Transport and Logistics in Kazakhstan

April 2024

AIFC

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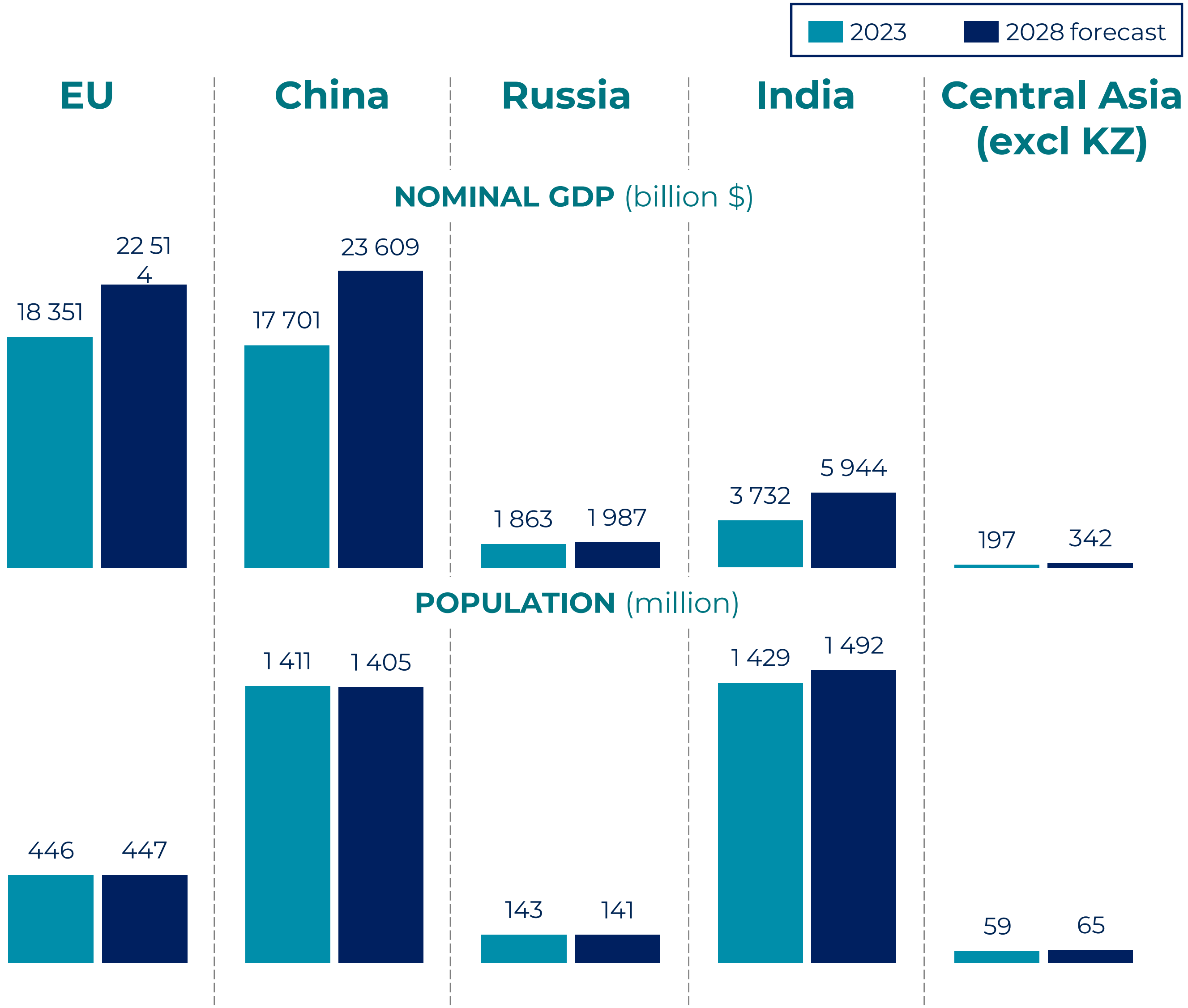
EXECUTIVE SUMMARY

- The economies of major players of the Eurasian continent – EU, China, India, Russia, and Central Asian region – are **forecasted to grow** and therefore experience an increase in investments and trade turnover.
- While most trade between Asia and Europe uses maritime routes, there are **multiple inland routes** that might diversify risks of geopolitical tensions around the Red Sea and the South China Sea on one side and technical limitations for capacity expansion of port infrastructure (land, berths, environment).
- Such diversification of logistics opportunities would **redirect part of cargo turnover** to inland routes as international trade between different regions within Eurasian continent is expected to grow, especially between Europe and East Asia, Middle East and East Asia, Europe and Southeast Asia.
- The Middle Corridor is **demonstrating growth** in cargo volumes, and the expansion of transport infrastructure is critical.
- Kazakhstan, as a key player of the Middle Corridor and the North-South Corridor, is **making significant efforts** to develop its own transport capabilities, including railways, highways, and ports.
- Transport vehicles, railcars, and vessels, air cargo transportation, and storage facilities as well as digitalisation and operational efficiency are **also important areas of focus**.
- The EBRD estimates that total investment needs to significantly improve the transport infrastructure of Central Asia to ensure sustainable connections are **€5.5 bn for Kazakhstan** and €18.5 bn for Central Asia overall that includes 33 hard infrastructure projects and 7 soft connectivity measures.
- To meet these needs, investment attraction, proper deal structuring, improvements to PPP and tariff setting mechanisms, digitalisation, international cooperation are required, to which AIFC has already been contributing.

1. GLOBAL ECONOMY & TRADE

ECONOMIES OF KAZAKHSTAN'S TRADING PARTNERS

- The selected countries are the **endpoints** of the Middle Corridor and North-South Corridor. It is anticipated that trade through these land corridors **will increase**.
- These countries account for **40% of global economy** and **43% of global population**. All of them are forecast to **demonstrate economic growth** until 2028.
- The economies of **India and Central Asia** will experience the largest economic growth **in percentage terms**. The economies of **the EU and China** is expected to demonstrate the largest economic growth **in absolute terms**.
- **India and Central Asia** are expected to demonstrate the largest **population growth** by percentage. While **the EU** population would remain **stable**, population of **China and Russia** is expected **to decline**.



Source: *IMF World Economic Outlook January 2024*

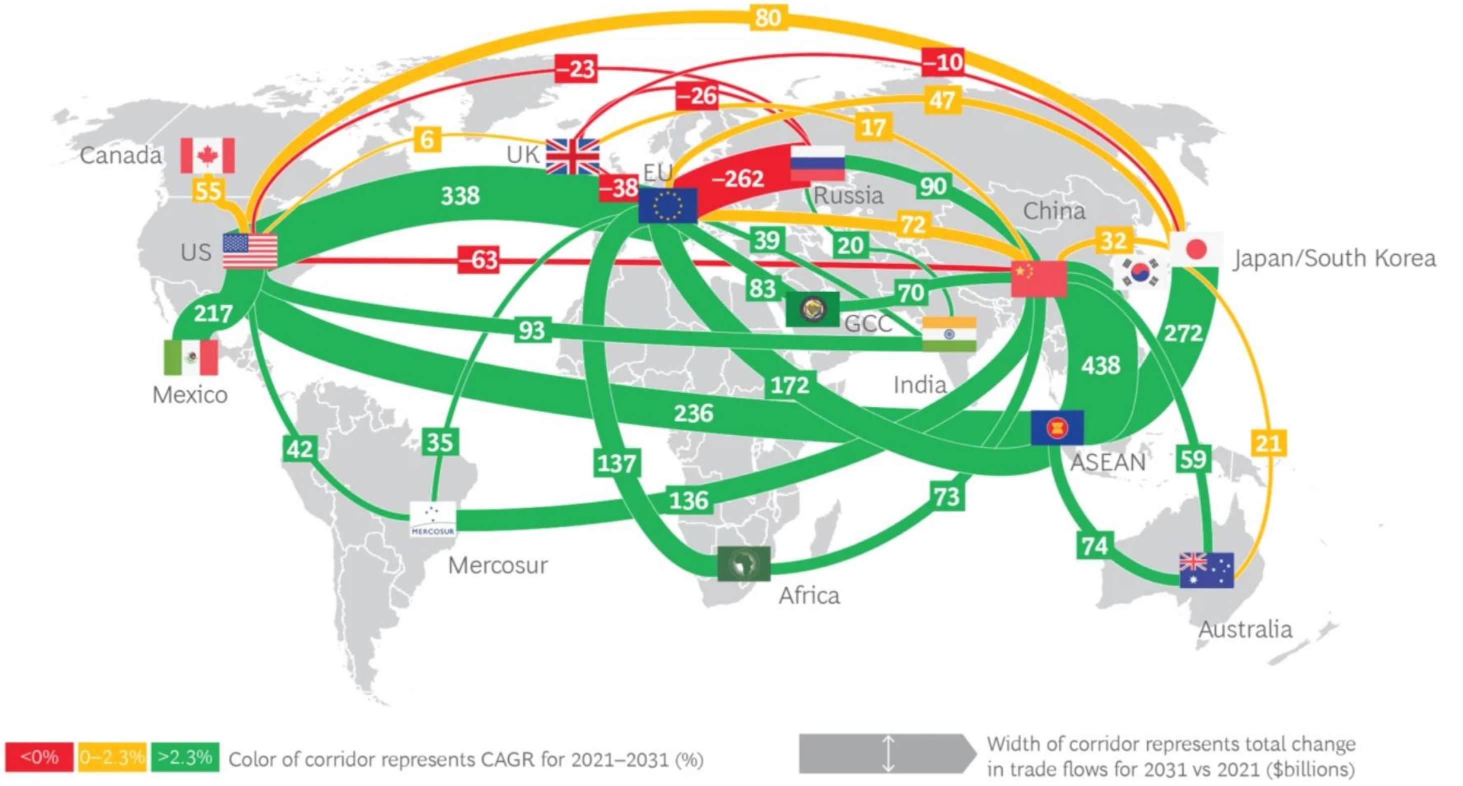
GLOBAL TRADE FORECAST BY 2031

- According to BCG, **global trade will grow at a rate of 2.3%** per year through 2031 that is less than the 2.5% annual increase forecast for global economic growth.
- EU-China trade will grow, but at **a slower rate than the global average**, as companies focus on increasing their resilience.
- **Southeast Asia will see significantly greater trade with China, the US, Japan, and the EU.** Companies will be attracted to Southeast Asia by the region's lower costs and the growing breadth and depth of its manufacturing capabilities.

Image source: BCG

Change in trade of goods, major corridors[1]

2031 vs. 2021, in constant 2021 $billions



+$72 bn Growth in trade between China & Europe

+$20 bn Growth in trade between Russia & India

+$90 bn Growth in trade between Russia & China

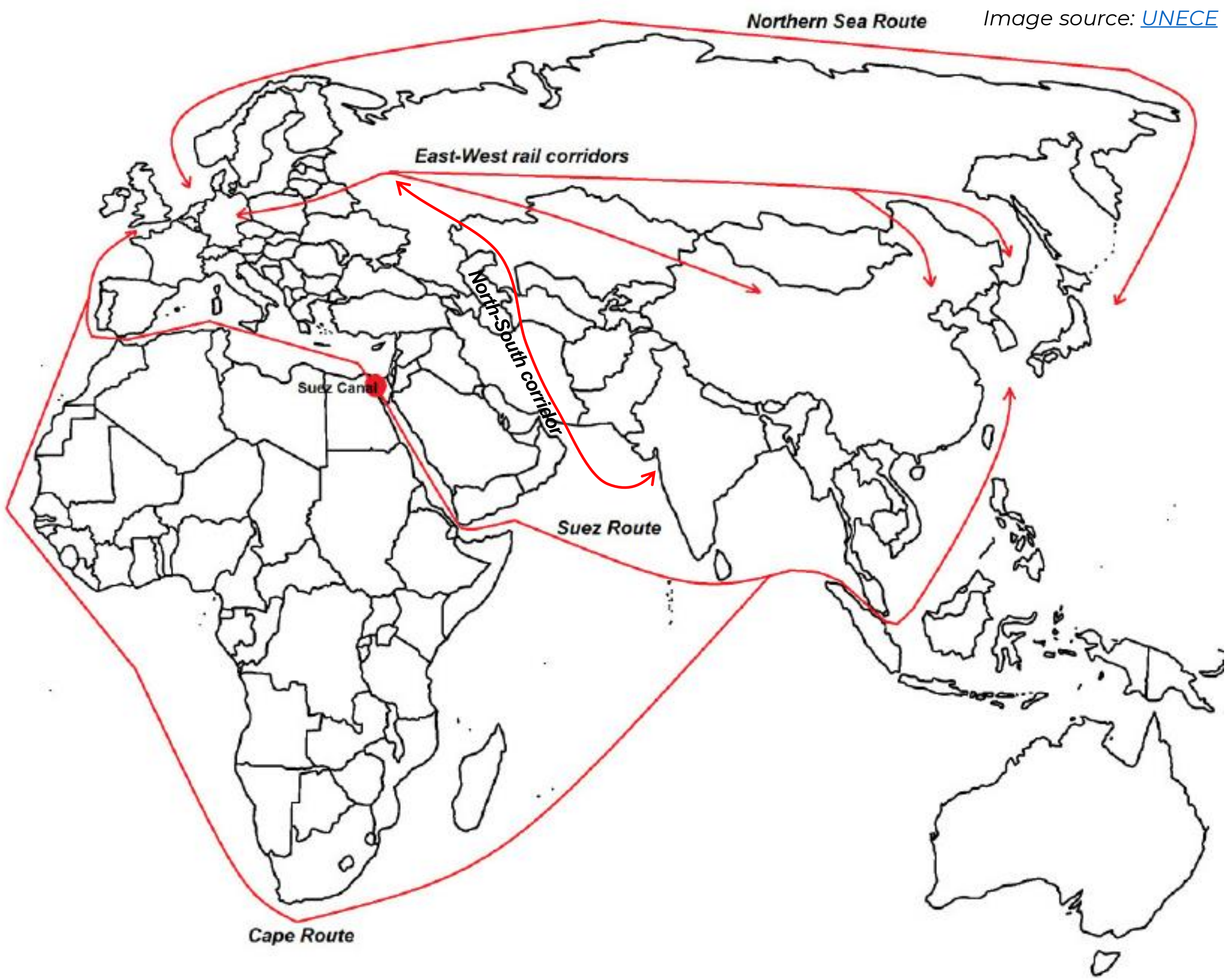
Source: BCG

2. INLAND INTERNATIONAL CORRIDORS

INTERNATIONAL TRADE ROUTES CONNECTING EAST ASIA AND EUROPE

- While the Northern Sea Route is unavailable in winter and the Cape Route is too long, **inland corridors are the best alternative to the main maritime route** through the Suez Canal which has bottlenecks sensitive to geopolitical tensions and risks.
- There are **multiple inland routes** connecting East Asia and Europe.
- Inland routes also have their own bottlenecks and risks, but **they create diversification opportunities and provide solution** to cases similar to the 2021 Suez Canal obstruction.
- Inland corridors expand logistic capabilities, increases supply of transportation services, and opens opportunities for 'greener' freights.

Image source: UNECE

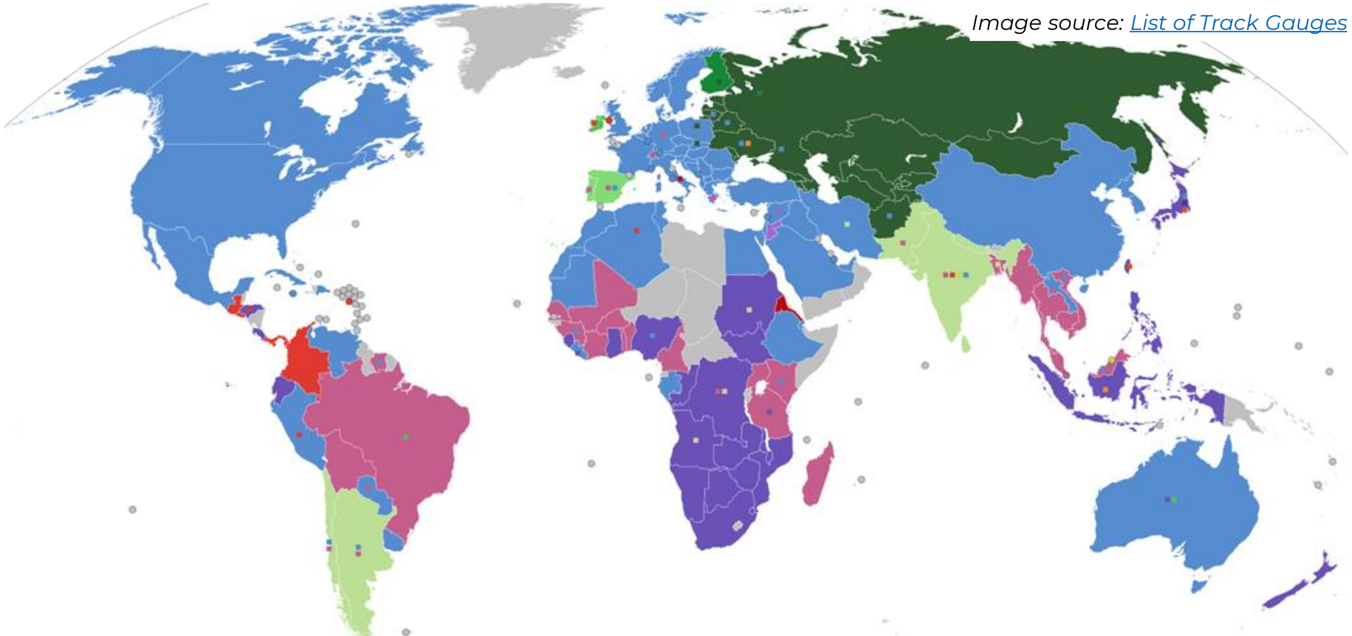


Source: World Bank, AstanaTimes, Universidad de Navarra, VOA News

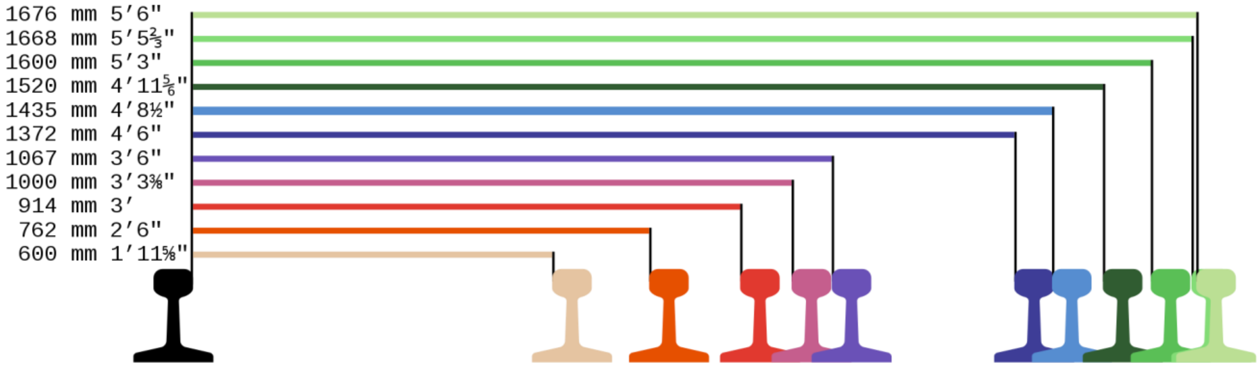
INTERNATIONAL RAILWAY SYSTEM

- Countries have different railway gauge size. While **post-Soviet countries have 1520 mm gauge**, China, Iran, Türkiye, and EU countries have 1435 mm gauge.
- Changes in gauge size affect the time required for cargo handling at borders and impact the **primary comparative advantage of in-land corridors: cargo delivery time**. Cargo delivery time could be further reduced through the optimisation of operational and documentation processes, achieved via unification and digitalisation.
- **The Middle Corridor** has two points of gauge change:
  - between Central Asia and China;
  - at Georgia-Türkiye border (can be replaced by change of mode at Georgian Black Sea ports).

Image source: [List of Track Gauges]



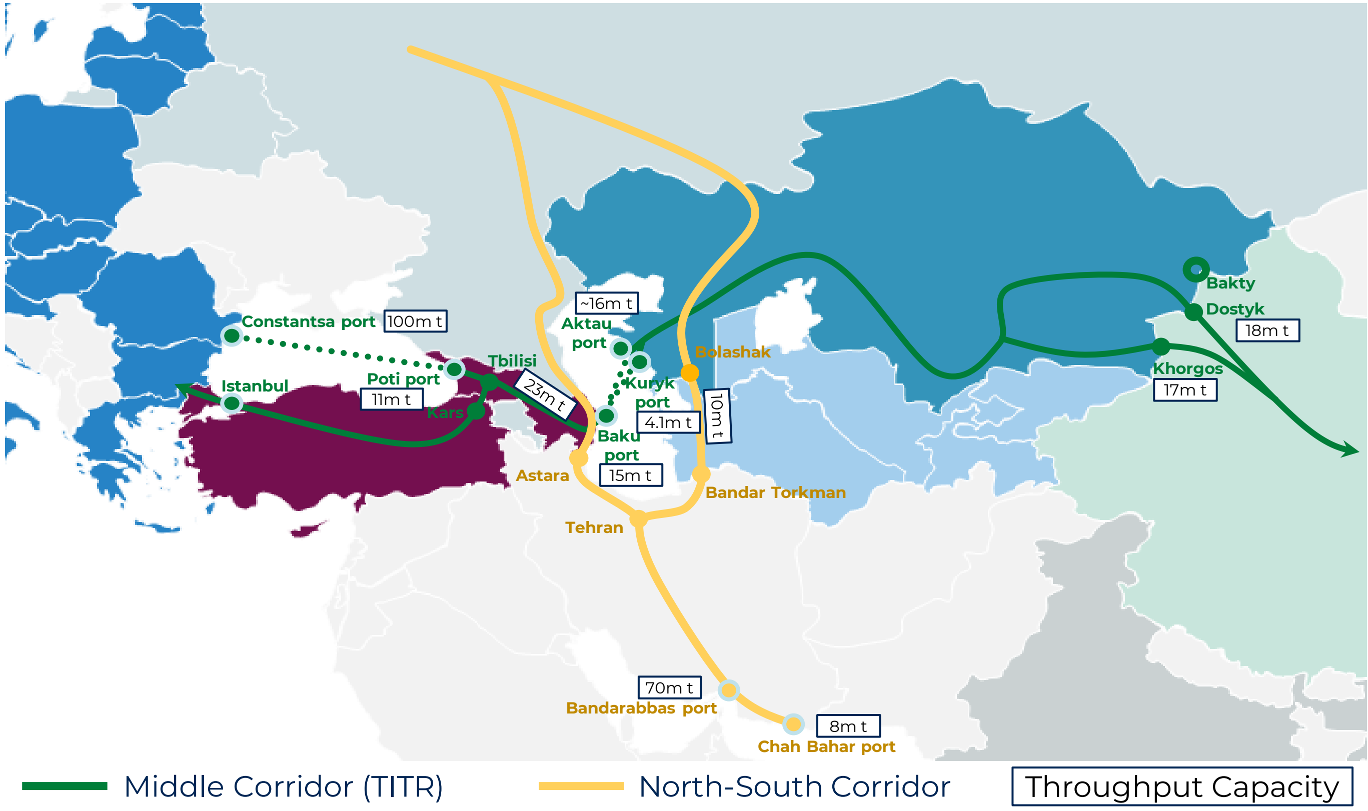
Note: Dots represent urban tram and light train gauges that differ from country's railway system gauge



Source: [Wikipedia]

KAZAKHSTAN'S ROLE IN THE MIDDLE AND NORTH-SOUTH CORRIDORS

- Kazakhstan is a key country for the Middle and North-South Corridors. To accommodate the growing cargo flow, **capacity expansion of infrastructure, marketing activities, and additional international arrangements is needed**.
- There are several large infrastructure projects on the Middle Corridor and on the North-South Corridor that connect East Asia, the Middle East, and Europe via the continent that **require long money and involve stakeholders from different countries**.



Source: AIFC findings, Aries Shipping Agency, Poti Seaport website, Baku Port website, World Bank, VesselTracker.com

INITIATIVES/INVESTMENT PROJECTS

Middle Corridor (TITR)

1. Kazakhstan-China border crossings (Khorgos, Dostyk, Bakty)
2. Kazakhstan railway system
3. Caspian ports (Aktau, Kuryk, Baku)
4. Caucasus railway system (Azerbaijan and Georgia)
5. Georgian ports on the Black Sea

North-South Corridor

6. Kazakhstan railway system and Caspian ports
7. Dry port at the Iran-Turkmenistan border
8. Rail and auto transportation system of Iran
9. Iranian ports on the Gulf

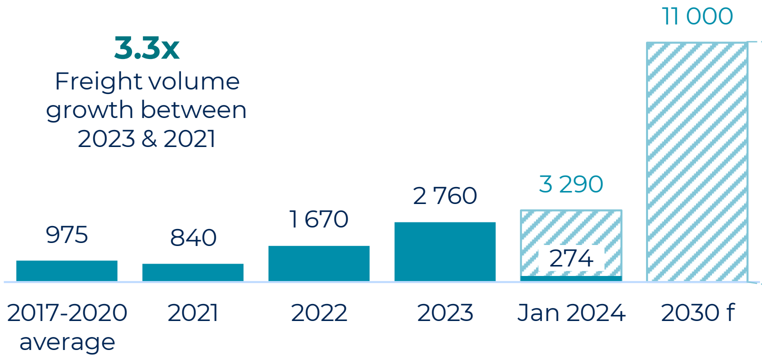
General initiatives

10. Enroute trade hubs
11. Wagons and container parks
12. Digitalization and data flow
13. Human capital development

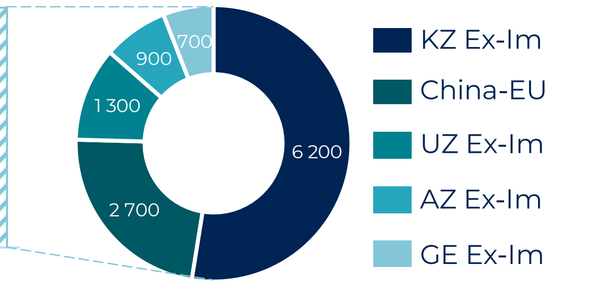
THE MIDDLE CORRIDOR

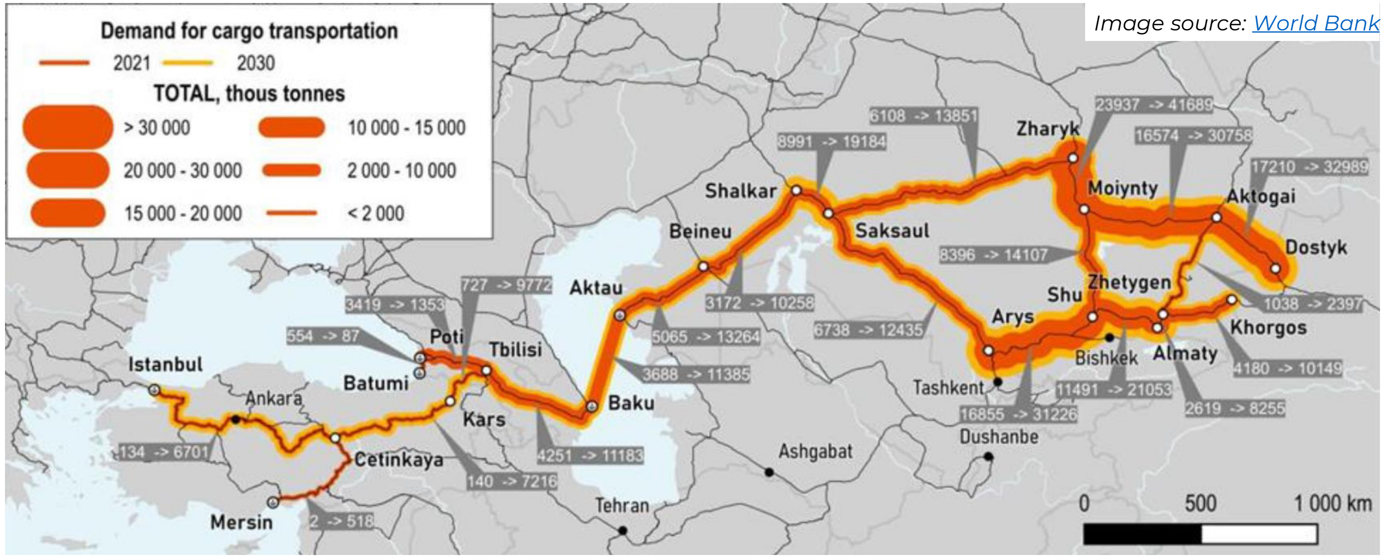
- The Middle Corridor is a strategically important multimodal corridor with a length of **6 180 km** and a throughput capacity of **6m tonnes**, including 80 000 TEU.
- Transportation time along the Middle Corridor have been **reduced from 38-53 days to 19-23 days**. The goal is 14-18 days in 2024, including 5 days via Kazakhstan.
- The World Bank forecasts volumes on the Middle Corridor to **triple by 2030 and reach 11m tonnes per year** mostly due to economic growth of Central Asia and Caucasus rather than due to growth of transit cargo.
- The World Bank assumes that the Middle Corridor **will remain mostly a regional route**, with intercontinental trade representing under 40% of its volumes by 2030.

FREIGHT VOLUME VIA THE MC
(thousand tonnes)



2030 FORECAST FREIGHT VOLUME BREAKDOWN VIA THE MC
(million tonnes)





Source: Ministry of Transport of Kazakhstan, AstanaTimes, World Bank

3. KAZAKHSTAN'S TRANSPORT & LOGISTICS INFRASTRUCTURE

KAZAKHSTAN'S TRANSPORT INFRASTRUCTURE SYSTEM

- Kazakhstan has invested **$35bn** in transport and logistics over the past 15 years.
- Share of transport and logistics in Kazakhstan's GDP is forecast to grow from 6.2% in 2022 to **9% by 2025**.

16 000 km
of railway network, including 275 km in other countries

94 800 km
of highway network, including 24 900 km of international and national level highways

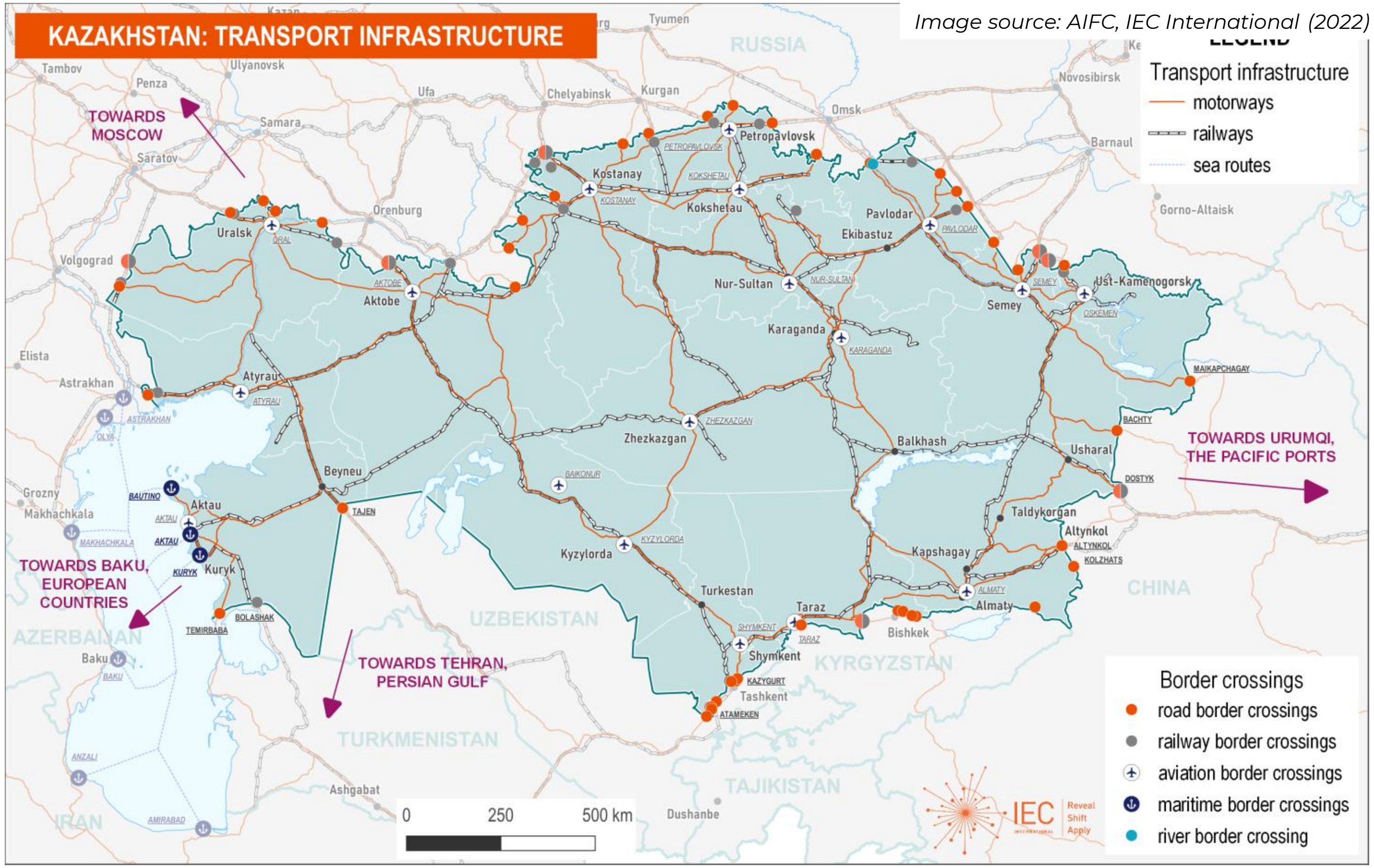
Caspian ports
Aktau Marine Trade Port, Aktau Marine Northern Terminal, and Kuryk Marine Complex

25 airports
International or local airports

29 000 km
of pipeline system including 9 200 km of oil pipelines and 16 500 km of gas pipelines

2 170 km
of rivers

Image source: AIFC, IEC International (2022)

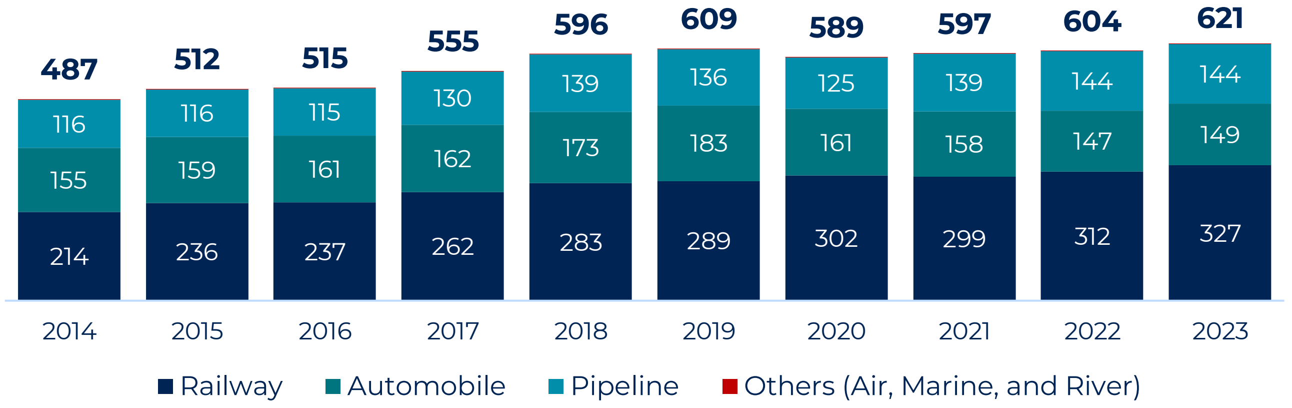


Source: AstanaTimes, Bureau of National Statistics of Kazakhstan

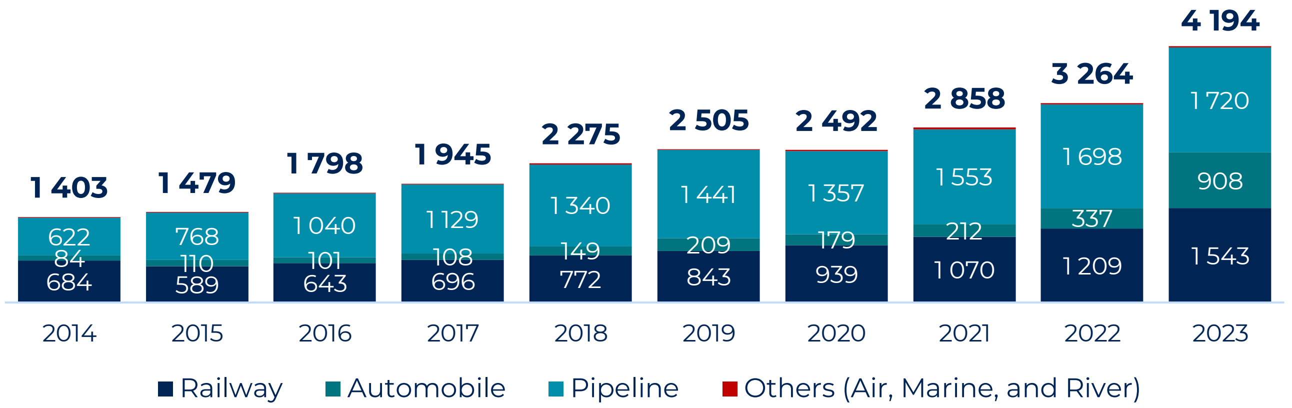
MODES OF TRANSPORT IN KAZAKHSTAN

- Although the cargo load has stabilised in recent years, it has **grown significantly** over the last decade.
- In terms of cargo load, **railways transport** is the most used mode of transport in Kazakhstan, followed by automobile and pipelines.
- In real terms, cargo volume via other modes of transport **remains insignificant**.
- Rivers of Kazakhstan have limited capacity for cargo transportation, unlike those from North America or Europe.

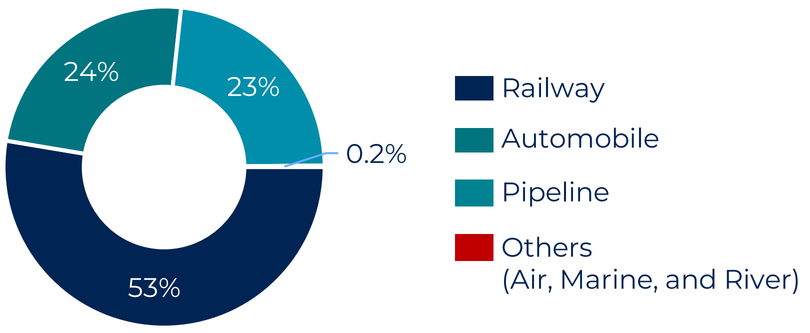
CARGO VOLUME BY MODE OF TRANSPORT, 2014-2023
(billion tonnes-km)



TRANSPORTATION INCOME BY MODE OF TRANSPORT, 2014-2023
(nominal billion tenge)



SHARES OF TRANSPORT MODES, 2023

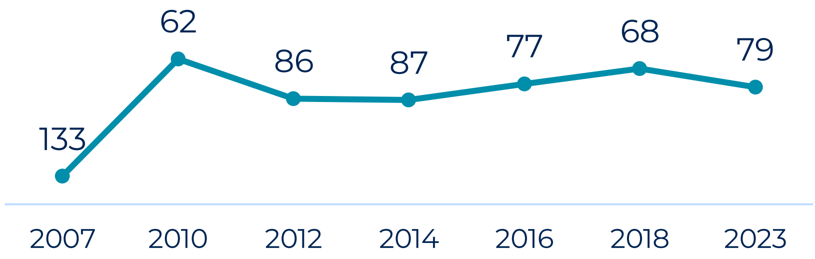


Source: *Bureau of National Statistics of Kazakhstan*

KAZAKHSTAN'S RANKING IN THE 2023 LOGISTICS PERFORMANCE INDEX

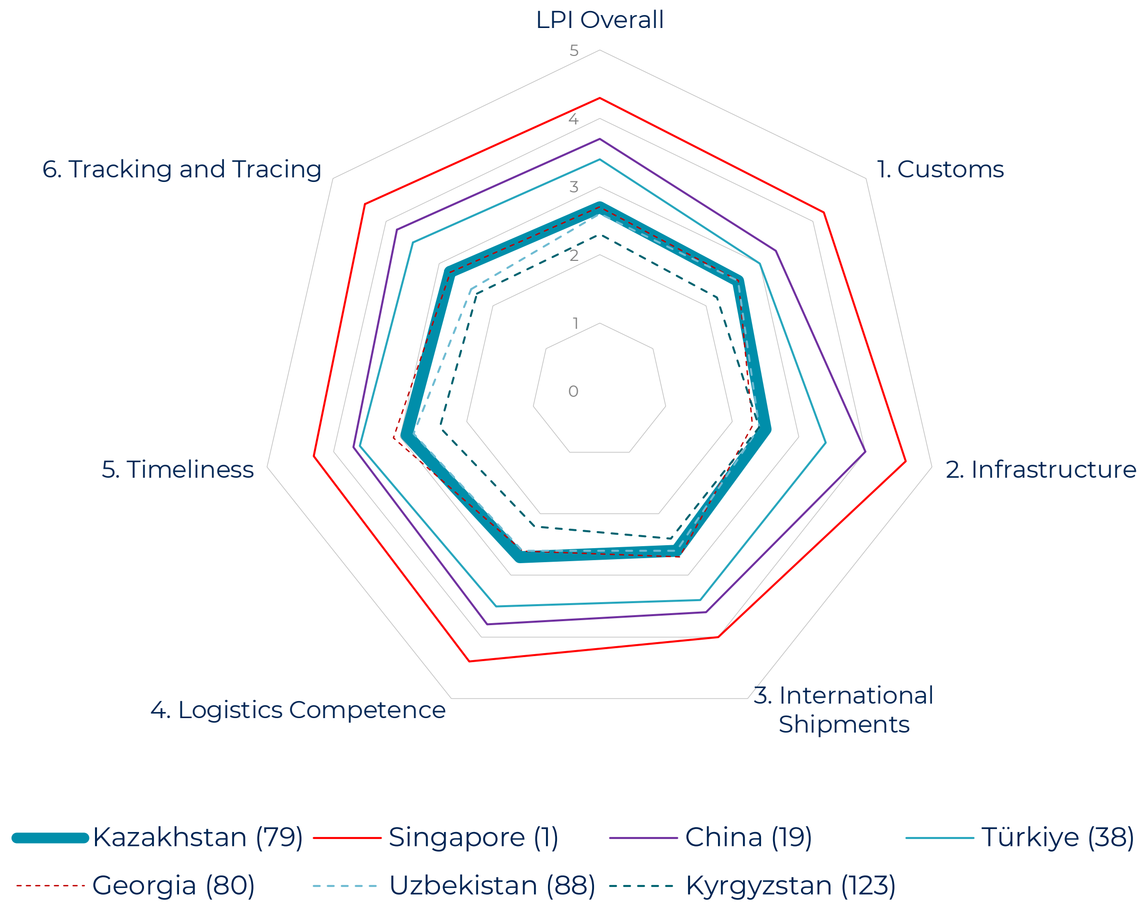
- In 2023, Kazakhstan ranked **79th out of 139 countries** with an overall index of 2.7 out of 5.0.
- Kazakhstan's performance (grade/rank) by the index components:
  - Customs – 2.6 / **74**
  - Infrastructure – 2.5 / **80**
  - International Shipments – 2.6 / **91**
  - Logistics Competence – 2.7 / **81**
  - Timeliness – 2.9 / **93**
  - Tracking and Tracing – 2.8 / **80**

KAZAKHSTAN'S RANK IN THE LPI



Source: [World Bank's Logistics Performance Index 2023]

SINGAPORE LEADS IN THE 2023 LOGISTICS PERFORMANCE INDEX



Note: Ranking is shown for countries along the Middle Corridor and Singapore as ranking leader; Azerbaijan is not presented in the index.

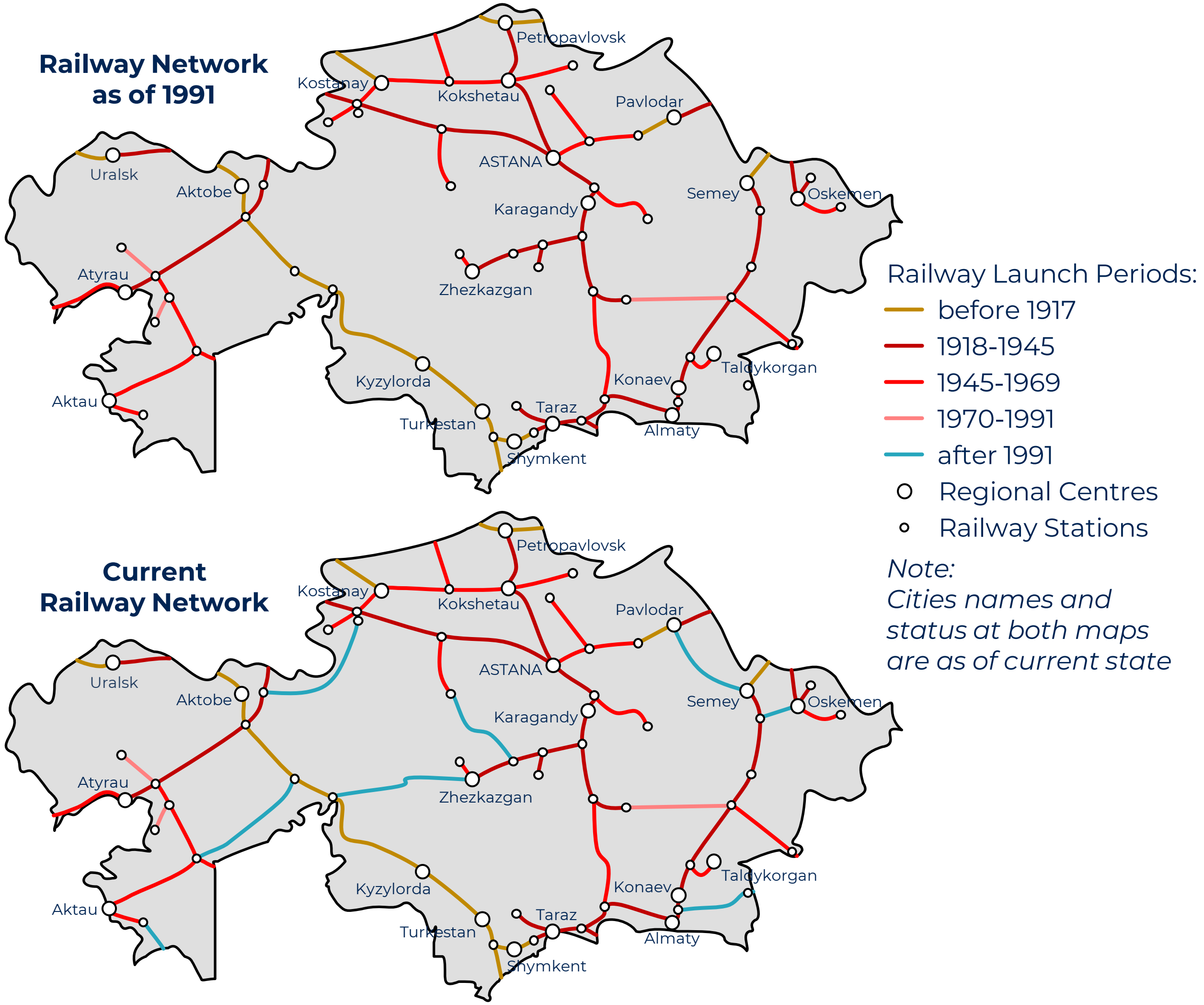
4. RAILWAY TRANSPORTATION

RAILWAY INFRASTRUCTURE IN KAZAKHSTAN

- Railways are a key cargo transportation mode in Kazakhstan.
- In 1991, Kazakhstan had **comparatively developed but segmented** railway network: West Kazakhstan, North Kazakhstan, and East Kazakhstan were connected to South Kazakhstan, but not to each other.
- Major cities and every region had a railway connection; however, there were many **connections through other countries**, making intra-country transportation challenging.
- In recent years, Kazakhstan worked on **integrity of own railway network** by constructing intra-country connections such as Pavlodar – Oskemen, Aktobe – Kostanay, Zhezkazgan – Aktau, and others, but also on **new international connections for external trade** such as railways to **Turkmenistan** and **Iran**, and to **China**.

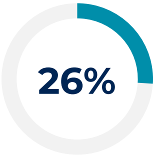
Source: *[Qazaqstan Tarihy website]*

HISTORY OF KAZAKHSTAN'S RAILWAY NETWORK CONSTRUCTION



ELECTRIFICATION OF RAILWAYS

- Electrification of a railway determines what types of locomotives and at what speed can use it.
- The electrified railways of Kazakhstan operate under 25kV AC, **capable of serving high-speed trains**.
- However, only **4 200 km** out of a total of 16 000 km of railways are electrified. Kazakhstan plans to electrify additional **1 000 km** by 2025.



Share of electrified railways in Kazakhstan

ELECTRIFICATION OF KAZAKHSTAN'S RAILWAY NETWORK

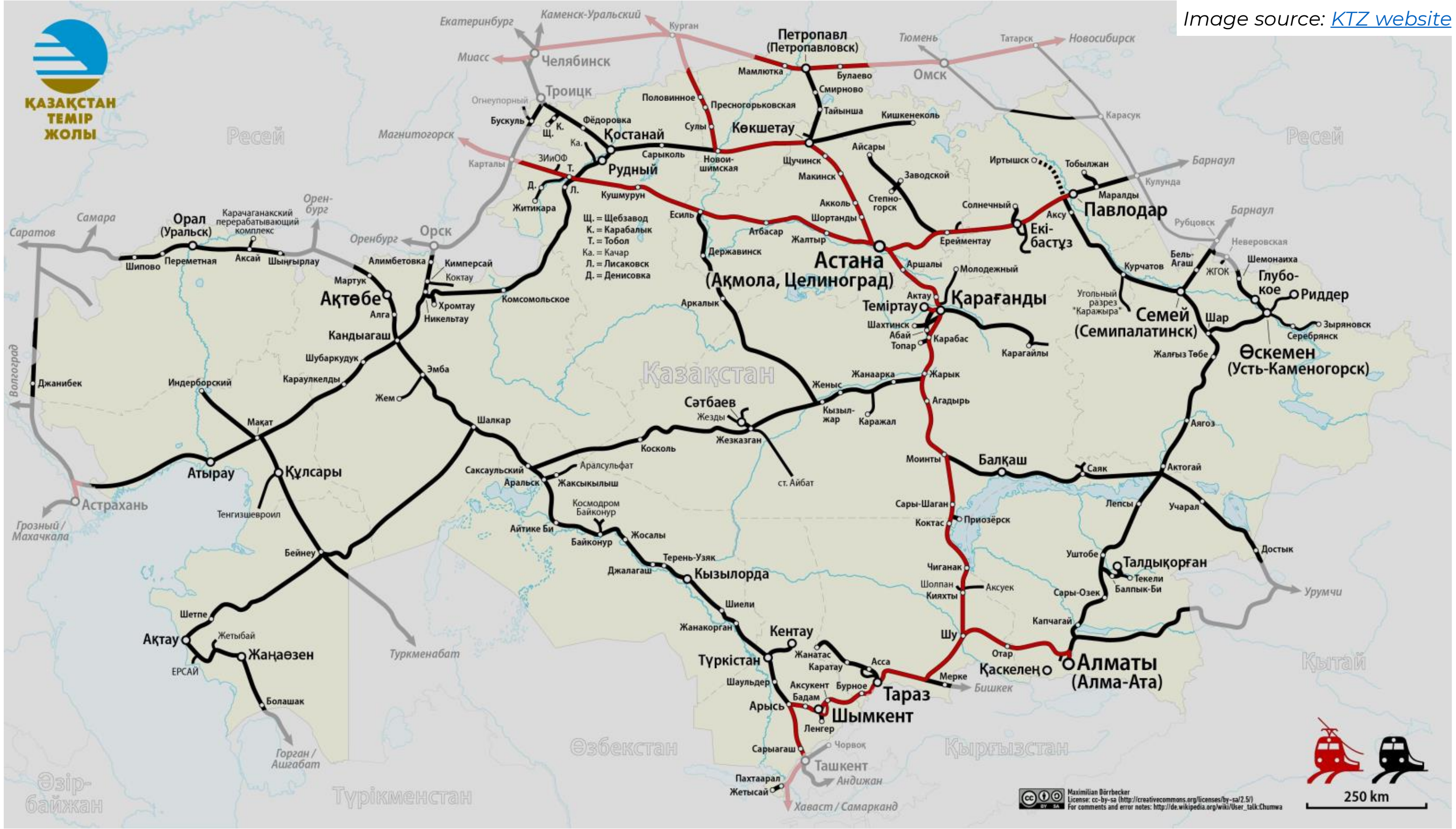


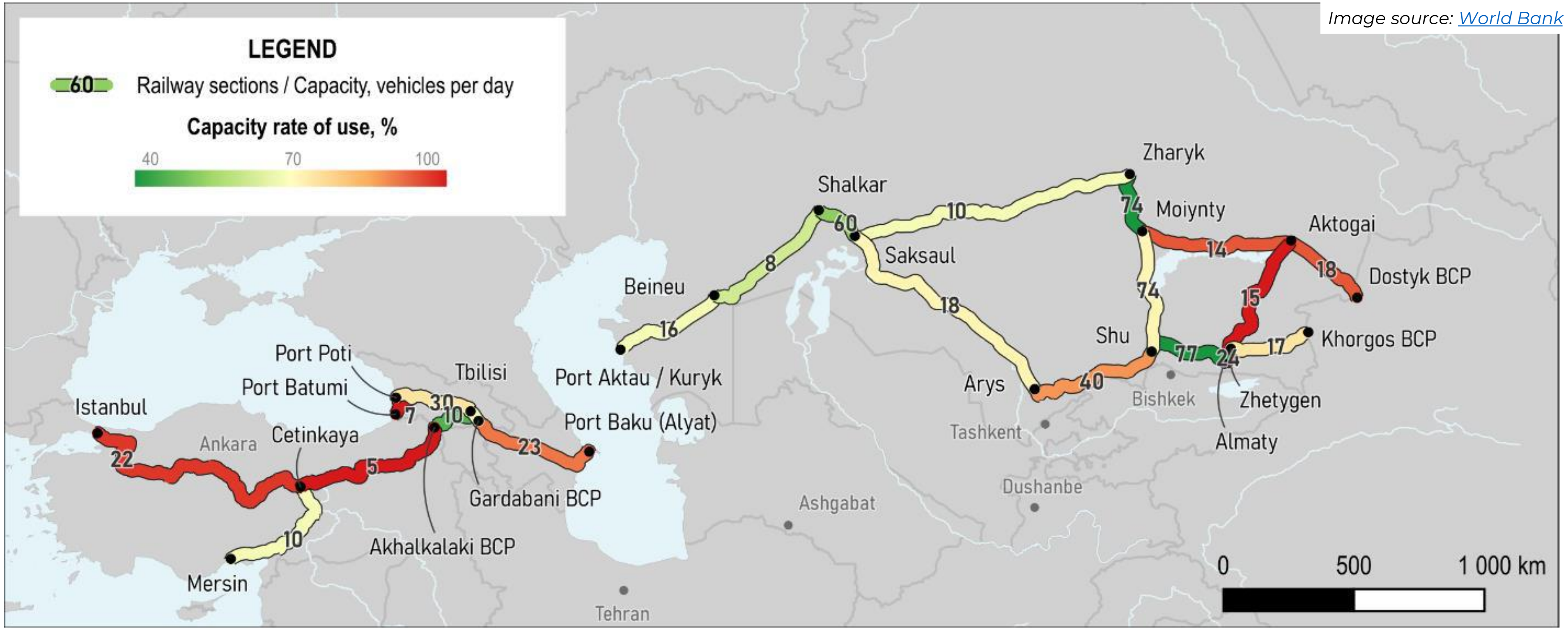
Image source: [KTZ website]

electrified — not electrified

Source: [Atameken Business]

RAILWAY CAPACITY AND USE OF MIDDLE CORRIDOR

Image source: [World Bank]



- In Kazakhstan, the most loaded railway sections are **Dostyk-Moiynty** and **Shu-Shymkent**.
- Kazakhstan is currently expanding Dostyk-Moiynty capacity with construction of **second railway track** and started to build a new line to connect **Bakty** (Kazakhstan-China border point) to the national railway system.

Source: [World Bank]

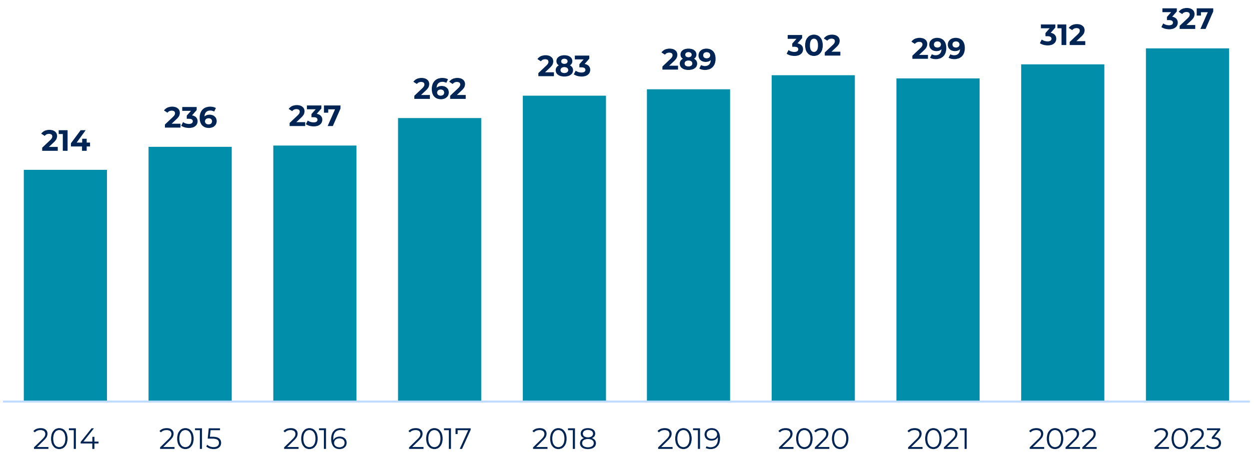
RAILWAY CARGO AND PASSENGER STATISTICS

- The railway cargo volume has significantly grown over the last years, reaching **327 bn t-km** in 2023.
- The cargo volume **kept growing even in 2020**, the height of the Covid-19 pandemic.
- The railway passenger volume **has recovered** from the Covid-19 pandemic.

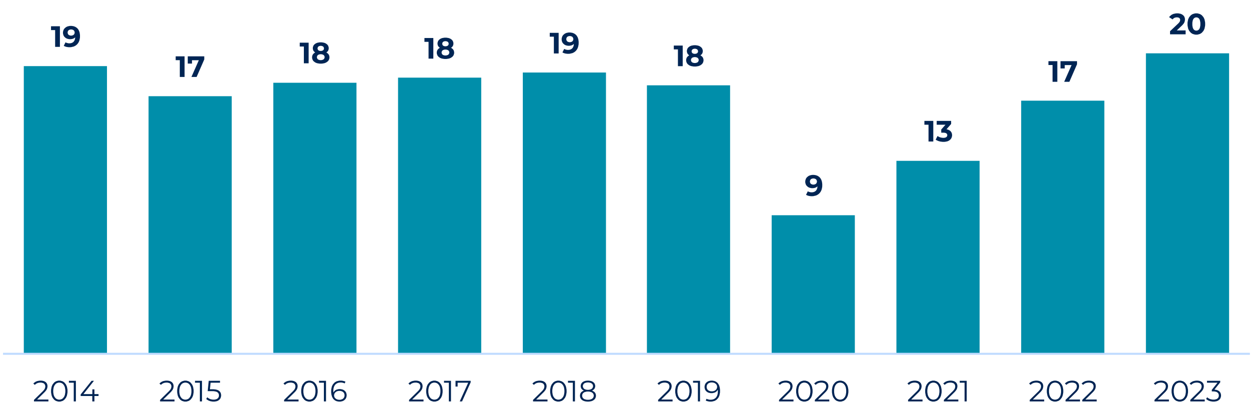
+4.8% Cargo volume CAGR between 2014 and 2023

+0.5% Passenger volume CAGR between 2014 and 2023

CARGO VOLUME OF RAILWAYS IN KAZAKHSTAN, 2014-2023
(billion tonnes-km)



PASSENGER VOLUME OF RAILWAYS IN KAZAKHSTAN, 2014-2023
(billion passenger-km)



Source: Bureau of National Statistics of Kazakhstan

KAZAKHSTAN TEMIR ZHOLY (KTZ)

- KTZ is a transport and logistics holding, operator of Kazakhstan's railway network, and national railway carrier of cargo and passengers.
- In 2023, KTZ:
  - transported **270 bn tonnes-km of cargo** (82.5% of total rail cargo) in Kazakhstan (+7% vs 2022)
  - started construction of **Almaty bypassing railway** line
  - continued construction of the second railway track on the **Dostyk-Moiynty** section
  - initiated the construction of **Bakty-Ayagoz** railway
  - created a **joint venture with PSA** to manage the Middle Corridor
  - purchased **112 locomotives**
  - repaired **1 369 km of railways** (2x vs 2022)

ҚАЗАҚСТАН ТЕМІР ЖОЛЫ

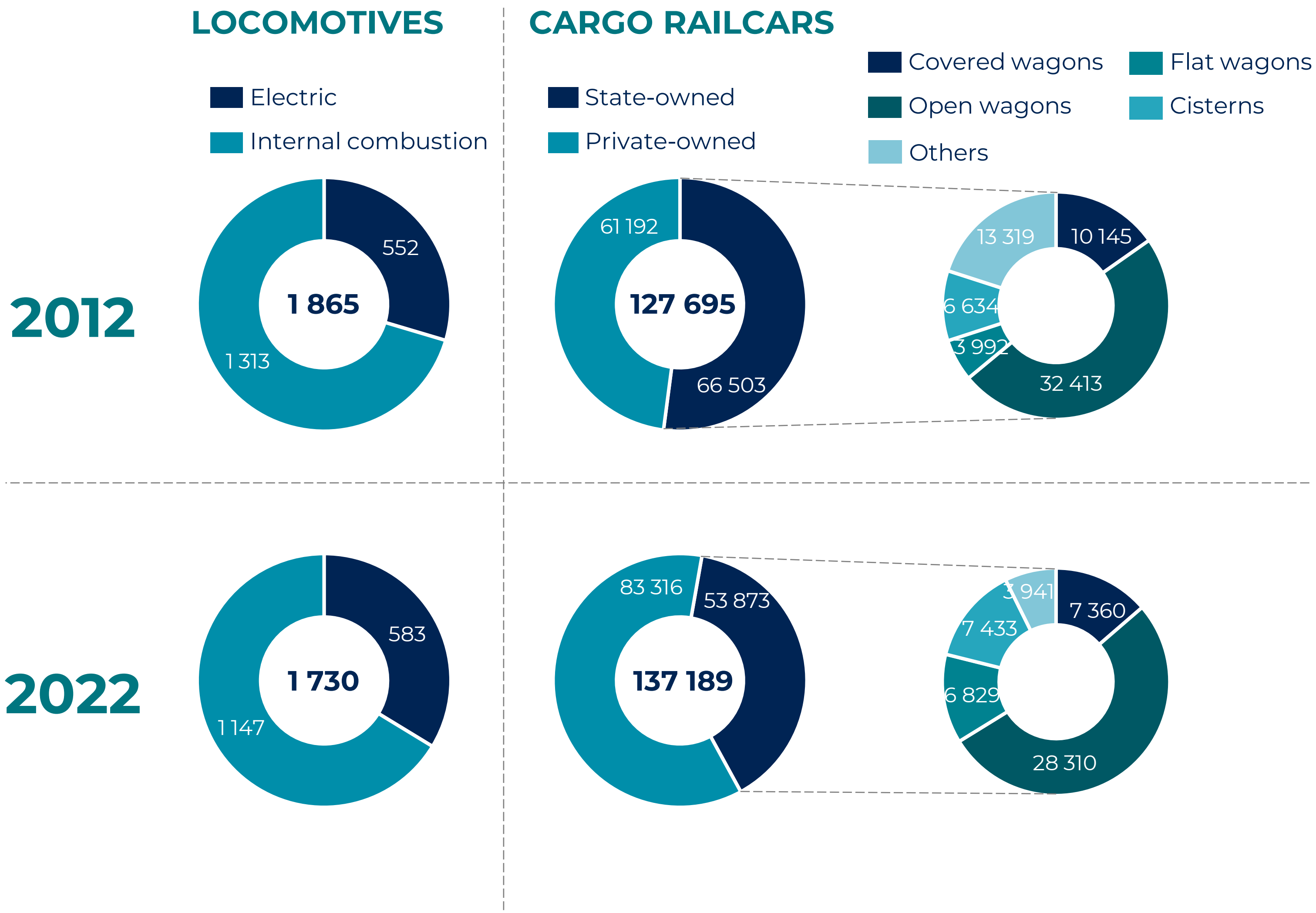
STRATEGIC PLANS OF KTZ

- Increase efficiency of rail transportation
- Develop transit transportation
- Increase customer satisfaction
- Digitalisation
- Implement ESG principles
- Guarantee safety of train traffic

Source: KTZ website

LOCOMOTIVES AND RAILCARS COUNT IN KAZAKHSTAN

- Between 2012 and 2022, the number of locomotives **decreased from 1 865 to 1 730**, a 7.4% decline.
- Number of electric locomotives **grew from 552 to 583**.
- Over the same period, number of cargo railcars **increased from 127 695 to 137 189**, a 7.4% growth.
- Number of state-owned cargo railcars **decreased from 66 503 to 53 873**.
- **Flat wagons** account for the largest share among state-owned cargo railcars.



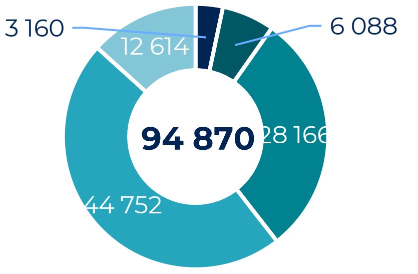
Source: Bureau of National Statistics of Kazakhstan

5. AUTOMOBILE TRANSPORTATION

HIGHWAY NETWORK OF KAZAKHSTAN

- Highway network is around **94 800 km**, including 24 900 km of international and national level and 31 800 km of regional (oblast) level highway.
- There are about **230 autocars per thousand people** in Kazakhstan that is comparable to Albania or China, and twice less than in Hungary, Romania, Brazil, and Bahrain.
- **Category IV** accounts for the largest share in highway network.

BREAKDOWN OF HIGHWAY CATEGORIES
(km)



INTERNATIONAL AND NATIONAL HIGHWAYS OF KAZAKHSTAN

Image source: [Kazakhstan's Committee for Roads]

Highway Category	*I*	*II*	*III*	*IV*	*V*
Daily throughput capacity in sedans equivalent	*> 14 000*	*from 6 000 to 14 000*	*from 2 000 to 6 000*	*from 200 to 2 000*	*< 200*

Source: [Bureau of National Statistics of Kazakhstan], [List of countries and territories by motor vehicles per capita]

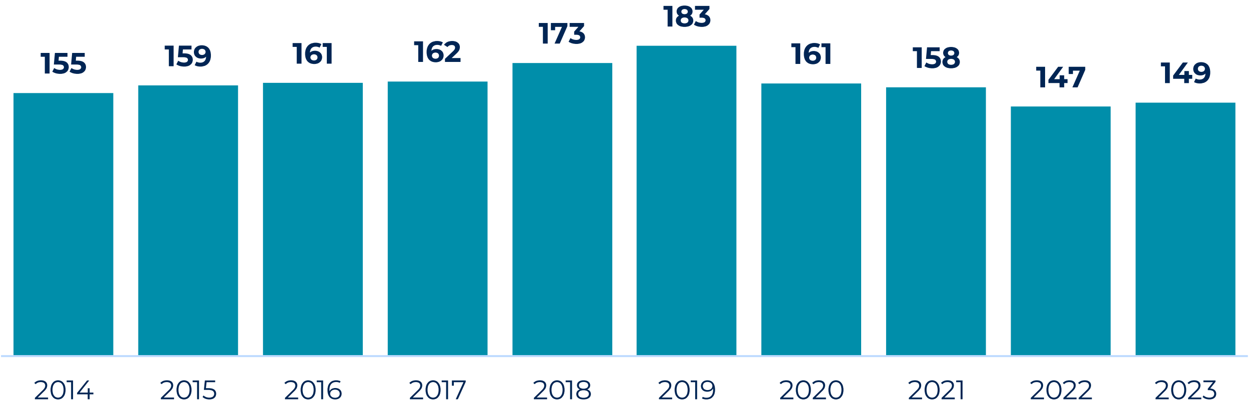
CARGO AUTOMOBILE STATISTICS

- Automobile transport in Kazakhstan accounts for a significant share of freight traffic, **24% in 2022**, and **more than 90% of passenger traffic**.
- After reaching its peak in 2019, the automobile cargo volume **has been decreasing**.
- From 2003 to 2008, the number of automobile cargo transport count increased almost twice – **from 223 000 to 414 000**.
- After that, the number of cargo automobiles was volatile, but the overall trend was upward.

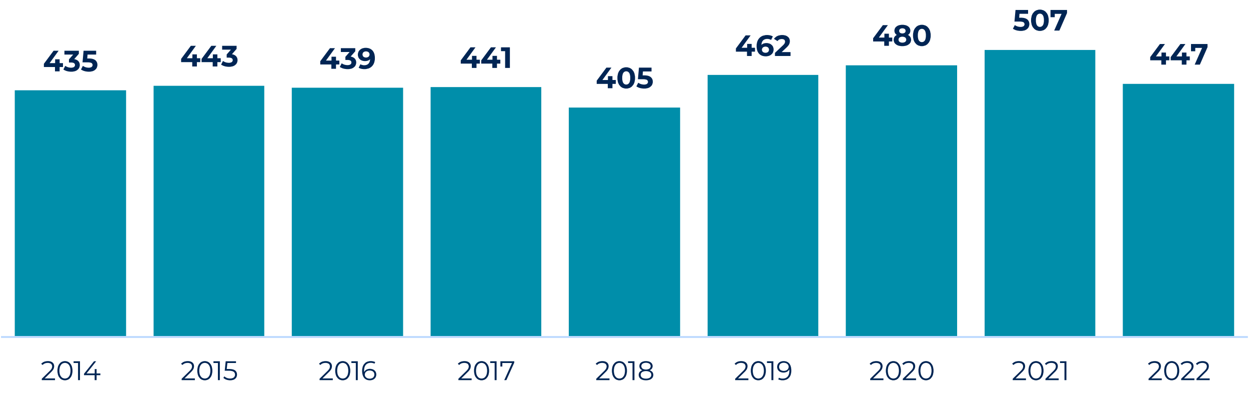
447 000 number of automobile cargo transport in 2022

–19% decline in automobile cargo volume from 2019 to 2023

CARGO VOLUME OF AUTOMOBILE TRANSPORT IN KAZAKHSTAN, 2014-2023
(billion tonnes-km)



AUTOMOBILE CARGO TRANSPORT COUNT IN KAZAKHSTAN, 2014-2022
(thousands)



Source: [Bureau of National Statistics of Kazakhstan]

6. KHORGOS

KHORGOS

- Khorgos is a multimodal hub at Kazakhstan-China border, which was established in 2011 to create an **efficient transport, logistics and industrial centre** to support Kazakhstan-China trade.
- The construction of the railway to Khorgos was completed in 2012. Khorgos is **accessible via the Altynkol** railway station.
- The Dry Port Zone is developed by **Khorgos Gateway** (created in 2016) – a joint company of Kazakhstan Temir Zholy (51%), COSCO Shipping (24.5%), and Port of Lianyungang (24.5%).

MAP OF THE DEVELOPMENT PLAN OF KHORGOS

Image source: Nurkent town development plan

CAPACITY OF THE DRY PORT*

540k TEU/ year	Throughput capacity
48 500 m2	Storage warehouse area, of which 700 sq. m are refrigerated
31.4 ha	Railway station area and 27.5 km of railway tracks
18 000 TEU	Container storage capacity

** Includes rail-mounted automated gantry and pneumatic wheel cranes, carriers, forklifts*

Source: *ICBC Khorgos website, AstanaTimes, 24kz, South China Morning Post*

7. CASPIAN PORTS

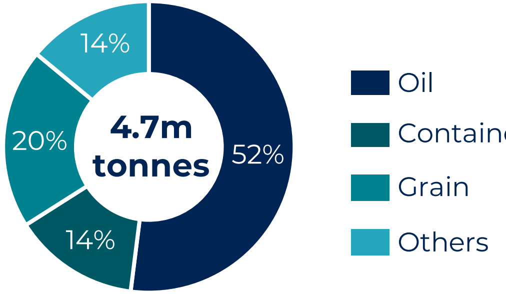
THE CASPIAN SEA

- The Caspian Sea connects Kazakhstan via Aktau and Kuryk to Azerbaijan, Iran, Russia, and Turkmenistan.
- The Caspian Sea is **capable for cargo vessels** and **connected to the global ocean via the Volga-Don river canal**, which is located in Russia.
- Kazakhstan, Russia, Azerbaijan, Turkmenistan, and Iran agreed on the **legal status of the Caspian Sea in 2018** defining sovereignty over seabed, subsoil, and airspace.
- In Aktau there are two "sub-ports": a state-owned port in the south (ASCP) and a new public-private terminal (AMNT) to the north of ASCP.
- Kuryk port is under development with only ferry terminal operating currently.

20m tonnes Combined estimated capacity of Caspian ports in Aktau and Kuryk

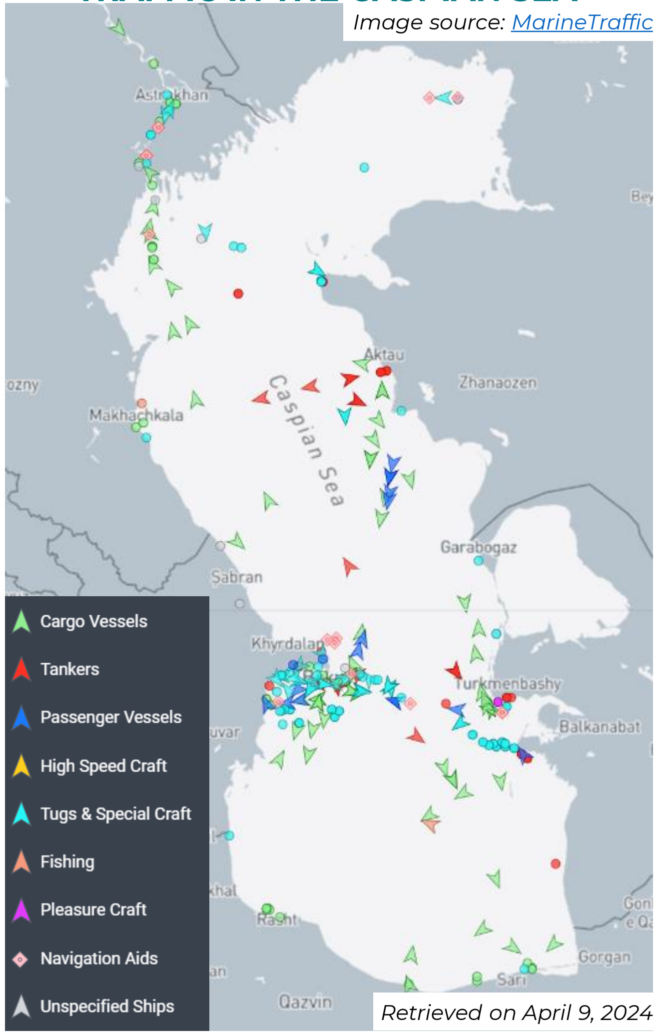
4.7m tonnes Traffic via the Aktau port, including 44 200 TEU of containers, in 2022

BREAKDOWN OF CARGO TRAFFIC VIA THE AKTAU PORTS, 2022



TRAFFIC IN THE CASPIAN SEA

Image source: MarineTraffic



Retrieved on April 9, 2024

Source: ASCP website, AMNT website, Ministry of Foreign Affairs of Kazakhstan

AKTAU PORT: ASCP AND AMNT

ASCP
Aktau Sea Commercial Port

- Open ice-free port
- **11 berths** of 5.1-7.0 m depth
- Open area is **79 700 sq. m**
- Covered transit area is 2 000 sq. m
- Ferry, petroleum, metals, grain terminals
- Total capacity is **11.8m tonnes** annually, including ferry terminal – 2m tonnes, oil terminal – 7.5m tonnes, grain terminal – 1m tonnes, dry cargo terminal – 2.5m tonnes

+ Bautino Terminal – non-standard industrial and construction cargo handling as oilfield services

AMNT
Aktau Marine Northern Terminal

- Open ice-free port
- **4 berths**
- Total storage area is **100 000 sq. m**
- Container, general cargo, grain terminals
- Total capacity is **4.0-4.5m tonnes** annually, including container terminal – 70 000 TEU, general cargo terminal – 2m tonnes, grain terminal – 1m tonnes

MAP OF THE AKTAU PORT

Source: ASCP website, AMNT website

KURYK PORT

Kuryk Port Ferry Terminal

- Open ice-free port state-owned
- **4 berths** of 7 m depth
- Total area is **67 400 sq. m**
- Railway ferry and motorway ferry
- Total capacity is **4.1m tonnes** annually
- Processes up to **5 ferries per day** (a ferry accommodates up to 54 railway wagons)

Results as of 10 months of 2023:

- load was **44% of the capacity** (1.8m tonnes)
- 17% growth compared to the same period of 2022

MAP OF THE KURYK PORT

Image source: Kuryk Port Development website

Sarzha Multimodal Marine Terminal

- Under development
- Open ice-free port private-owned
- **4 berths** of 7 m depth
- Total area is planned to be more than **110 000 sq. m**
- Grain terminal* – 1.5m tonnes
- General cargo terminal* – 1.65m tonnes
- Oil terminal** – 2.6m tonnes
- Container cargo terminal** – 150 000 TEU

* Construction is to be initiated in 2024

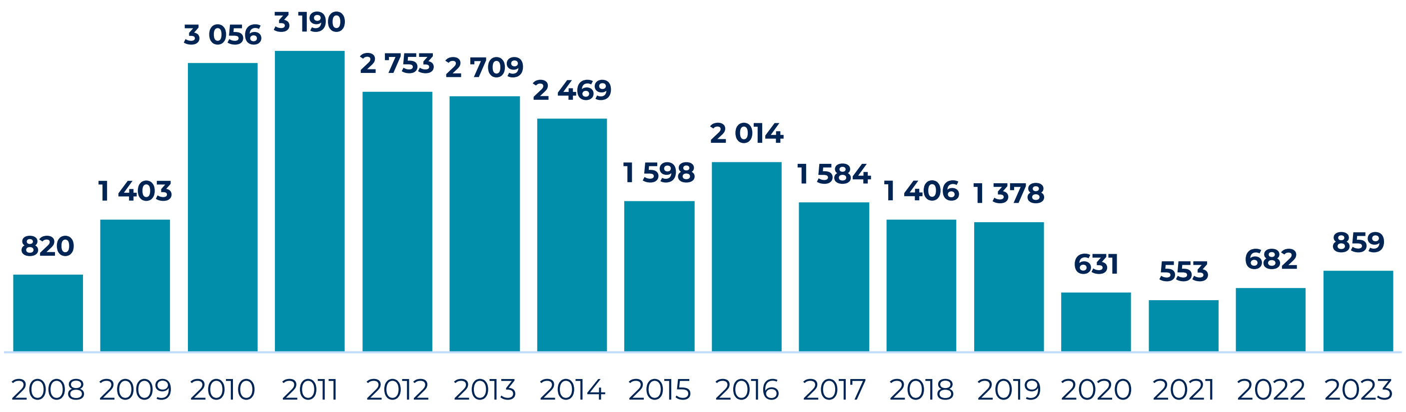
** Construction is not yet started

Source: Kuryk Ferry Terminal website, Kuryk Port Development website

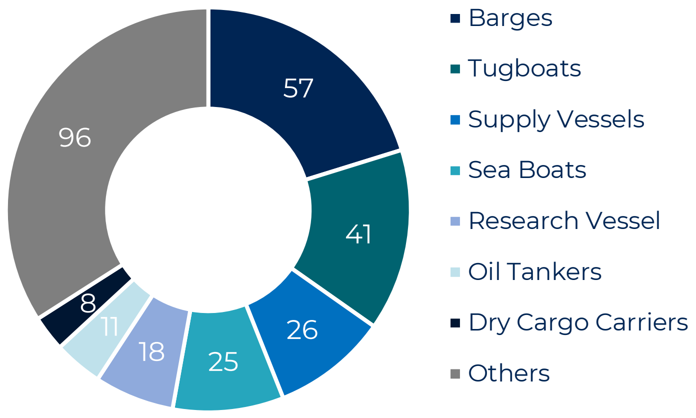
MARINE CARGO AND VESSELS STATISTICS

- Cargo volume of marine transport **has been falling** since reaching its peak in 2011. This was mainly because the volume of oil exports via the Caspian Sea ports were replaced by other modes of transport.
- In 2022, the volume of cargo transhipped through Kazakhstan's seaports **reached 6.5m tonnes**, 19% increase compared to 2021.
- In 2022, number of vessel calls in Kazakhstan's seaports reached 2 237, a 23% increase compared to 2021.
- In terms of vessel types, tugboats, barges, sea boats, and supply vessels account for the largest shares.
- Majority of the vessels **are older than 10 years**.

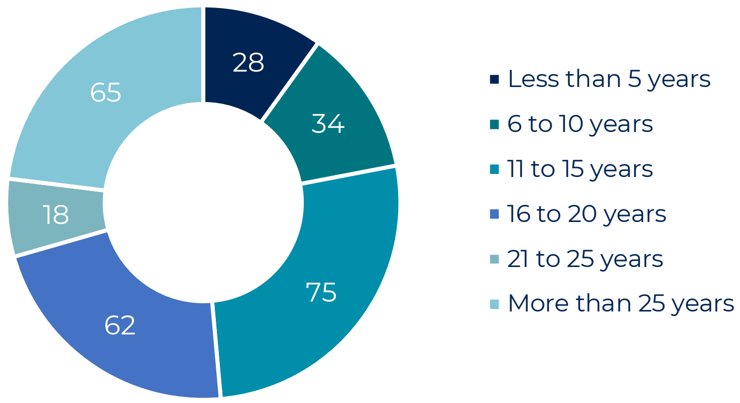
CARGO VOLUME OF MARINE TRANSPORT IN KAZAKHSTAN, 2008-2023
(million tonnes-km)



VESSELS BY TYPE, 2022



VESSELS BY AGE, 2022



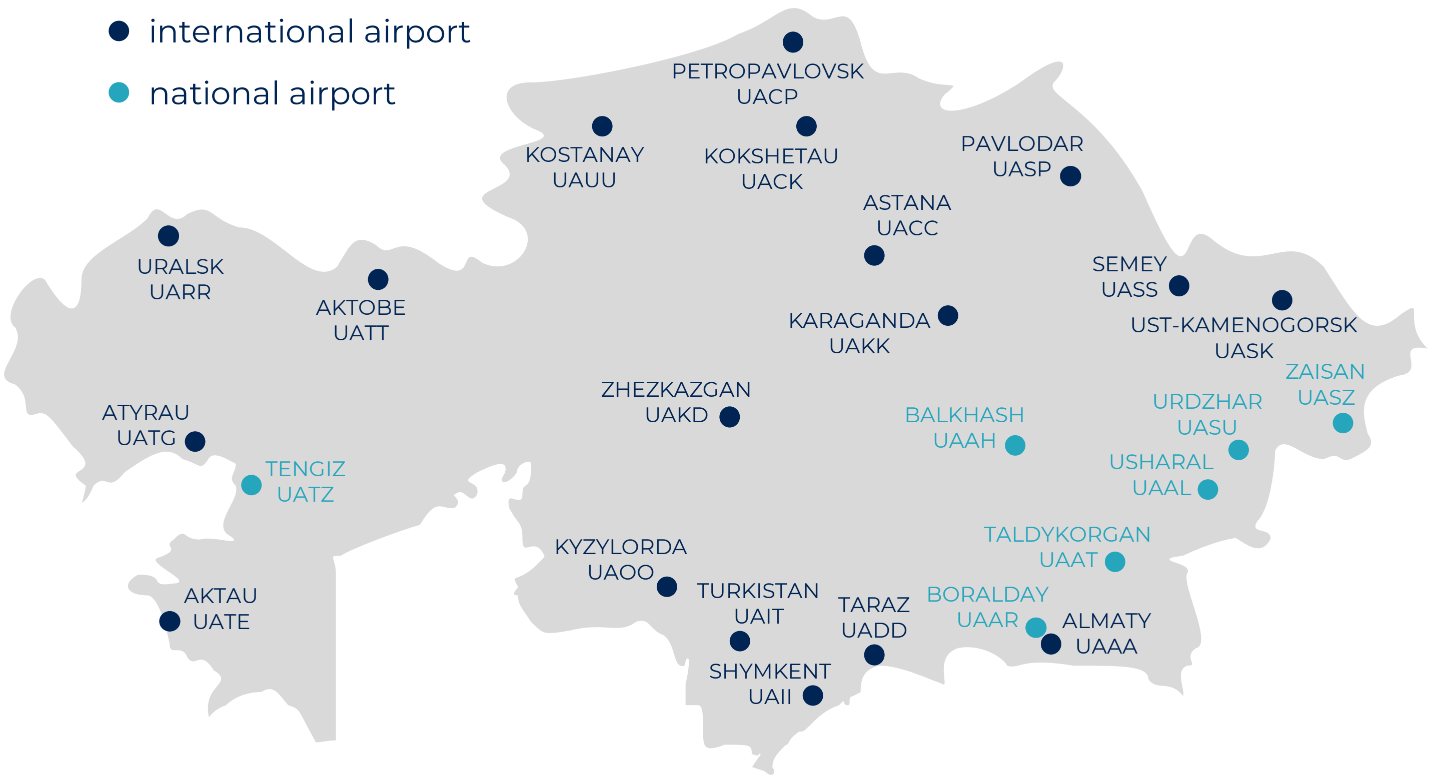
Source: [Bureau of National Statistics of Kazakhstan]

8. AIR TRANSPORTATION

AIR TRANSPORTATION AND INTERNATIONAL AIRPORTS

- Kazakhstan's aviation industry **is recovering after a three-year downturn** due to the Covid-19 pandemic. As the industry recovers, air traffic is being restored, flights are resuming, and new flight destinations are opening.
- Progress has been made in recent years to **modernise and expand** the country's international airports.
- Now, the development and expansion of **cargo terminals** is a priority for the country and is underway at two of the biggest airports: Almaty International Airport (Almaty) and Nazarbayev International Airport (Astana).

AIRPORTS OF KAZAKHSTAN (ICAO codes)



18 international airports in Kazakhstan

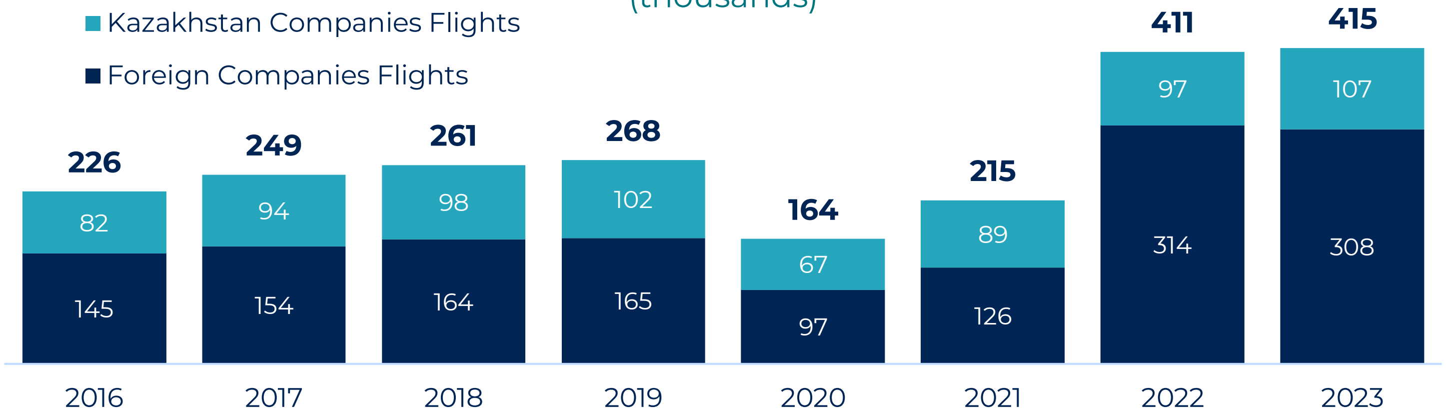
7 national airports in Kazakhstan

Source: *KazAeroNavigatsiya*

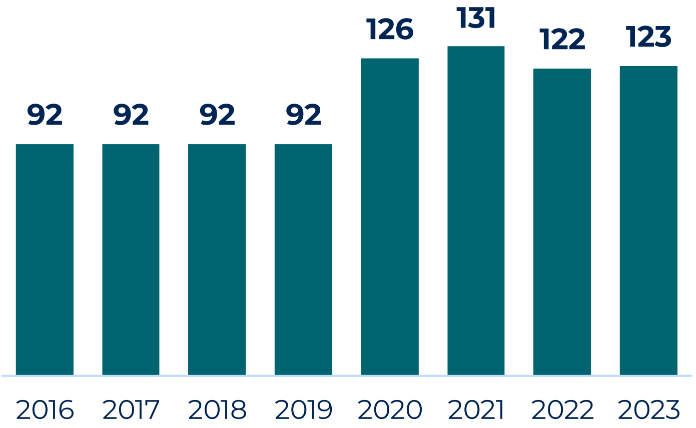
TRANSIT FLIGHTS THROUGH KAZAKHSTAN'S AIRSPACE

- Transit flight routes changed in 2022, making **Kazakhstan's airspace** more important.
- In 2022, number of serviced flights via Kazakhstan's airspace **increased almost 2.5x times** compared to 2021. In 2023, it exceeded **308 thousand** (transit and landing).
- Number of **Air Traffic Service (ATS) routes** via Kazakhstan was stable in 2016-2019 and **started to grow after the fifth freedom was accepted** on 1 November 2019.

SERVICED FLIGHTS VIA KAZAKHSTAN
(thousands)



ATS ROUTES VIA KAZAKHSTAN



+91% Growth in the total number of serviced flights via Kazakhstan in 2022

+148% Growth in the number of serviced flights by international companies via Kazakhstan in 2022

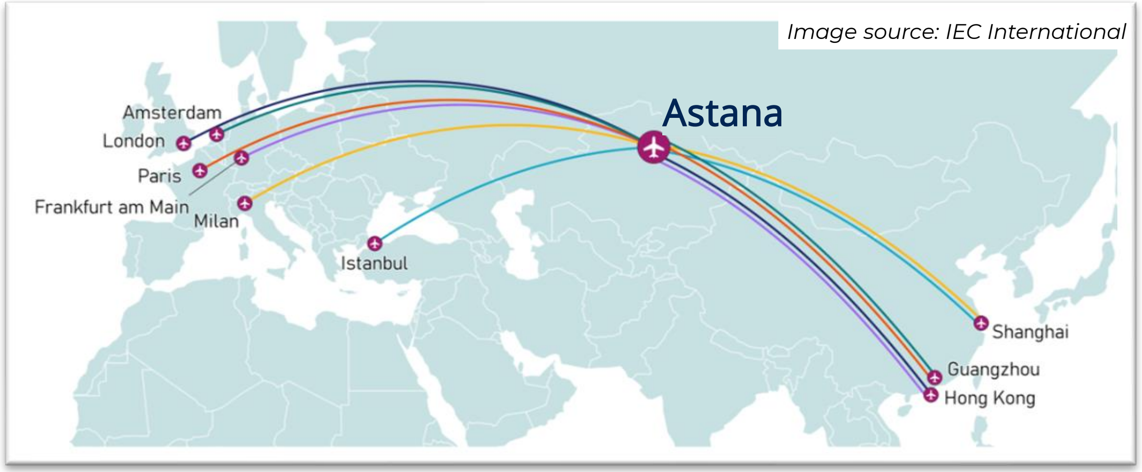
+37% Growth in the number of Air Traffic Service (ATS) routes via Kazakhstan after 5th freedom was accepted

*Note: **ATS route** is a specified route designed for channeling the flow of traffic as necessary for the provision of air traffic services and refers to a variety of airways, including jet routes, area navigation (RNAV) routes, and arrival and departure routes.*

Source: *Ministry of Transport of Kazakhstan*, *KazAeroNavigatsiya*

INTERNATIONAL AVIATION HUB IN ASTANA

- Nursultan Nazarbayev International Airport of Astana could be developed into a **transit hub for cargo airlines** flying from China to Europe.
- Its main competitive advantage is comparably **lower prices offered for ground handling** and **jet fuel***.
- Currently, the Astana airport serves **more than 2 000** cargo transit flights per year, whereas pre-Covid the figure was less than 50 transit cargo flights.
- **Trade operations** via the Astana airport:
  1. Transit freight on the routes Asia-Europe;
  2. Imports of goods from East and Southeast Asia, Europe;
  3. Exports of goods to neighboring countries.



40x Growth in the number of cargo transit flights via Astana compared to pre-Covid levels

Note: Jet fuel supply must be ensured since most transit cargo flights are carried out on heavy aircraft, which require a large amount of refueling.

Source: NNIA website, KazAeroNavigatsiya

9. PIPELINES

PIPELINES TIED TO PETROLEUM INDUSTRY

- Pipelines are one of the most **heavily utilised modes** of transportation in Kazakhstan, primarily due to the dominance of the oil and gas industry in the country's exports.
- Pipelines are **the cheapest mode of transportation** for exporting oil and gas. Consequently, their development is closely tied to the oil and gas sector and is financed accordingly.
- In 2023, **Caspian Pipeline Consortium** accounted for transportation of **80.1% of Kazakhstan's total crude oil exports** (56.5m t out of 70.5m t) or 62.8% of total crude oil production (89.9m t).
- Currently, Kazakhstan is also working on increasing its oil exports via **the Caspian Sea**.

PIPELINES OF KAZAKHSTAN

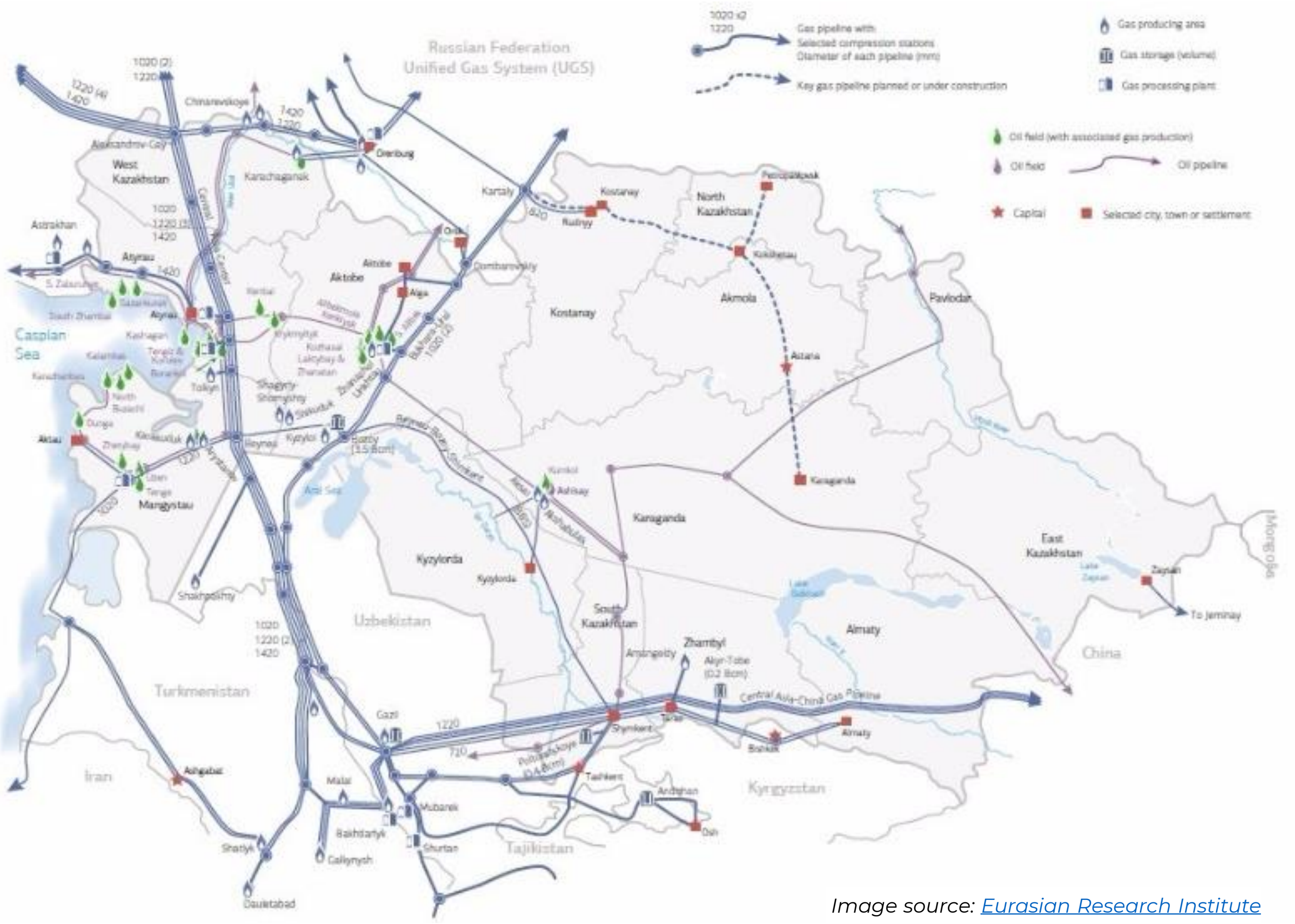


Image source: Eurasian Research Institute

Source: KazTransOil website, CPC website, National Energy Report KAZENERGY 2023, Bureau of National Statistics of Kazakhstan

10. STORAGE

STORAGE AND WAREHOUSES

- The current amount of warehousing property in Kazakhstan is **about 1.3m sq. m** of Class A and Class B warehouses.
- According to the NF Group study (2023 3Q), **1% of Class A and Class B** warehouses are vacant in Kazakhstan.
- Existing economic centres (Almaty, Shymkent, Astana, Aktobe and others) can be **natural points for the local consolidation** of traffic flows and the development of warehousing and storage facilities.

59 m² Sufficiency of high-quality warehousing property per thousand people (October 2022)

*Note: **Class A** and **Class B** are covered warehouses of at least 10m and 6m ceiling height respectively*

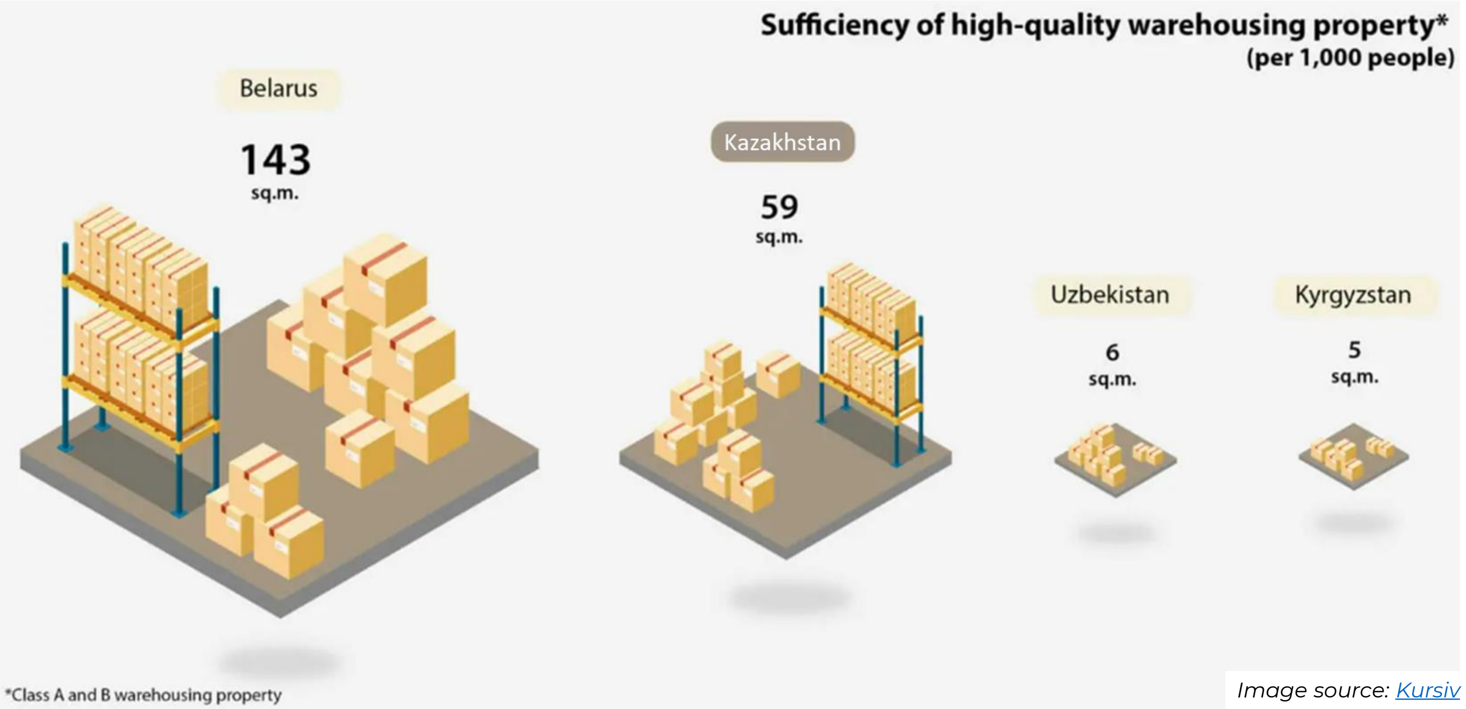


Image source: Kursiv

SHARE OF VACANT SPACES IN CLASS A AND CLASS B WAREHOUSES

Source: Kursiv, NF Group

11. INVESTMENT PROJECTS

CONCEPT FOR THE DEVELOPMENT OF KAZAKHSTAN'S TRANSPORT AND LOGISTICS POTENTIAL UNTIL 2030

MAIN DIRECTIONS

- develop a network of cross-border hubs and terminals to service additional transit volumes and to ensure continuous multimodal transportation
- increase the capacity of international transit transport corridors
- modernise and expand fleet of vehicles including trucks, rail, sea, and air transport
- eliminate non-physical barriers and simplify customs administration
- improve national legislation and develop "soft" infrastructure

TARGET INDICATORS & EXPECTED RESULTS

29.3% increase in labour productivity in T&L compared to 2019

98.4% increase in fixed capital investments in T&L compared to 2019

100% of international and republic auto highways in standard technical condition

95% of regional and local auto roads in standard technical condition

30% share of private carriers in railway cargo transportation

35m tonnes transit volume, including 2m TEU

100% of republic auto highways with mobile network with at least 3G Internet access

3% share of passenger railcars with service life of over than 25 years

34m railway passengers

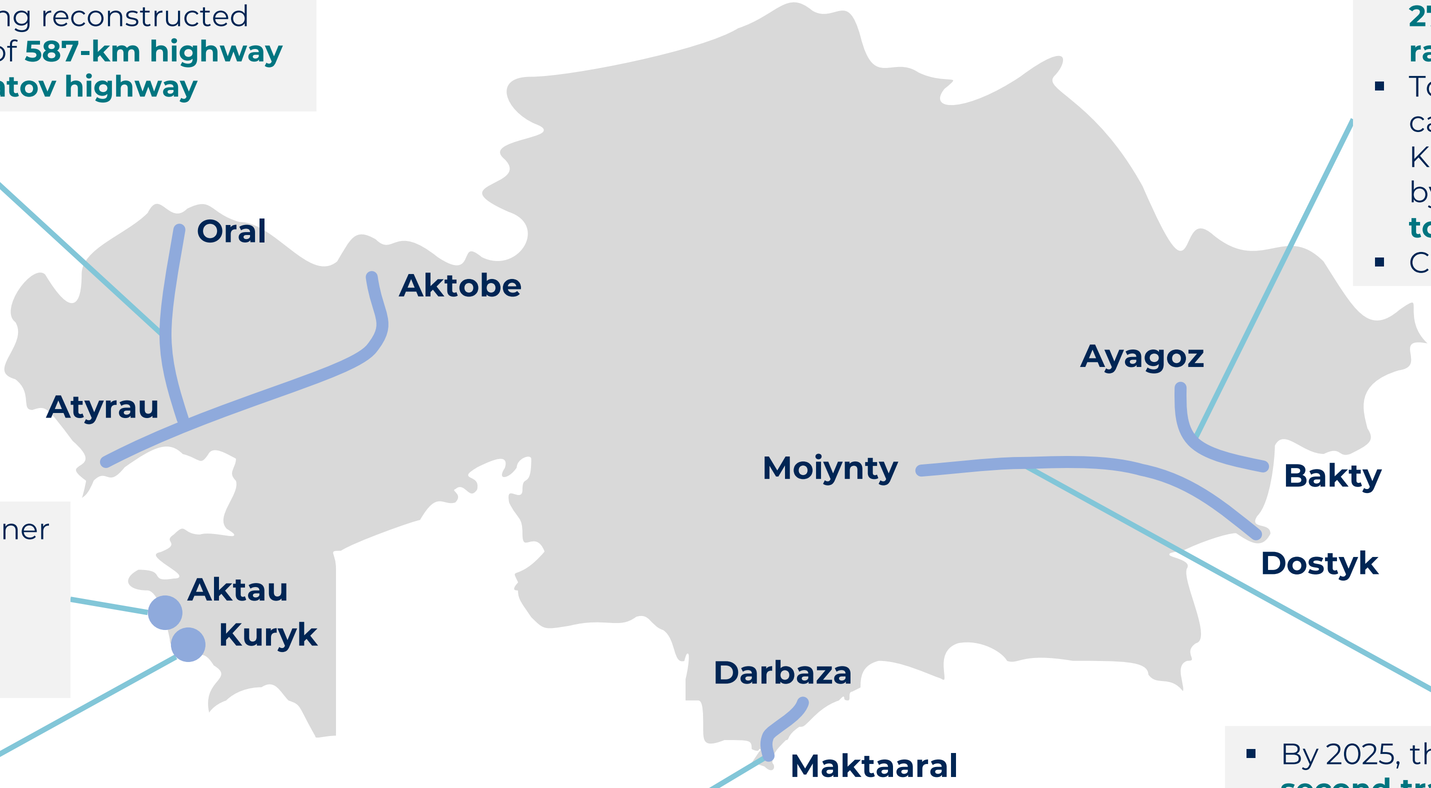
3m transit air passengers

Source: *Government Decree 1116 dated December 30, 2022*

ONGOING MAJOR TRANSPORT AND LOGISTICS INVESTMENT PROJECTS IN KAZAKHSTAN

- The **893-km highway from Aktobe and Atyrau to Russia's Astrakhan** is being reconstructed
- By 2025, the reconstruction of **587-km highway Atyrau – Oral – Russia's Saratov highway**

- Construction of **the 272-km Bakty-Ayagoz railway line**
- To boost the cargo capacity between Kazakhstan and China by an **additional 20m tonnes**
- Cost of **$1.2bn**



- By 2025, an additional container hub at **the Aktau seaport**
- A capacity of **more than 200 000 TEU**
- Cost of **$42.3m**

- **Sarzha multifunctional sea terminal** at the Kuryk seaport:
  - grain terminal of **1m tonnes/year**
  - oil terminal of **5.5m tonnes/year**
  - universal terminal of **3m tonnes/year**

- By the end of 2025, new **Darbaza-Maktaaral railway line** connecting Kazakhstan and Uzbekistan
- Aims to enhance transit connections to Central Asia and South Asia
- The cost is estimated at **$523.1m**

- By 2025, the construction of **the second track on the Dostyk-Moiynty section** (836 km)
- Valued at **$1.1bn** to boost the capacity of the section fivefold
- To increase the speed of transportation to **1 500 km/day** from the current 800 km/day

Source: Government of Kazakhstan, Ministry of Transport of Kazakhstan, KazLogistics, WorldBank

RECENT AGREEMENTS OF SAMRUK-KAZYNA

CRRC Corporation Limited is a Chinese corporation, the world's largest manufacturer of railway transport.

Signed in February of 2024, the document is of a strategic nature, aimed at strengthening ties and searching for new investment opportunities.

It was noted at the meeting that Kazakhstan is also interested in deep localisation of locomotive production using advanced technologies and creation of service centres for equipment maintenance. CRRC, in turn, can gain access to the EAEU and European markets through Kazakhstan.

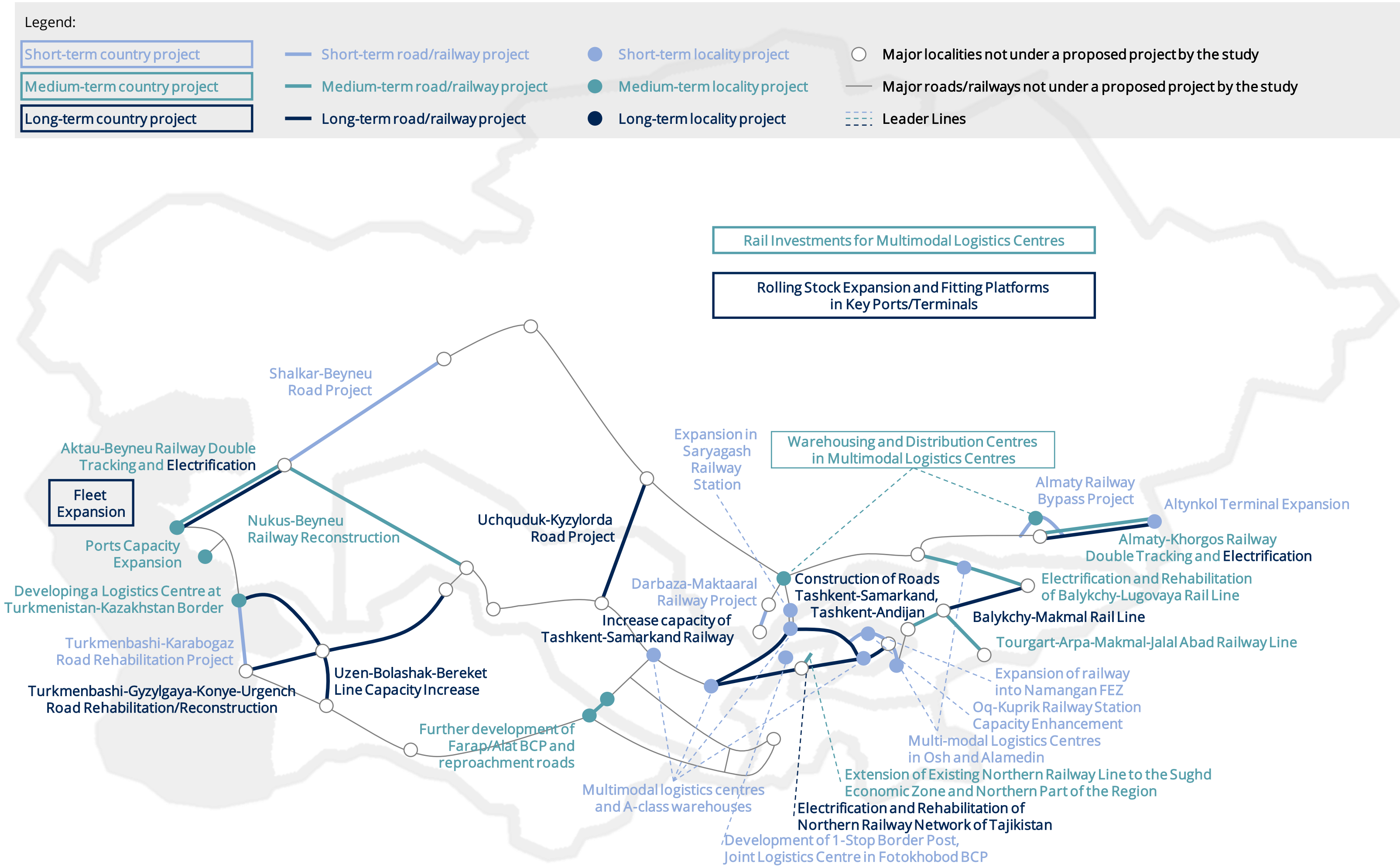
Azerbaijan Investment Holding is a state investment holding created in 2020 to manage the country's state-owned companies in the oil and gas sector, telecommunications, logistics and others.

An agreement on a strategic partnership to create a fund was signed in March of 2024. The fund will invest in projects that contribute to the development of the economies of the two countries, including projects to develop the Trans-Caspian International Transport Route (TITR).

Source: Samruk Kazyna website

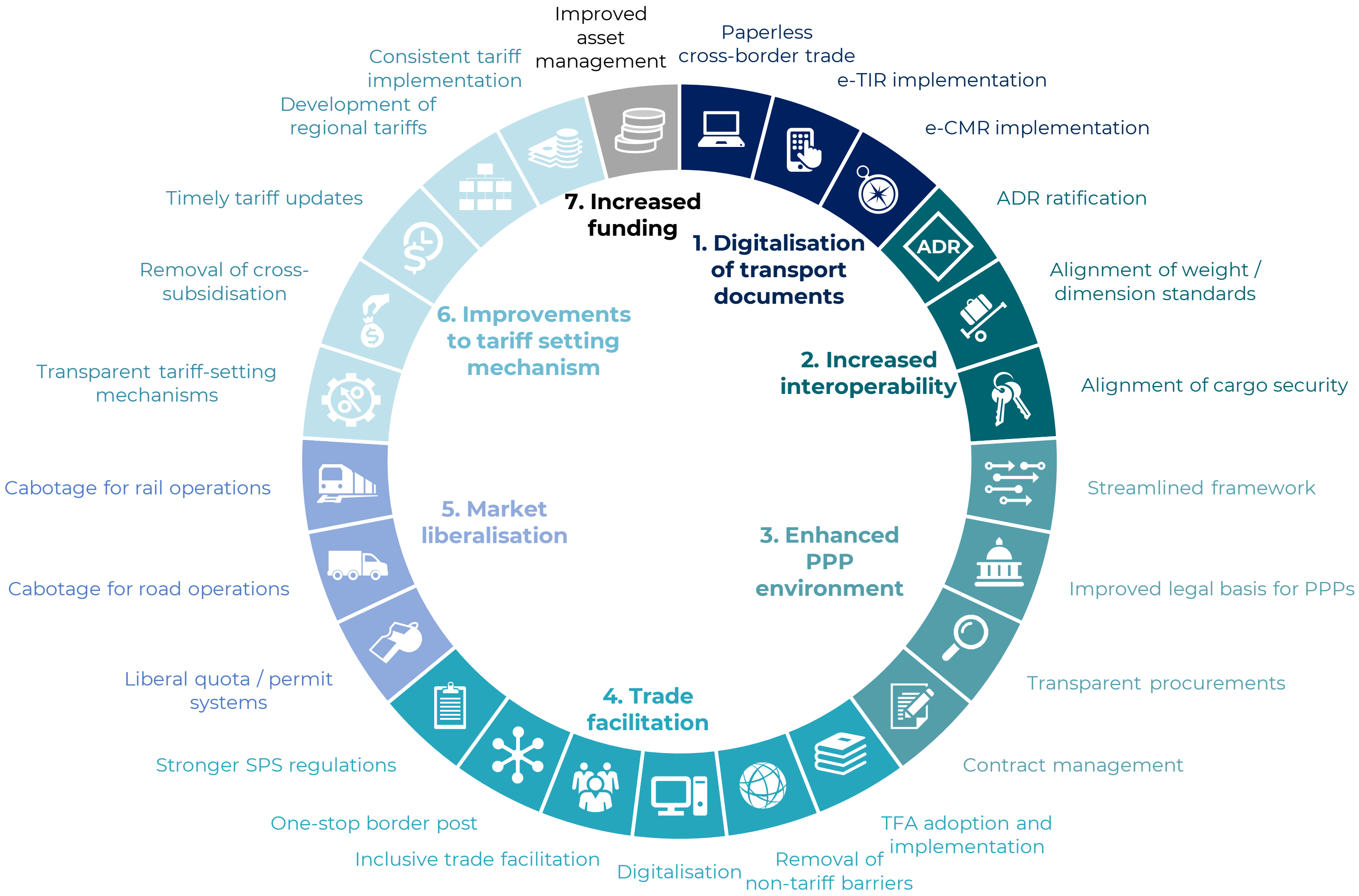
EU-EBRD STUDY ON CENTRAL ASIA CONNECTIVITY MAP OF PROJECTS

- The study revealed 7 soft connectivity measures and **33 hard infrastructure** needs for Central Asia worth **€18.5bn**.
- For Kazakhstan, there are **13 hard infrastructure projects worth €5.5bn**.
- Transit container volume via the Central Trans-Caspian Network is forecast to increase from 18 000 TEU in 2022 to **130 000 TEU** by 2040 under a BAU scenario.
- If all the investment projects and soft connectivity measures are implemented, this number could increase up to **865 000 TEU** by 2040 (a 48x increase).



Source: *EU-EBRD Study on Sustainable Transport Connections between Europe and Central Asia*

EU-EBRD STUDY ON CENTRAL ASIA CONNECTIVITY SOFT CONNECTIVITY MEASURES



Source: EU-EBRD Study on Sustainable Transport Connections between Europe and Central Asia

EU-EBRD STUDY ON CENTRAL ASIA CONNECTIVITY KAZAKHSTAN HARD INFRASTRUCTURE PROJECTS

Short-term needs (5 projects)	€1.25bn
Construction of Shalkar-Beyneu highway	€709m
Construction of the Darbaza-Maktaral railway line	€318m
Construction of a railway bypassing Almaty	€200m
Expansion of the capacity of the Altynkol terminal	€18m
Expansion of the Saryagash railway station	€9m

Long-term needs (3 projects)	€417m
Expansion of the merchant fleet in the Caspian Sea	€200m
Expansion of rolling stock and fitting platforms at key ports/terminals	€149m
Construction of the Kyzylorda-Uchkuduk (Uzbekistan) highway	€68m

Medium-term needs (5 projects)	€3.8bn
Construction of second tracks of the Aktau-Beyneu line and electrification of tracks	€1.67bn + €368m
Construction of second tracks of the Almaty-Khorgos line and electrification of tracks	€927m + €290m
Expansion of Aktau port capacity	€307m
Reconstruction of the railway line Beyneu-Nukus (Uzbekistan)	€159m
Construction of warehouses and distribution centres in the multimodal logistics centres of Almaty and Shymkent	€90m (€45m each)

Source: EU-EBRD Study on Sustainable Transport Connections between Europe and Central Asia

12. AIFC'S ROLE IN TRANSPORT & LOGISTICS

AIFC AS JURISDICTION OF CHOICE FOR TRANSPORT AND LOGISTICS

1. Ease of structuring and financing of the investment projects at all stages
2. Opportunity to choose an independent legal system / jurisdiction
3. Platform for dispute resolution through an independent arbitration

Creation of Infrastructure	Deal Origination	Physical Delivery
Project Financing	**Deal Financing**	**Settlement**
INTERNATIONAL INVESTMENTS	**INTERNATIONAL OPERATIONS & CROSS-BORDER TRANSACTIONS**	**STAKEHOLDERS FROM SEVERAL COUNTRIES**
INVESTMENTS INTO INFRASTRUCTURE	**AIFC FINANCIAL TRANSACTIONS**	
	AIFC JURISDICTION	

Source: AIFC findings

TRANSPORT AND LOGISTICS COMPANIES IN AIFC

Currently, 66 transport and logistics companies are AIFC participants. Below is an information on select JVs involved in the Middle Corridor:

	Caspian Integrated Maritime Solutions Ltd	KPMC Ltd.	Middle Corridor Multimodal Ltd.
ACTIVITY	Maritime and coastal freight transport	Consulting and practical services in the field of information technology for the transport and logistics sector	Multimodal and transportation and logistics services on the Trans-Caspian International Transportation Route
REGISTRATION DATE	13 February 2023	14 September 2022	16 November 2023
SHAREHOLDERS	NMSC Kazmortransflot LLP (Kazakhstan) International Maritime Investments Ltd. (UAE)	KTZ Express JSC (Kazakhstan) PSA Eagle Pte. Ltd. (Singapore)	National Company "Kazakhstan Temir Zholy" JSC (Kazakhstan) Closed Joint Stock Company "Azerbaijan Railway“ (Azerbaijan) JSC GEORGIAN RAILWAY (Georgia)
RECENT DEVELOPMENTS & PLANS	Two oil tankers (‘Taraz’ and ‘Liwa’) were purchased for transcaspian oil transportation. *Source: KazMunayGas website*	KPMC Ltd is to use the experience of its parent companies to integrate Kazakhstan’s transport corridors with the global largest hubs through initiatives such as the organisation of block trains and provision of station-to-station products and services. *Source: PSA International website*	The company will provide and implement a coordinated policy in Kazakhstan, Azerbaijan, and Georgia for the development of multimodal services in the China-Europe/Turkey-China direction. *Source: AstanaTimes*

Source: AIFC findings, AFSA Public Register

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AIFC