Change of Intermodal Trade Routes in the Light of the Russian war against Ukraine – Temporary Solutions or New Normal

Presentation at Black Sea Ports & Shipping 2023 Conference

Sebastian Wind

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The war on Ukraine has been raging for over 1 year – Geopolitical effects have impacted intermodal trade at ports and hinterland in the Baltic and Black Sea region

Impact of the war in Ukraine



Start of the war against Ukraine

Western sanctions against Russia



Wide-ranging sanctions on specific individuals, businesses, bank transfers, exports and imports

Disruption of CO established trade lanes

Trade flows to/from/via Ukraine severely hampered (e.g. raw materials)

With impact on ...



- Trade volumes redefining strategic importance of Polish, Romanian and Moldavian ports
- New rail terminals built or under construction in Hungary and Poland to improve access to hinterland routes

Silk Road / Eurasian Corridor

- Transported volumes are being shifted from historically dominant Trans-Siberian Route to 'Middle Corridor'
- However, decreasing shipping rates reduce demand for Silk Road transports at all

CNBC How the Russia-Ukraine war is worsening shipping snarls and pushing up freight rates



Russian Container Trade Shifting From The Baltic To The Black Sea



REUTERS

Ukraine restores Moldova rail link, could carry 10 mil tons a year

WORLD-GRAIN.com

Hungary's new rail terminal to aid Ukraine grain shipments

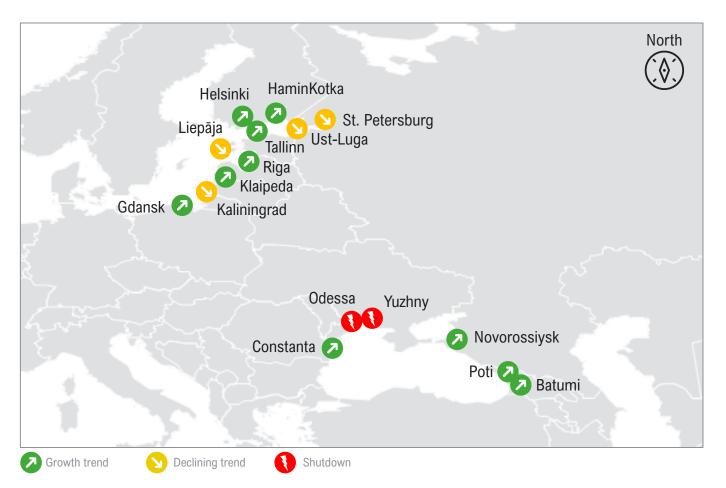


New Poland-Ukraine railway connection via emerging hub will be the fastest

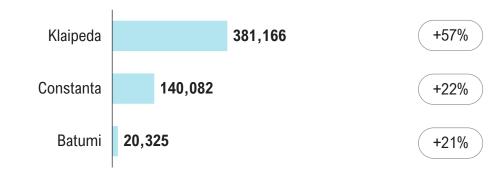
Roland Berger | 2 Source: Factiva, Roland Berger

The development of trade corridors has evolved to reshape the strategic relevance of port locations in the Baltic Sea region – Clear winners and losers have emerged

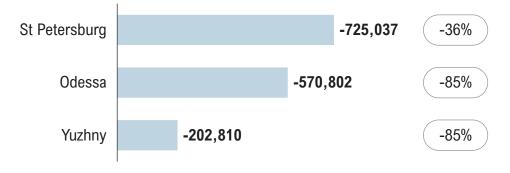
Recent development of container traffic at ports in the Black Sea and Baltic Sea



Biggest winners, 2021-2022 delta TEUs and growth



Biggest losers, 2021-2022 delta TEUs and decline¹⁾



Source: Roland Berger Market Research Roland Berger | 3

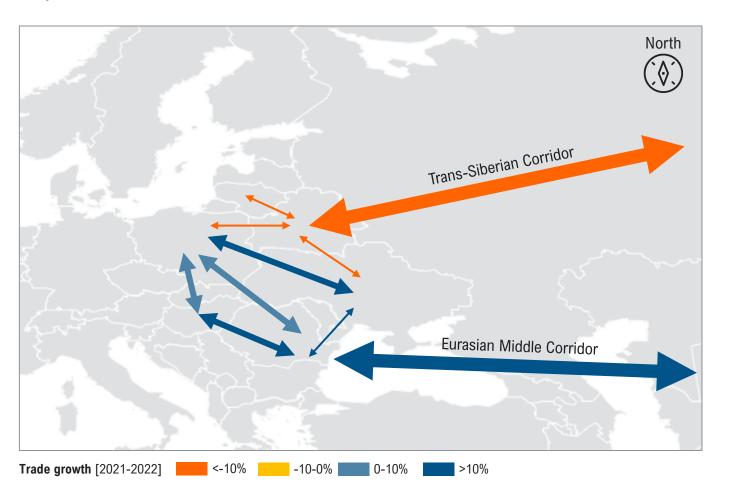
¹⁾ Estimated figures based on half-year growth and preliminary figures



Trade volume [Bn USD] ◆

The effects on intermodal trade corridors in the hinterland have been significant – Growth in Ukraine-Poland and Romania-Poland trade lanes particularly high

Implications on intermodal traffic in the hinterlands¹⁾



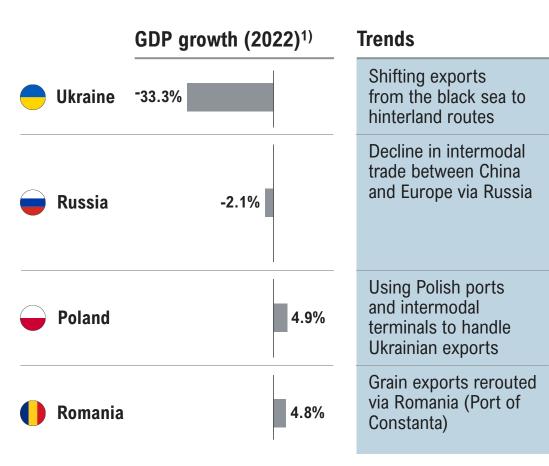
Comments

- China-EU trade seeing shift in trade volumes from Trans-Siberian rail corridor to Eurasian middle corridor owing to Western sanctions
- Rail routes between Ukraine and Moldova. Poland and Romania have experienced increasing volumes handled, particularly for grain shipments due to the Russian blockade of the Ukrainian sea ports
- Continued investments in hinterland multimodal hubs in Romania (Aiud), Poland (CPK) and Bulgaria (Sofia) have further strengthened intermodal trade
- In 2023, Ukrainian railways are pursuing new intermodal rail services to Poland, Romania, Austria, and Turkey
- Intermodal trade growth with the Baltic states remains difficult as a result of differences in track gauge (broad gauge vs. standard gauge)

Roland Berger | 4 Source: Euromonitor International, Roland Berger

Exports from Ukraine have moved through neighboring countries like Poland and Romania – Pressure on Russia has seen Silk Route trade lanes suffer considerably

Economic trends and drivers of main trade lanes



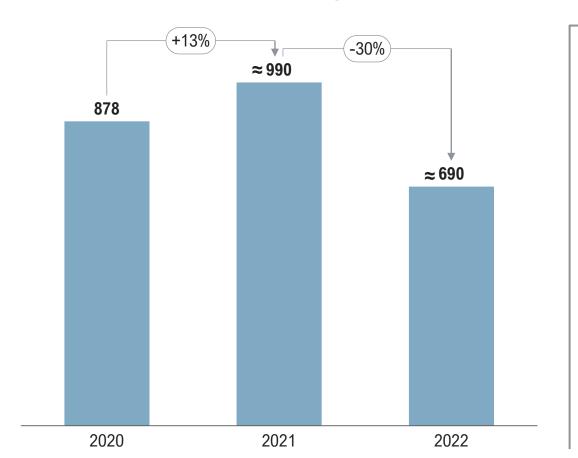
Comments

- Exports have slumped, affected by restricted access to the Black Sea trade
- Intermodal hinterland rail solutions have guaranteed not only exports to Europe but have also ensured food security for the Ukrainian population
- Traditionally, much of the intermodal trade between Europe and China has passed through Belarus and Russia
- The international fallout of the two countries have caused shippers and logistics providers to cut capacity on the corridors
- Companies have increasingly **shifted from rail to sea freight** or **rerouted**, for example via the Middle Corridor volumes remain comparably low on the latter
- Poland's direct economic access to European and western trade have given it a preferable position for Ukrainian foreign trade
- Particularly Polish infrastructure like seaports and intermodal terminals have given Ukraine a new international window for exports and imports
- Similar to Poland's role in accommodating Ukrainian exports, Constanta in Romania has seen considerable growth in 2022
- Large volumes of **grain shipments** (accounting for ~70% of Ukrainian grains) have been routed through Constanta in addition to large amounts of iron ore

Source: IMF, Roland Berger 5

Eurasian rail cargo volumes have experienced significant declines – Volumes 2022 to be below 2020 levels

Development of Eurasian rail cargo volumes¹⁾ ['000 TEU]





- RZD confirms -35% decline of traffic from China to Europe and back for the first nine months 2022
- **Duisport** as key hub currently reports about **30 silk road trains** per week (compared to peak in pandemic of 60-70 trains)
- In general, volumes have recovered steadily after a slump immediately after the start of the war, however, western shippers avoid silk road transports
- Today, Middle Corridor not competitive yet in terms of regular service, travel time and cost, ≈1% of volumes
- Beside the war, normalization of shipping rates and lockdowns in China have reduced demand for Eurasian rail cargo

Source: RZD, duisport, Roland Berger Roland Berger 6

¹⁾ Defined as EU28 (all European Union countries + UK) to Asia 5 (Kazakhstan, Mongolia, China, Japan, South Korea)

Besides the war, trade volumes with China and the price delta to shipping are expected to determine the Eurasian silk route volumes going forward

Outlook

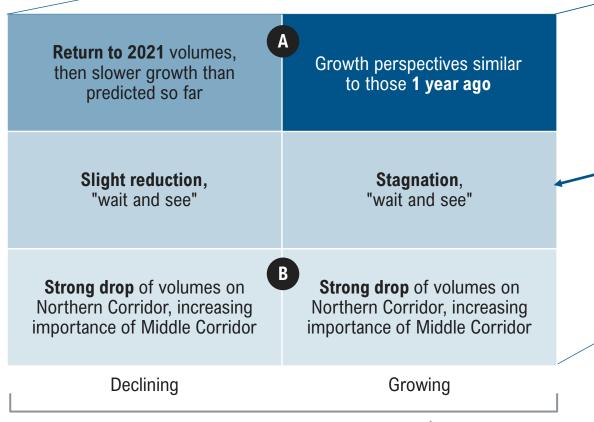


Development of Ukraine war and political tensions with Russia

Cease fire, easing of tensions

Status quo continued

Stronger sanctions preventing rail transports with RZD



Price delta to sea shipping



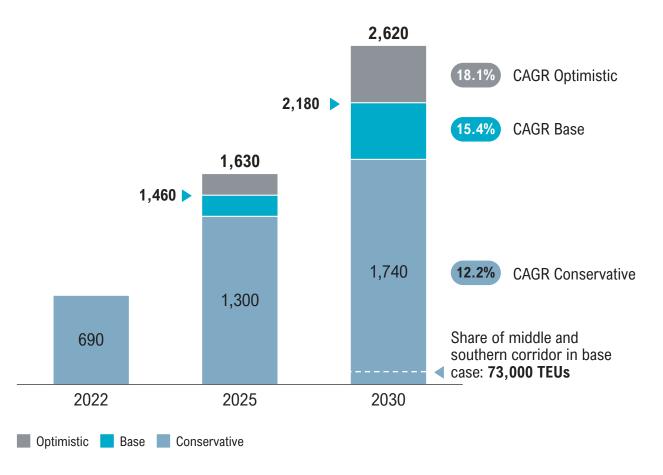
Trade volume Europe - China



Source: Roland Berger 7

In the amicable scenario of a ceasefire and easing of sanctions, volumes are expected to return to the levels projected one year ago

B Europe (excl. Russia) to Asia rail traffic¹⁾ ['000 TEUs]



Key assumptions

Strong growth for Silk Road rail traffic

After a cease fire, Eurasian rail cargo expected to return to growth path, conservative case relevant if trade volumes between China and Europe stagnate and sea shipping rates decline to 2019 levels

- Rail expected to be a stable alternative

 Currently, rail has only a ~2% share of containerized traffic, experts expect the share to increase gradually over the years but will stabilize at ~4-6%, as there will always be goods that need the low cost of sea and the high speed of air
- Middle Corridor will grow, but remains minor

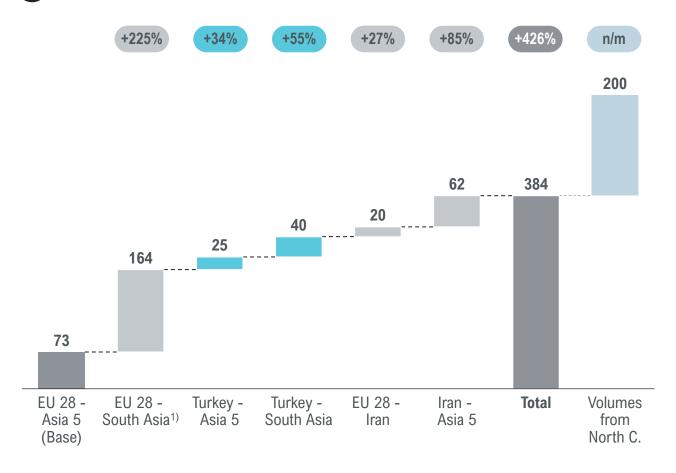
 The southern and middle corridors can obtain more share based on trade flows within their natural catchment areas if they can become more competitive in performance Even so they are likely to remain minor

Source: UIC, Roland Berger 8

¹⁾ Defined as EU28 (all European Union countries + UK) to Asia 5 (Kazakhstan, Mongolia, China, Japan, South Korea)

We expect the middle and southern corridor to benefit little if sanctions against Russia are tightened further and the northern corridor becomes unusable

Volumes middle and southern corridors and upsides2) ['000 TEUs]



Key take-aways and assumptions

- Middle/Southern corridor will not become significant with "traditional" Eurasian flows Mainly due to the **natural catchment area** of the southern and the middle corridors and the longer transport time needed
- Major potential comes from upsides with countries that have no other alternative

For countries like Turkey, Iran, and countries in South Asia, southern and middle corridors are not only the natural, but the only rail route

All upsides come with heavy pre-conditions that need to be met

> South Asia, esp. **India**, has huge potential volume. However, political rivalries with Pakistan need to be resolved or circumvented and rail connection towards Myanmar be established. Iran's potential is heavily depending on sanctions

¹⁾ Defined as Pakistan, India, Nepal, Bangladesh, Myanmar, Thailand. Of the potential with EU, majority >50% is attributable to India

²⁾ All numbers for the year 2030, upsides only refer to flows with enough distance between them, but not adjacent flows

Detours have emerged with logistics players willing to bear the additional costs – However, uncertainty over long-term future infrastructure developments remain

"Temporary Solutions" or "New Normal"

Temporary Solutions

Prerequisite

Impact on infrastructure





Russian-Ukraine ceasefire

- · Reopening of Ukrainian Ports and reestablishment of hinterland transports
- Investor confidence and readiness to restore Ukrainian port and hinterland infrastructure
- No further investments in capacity of ports and terminals in neighboring countries to handle Ukrainian foreign trade

Impact on trade lanes



- Increased imports from Ukrainian grain, fertilizer, iron ores and manufactured goods
- Cost of shipping via alternative routes remain higher versus traditional pre-war trade routes

2 New Normal

Continuation of war

- Companies re-assessing geopolitical risks, moving production facilities to lower-risk countries
- Investments in rail infrastructure such as railway lines and intermodal terminals e.g. in Romania and Hungary
- Build-up of new warehouses, loading facilities and logistics centers along the new established trade lanes
- Stronger reliance of Ukraine (long-term partnerships) on neighboring countries (i.e., Poland, Romania, Hungary, Moldova)
- Long term establishment of new trade lanes into Western Europe

- How to profit from trade lane changes?
- Where and what investments have the highest priority?
- Chances from investments into Ukraine during and after the war
- How to reduce risk for infrastructure investments?

Roland Berger | 10 Source: Roland Berger

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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