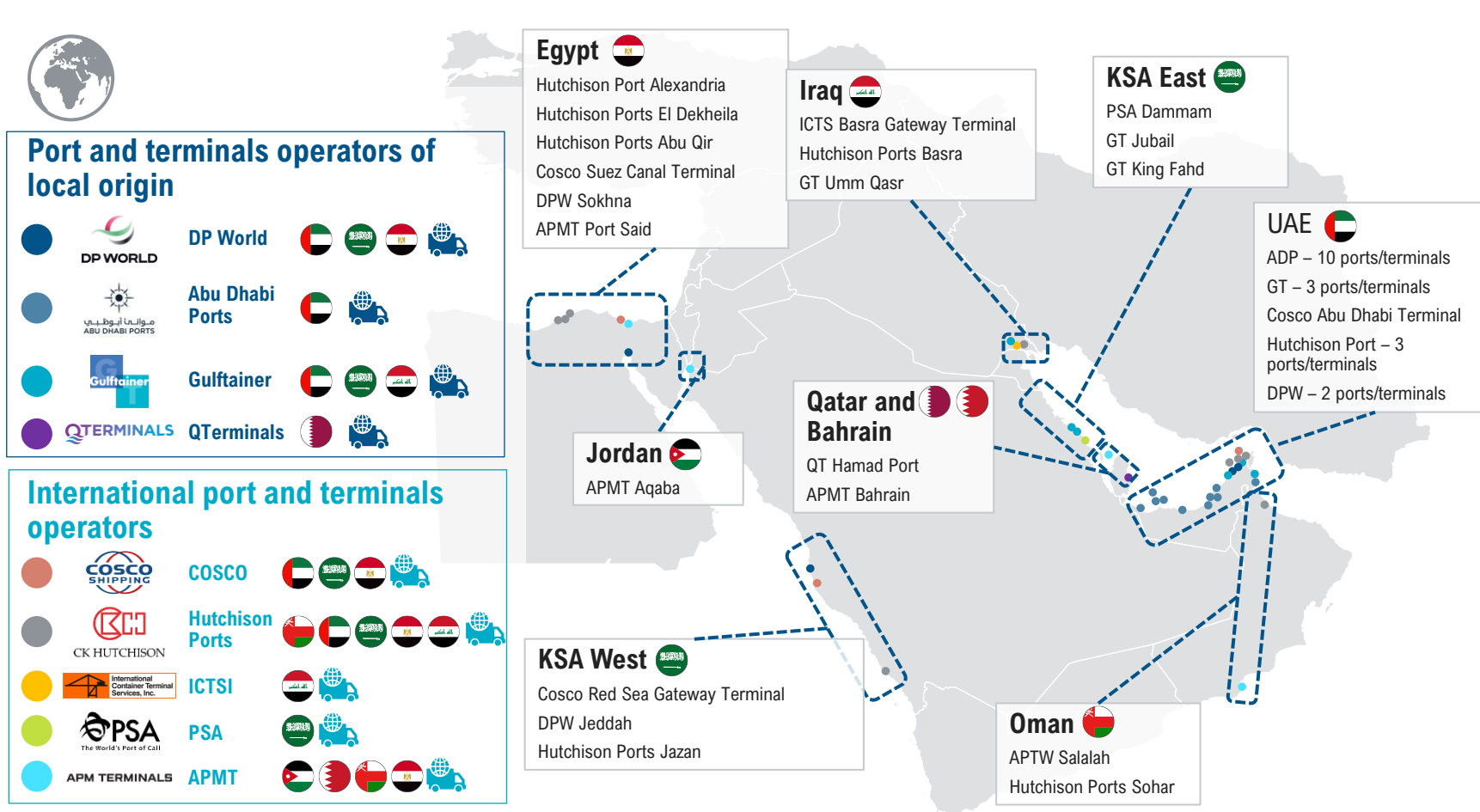
Among the many opportunities for Middle Eastern ports, we see four key areas which deserve special attention

1. Facilitating international growth of local port operators
2. Deregulating the maritime and ports sector
3. Deriving EBIT improvements from digital solutions
4. Benefitting from H2-based decarbonization in/around ports



With the capital flow, local port operators will develop further and potentially internationalize, the presence of international giants in GCC will grow too

Overview of GCC ports and terminal services providers (multi-port companies)¹⁾



- With the rapid inflow of capital into the countries of GCC region, the port industry is booming and expected to develop further
- Local port operators like DP World and Gulftainer have been developing overseas presence for years with ADP and QTerminals expected to further widen their reach internationally
- International giants like APMT and Hutchison have been consistently developing their presence in GCC region
- GCC is expected to attract further interest from global giants simultaneously with the growth of the local players, potentially, beyond GCC

1) Only water ports and terminals (no wharfs, inland terminals etc.) included

Deregulation of the maritime and ports sector is key for the Middle East, but can stretch for years like in Ukraine – Centralized and efficient orchestration is critical

Overview of port sector deregulation process in Ukraine and lessons learnt

Ukrainian ports deregulation background



- No prior projects of privatization / concession in Ukrainian transportation industry
- No dedicated owner for port privatization and deregulation projects (Ministry of Infrastructure as main point of contact)
- Frequent government changes in the country



Success factors



If not steered in an efficient manner, ports deregulation campaign can take decades – orchestration is critical

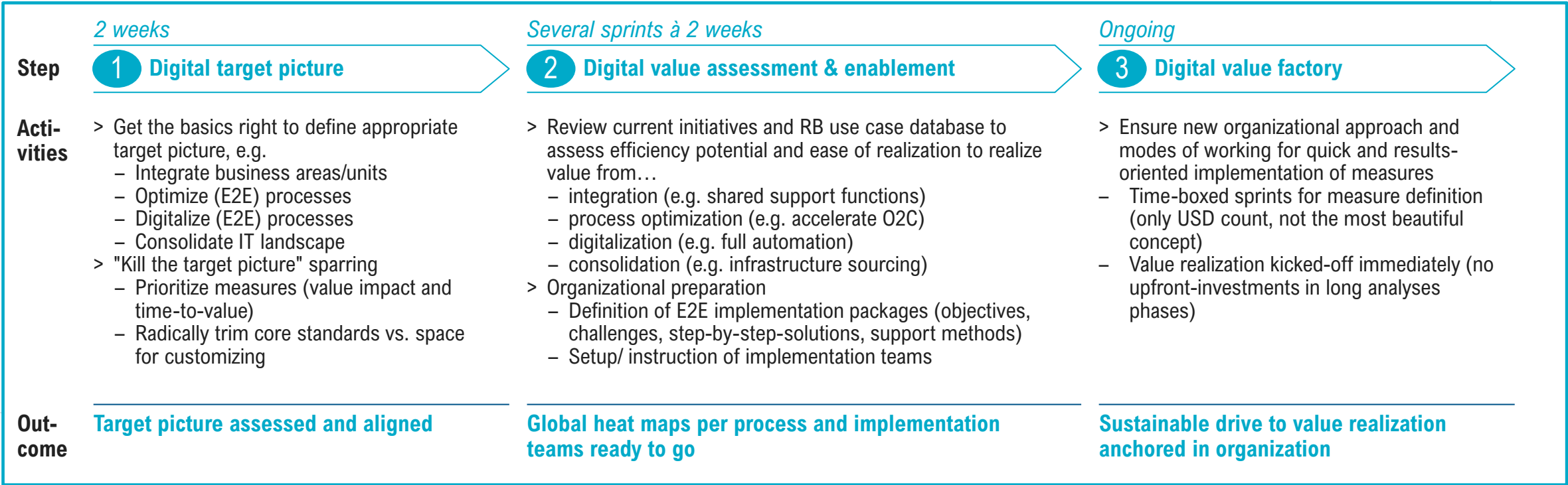
- Organized steering of the initiatives with a clear roadmap
- Centralized decision-making
- Multistakeholder alignments

Digitalization is key for ports – Transforming digitalization into EBIT improvement requires sharp target picture, value-driven initiatives & strong execution capability

Project example – Derive EBIT improvements from digital solutions

Restructuring mindset:

- > EBIT potential in EUR is main KPI of every measure
- > Implementation of measures starts right away
- > Digital is only one lever to realize EBIT potential (maybe other levers to be pulled before)



As economic hubs, ports will need clean hydrogen to decarbonize a variety of applications and use cases – It has truly become a hot topic in the community

Six key domains of hydrogen-based decarbonization in and around ports

#1: Clean hydrogen as a fuel for port handling equipment (in e.g. RTGs, reach stackers)

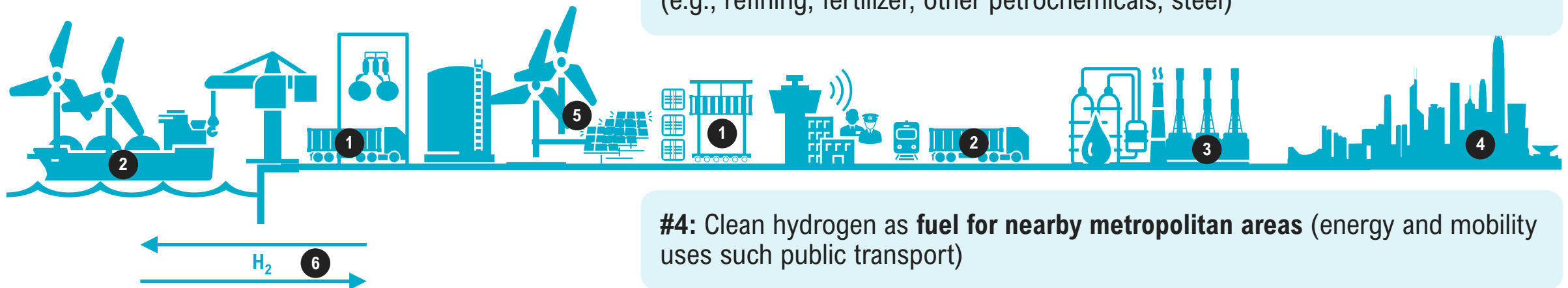
#2: Clean hydrogen and derivatives (MeOH, NH₃) as fuel for maritime transport (i.e. refueling of ships) and **hinterland logistics** (heavy-duty trucks)

#3: Clean hydrogen fuel and feedstock for industrial clusters around ports (e.g., refining, fertilizer, other petrochemicals, steel)

#4: Clean hydrogen as fuel for nearby metropolitan areas (energy and mobility uses such public transport)

#5: Clean hydrogen production in and around ports (e.g. green hydrogen from offshore wind or on-site solar PV)

#6: Ports as hubs for clean hydrogen trade flows (import/export terminals, pipelines, etc.)





Roland
Berger

