Ukraine as a logistic hub for Eurasian connectivity

Professor Alexander Rogach, Professor One Belt One Road Research Institute, Chu Hai College

Ukraine: general statistics (1)

- Based on area, and population (43 mln people) Ukraine is **one of the largest European countries.**

- Ukraine has extremely rich and complementary mineral resources in high concentrations and close proximity to each other.

- Rich **iron ore reserves** located in the vicinity of Kryvyy Rih, Kremenchuk, Bilozerka, Mariupol.

- One of the world richest areas of **manganese-bearing ores** in the world is located near Nikopol.

- **Rich coal resources** used for coke are mined in the Donets Basin.

- Ukraine also has important deposits of **titanium ore, bauxite, and mercury.**

Ukraine: general statistics (2)

Ukraine has unique agriculture conditions and serves as bread basket for Europe and China:

➢**Long term experience and skills in agriculture,**

➢the **richness of its soil**,

➢the **advantageous climate.**

Ukraine is the world largest exporter of sunflower oil.

Ukraine's national flower is a source of gold. It is the world's **largest exporter of sunflower oil.**[1]

SUNFLOWER OIL   SUNFLOWER OIL   SUNFLOWER OIL

Ukraine exported over

6 million tons

of sunflower oil in 2019.

Ukraine: GDP per capita, PPP (2010-2020)
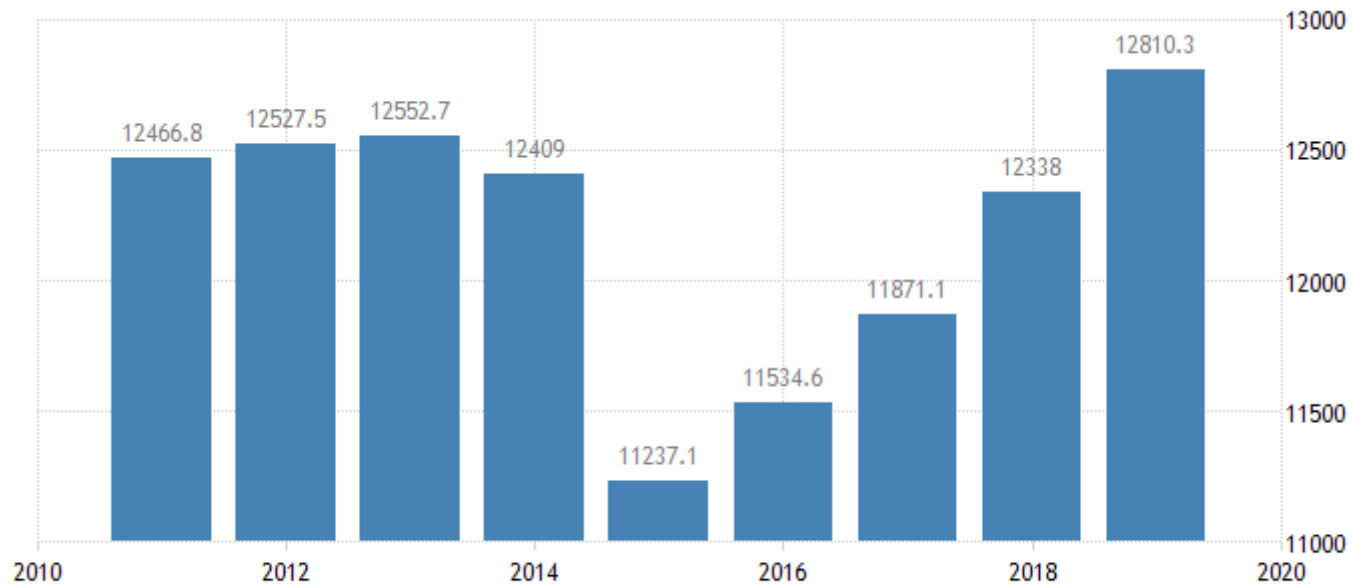
Ukraine is strategically located

➤ At the crossroad of the **Belt and Road Initiative.**

➤ and its **strategic location** near to the Black Sea and Sea of Azov.

Ukraine as the transit country for China- Europe connectivity
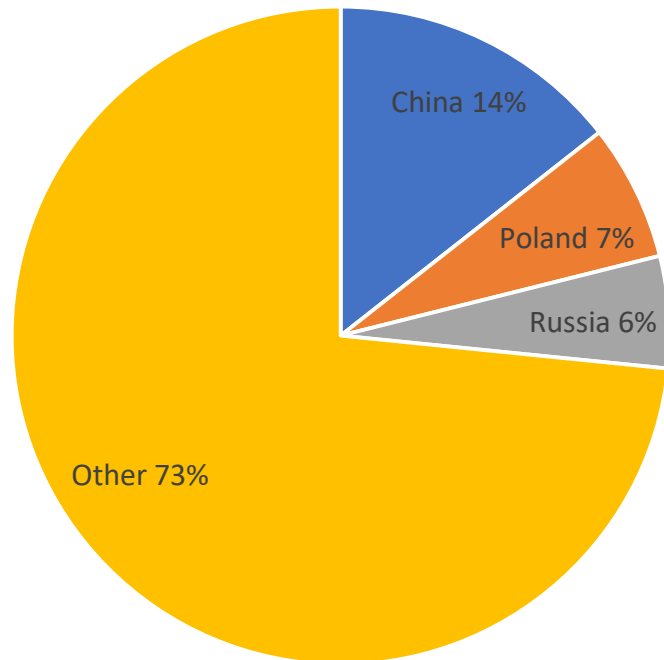
Ukraine: potential for transport connectivity

Ukraine's vast road, rail, air and sea infrastructure and favourable geographic location, makes the country an important for Asia-Europe transport connectivity.

1) **Ukraine as transit corridor between China and Europe.**

2) **Ukraine as a direct trade partner for China.**
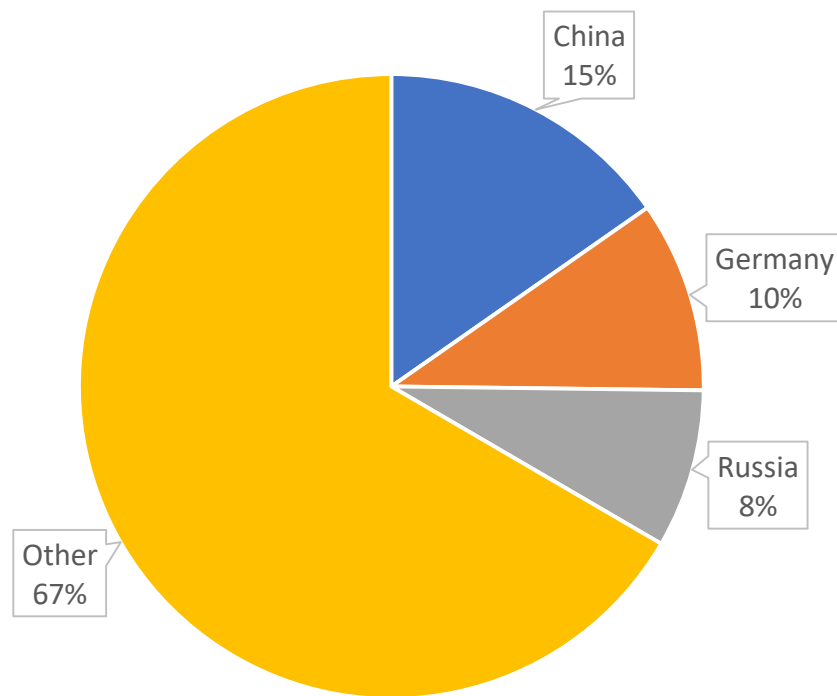
Ukraine as a trade partner for China

Ukrainian export and import: geographical structure (2020)

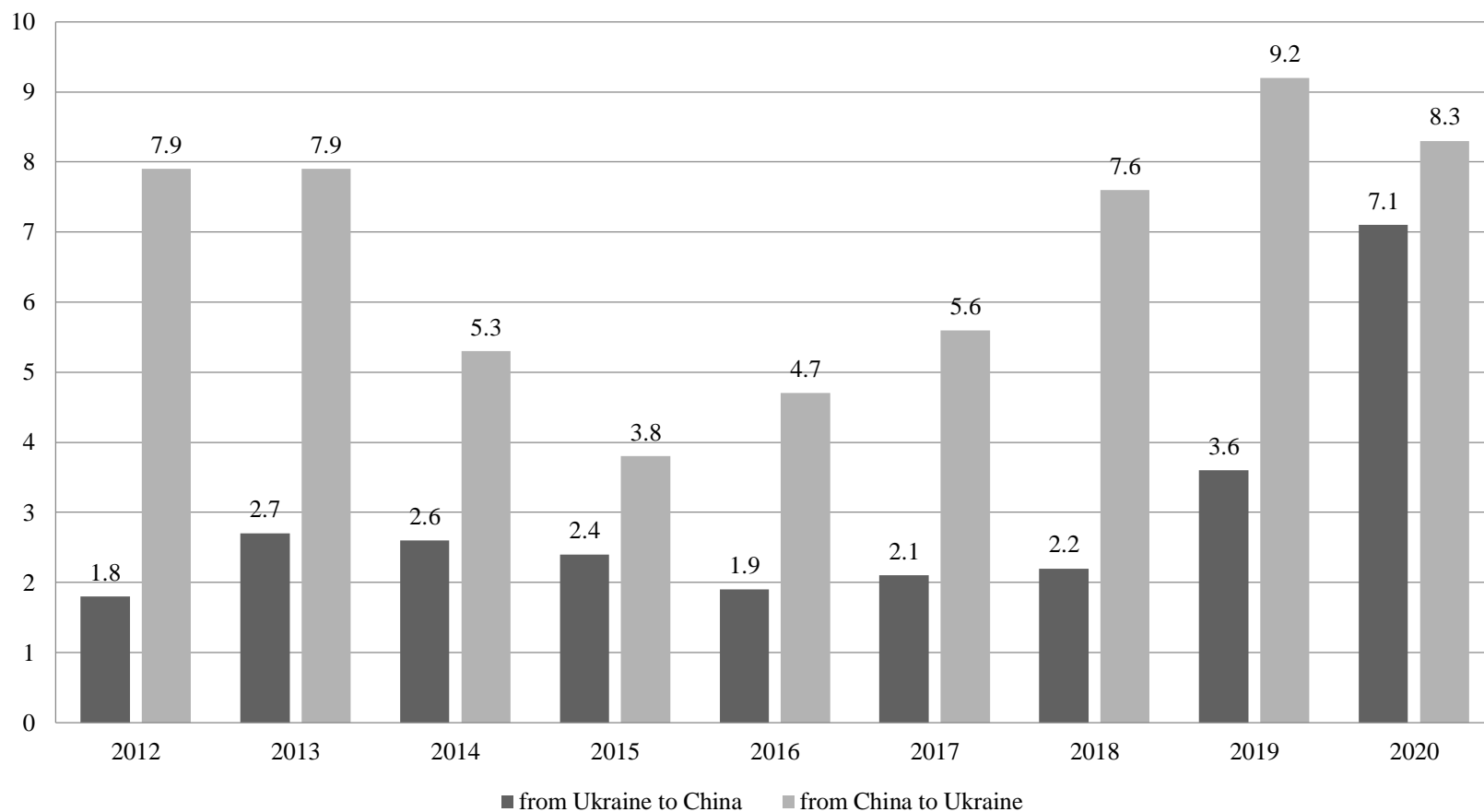
Export

China 14%
Poland 7%
Russia 6%
Other 73%

China   Poland   Russia   Other

Import

China 15%
Germany 10%
Russia 8%
Other 67%

China   Germany   Russia   Other

Source: State Statistics Service of Ukraine, 2021

Ukraine's Main Partners in Foreign Trade in Goods in 2020 (in bln USD)

Export	**49.33**	**-1.7%**	**Import**	**54.22**	**-10.3%**
№ Country	Volume	Change	Country	Volume	Change
1 China	7.12	49.43%	China	8.31	-10.72%
2 Poland	3.29	-0.73%	Germany	5.14	-36.16%
3 Russia	2.72	-20.26%	Russia	4.56	-31.46%
4 Turkey	2.44	-7.47%	Poland	4.14	0.85%
5 Germany	2.08	-15.02%	USA	3.06	-24.02%

Source: State Statistics Service of Ukraine, 2021

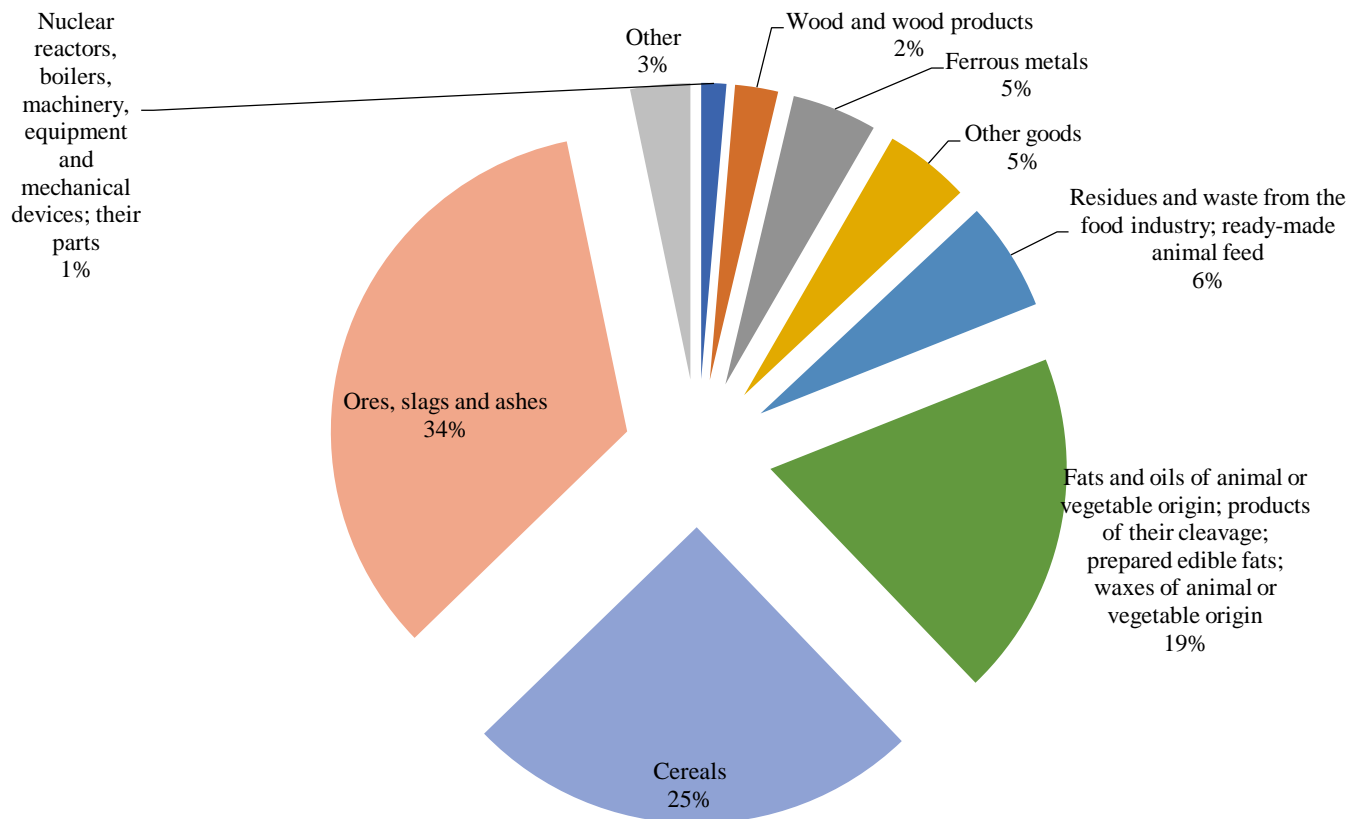# Bilateral trade in goods between Ukraine and China for 2012-2020 (in bln USD)

Source: State Statistics Service of Ukraine, 2021

Recent trends in bilateral trade

1) the growth of exports of Chinese enterprises to Ukraine resumed reaching a **historical maximum** of $9.2 billion in 2019 already;

2) the volume of **Ukrainian exports to China** showed a **rapid growth** after a long, almost ten-year period of stagnation;

3) **trade became more balanced** (for example, in 2020, imports from China slightly exceeded exports to China);

4) the trade growth rate in 2019 and 2020 **was the highest** in all the years of Ukraine's independence.

Source: State Statistics Service of Ukraine, 2021

Exports from Ukraine to China, 2020

Nuclear reactors, boilers, machinery, equipment and mechanical devices; their parts — 1%

Other — 3%

Wood and wood products — 2%

Ferrous metals — 5%

Other goods — 5%

Residues and waste from the food industry; ready-made animal feed — 6%

Ores, slags and ashes — 34%

Fats and oils of animal or vegetable origin; products of their cleavage; prepared edible fats; waxes of animal or vegetable origin — 19%

Cereals — 25%

Source: State Statistics Service of Ukraine, 2021

# Ukraine-China Trade: Commodity structure (2020)

As for exports to China, the largest export items were

1) **Mineral products** $2.5 billion;

2) **Cereals/Crop products** $1.89 billion;

3) **Vegetable (sun flour) oils** $1.11 billion;

4) Ferrous   metals $625 million;

5) Processed food products $505 million;

6) Other goods $229 million;

7) Wood $126 million.

Ukraine: Cereals crop export to China
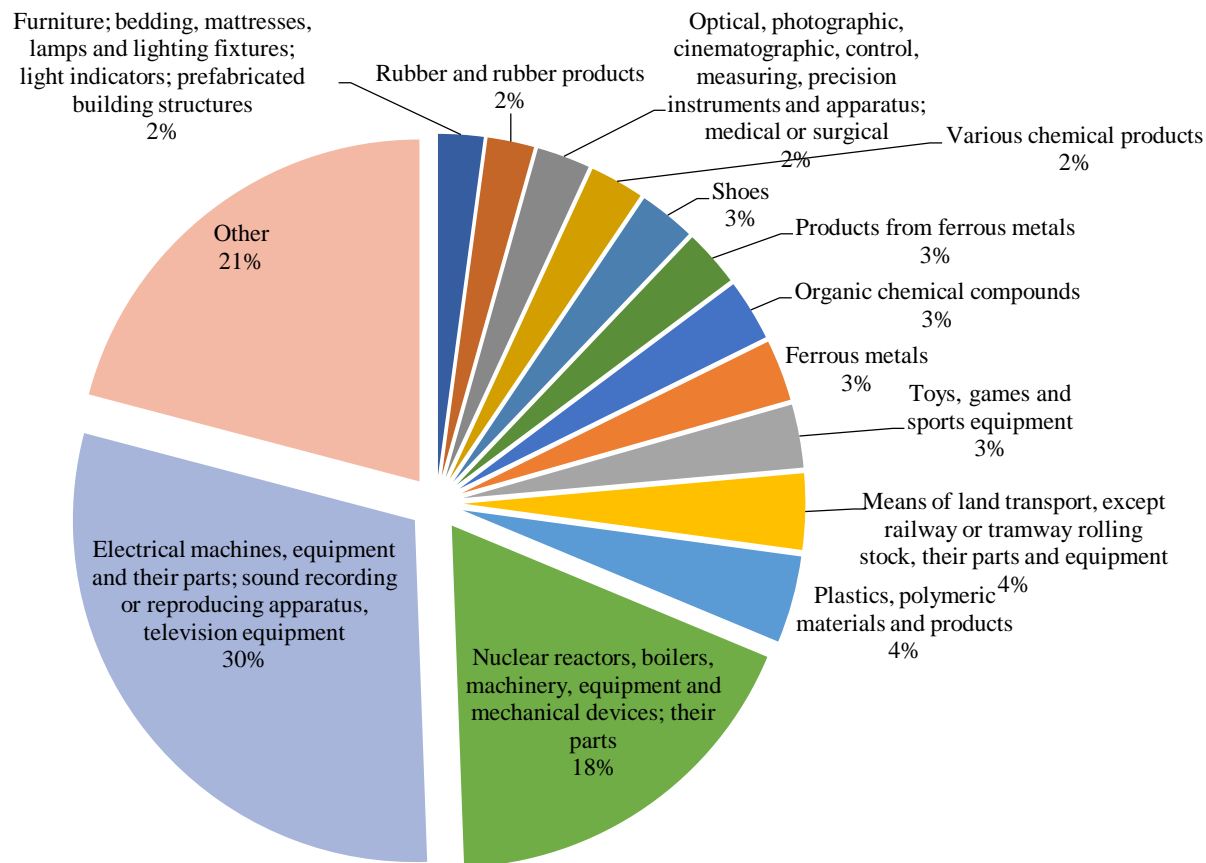
2020 Total: **$1.89 billion**, of which

  - corn sold for 1.38 billion dollars,

  - barley for 470 million dollars.

Corn export to China

■ 2013 ■ 2019 ■ 2020

Source: State Statistics Service of Ukraine, 2021
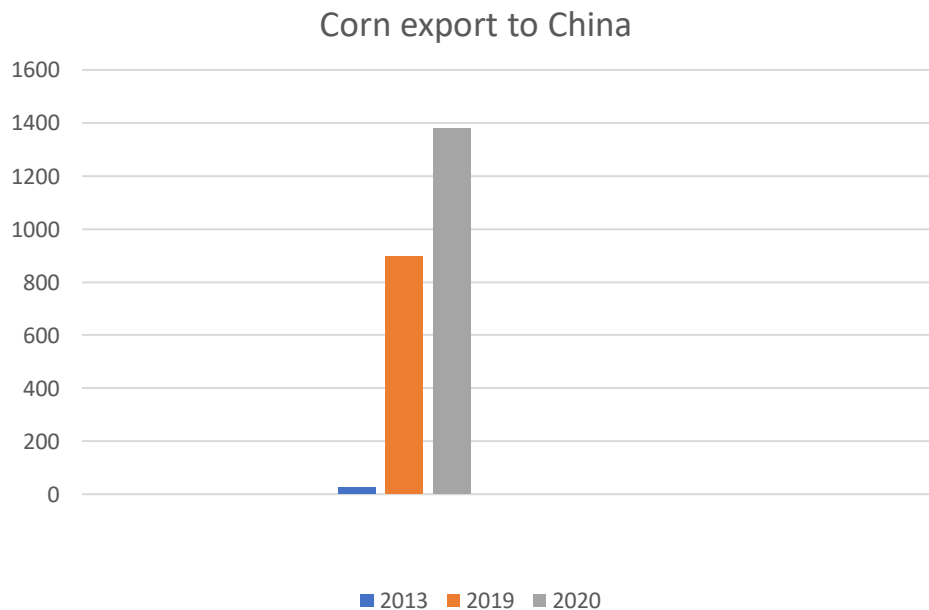
China and ASEAN consumed more Ukrainian foods in 2020

- China, Ukraine's top agricultural importer, consumed more than **USD 3.5 billion** worth of Ukrainian agricultural and food products in the 2020,

- and ASEAN countries increased their imports of Ukrainian agricultural goods **by 48% since 2016**.

Source: State Statistics Service of Ukraine, 2021

Ukraine's Import from China, 2020.

Furniture; bedding, mattresses, lamps and lighting fixtures; light indicators; prefabricated building structures
2%

Rubber and rubber products
2%

Optical, photographic, cinematographic, control, measuring, precision instruments and apparatus; medical or surgical
2%

Various chemical products
2%

Other
21%

Shoes
3%

Products from ferrous metals
3%

Organic chemical compounds
3%

Ferrous metals
3%

Toys, games and sports equipment
3%

Electrical machines, equipment and their parts; sound recording or reproducing apparatus, television equipment
30%

Means of land transport, except railway or tramway rolling stock, their parts and equipment
4%

Plastics, polymeric materials and products
4%

Nuclear reactors, boilers, machinery, equipment and mechanical devices; their parts
18%

Source: State Statistics Service of Ukraine, 2021

Ukraine and Belt and Road Initiative

➢The Programme of joint development of the Economic belt of the New Silk Road and Maritime Silk Road was signed by representatives of Ukraine and China in **December 2020.**

➢The Ukrainian Government intends **to involve Chinese companies in**

- **infrastructure building** projects,

- industrial parks,

- energy sector,

-and agriculture.

Transportation and Logistics Potential of Ukraine

Ukraine: potential for transport connectivity: Railways network (1)

- The railway network in Ukraine is among the **densest in the region** - 19.800 km (47.4% are electrified).

- It is the **14th largest in the world.**

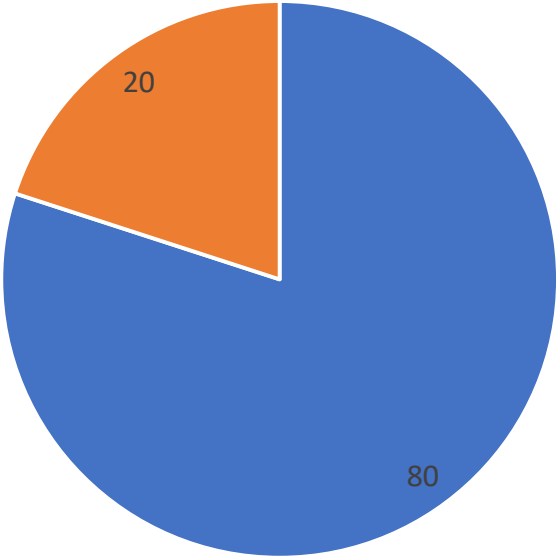- It ensures the work with **40 international railway** cross-walks.

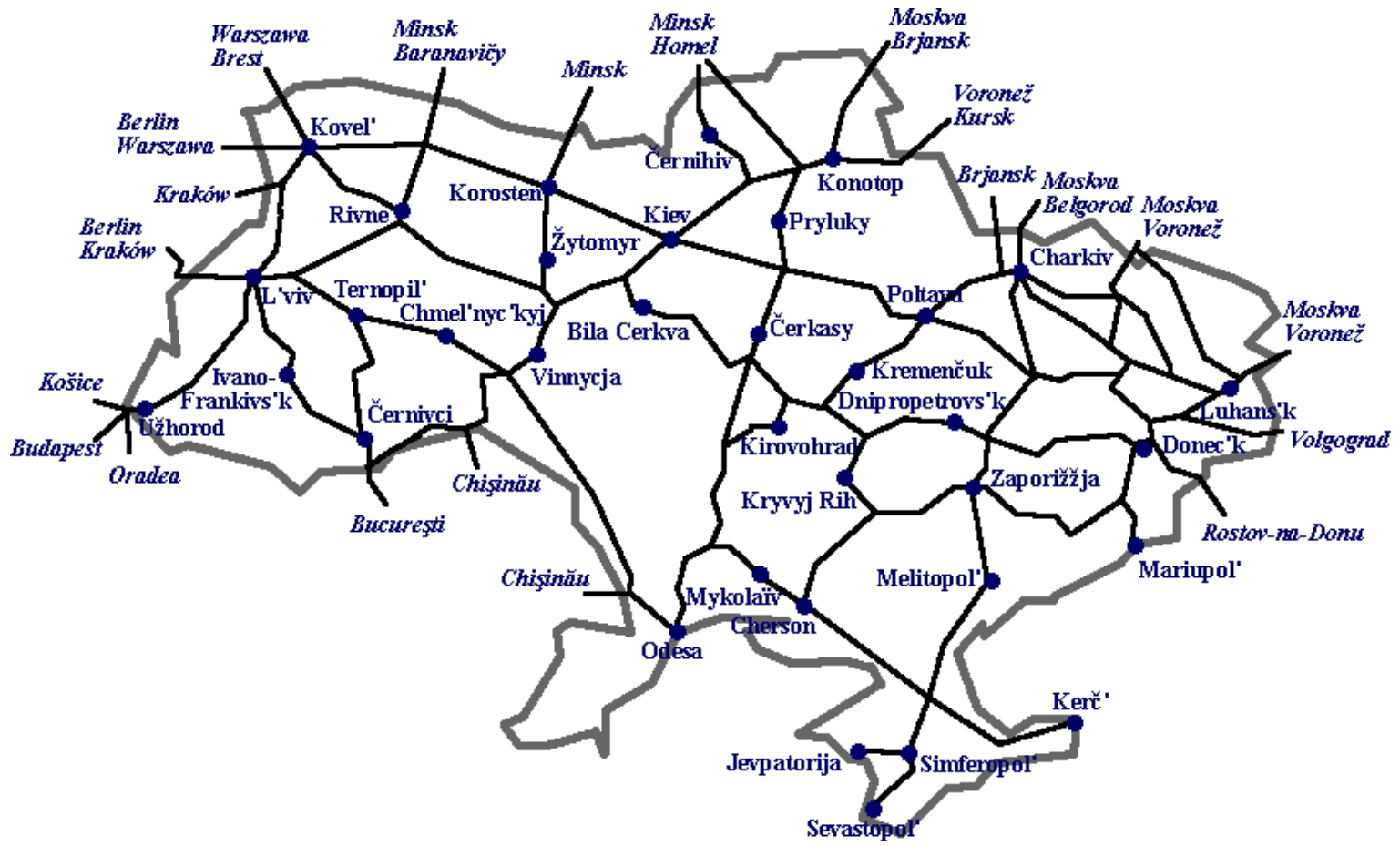# Railways are the most common way of cargo transportation in Ukraine

Cargo volume
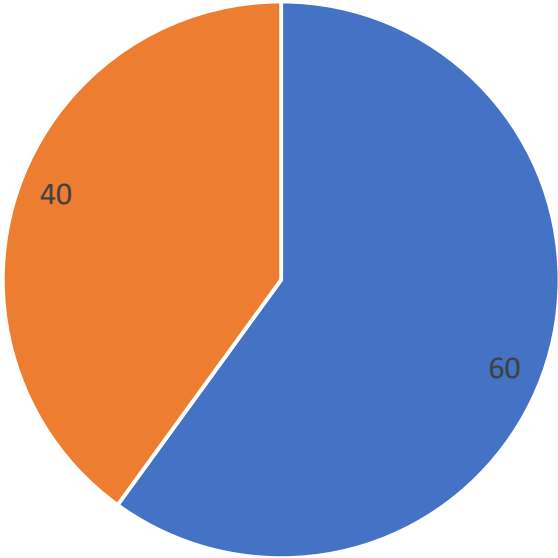
Freight turnover

Source: https://www.uz.gov.ua/cargo_transportation/intermodal_transportation/container/

Ukraine: potential for transport connectivity: Railways network (2)

Ukraine: potential for transport connectivity: Railways network (3)

BUT: Due to the difference between track gauges between former Soviet Union countries and the EU, there is a need **to convert gauge on the border**.

➢Ukrainian railway is **1520 mm wide gauge.**

➢The **same width gauge** is in the CIS countries.

➢There are **short transborder distance** of the same 1520 mm wide in the neighbouring railways of Poland, Romania, Slovakia, and Hungary (EU standard gauge is **1435 mm**).

Potential for transport connectivity: maritime transport capacity

- Ukrainian maritime transport sector has a range of river and seaports, all of seaports are warm water ports.

- **There are 13 sea ports** in Ukraine: Reni, Izmail, Ust-Dunaisk, Belgorod-Dnestrovskiy, Chernomorsk, **Odessa**, Pivdennyi, Mykolaiv, Olvia, Kherson, Skadovsk, Berdyansk, and Mariupol.

- **Total capacity** of sea ports in Ukraine is around 240 mln. Tons.

Ukraine's sea ports map

Ukraine: Transport Corridors for the Belt and Road Initiative

Ukraine and Euro-Asian Transport Links (EATL) project (1)

- Ukraine is a participant to the **Euro-Asian Transport Links (EATL)** project.

- 5 out of 9 EATL routes **pass through Ukraine.**

1) **Trans-Siberian Railway, Northern Road**

➤West (Finland, Latvia, Lithuania, Poland, Hungary) to East (Russian Pacific)

➤Countries crossed: Russian Federation, Belarus or **Ukraine**

➤Number of gauge changes: 0

Source: (UNECE, 2019)

EATL Rail Routes That Pass Through the Territory of Ukraine (2)

2) Trans-Siberian Railway, Southern Route

➢West (N and E EU (Finland, Lithuania, Poland, Hungary)) to East (China)

➢Countries crossed: **Ukraine**, or Belarus, Russian Federation, Kazakhstan, China

➢Number of gauge changes: 1 (Kazakhstan/China)

3) West (E EU (Hungary, Poland)) through Central Asia to East (Russian Pacific Coast)

➢Countries crossed: **Ukraine**, Moldova, Russian Federation, Kazakhstan

➢Number of gauge changes: 0

Source: (UNECE, 2019)

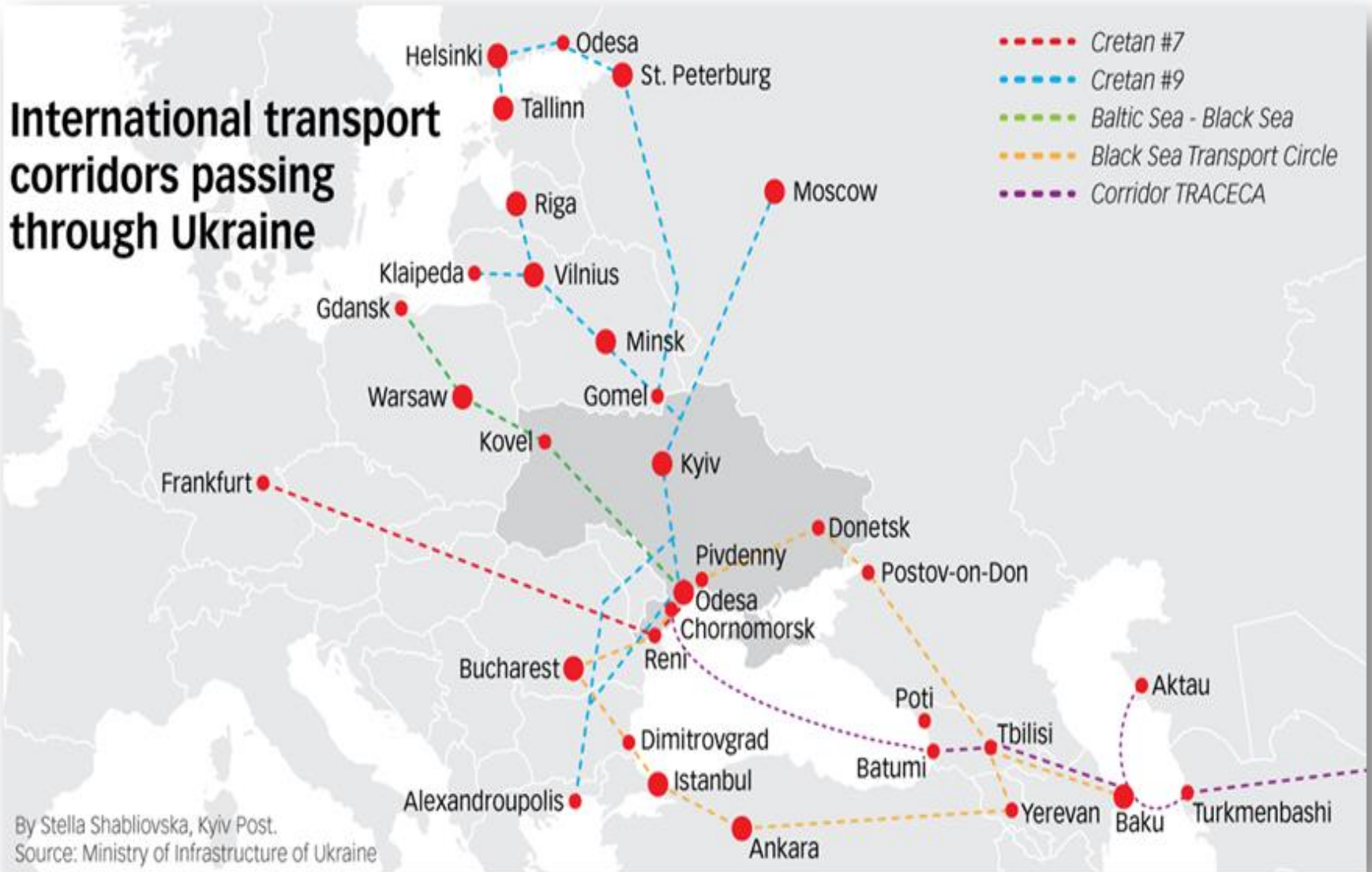# EATL Rail Routes That Pass Through the Territory of Ukraine (3)

4) West (E EU (Hungary and Poland)) through Central Asia to East (China)

➢Countries crossed: **Ukraine,** Kazakhstan, Uzbekistan, China)

➢Number of gauge changes: 1 (Kazakhstan/China)

5) North (N and E EU (Latvia, Poland and Lithuania)) through Caucasus to South (Azerbaijan, Iran)

➢Countries crossed: **Ukraine**, Russian Federation, Georgia, Azerbaijan, Iran

➢Number of gauge changes: 1 (Azerbaijan/Iran)

Source: (UNECE, 2019)

International transport corridors passing through Ukraine

By Stella Shabliovska, Kyiv Post.
Source: Ministry of Infrastructure of Ukraine

Legend:
- Cretan #7
- Cretan #9
- Baltic Sea - Black Sea
- Black Sea Transport Circle
- Corridor TRACECA

Cities: Helsinki, Odesa, St. Peterburg, Tallinn, Moscow, Riga, Klaipeda, Vilnius, Gdansk, Minsk, Warsaw, Gomel, Kovel, Kyiv, Frankfurt, Donetsk, Pivdenny, Postov-on-Don, Odesa, Chornomorsk, Bucharest, Reni, Aktau, Poti, Tbilisi, Dimitrovgrad, Batumi, Istanbul, Alexandroupolis, Yerevan, Baku, Turkmenbashi, Ankara

Ukraine: The main economic corridors

 1) **New Eurasian Land Bridge** (7 countries: the Czech Republic, Hungary, Slovakia, Slovenia, Poland, Kazakhstan, and Ukraine),

2) **China – Central West Asia** (27 countries: Ukraine, Kazakhstan, Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Georgia, Iran, Iraq, Israel, Jordan, Kyrgyzstan, Lebanon, Macedonia, Moldova, Montenegro, Palestine, Romania, Serbia, Syria, Tajikistan, Turkey, Turkmenistan, and Uzbekistan) (OECD, 2018).

Interconnection points of routes from Asia to European Rail Freight Corridors
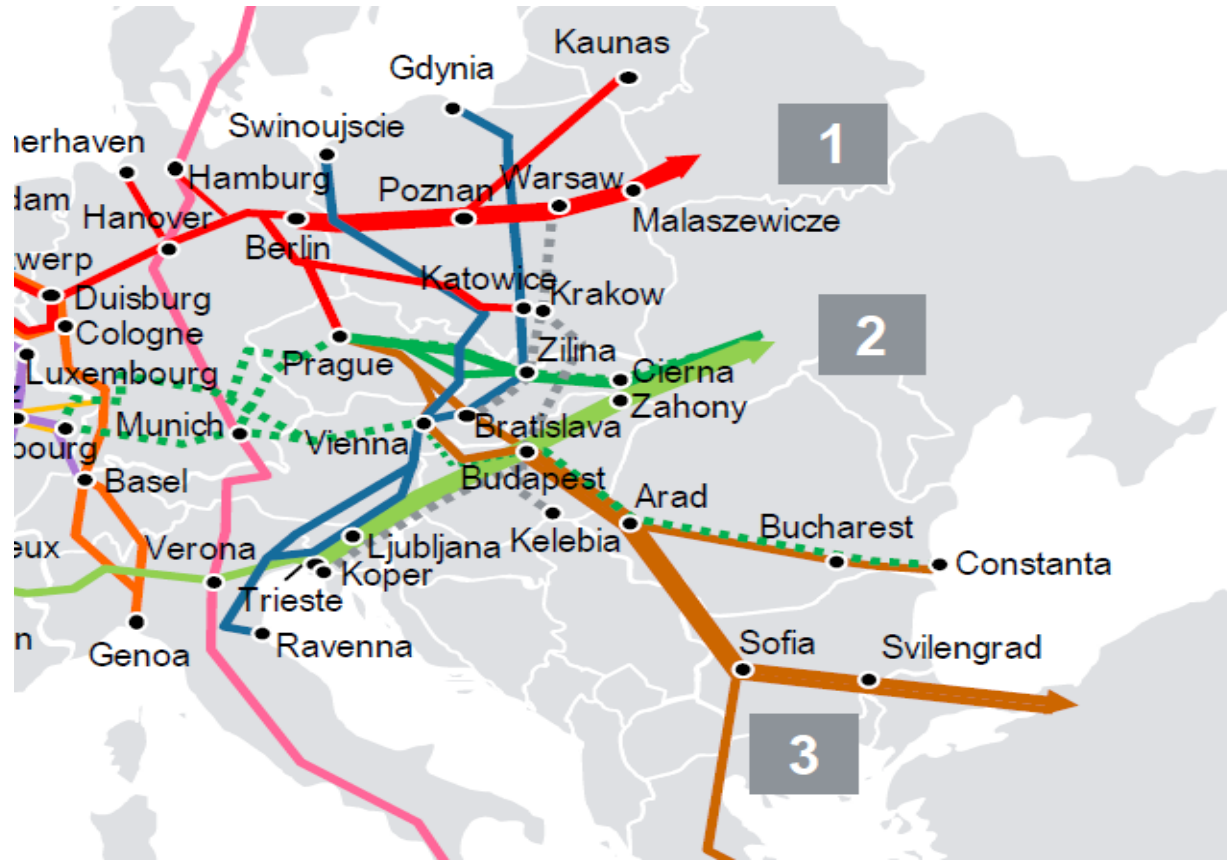
Ukrainian seaports: transit of goods manufactured in China

The port Ilyichivsk/Odessa is an important connecting hub for the routes through:

➢Turkmenistan, the Caspian Sea and Azerbaijan to the Black Sea (port Batumi, Georgia);

➢and further to the Central and Eastern Europe through the port Constanta (Romania);

➢and to Southern Europe through the port Varna (Bulgaria).

The port Ilyichivsk/Odessa: Potential for trade

➢ The transportation of **industrial goods from China** to Europe.

➢ It seems important in terms of **export of agricultural products, raw materials** and other goods from Ukraine to China (and the Central Asia in general).

➢ Capacity for **oil export** from the Central Asia and Azerbaijan to Ukraine and Georgia.

Black Sea ports: South route for Ukrainian export to China

- the Black Sea Ports - Georgia (Batumi port - Gardabani) - Azerbaijan (Boyuk-Kesik - Alat) - Kazakhstan (Aktau - Dostyk) – China;

- through ferry crossings Chornomorsk Port - Poti / Batumi Port and next Alat Port - Aktau-Port.

GLOBAL VIEW:
UKRAINE IS CONVENIENT TRANSPORT HUB
BETWEEN EUROPE AND ASIA
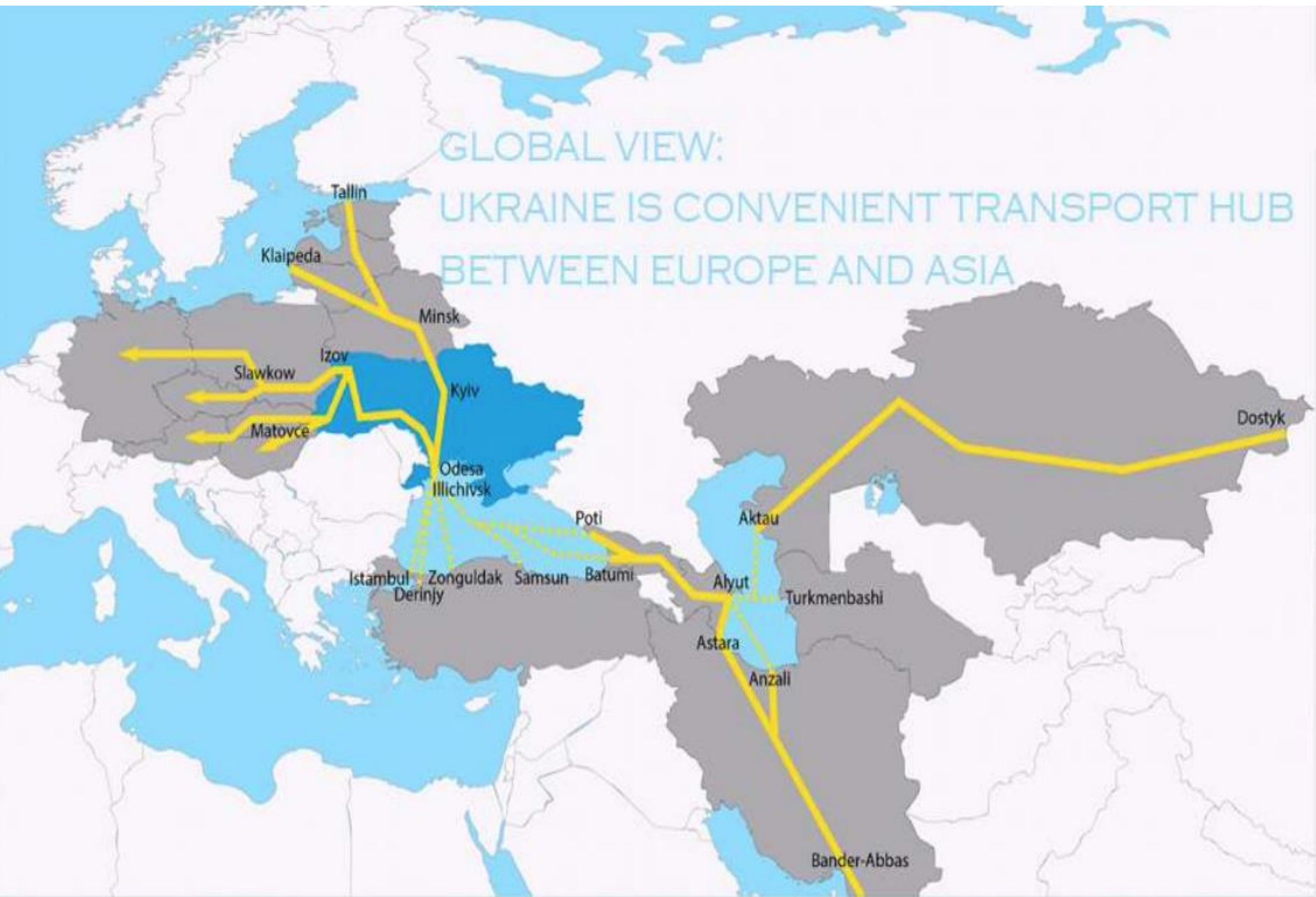
Source: https://www.uz.gov.ua/cargo_transportation/intermodal_transportation/container/

The Black Sea-Baltic corridor: "Viking" project

- This is a combined transport train, which has been operating since 2003 and passes through **Lithuania, Belarus and Ukraine** and connects the sea container lines of the Baltic and Black Seas.

- In 2012, **Georgia, Bulgaria, and Romania** joined the project,

- In 2013, **Moldova's railways** joined the Viking project.

Source: http://www.liski.ua/en/container_trains/18.html

Container railway connections within the framework of TRACECA
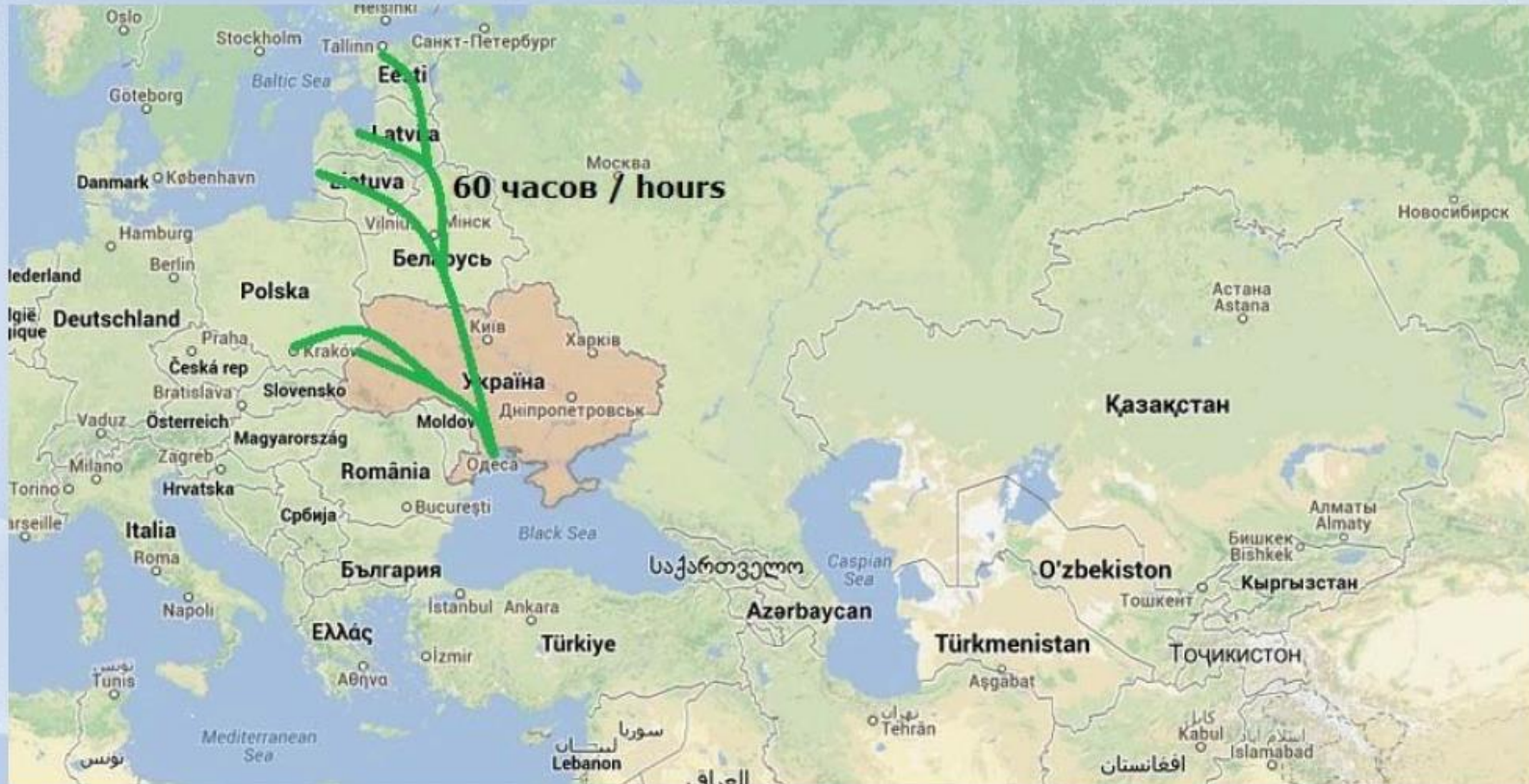
- Container trains Viking and Zubr connect ports of Ilyichevsk, Odesa and Yuzhnyi to Baltic ports Klaipeda, Riga and Muuga

- 400 km broad gauge railway track up to Slawkow in Poland allows connection with Central and Western Europe

http://www.liski.ua/en/container_trains/18.html

Ukraine and the container trains from China

2020: The first period of container trains traffic

- **On June 9, 2020**, the first direct container train from China arrived in Ukraine.

- A train included 31 fitting platforms delivered **41 containers.**

- The distance from the start to the end point of the route was covered **in 15 days**, and from the Mongolian-Chinese border to Kiev - a little more than 10 days.

What was the route of the first train?

➢The departure point of the first train from China was **Yantai.**

➢**Within five days**, the train reached the **border crossing between China and Mongolia** - these are Erlian and Zamyn-Uude stations.

➢Further, the route ran **through the territory of Mongolia** to the Sukhe-Bator - Naushki border crossing.

➢Then in transit through the **territory of the Russian** Federation to the Ukrainian border crossing **Zernovo**.

➢And from there - **to Kyiv (Liski terminal).**

What were the loads of the first train?

The train transported to Ukraine:

- drilling equipment,

- bicycle parts,

- furniture,

- household goods,

- personal protective equipment,

- petrol trimmers,

- medical equipment.

The next trains from Wuhan and Nanchang to Ukraine

- Departure from **Wuhan** was scheduled on June 16, 2020 departure from **Nanchang** on 26 June,2020.

- Transit time was **15-18 days.**

- **Transportation by sea takes 45 days.**

Container trains statistics (March 2021)

- The Ukrainian Railways company (**UZ** - Ukrzaliznytsia) announced:

- **27 direct container trains** from China have arrived in Kyiv in **the nine months** since the launch of direct container trains on the China-Ukraine route.

- According to the UZ, **over 1,200 containers** were transported in the 27 trains.

- The trains are unloaded at **the Kyiv-Liski train station.**

Source: https://www.uz.gov.ua/cargo_transportation/

Container trains from China: the top destinations

- The top destinations were: Poland – 7; Hungary – 6; Slovakia – 2.

➢Four container trains from China finished their 2-week trip at Ukrzaliznytsia's logistics centre in Liski, on the left bank of Kyiv.

Source: https://www.uz.gov.ua/cargo_transportation/

2020: Container trains destinations
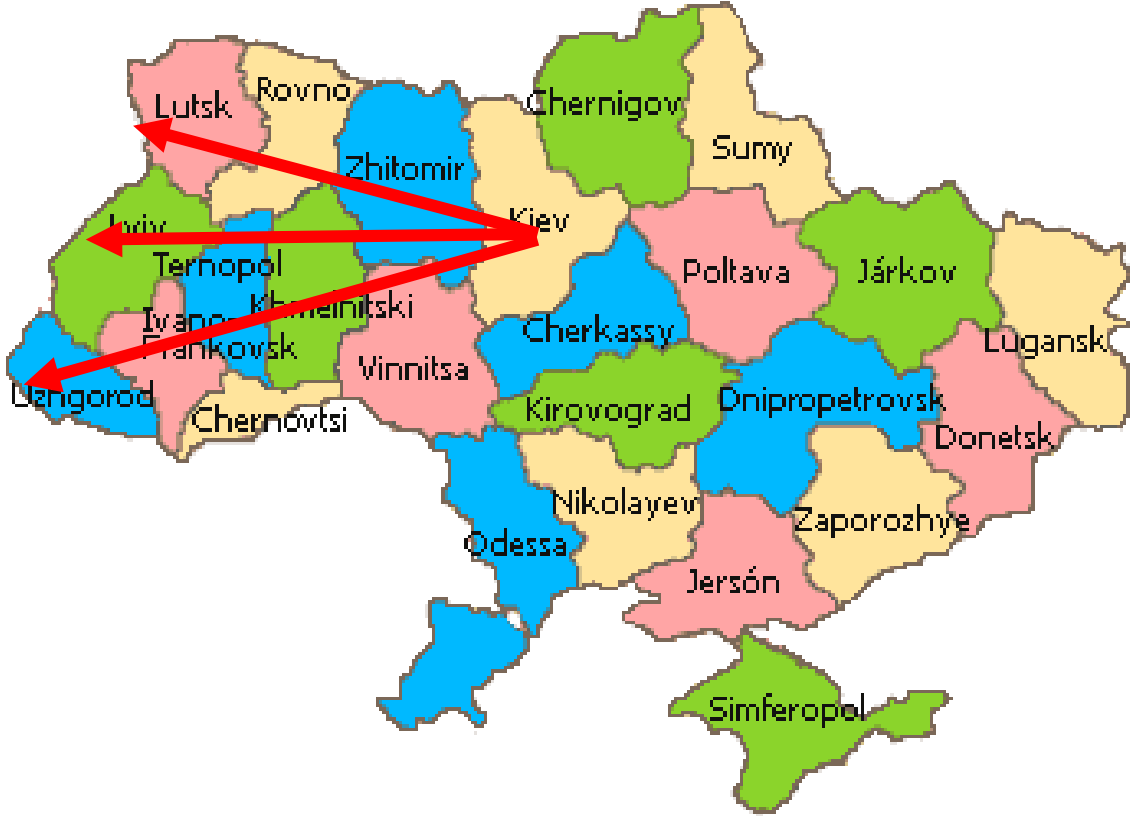
Ukraine as transit corridor from Slovakia to China

- One of the largest intermodal transport operators in the EU, the company Metrans organized route that links **Slovakia with China** via Ukraine.

- It takes approximately **14-16 days** to ship a container train from Xi'an (China) to Dobra (Slovakia).

- The rail route runs **weekly on Friday**.

- It is by **520 km shorter distance** compared to the most popular route via Belarus and Poland.

Source: https://metrans.eu/about-us/

The Formag-Kiev: an example of a freight forwarder

- The Formag-Kiev acts as a **freight forwarder for container train to China**.

- A client who wants to transport the goods turns to the forwarder - **the forwarder negotiates with the train organizers**.

- The train is formed from **standard 40-foot containers**.

- The maximum container load is up to **26 gross tons**.

- Conditions for the free use of the container - **14 days** from the date of arrival of the train at the Kiev-Liski station.

What is the role of Ukrzaliznytsia?

- "Ukrzaliznytsia" provided its **infrastructure;**
- It provided **services for the fast passage** of the train;
- It provided fast processing at the **Liski terminal** (Kyiv).

The problem of loading the train in the opposite direction

- The products that are now exported from Ukraine to China are transported by sea.

- But some Ukrainian exporters consider that speed can give an advantage and prefer Container train.

Valery Tkachev, Deputy Director of the Commercial Department of Ukrzaliznytsia: "If we manage to organize the shipment of goods from Ukraine to China, it will be possible to reduce the cost of delivery".

Source: https://www.uz.gov.ua/cargo_transportation/intermodal_transportation/container/

What is the cost of transportation by container train?

➢"Delivery of a container from the Chinese border to Kyiv costs 3-3.2 thousand dollars" (data of UZ).

➢According to Formag LTD, prices range from $ 3,000 to $ 3,300.

➢Another market participants announced the figures of $ 3,000-3,500 for a 40-foot container.

Source: https://www.uz.gov.ua/cargo_transportation/intermodal_transportation/container/;
https://www.formag.com/en/news.html

Container trains in 2021

- Five container trains from China arrived in Kyiv from the beginning of 2021 to March 3.

- The plan for 2021 is to receive up to **7 direct container trains from China every month**.

Container trains: new destinations in Ukraine

➢ **Traditional destination point –Liski Terminal (Kyiv).**

➢ Prospective destinations:

▪ Dnipro (Liski affiliate terminal);

▪ Kharkiv (Liski affiliate terminal);

▪ Odessa (Liski affiliate terminal and Odessa Port).

UZ Terminals (Liski) capacities for container trains from China

Source: http://www.liski.ua/ua/
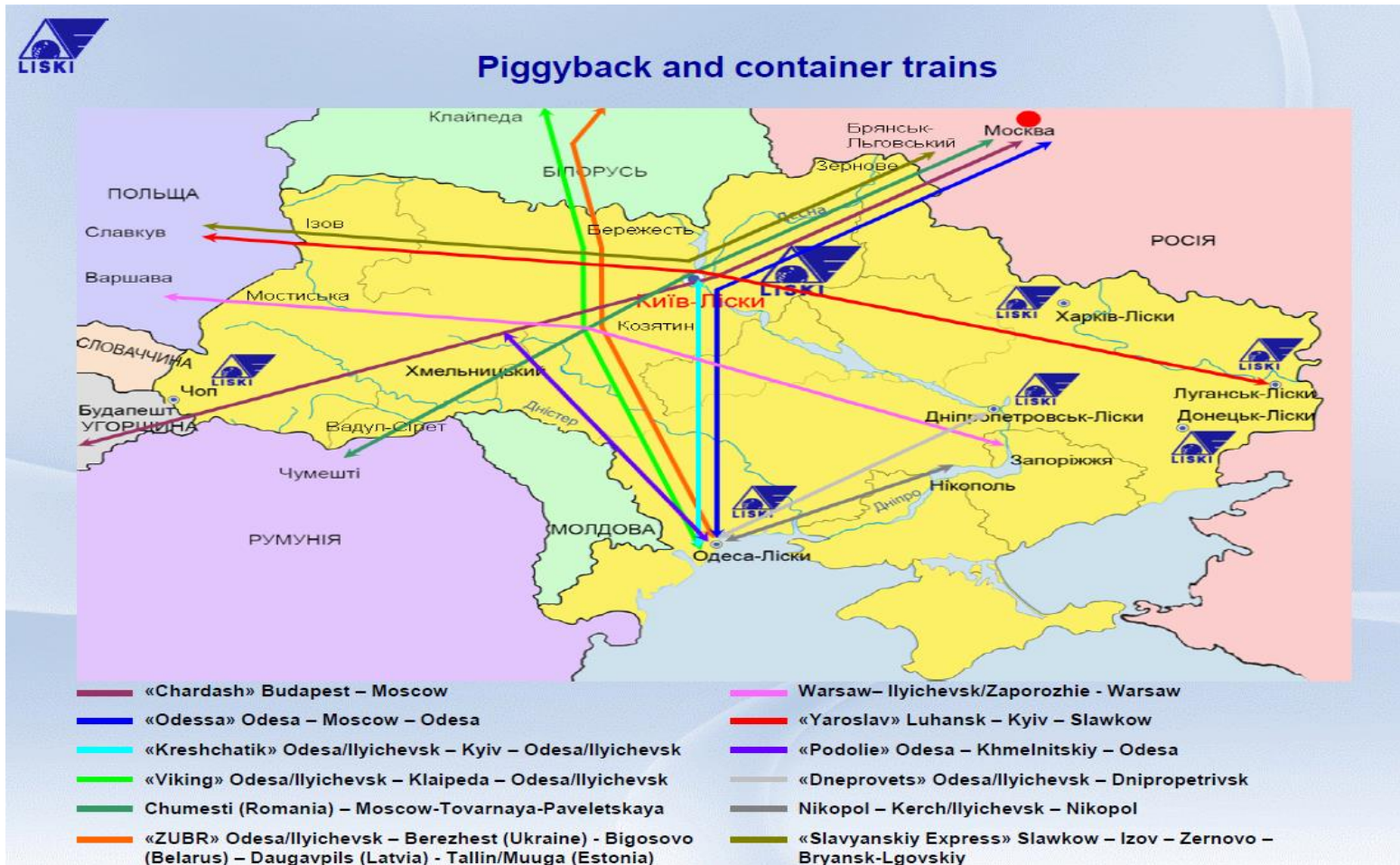
Current and prospective container train's destinations
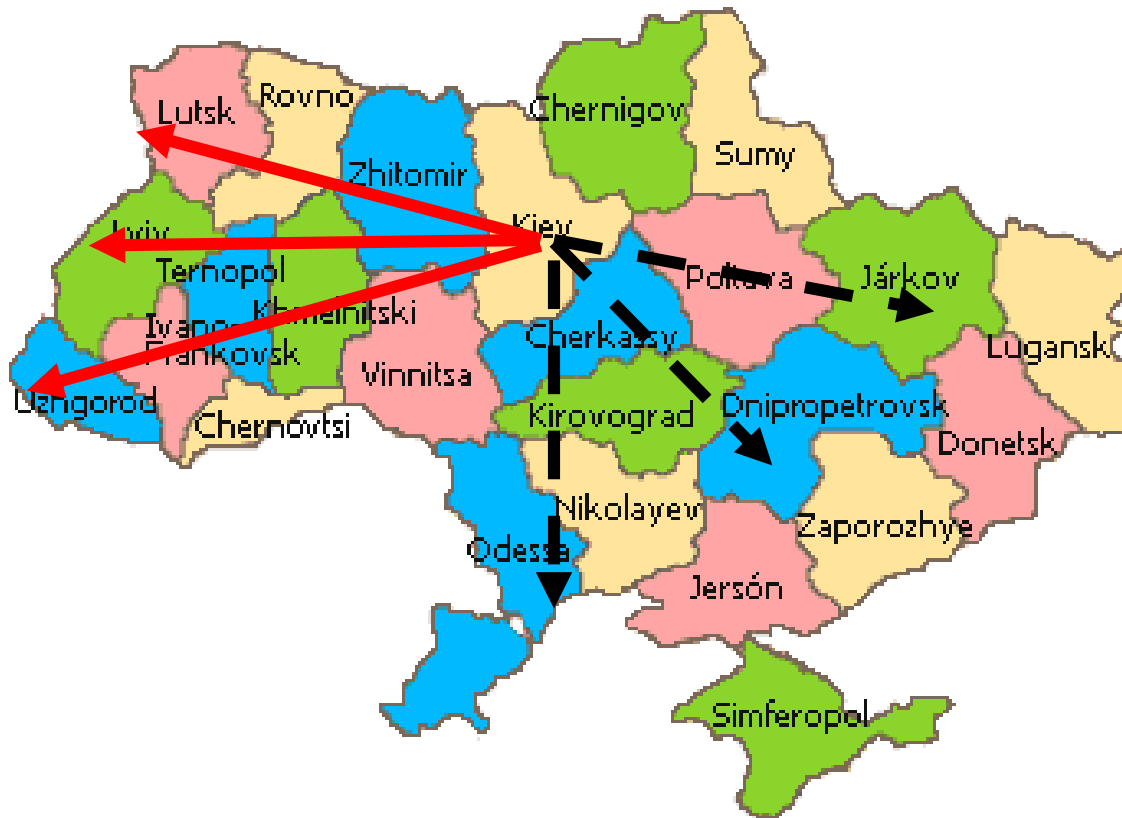
Guangzhou launches first direct China-Europe freight train to Ukraine

- 29 May 2021, The first container train linking southern China with southern Ukraine (China and **Odessa)**.

- On Saturday, the train left **Guangzhou**, for a **25-day, 8,408 km trip to Odesa**.

- The train's **100 containers** largely carry a cargo of tealeaves, mowers and rice cookers.

- The train is about 646 tons in total with a **value of 10,590,000 yuan (about $1.67 million).**

2021: the 2nd stage of container trains transportation

1) In November 2020 "Ukrzaliznytsia" signed the service **agreement with DHL Global Forwarding** for transit container transportation on the route China - EU through the territory of Ukraine.

2) The agreement with PKP Cargo Connect: container trains will be transported from / to Ukrainian railway stations at Polish stations, with subsequent transportation to recipients throughout the EU.

3) The agreement with BTLC Germany provides for the transportation of goods in the China - Ukraine / EU connection and vice versa.

Source: https://www.uz.gov.ua/cargo_transportation/intermodal_transportation/container/

Ukrzaliznytsia: the Agreement with DHL Global Forwarding

Three key points.
Ukrzaliznytsia together with DHL will

1) organize container trains,

2) attract additional cargo,

3) and expand the geography of transportation.

- **The operator will be the branch of CTS "Lisky" JSC "Ukrzaliznytsia".**

A powerful logistics center for DHL cargo

➤ **A powerful logistics center for DHL cargo will be established** on the basis of the Liski Transport Service Center branch in Kyiv.

➤ For its part, Ukrzaliznytsia has committed itself to working to **simplify customs procedures** through the territory of Ukraine and to ensure **compliance with the train schedule**.

➤ DHL will continue to develop the railway expedition with the main focus on the **transport corridor China - Ukraine - European countries and vice versa**.

The Need to Remove Obstacles to Growth of Container Traffic

1. Administrative and legal barriers as well as standardization of documentation and technical regulations.

2. Unification of the relevant custom procedures by all participating countries.

3. Construction of dry ports/hubs for accumulation of containers.

4. Reducing costs of intermodal transportation of goods in Ukraine.

A decrease in Chinese subsidies: impact for Ukraine

- Rail Transit is more sensitive to price than to speed.
- The reduction of Chinese subsidies is likely to have a drastic impact on flows and reallocation across the routes.
- Southern routes via Kazakhstan are likely to be the first impacted and see their volume decrease.
- Price reduction outside China may offset partly the reduction of Chinese subsidies.

Thank you for your attention