



Trade flow shifts in the Baltic and Black Sea – Implications for port infrastructure planning and management

Compiled for

BALTIC AND BLACK SEA
PORTS & SHIPPING 2022

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



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Roland Berger has comprehensive project experience in the maritime sector and successfully supports the global port, terminal and shipping industry

Maritime expertise worldwide

Global industry Know/How

- In/depth knowledge of markets and industry trends in port/terminal, shipping and logistics
- Constant development of skills through ongoing project work covering the entire range of port/terminal business and emerging markets' challenges
- Key experts on port, terminal and shipping topics



- Broad international project experience and wide and global network of clients in the port/terminal industry
- Roland Berger provides strong expertise in complimentary fields of port/terminal industry (e.g. shipping, terminals)
- Strong track record with major ports in Europe, Asia and the Middle East



Global track record

Roland Berger's ports/terminals practice



Broad international network

- 50 international offices in 36 countries providing local market insights as well as international coverage
- Strong coverage of emerging markets through local office presence and expert know/how
- Global network of port/terminal experts within the firm

- Assistance to clients in all relevant functional areas / from demand forecasting to development planning and operational improvement
- Broad range of disciplines in/house / required to successfully deal with port/terminal/related challenges
- Extensive knowledge in implementation planning and monitoring

Methodological competences



Clients in ports & terminals

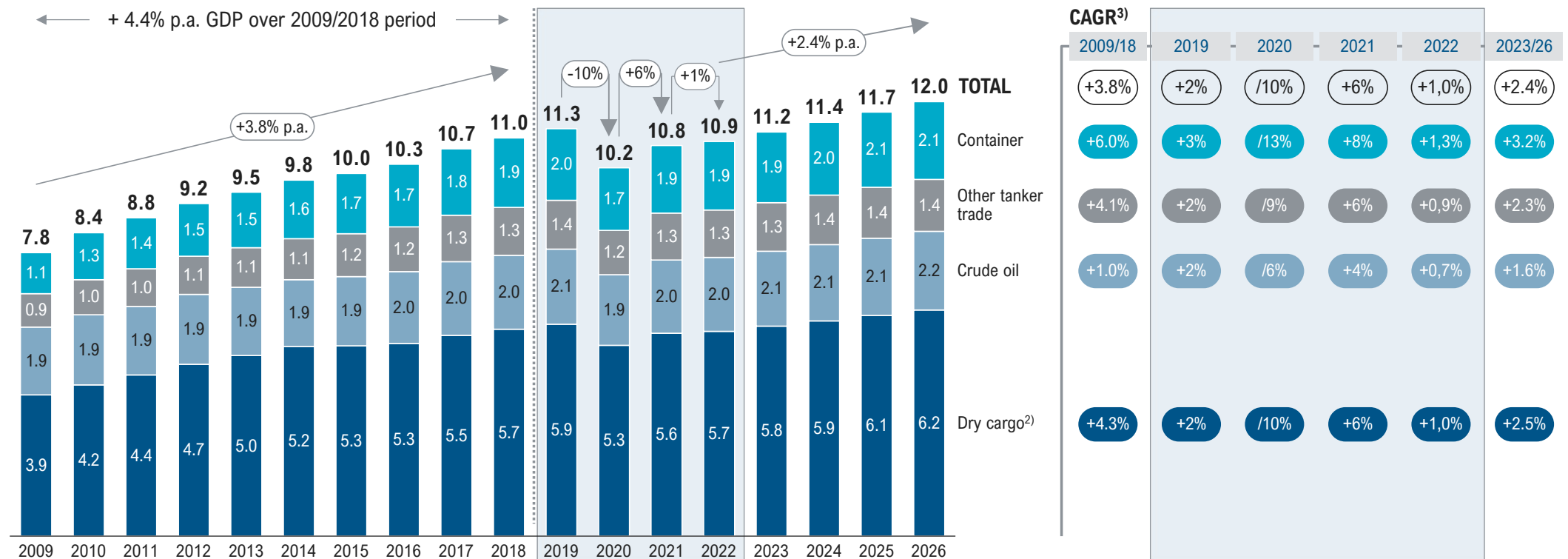


Clients in shipping



COVID/19 has impacted maritime volumes significantly with a 10% drop in 2020 – In addition, negative impact from the war in Ukraine in 2022

Global maritime trade forecast¹⁾ by cargo type, [Ton bn ; 2009/25]



Note: Forecast resulting from Roland Berger analysis based on average key sources of forecasts

1) Volume of goods unloaded; 2) Includes dry bulk, break bulk, Ro/Ro and other general cargo excl. Container; 3) Based on relation of growth multiplier assumptions per cargo type

Source: OECD, WTO, IMF, WorldBank, Euromonitor, Roland Berger

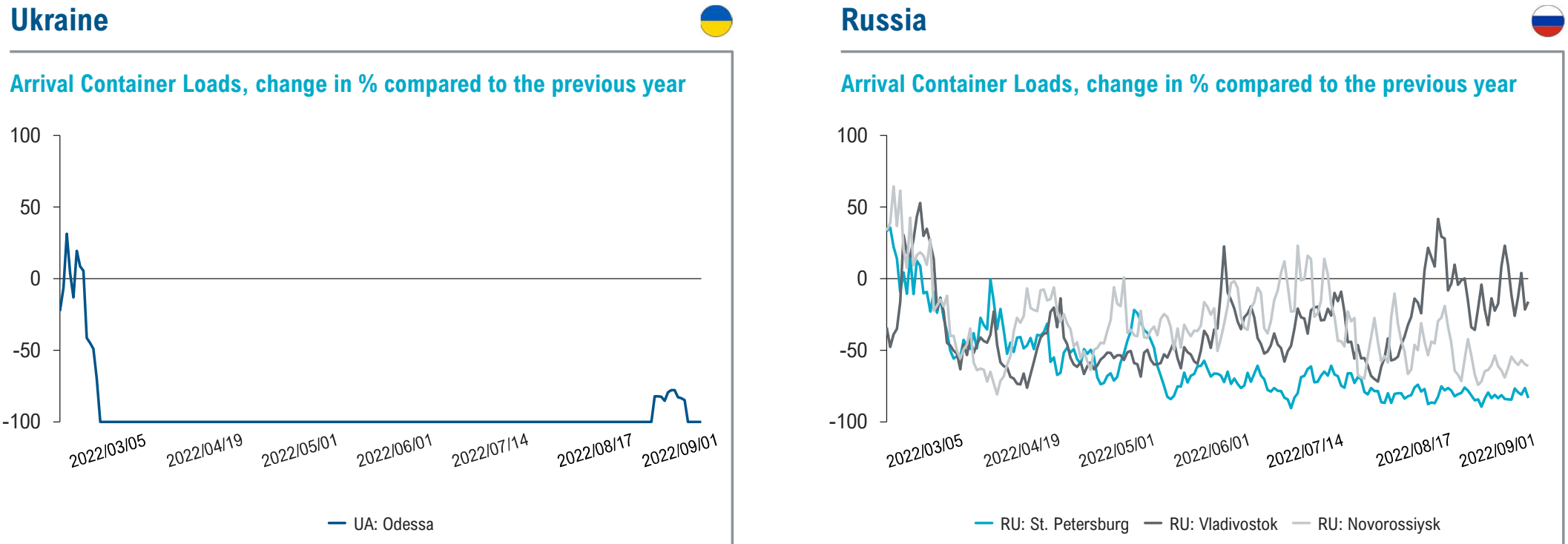
Due to closed ports in Ukraine and sanctions on Russia overall traffic has dropped and remaining volumes are partially transported on alternative routings

Implications from war in Ukraine on Baltic and Black Sea



For example, container traffic is not possible via Ukraine's port of Odessa and significantly reduced for Russia's Black Sea and Baltic ports

Arrival Container Loads [%, 2022]

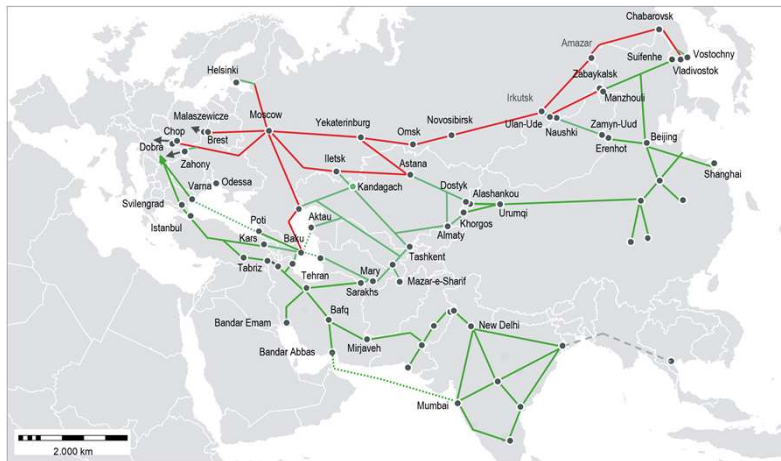


As of September 2022, container traffic is still not possible via Ukraine's Black Sea port of Odessa; Russia, however, appears to be making progress in its efforts to replace the lack of trade with the EU with trade with Asia

In addition, the middle corridor of the silk road is gaining importance – However, bottlenecks in infrastructure and customs are hindering growth

Silk Road corridors

Northern and Middle Corridors



Outlook

Demand focus shift

- **North Corridor** expected to rebound back in range of 2021 levels mid-term
- **European customers** seeking complementary services via **Middle Corridor** to diversify transport risks

Capacity development

- **No significant increase in Middle Corridor** volumes is expected before completion of key corridor **infrastructure and process** development projects

Market volatility

- **Highly volatile market** dynamics expected to create further volume fluctuations in the short/ and medium/term outlook

*"European freight forwarders are highly interested in adopting the Middle Corridor as **alternative to North Corridor**, but with current prices and transit times, the **best alternative is air or sea freight**", / Operator*

*"Demand for Middle Corridor has **increased this year**. The volume increase, however, is negligible since the **corridor still lacks sufficient capacities** to serve customers", / Operator*

*"Everyone is currently talking about the **Middle Corridor** – However, we believe **large volumes** will be possible only in the upcoming **3/5 years**", / Operator*

As a result, the Baltic – Black Sea corridor will gain of importance due to diverted cargo flows from/to Ukraine and volume increase on the middle Silk Road corridor

Baltic – Black Sea Corridor



Remarks and insights



"Following the Russian invasion of Ukraine by Russia, all imports and exports must take place across land. This has highlighted the current inadequacies of land connections between the EU and neighboring states in Eastern Europe. Thus, the EU plans improved connections by upgrading current links. This will include standardizing railway gauges with Ukraine and Moldova", **Post Europe**

"Under the plan, the North/Sea Baltic Corridor would be extended via Lviv and Kyiv to Mariupol, the Baltic/Black/Aegean Sea Corridor extended to Odesa via Lviv and Chişinău, and the Baltic Sea/Adriatic Sea and the Rhine/Danube Corridors extended to Lviv", **Railway Gazette International**

"The cross/border connections between EU states and Belarus and Russia are being removed from the 'core' TEN/T network to the less well funded 'comprehensive network'", **Modern Railways**

- **Longest route** in Europe, passing for 8 different countries, has already reached more than **55% of utilization** of its network with **>50 bn TKM**
- EU/COM **updated TEN/T network** by extending European Transport Corridors to the territory of **Ukraine and Moldova**
- Volume **increase >3%** expected due to:
 - Increased traffic to/from **Turkey**
 - Strengthening of the **Silk Road Middle Corridor**
 - Diverted Cargo due to **war in Ukraine**
- **This will result in growing importance of the Baltic – Black Sea corridor and volume increase on the middle Silk Road corridor**



Infrastructure managers are confronted with overload of assets and personnel – Relief possible through process optimization, new partnerships and investments

Implications for infrastructure manager and operators

IMPLICATIONS



Terminal and infrastructure congestions



Overload of assets
(not sufficient time for maintenance, etc.)



Personnel overworked
(high sick leave rate)



Higher operation costs



Lower quality in service delivery

SOLUTIONS



Stretch existing terminals and infrastructure in neighboring countries of Russia and Ukraine

- Process optimization and additional personnel
- Partnerships of ports and hinterland providers

Speed/up of automation and digitalization

- Improved operations planning (based on rolling real-time forecast of trains and vessels arrivals)

Increase of terminal and infrastructure capacity

- Speed-up ongoing projects (esp. rail)
- Set-up new investment projects

Open questions and first hypotheses for discussion

?	Will new volume flows on the Baltic – Black Sea corridor be sustainable?	?	<i>Our understanding: Yes, to some extent, as sanctions will endure, and Russia will not be a trusted partner even after that</i>
?	How much additional capacity can be created short term without investments?	?	<i>We assume 5 - 15% from operational excellence and efficiency improvement, depending on current maturity of operations</i>
?	Is it already time for investments into additional infrastructure capacity?	?	<i>Yes, it is already time for investments, as they will shape transport flows long term and attract additional investment</i>
?	What investments have the highest priority?	?	<i>In hinterland transport (esp. Rail), we foresee the following dimensions: Port access infrastructure, tracks, intermodal terminals</i>



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Berger

