DEVELOPMENT OF BORDER INFRASTRUCTURE IN THE UKRAINE-EU CROSS-BORDER SPACE:

A SYSTEMATIC APPROACH

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 THE LAND SECTION OF THE UKRAINE-EU BORDER
- > DYNAMICS AND DISTRIBUTION OF CARGO FLOWS THROUGH CHECKPOINTS ALONG THE UKRAINE-EU BORDER SECTION
- > WAYS TO SOLVE PROBLEMATIC ISSUES

ECONOMIC FACTORS
INFLUENCING THE
DEVELOPMENT OF
LOGISTICS AND
TRANSPORT
INFRASTRUCTURE

Freight flow volumes

- the intensity of freight flows
- uniformity (nonuniformity) of freight flows

Structure of freight flows

- commodity structure
- geographical structure

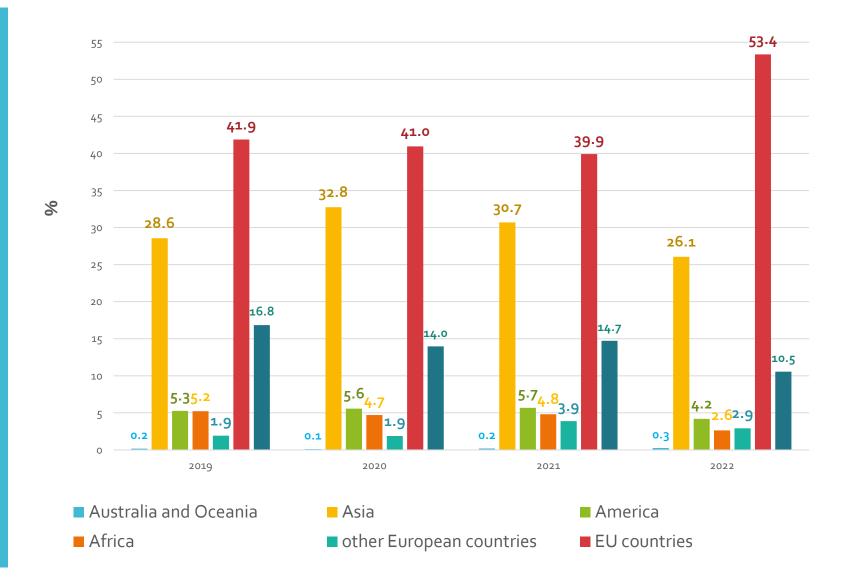
development of infrastructure throughput

logistics (transportation mode, route...)

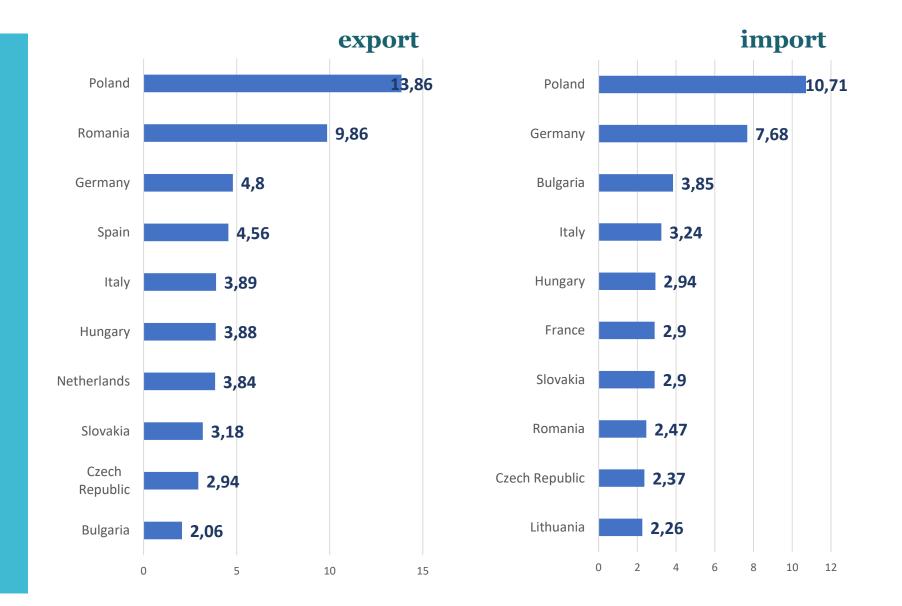
BASIC PREREQUISITES FOR INCREASING FREIGHT FLOWS ACROSS THE LAND SECTION OF THE UKRAINE-EU BORDER

- Regulation(EU) 2022/870 of the European Parliament and of the Council of 30 May 2022 on temporary trade-liberalisation measures supplementing trade concessions applicable to Ukrainian products under the Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and Ukraine, of the other part (extended to June 2024) "economic visa-free regime"
- AGREEMENT BETWEEN THE EUROPEAN UNION AND UKRAINE ON THE CARRIAGE OF FREIGHT BY ROAD (*Special Agreement on the Liberalization of Road Transport*), June 29, 2022 (has been extended until June 30, 2024) "transport visa-free regime"
- ➤ Application of Common Transit Convention and the Convention on the Simplification of Formalities in Trade in Goods (the international application of NCTS) (from October 1, 2022) "customs visa-free regime"
- > Reformatting of modern global freight logistics (bypassing Russia and Belarus)
- Rebuilding Ukraine become the largest economic project in Europe today (2nd International exhibition & conference REBUILD UKRAINE powered by energy, 14-15 November 2023) (investment attraction)

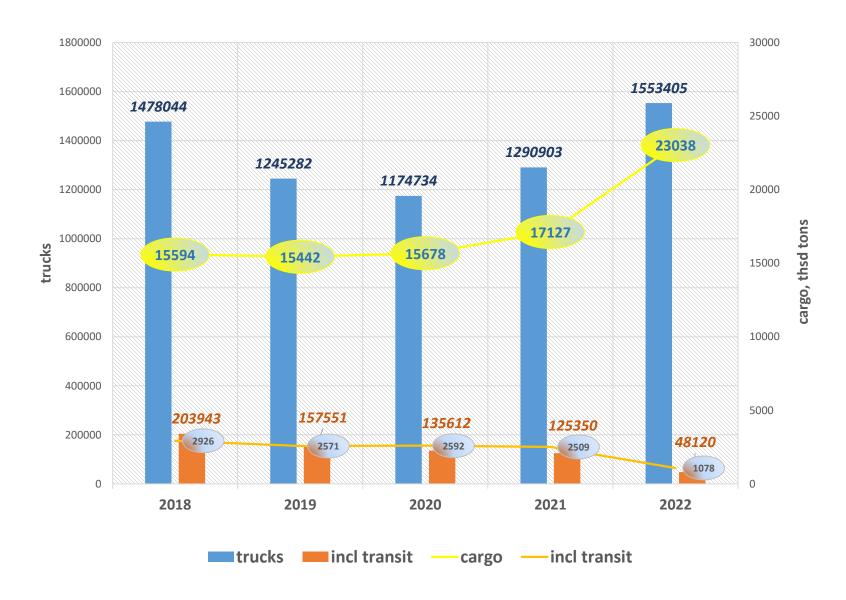
Geographical structure of Ukraine's foreign trade



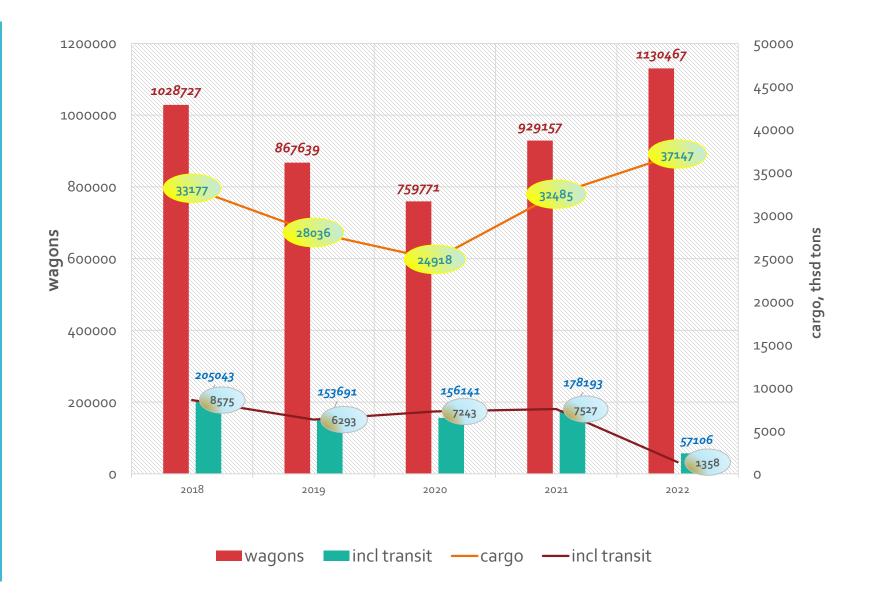
TOP-10 EU trade partners of Ukraine, the first half of 2023



Dynamics of crossing the border by trucks and the volume of transported goods

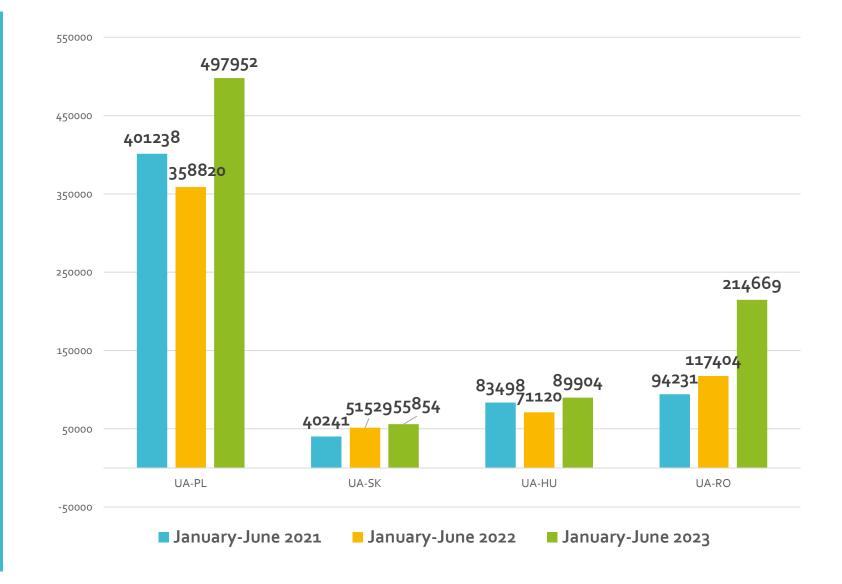


Dynamics of crossing the border by freight wagons and the volume of transported goods



Dynamics of the passage of trucks by sections of the Ukraine-EU border,

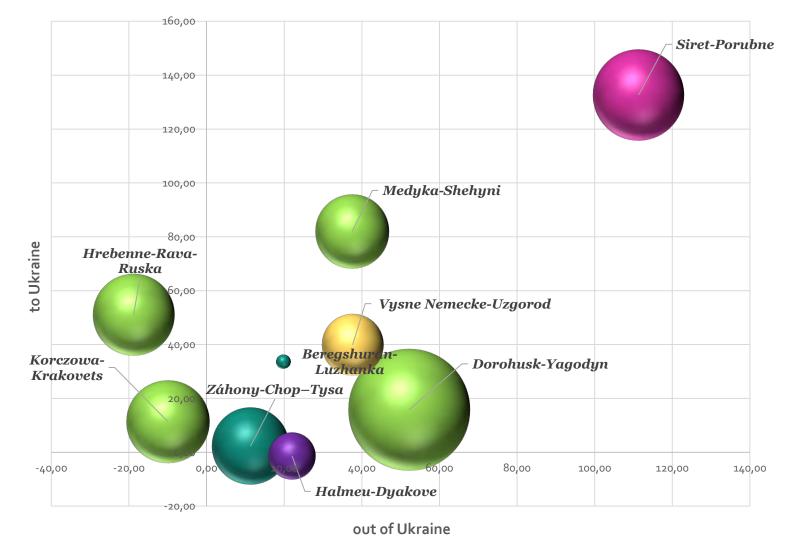
January-June 2021-2023



Increase (decrease) in the number of border crossings by trucks,

in the first half of 2023 compared to the first half of 2021

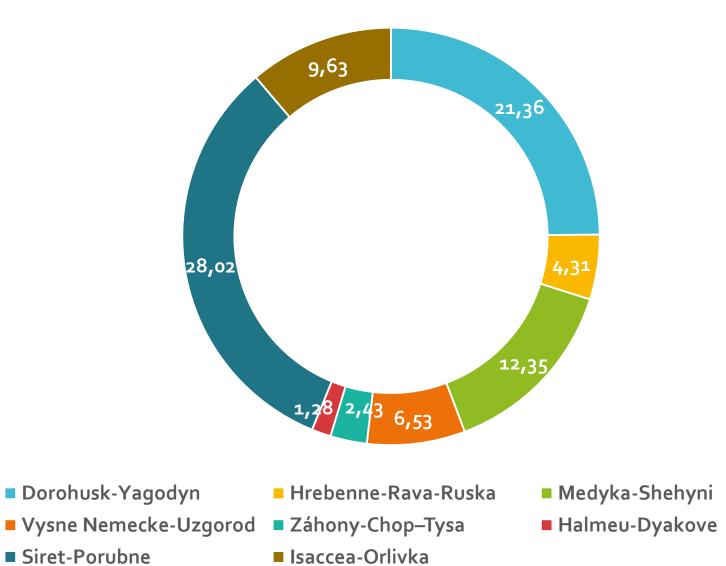
The number of trucks passing through the checkpoint Isaccea-Orlivka in the direction from Ukraine tripled and almost doubled to Ukraine.



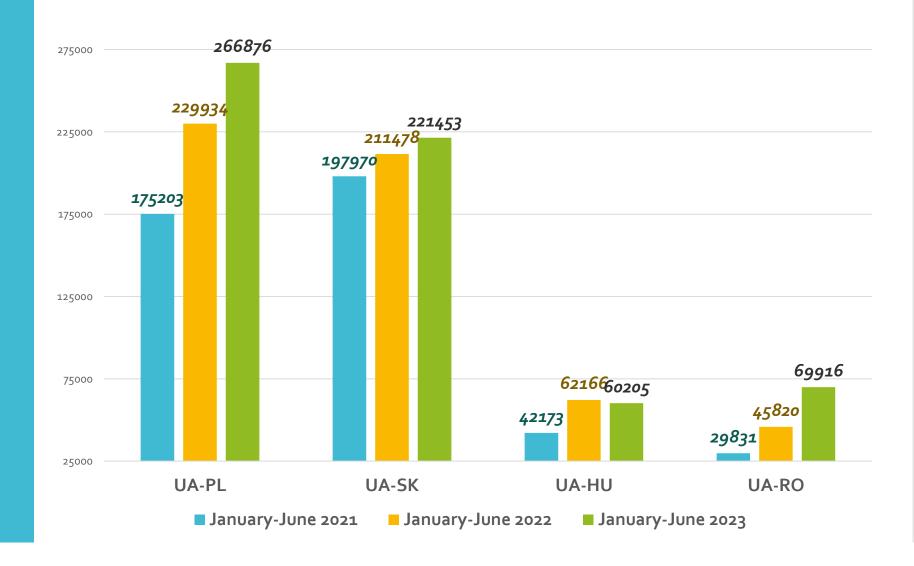
Bubble size represents the share of the checkpoint in the total number of trucks passed across the border

Distribution of the increased number of border crossings by trucks between checkpoints, %

In the first half of 2023, **239,171** more trucks crossed the border (38,6%) compared to the first half of 2021



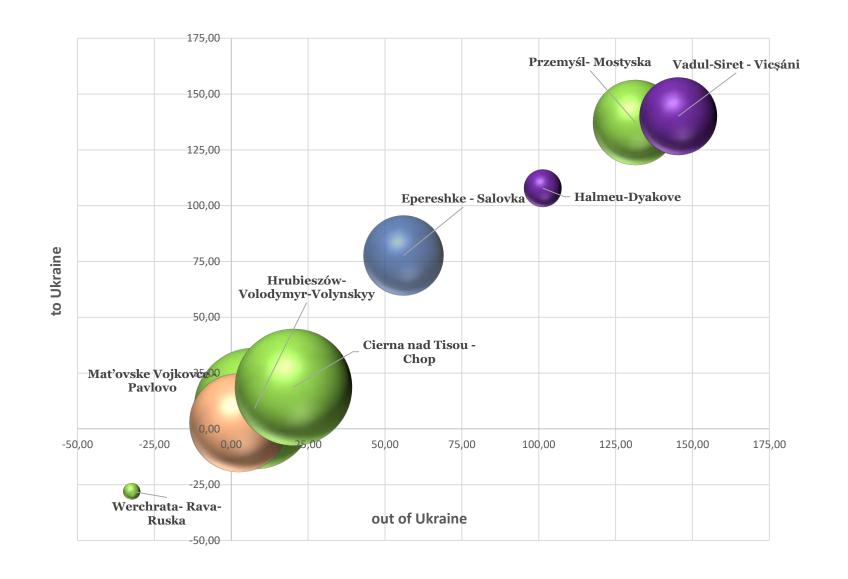
Dynamics of crossing the border by freight wagons by sections of the Ukraine-EU border, January-June 2021-2023



Increase (decrease) in the number of border crossings by wagons,

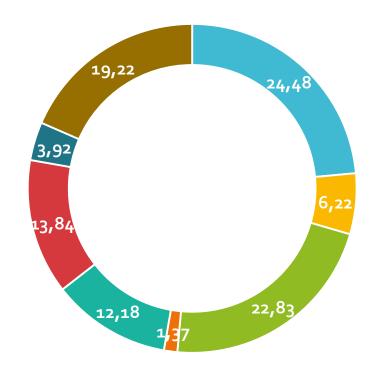
in the first half of 2023 compared to the first half of 2021

The number of wagons passing through the checkpoint Dorohusk-Yagodyn has tripled, both in the direction from and to Ukraine. Its share was 8,95%



Distribution of the increased number of border crossings by wagons between checkpoints, %

In the first half of 2023, **173,273** more wagons crossed the border (39%) compared to the first half of 2021



- Dorohusk-Yagodyn
- Przemyśl- Mostyska
- Cierna nad Tisou Chop
- Halmeu-Dyakove

- Hrubieszów- Volodymyr-Volynskyy
- Mat'ovske Vojkovce Pavlovo
- Epereshke Salovka
- Vadul-Siret Vicșáni

STRUCTURAL ELEMENTS OF LOGISTICS AND TRANSPORT INFRASTRUCTURE FOR CARGO TRANSPORTATION

Technical

- **©**Transport communications
- **©**Rolling stock

Infrastructural

- **©**Border infrastructure
- OTerminals (warehouse, transshipment, logistics, etc. infrastructure)
- **©**Roadside service infrastructure

Institutional

- OIntegration into international transport corridors (ITC)
- **©**As a structural element of international transport corridors (ITC)

Organizational and economic

OParticipants and market capacity of transport services

Conclusions

- ➤ Unlike most EU countries, Ukraine remains a net exporting country (in physical values)
- Exports account for about 70% of Ukraine's foreign trade (in physical values)
- Country is characterized by a fairly low level of foreign trade development in terms of exports and imports per person (both in physical and value terms)
- During 2019-2022, the EU countries dominated in foreign trade with Ukraine: their share is constantly increasing: from 40.81% in 2019 to 53.35% in 2022
- EU neighboring countries are playing an increasingly important role in Ukraine's foreign economic activities. Their share increased from 13% in 2019 to 23% in 2022
- The traffic on the Ukrainian-Polish section of the border is the most intensive. The total number of border crossings by trucks exceeds the number of border crossings on the remaining three sections of the Ukraine-EU border
- In 2022, the increase in the number of crossings by trucks through the land section of the Ukraine-EU border exceeded the available design capacity of checkpoints. In particular, on the Ukrainian-Polish section of the border, the actual passage of trucks exceeded the project capacity of checkpoints by 41%, on the Ukrainian-Romanian section by 16%
- According to the theory of mass service (the theory of queues), in real conditions, the collapse of the system (high probability of exponential growth of the queue) is observed when the load factor reaches 0.8-0.9. High flow intensity, non-uniformity of flows and insufficient capacity cause queues to form
- The throughput capacity of checkpoints should be more than 20% greater than the indicator of the intensity of cargo flow
- In the first half of 2023, compared to the previous period, the number of border crossings by trucks increased by 43%, and freight wagons by 12%
- Capacity development planning should take into account existing trends in volumes, routes and types of cargo transportation, freight traffic prospects, deepening of Ukraine's cooperation with EU member states, formation of new trade corridors, etc

THANKYOU

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