

ALTERNATIVE TRANSPORT ROUTES FROM EUROPE TO ASIA AFTER THE OUTBREAK OF WAR

Wojciech DOMAGAŁA^{1*}, Olga BUCKIŪNIENĖ²

¹ Cracow University of Economics, Department of Packaging Science; domagalw@uek.krakow.pl,
ORCID: 0000-0002-3218-6300

² University of Applied Sciences, Lithuania; o.buckiuniene@ekf.viko.lt, ORCID: 0000-0001-5485-7331

* Correspondence author

Purpose: The aim of this paper is to identify possible transport routes leading from Europe to Asia that bypass the territory of the Russian Federation or go through Russia and don't violate the sanctions.

Design/methodology/approach: Comparative analysis, regional map analysis and case study are used. Map analysis allowed for the creation of various transport routes leading from Europe to Asia. The determining aspect affecting the course of a given route was access to transport infrastructure. The described case study shows the perspective of a small entrepreneur who wants to send his goods to Asia legally and in compliance with applicable sanctions. The comparative analysis made it possible to define new transport paths that largely coincide with the economic corridors of the New Silk Road.

Findings: Possible routes for transporting goods from Europe to China were presented, with a focus on land and intermodal routes that avoided Russian Federation territory and ran through Central Asian countries. The possibility of omitting sanctions in the transport of goods from Europe to Asia was also shown.

Research limitations/implications: Further research on this topic is suggested. A significant impediment in the creation of this article was the lack of access to numerical data from carriers performing the types of transport described in the article. Data worth analyzing concern the number of transports, the value and type of transported goods, transport costs, as well as qualitative data on the experience and good practices of carriers who carry out transport from Europe to China via Central Asia.

Originality/value: The article describes the logistical problems of a transport nature that arose as a result of the outbreak of the Russian-Ukrainian war, which, to the author's best knowledge, have never been described in detail before, nor have possible solutions to these problems been presented. The article is addressed to small entrepreneurs trading in Asian countries who cannot afford to use the services of intermediaries and are forced to organize transport on their own. The article also highlights the benefits for carriers by presenting alternative transportation routes that do not include Russia.

Keywords: transport, intermodal transport, Central Asia, Russo-Ukrainian War.

Category of the paper: Viewpoint, Case study.

1. Introduction

In the age of globalization, transportation is critical for connecting distant regions and economies. An example of such a connection was the former Silk Road, which connected Europe with China. The Belt and Road Initiative, initiated and being developed, aims to recreate the Silk Road and create a convenient transport connection between the old world and the Middle Kingdom (Mobley, 2019; Fang, 2015). important role in the smooth operation of various transport initiatives, in the case of land transport, are the transit countries through which the transport route passes, but they are neither the starting point nor the destination of this transport. In the discussed case, this role is played mainly by the countries of Central Asia, i.e. Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan and Turkmenistan. (Khasseanova-Kaliyeva et al., 2017). These countries, due to their location, are particularly important in the first stage of transport from China to Europe, because the goods, once in Central Asia, can be transported north through Russia, west through the Caspian Sea, or south-west through Iran to Europe (Kalyuzhnova, Holzhaecker, 2021).

In the current, highly volatile geopolitical environment, the decision to choose a mode of transportation is critical in terms of transport efficiency and safety. The aim of the article is to present the impact of the sanctions that were imposed on Russia and Belarus after the aggression against Ukraine on transport running through and ending in Central Asia and to show possible alternative routes and ways of performing this type of transport. The research methods used will be a comparative analysis and a case study of the transport of goods from a Polish company operating in the specialized entertainment industry to Kazakhstan.

2. Methods

In this article, the following were used: comparative analysis, case study and map analysis of individual regions. The case study is a method for condensing broad and often complex behaviors or phenomena that occur in a research subject into more easily developed research problems (Flyvbjerg, 2011; Heale, Twycross, 2018). As a case study in this article, the situation of a certain Krakow-based company operating in the specialized entertainment industry will be used.

Comparative analysis involves the analysis and compilation of empirical data to create an overall analysis and, potentially, provide a broader perspective (Roig-Tiemo et al., 2017). In this article, comparative analysis was used to analyze maps of the regions and their infrastructure and to create potential alternative transport routes.

3. Results

3.1. Transport routes from Europe to Asia

The Belt and Road Initiative assumes the creation and maintenance of transport and economic corridors, mainly leading from China to Europe. It is possible to distinguish six such corridors (Wen et al., 2019):

1. NELBEC New Eurasia Land Bridge Economic Corridor.
2. CMREC China-Mongolia-Russia Economic Corridor.
3. CIPEC China-Indochina Peninsula Economic Corridor.
4. CCAWAEC China-Central Asia-West Asia Economic Corridor.
5. CPEC China-Pakistan Economic Corridor.
6. BCIMEC Bangladesh-China-IndiaMyanmar Economic Corridor.

These corridors are shown in figure 1.

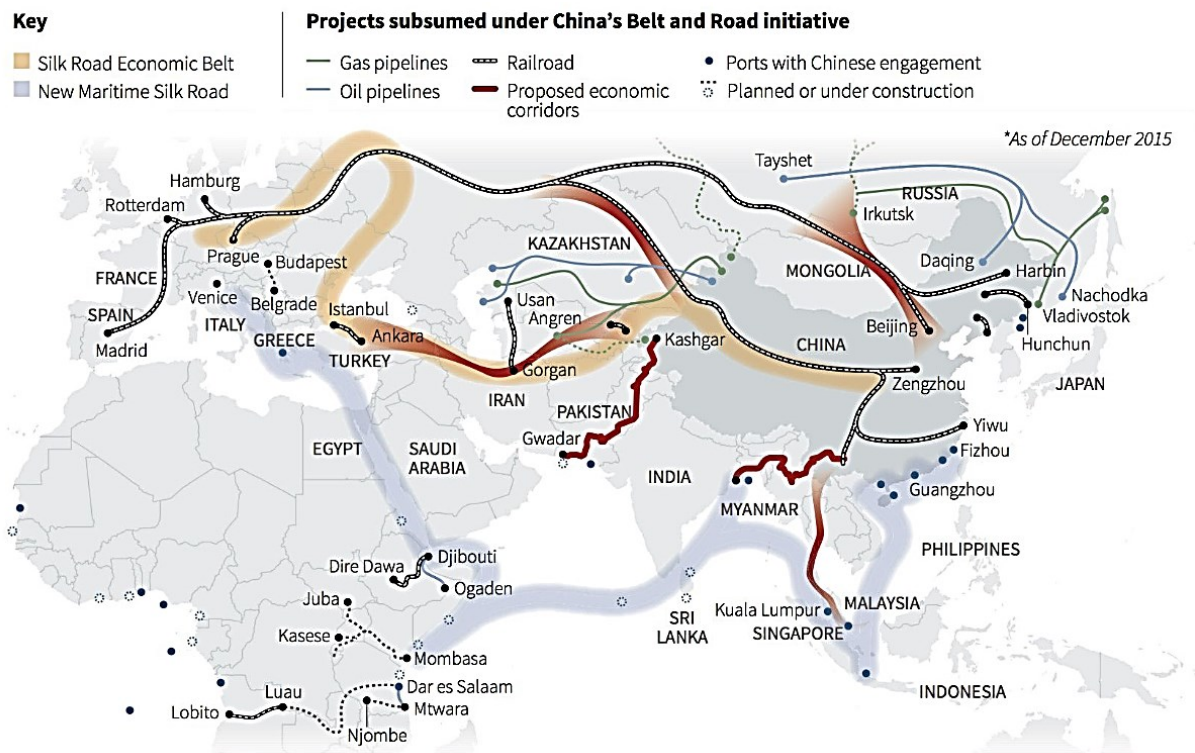


Figure 1. Belt and Road Initiative.

Source: Mercator Institute for China Studies. (C.Inton, 24/03/2017. Reuters).

Transport and economic corridors from the Belt and Road Initiative allow not only for more and more effective transport of goods, which is associated with both increasing the volume of transport and reducing its costs, but also for the development of the economies and infrastructure of the countries through which these corridors run (Lu et al., 2018). This project allows the transport of various types of goods using all modes of transport: road, rail, water, transmission and air, with the least emphasis on air transport. This proves the high intermodal

potential of transports carried out in the corridors of the Belt and Road Initiative. It is worth emphasizing that out of three land corridors, two run through Russia and two through Central Asia, which makes the countries of this region an important link in the organization of international transport in the economic corridors of the Belt and Road Initiative, especially if there is a need to bypass the Russian Federation in planned transport.

The countries of Central Asia, due to their location, are somehow forced to cooperate economically in order to optimize the transport services as much as possible, which results not only from the immediate geographical vicinity but also from the proximity of countries with huge economic potential (China, India, Russia). This cooperation, for many different reasons, can be described as turbulent (Kulipanova, 2012). However, the countries of Central Asia have undertaken and continue to undertake many initiatives aimed at stimulating the development of infrastructure and economies in the region. This is manifested by the extremely friendly approach of these countries to the entire Belt and Road Initiative project, which will allow for attracting new investors and, consequently, further development of the countries, including their infrastructure and economies (Taliga, 2021).

In the territory of the Central Asian countries, various international organizations operate, and there are many programs aimed at modernizing infrastructure, investing in improving its functioning, as well as controlling the quality and efficiency of transport. Among them, the following can be distinguished (Khassenova-Kaliyeva et al., 2017; Łacny, 2009):

- The International Road Transport Union IRU.
- Central Asia Regional Economic Cooperation Program CAREC.
- Transport Corridor Europe Caucasus Asia program TRACECA.
- Viking Train Railroad project.
- Belt and Road Initiative BRI.

The International Road Transport Union (IRU) was the initiator of the NELTI project, which began in the late 2000s. This project was aimed at streamlining procedures and checking the quality of transport infrastructure in Central Asia (Łacny, 2009).

In turn, the CAREC program, which is comprised of eleven regional countries and independent institutions, develops long-term transportation strategies for the region (including CAREC 2030). CAREC helps the countries participating in the program organize the money needed to carry out the investments. Under the CAREC program, Central Asian economic corridors, which are presented in figure 2, were created.

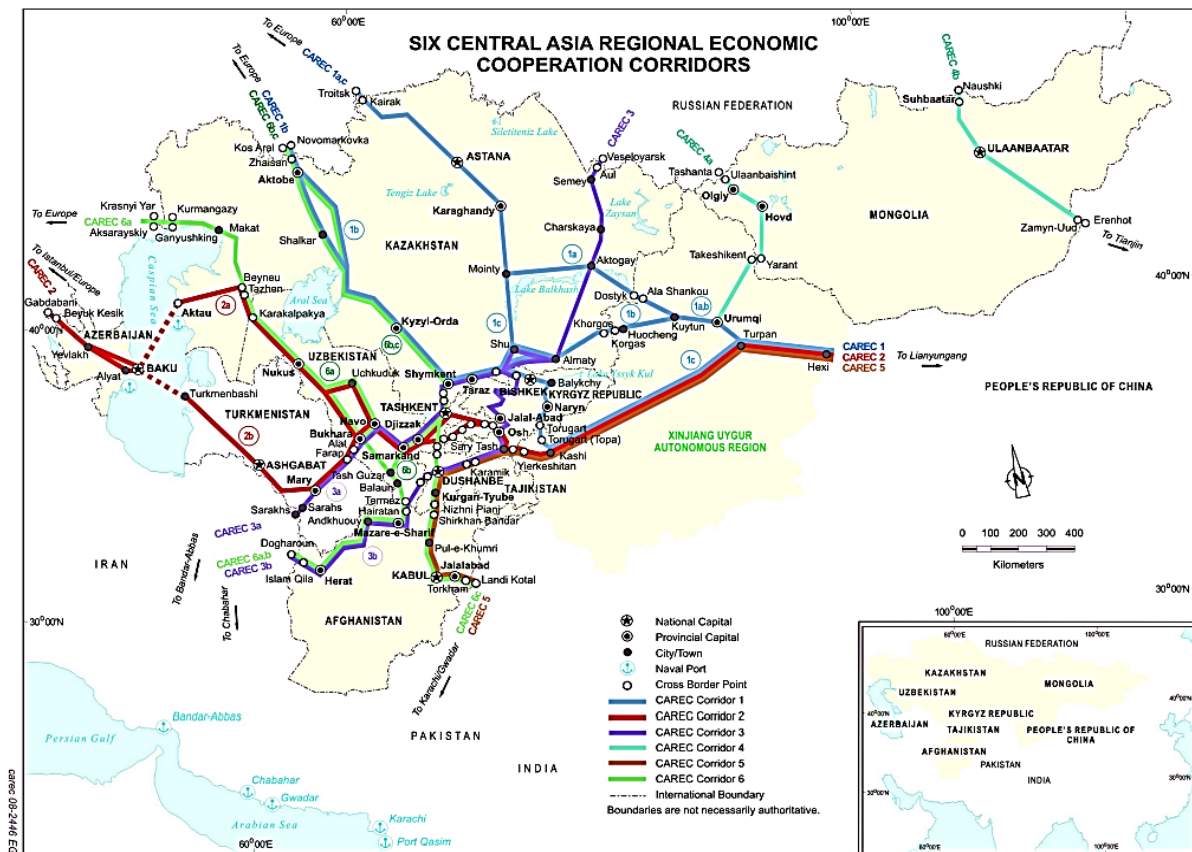


Figure 2. Economic corridors of CAREC program.

Source: (Khasanova-Kaliyeva et al., 2017).

These corridors not only allow for faster, more efficient transport using various modes of transport, but also significantly affect the economic development of the region. In addition to transport, CAREC implements projects supporting, among others, the energy industry, trade and tourism, which is conducive to the development of the entire region.

TRACECA, on the other hand, is a European program aimed at connecting Central Asia and the Caucasus countries to Europe through efficient and reliable transportation links. Currently, the countries participating in this program are implementing development strategies for 2016-2026, and the effects of the implemented projects contribute to the development of the competitiveness and attractiveness of the TRACECA corridor in order to facilitate further trade liberalization and reduce barriers in the path of goods along the entire corridor. The map of corridors in the Central Asia region is presented in figure 3.

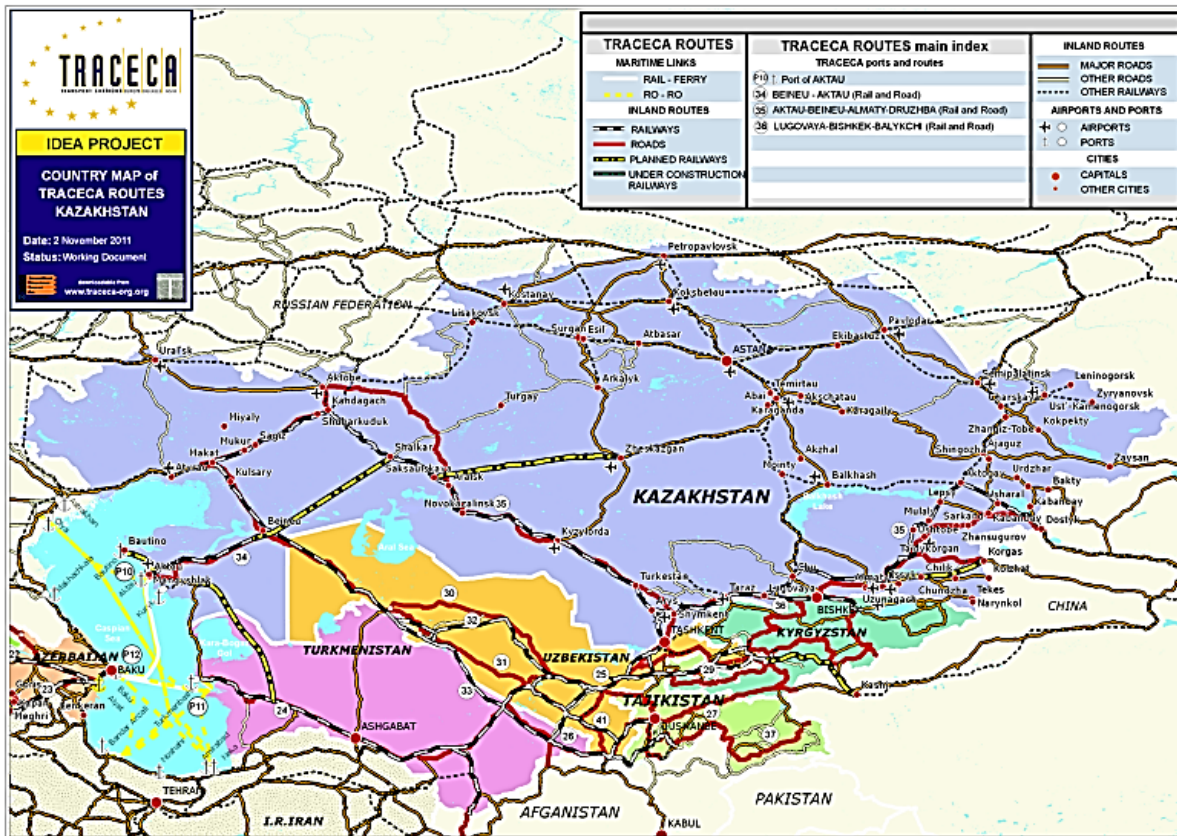


Figure 3. TRACECA map of Central Asia.

Source: (Khassenova-Kaliyeva et al., 2017).

The Viking Train Railroad project was an intermodal project connecting Lithuania with the countries of Central Asia by rail and sea. In the first months of 2021, over 31,000 people were transported under this project. TEU (RAILTARGET, 2021; Viking Train, 2022). Due to the fact that a significant part of the European part of the route ran through Belarus and Ukraine, the project was suspended after the Russian aggression against Ukraine, and the vikingtrain.com domain is up for sale as of December 2, 2022 (Project3seas, 2022).

The geographical location of the Central Asian countries makes them ideal transit countries in transport relations between Europe and China, and new investment projects in the transport industry make these countries more and more attractive to new investors and help optimize transport processes. In addition, there are many different transport routes that allow you to bypass selected countries in the transit of goods when necessary.

3.2. The impact of the war on transport to Central Asia

The Russian aggression against Ukraine, which took place on February 24, 2022, caused not only a significant political, humanitarian and epidemiological crisis (Choudhary et al., 2022), but also an economic one (TÁRIK, 2022). Warfare will prevent the effective performance of many activities, including transport, in countries where war is taking place. This involves the need to organize new routes and transport routes bypassing unstable regions

affected by military operations (Fan, 2022). This affects, among others, the countries of Central Asia, whose transport from Europe is significantly hindered by the need to bypass the territory of the Russian Federation.

As part of economic pressure aimed at ending the Russian-Ukrainian war as soon as possible, many countries imposed various types of sanctions on the Russian Federation. In terms of the operation of the transportation industry, the sanctions as of December 2, 2022 include: (Biznesgov, 2022; Europa.eu, 2022):

- a ban on the export of goods and technologies suitable for use in the aerospace industry,
- prohibition of providing insurance, reinsurance and maintenance services for goods and technologies suitable for use in the aerospace industry,
- prohibition on the provision of technical assistance and other related services, as well as financing and financial assistance in relation to goods and technologies suitable for use in the aerospace industry (the prohibition covers the entire CN code 88 (aircraft, spacecraft and parts thereof),
- ban on landing, taking off from and overflying the EU territory by Russian air carriers, aircraft registered in Russia and owned, chartered and controlled by Russian legal and natural persons,
- restrictions on the export of marine navigation goods and radiocommunication technology,
- complete ban on the entry of Russian and Belarusian road carriers operating in the European Union,
- a ban on the entry of Russian-flagged ships into EU ports,
- in justified and predetermined cases, derogations from these bans are possible, including for the completion of contracts concluded before a specific date, humanitarian purposes, counteracting threats to health and human safety and environment, medical purposes and cybersecurity.

The sanctions introduced by the Member States of the European Union were introduced in order to prevent all Russian vehicles and most Belarusian vehicles from entering the territory of the community, which is associated with the complete inability to carry out any transport activities by organizations from countries aggressing against Ukraine.

At the same time, "counter-sanctions" have been introduced by the parties covered by the sanctions, which basically prevent carriers from the European Union from carrying out transports in Russia and transiting (Transinfo, 2022; Logistykarp, 2022).

Both types of sanctions make transport, both road and rail, from Europe to Central Asia and China virtually impossible to carry out on the two shortest of the three land corridors of the Belt and Road Initiative. This situation puts most carriers that deal with transport to the east at a disadvantage, as it is impossible to carry out direct transports to Russia, and transports to Central Asia and the Far East using road transport generate relatively high costs and may entail certain risks regarding the feasibility of the transport itself or the durability of the goods.

3.3. Possibilities of transport to Central Asia after the Russian aggression against Ukraine

To avoid the sanctions imposed by Russia and Belarus on European carriers, they are forced to use one of the three Belt and Road Initiative transport corridors—the CCAWAEC corridor (China-Middle East, land) China-Central Asia-West Asia Economic Corridor. It will also be necessary to change its route because, in the European part, it will have to run through the southern part of the community—Hungary, Romania, Bulgaria or Greece.

Possible transport routes from the European Union to Central Asia and China are shown in figure 4. The TRACECA map, which contains all road and rail routes in the countries belonging to the project, was used to perform the route analysis. The planned routes assume a varied use of three modes of transport: road, rail and sea, both in separate cases and in integrated intermodal solutions. The assumed starting points of the routes are Romania or Bulgaria. These countries were chosen for the beginning of the route due to their membership in the TRACECA program and geographical location. Both countries are located on the Black Sea, through which alternative transport routes can run, and Bulgaria is adjacent to Turkey, through which all possible land transport routes not leading through Russian territory run. Due to the proposed Asian routes, the proposal of a route from further countries in the community does not fit into the purpose of this article. The end point is understood to be China; however, depending on the exact location of the end point, other transport routes will be proposed. At the same time, the proposed routes are relevant when the destination of the transported goods is in one of the transit or neighboring countries, but only if the neighboring country is not Russia.

The analyzed routes are marked with the following colors: blue, black, brown and green.

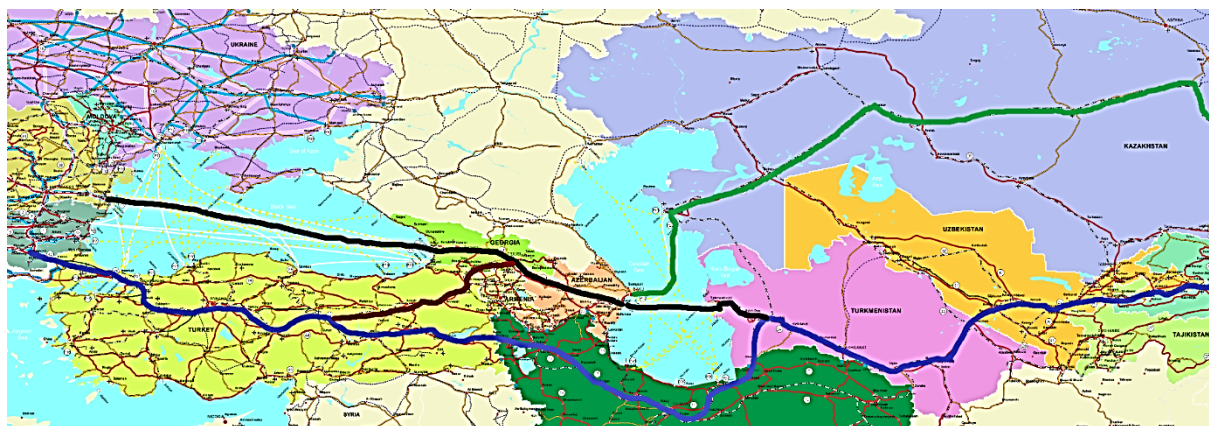


Figure 4. Favorable transport routes from Europe to the east, bypassing Russia.

Source: own study based on TRACECA map.

The blue (land) route passes through Bulgaria, Turkey, Iran, Turkmenistan, Uzbekistan and Kyrgyzstan. It was planned in such a way as to run simultaneously along the road and railway infrastructure, hence the slight extension of the route in Turkmenistan, north of Iran, that can be observed. Running the route further east in Iran would not involve the use of rail and only

road transport would be possible. In a situation where multimodal transport is not used or only road or rail transport is used, this is the most reasonable route from Europe to the East.

The black route (land and sea) starts in Romania or Bulgaria, then leads through the Black Sea basin to Georgia and Armenia, from where goods are transported through the Caspian Sea to Turkmenistan, where the final part of the route coincides with the blue route. From the point of view of the starting point, it is geographically the shortest route while at the same time being the most risky route. This risk results from the course of the route through the Black Sea basin, where military operations in the Russian-Ukrainian war are taking place. While ships not flying the flags of countries directly involved in the conflict should be safe in theory, the possibility of a ship being hit by a stray missile or an undetected naval mine, resulting in cargo and ship losses and potential crew losses, should always be kept in mind.

In the initial stage, the brown route (land and sea) runs the same as the blue route, and in the final stage, it runs with the black route. In Turkey, the route changes from the blue route and heads north towards Armenia, from where the goods are directed to the black route to the Caspian Sea. This route is relatively shorter than the blue route, due to the fact that it is not necessary to circumnavigate the Caspian Sea, but it does not necessarily take less time to cover this route. Due to the need to reload goods in two ports on the Caspian Sea and the sea transport processes themselves, the transport time may be significantly longer. In this case, as in the case of the black and green routes, it should be remembered that the infrastructure and fleet of the Caspian Sea ports significantly differ from European standards, and larger investments have only begun to be implemented in recent years.

The green (land and sea) route is similar to the brown and black routes. Differences emerge in Azerbaijan, from where goods are shipped to Kazakhstan instead of Turkmenistan. At the Kazakh port, the goods are transshipped onto a train or semi-trailer and, depending on the type of transport chosen, the goods move towards Mongolia or northern parts of China.

The routes described and presented in figure 4 do not include total sea transport from Europe to China, India, or Pakistan because the goal of this analysis was to propose routes that land carriers could use without engaging in long-distance sea transport. At the same time, the presented routes show the possibility of transporting goods from Europe to the East, completely avoiding transit through the territories of the Russian Federation, Belarus and Ukraine.

In addition to the indicated routes from Europe to the east, there is also the possibility of transporting goods from the territory of the community through the territory of Belarus and the Russian Federation. This alternative will be presented as a case study.

A company from Krakow (company K) operating in the specialized entertainment industry received a commercial inquiry from a company (company U) operating in the same industry located in Central Asia. The inquiry concerned the delivery of goods imported from Great Britain. Due to the fact that the manufacturer does not deliver its goods directly to Central Asia, the U company, in order to meet the demand and the basis of its activity, placed orders from

another company operating in this industry, which was located in Moscow. After the Russian aggression against Ukraine, the manufacturer ceased any deliveries to stores on Russian territory, which at the same time resulted in the inability to place an order by the U.

Company K expressed interest in a new market and sent the order to Company U. However, due to the relatively small scale of business, Company K does not have its own transport fleet or logistics department and all orders to customers are transported directly by external courier companies, so it was not possible to use one of the alternative transport routes proposed in the article. Also important in this case were the costs of order fulfillment, which should be as low as possible.

In order to carry out the transport of goods while meeting all the assumptions, the U company proposed its own road transport carried out by a Kazakh carrier. Due to the fact that the vehicle and the company of the Kazakh carrier are not registered in the European Union, Russia or Belarus, he was able to perform the agreed transport without major problems and breaking sanctions. The shipment from Krakow was transported to Lithuania by a courier company, from where it went to its destination via Belarus.

In the described case, it was also possible to use the services of a Russian or Belarusian carrier, as Russian and Belarusian sanctions prevent Community carriers from transporting into their territory, but it is possible to reload in a logistics center near the border, from which the goods can be collected by a native carrier for further transport.

4. Discussion

In the turbulent reality of globalization, war, even if it seems to have a local dimension, affects a place many kilometers away from the place of military operations. The countries of Central Asia, which in recent years have benefited from international investments and their presence at the center of global land trade routes, are suddenly indirectly affected by economic sanctions intended to weaken the economy of another country.

Simultaneously, specialized transport companies that deal with the transport of goods to Russia, Belarus, or the Far East are forced to seek alternatives in order to continue doing business.

Despite the presence of sanctions that are aimed at stopping transport beyond the eastern border of the community, this transport can still be carried out using loopholes in the law. Furthermore, alternative routes that do not pass through the territories of warring countries result in longer travel times, but they can also be a long-needed stimulus, stimulating investments in the infrastructure required for efficient logistics service of transportation.

It is recommended to conduct further research on the subject of the impact of the Russo-Ukrainian war on the transport of goods to Asia, excluding air and ocean transport. A significant obstacle in the development of more detailed studies based on economic calculations was the complete lack of willingness to cooperate with transport companies operating from Europe to Central and East Asia. Obtaining and processing numerical data on the quantity, costs and times of transport as well as qualitative data on the opinions of carriers would allow for a deeper research of the problem and a broader description of its effects, as well as finding solutions that could be implemented in practice.

5. Summary

This paper presents the economic corridors of the Belt and Road Initiative and the most important transport routes in Central Asia, along with the Central Asian economic cooperation corridors. The problem, faced by carriers providing transport services east of Europe, resulting from the outbreak of the Russian-Ukrainian war is also described. The issue of economic sanctions imposed on Russia and Belarus and how they affect the transport possibilities from the European Union to Central Asia and China were discussed.

Using a comparative map analysis, alternative transport paths leading from the southeastern borders of the European Union to Central Asia have been presented, with the possibility of further travel to China, which at the same time bypasses the Russian Federation. The presented paths show the possibility of transport using various modes of transport: road, rail, sea and multimodal, and are based on the analysis of maps and infrastructure of the countries through which they lead. The case study presents the situation of a Polish company that wants to sell its goods to the countries of Central Asia but faces the problem of organizing transport, which is caused by the current economic sanctions. The problem of organizing transport in this situation is solved by using the services of a Kazakh carrier, which can move freely through the territory of Russia, Belarus and the European Union because it is not subject to sanctions, thus making it possible to travel through said territories without violating the sanctions.

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