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DOI: 10.31388/2220-8674-2022-2-3

UDC 339.45

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THE MAIN ASPECTS OF THE DEVELOPMENT OF INTERNATIONAL TRANSPORT TRANSPORTATION IN THE EUROPEAN ECONOMIC SPACE

Summary. On 24 February 2022 the armed forces of the Russian Federation carried out an armed aggression on the territory of Ukraine. Due to the invasion on Ukraine, rail freight forwarders look for new routes The article discusses new transport route from China to Europe - the Middle Corridor. The Middle Corridor started activity in 2013, in this time national railway companies of Kazakhstan (KTZ - Kazakhstan Temir Zholy), Georgia (JSC Georgian Railway) and Azerbaijan (ADY - Azerbaijan Railways) [11, 13] create the Coordination Committee for the development of the corridor. This route has been developed since July 2015, when the first pilot train with containers from China arrived at Azerbaijan. In October 2016, Kazakhstan, Azerbaijan and Georgia adopted a document to inaugurate the Trans-Caspian International Transport Route Association with its headquarter in Astana, the capital of Kazakhstan. From this time the association promoting traffic on the corridor. The Trans-Caspian International Transport Route is also known as the Middle Corridor. The Trans-Caspian International Transport Route is relatively unknown way among China and Europe as part of the Belt and Road initiative (BRI). This route was developed to give a new and different possibilities for the northern routes of the New Silk Road. Main New Silk Road route transportation goods through Russia, Kazakhstan and Belarus, to enter Europe at the border with Poland. The Middle Corridor is alternative for classic routes of New Silk Road [12]. The Middle Corridor is alternative and another entrance from China to Europe by the Black Sea. The route is steadily gaining popularity. The Middle Corridor is new opportunity for all

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the countries along the route. Connecting China and Europe via the Caspian Sea, the Trans-Caspian International Transport Route is next of the Belt and Road initiative corridor. The war in Ukraine also gives renewed dynamism for development [5].

Keywords: rail freight, Middle Corridor, intermodal, BRI

Formulation of the problem. Rail operators in intermodal transport, based on the European Union decision to impose sanctions on the Russian Federation stop to accept and transport cargo destined for or originating in Russia or going through Russia. This measure applies to all operations with containers destined for Russia and includes rail transportation, handling and storage or related road transportation.

By February 2022, about 90 per cent of the transports from China went via the Northern Corridor, the route from China via Kazakhstan or Mongolia through Russia. Intermodal operators due to customers' expectations, who want to avoid Russia and Belarus due to ethical reasons, financial, insurance and logistics risks offer a solution (new routes). Rail operators in intermodal transport, based on the European Union decision to impose sanctions on the Russian Federation stop to accept and transport cargo destined for or originating in Russia or going through Russia. This measure applies to all operations with containers destined for Russia and includes rail transportation, handling and storage or related road transportation [7].

The solution is worth paying attention to the Middle Corridor. The Middle Corridor has two variants (routes). First is China – Kazakhstan - Caspian Sea Azerbaijan – Georgia –Turkey. Second variant is the Trans-Caucasus Transit Corridor China Kazakhstan – Baku – Poti – Constanta (Romania) / Varna (Bulgaria) [6].

The Trans-Caucasus Transit Corridor is a segment of the Middle Corridor. The Middle Corridor is independent of the Russian territory, described in the documents as the China-Central Asia-West Asia Economic Corridor. Its route was developed under the TRACECA initiative in the 1990s. It connects China through Kazakhstan, the Caspian Sea, Azerbaijan, Georgia, the Black Sea, Ukraine with Poland, and Western Europe, and runs from Georgia to Turkey in another branch [10].





Figure 1. New Silk Road (Northern Corridor)

The middle corridor. The Middle Corridor is characterized by a high complexity in the organization of the transport process, due to the necessity of multiple transhipments and at least one ferry crossing through the Caspian Sea. In the variant reaching Poland via Ukraine, there is a need for an additional crossing through the Black Sea – current it is not possible. An alternative is transport on the Baku-Tbilisi-Kars line to Turkey and the recently opened Marmaray tunnel to Europe. Due to the complexity of the transport process, transport time, its cost and punctuality deficit, it is not attractive compared to the northern corridors running through Russian territory. The development of this corridor can be seen as a political counterbalance to the corridors dependent on Russia. Currently, this corridor is start used for transport from China to Europe [16].

The development of this corridor can be seen as a political counterbalance to the corridors dependent on Russia. The countries along the corridor are gradually developing it, optimizing transport between countries along the way, e.g. Kazakhstan with Turkey. Integration is served by various bodies, such as the "Trans-Caspian Transport Route" Association, where efforts are made to develop the corridor, including organization of regular feeder transports (a feeder is a small vessel transporting 300-500 TEU at a time) in the Caspian Sea, or the use of preferential rail tariffs for cargo. The Polish representative in the association is PKP Linie Hutnicza Szerokotorowa, i.e. the manager of the western most broad-gauge line in Europe. Due to the conflict between Ukraine and Russia, the Middle Corridor is gaining in importance. However, capacities are insufficient [9]. The problem with the central corridor: customers are reluctant to buy a



product that – compared to the northern corridor – takes significantly longer and demands much more investment. Multimodal services and creativity are in demand. But the decision-makers for this are situated in the customeroriented companies. In general, rail transport can be considered very important because the arguments of rail are still valid. Rail transport is quicker than sea, cheaper than air and more sustainable than other transport modalities [14].

In November 2013, during the II International Transport and Logistics Business Forum "New Silk Road" in Astana, the authorities of Kazakhstan Railways, Azerbaijan Railways, Georgian Railways signed document about flourish Coordination Committee for the development of the Trans-Caspian International Transport Route. In relation to raise the movement of goods to the Trans-Caspian International Transport Route in February 2014, more companies joined to the Coordination Committee. To the initiative joined following companies: Azerbaijan Caspian Shipping, Baku International Sea Trade Port, Aktau International Sea Commercial Port, Batumi Sea Port. The Coordination Committee consisted of seven companies [2].

The consequences of working together all members were [8]:

- engage complex prices for container services, preferential tariffs for transportation of fuel oil, gasoil, grain,
- approved the scheme of communication between transporation firms, rail carriers, sea transportation companies for the flow of container trains by the China, Kazakhstan, Azerbaijan, Georgia and Turkey,
 - launched "Nomad Express" the container service,
- -lanched three test cointainers trains "Nomad Express". First test train launched at 28.07.2015 from Shihezi (China) to Kishli (Azerbaijan). Second test train lauched at 29.11.2015. from Lianyungang (China) to Istanbul (Turkey). Third test train lauched at 15.01.2016 from Ilyichevsk (Ukraine) to Dostyk (Kazakhstan).
 - new associates were added to the initiative,
 - held image events and road shows.

In December 2016, the members of the Coordination Committee for the development of the Trans-Caspian International Transport Route agree to establish the International Association "Trans-Caspian International Transport Route". Since February 2017, the International Association "Trans-Caspian International Transport Route" has started activity.

Members of the Association are commercial and non-commercial organizations, which are interested in cooperation with the Association and in contributing to the development of its activity. The rights of Regular member of the Association [8]:

- participation in administration of the Association's affairs with the right of casting vote in adoption of decisions,
 - -authority to make decisions on the activity of the Association by



participating in its scheduled and special Common Meetings,

- authority to form the agenda of the Common Meeting,
- electing the Managing Board of the Association,
- contributing of suggestions on the activities of the Association to the Managing Board of the Association and participation in their discussion,
- proposal of candidates and being elected to the Managing Board of the Association,
 - convening of an extraordinary Common Meeting.

The rights of Associate member of the Association:

- participation in sessions of the Common Meeting with the right to advisory vote in adoption of decisions,
- participation in the discussions of the issues related to the activities of the Association,
- submit for consideration own proposals on the activities of the Association to the Managerial Board of the Association,
- getting communication on the activities of the Association, its research and information materials,
- applying of guidelines and decisions concerning the activity of members of the Association in own work.



Figure 2. The Trans-Caspian International Transport Route

Figure 2 shows the Trans-Caspian International Transport Route (the Middle Corridor) on the map. It starts from Southeast Asia and China, runs through Kazakhstan, the Caspian Sea, Azerbaijan, Georgia and further to European countries [3, 4]. The Trans-Caucasus Transit Corridor (CTC) is a segment of the Middle Corridor.





Figure 3. The Trans-Caucasus Transit Corridor

The Trans-Caucasus Transit Corridor is comprised of roads, railways, the Caspian seaport of Alat, and the Black Sea seaports of Poti and Batumi in Georgia. The length of the corridor in Azerbaijan is about 503 km from Baku to the Georgian border. In Georgia, it further extends for about 272 km eastward from the Azerbaijan-Georgian border to Samtrede, where it splits into two directions to the Georgian Black Sea ports of Batumi and Poti [1, 8, 15].

Figure 4 and 5 shows variants of the Middle Corridor at maps.

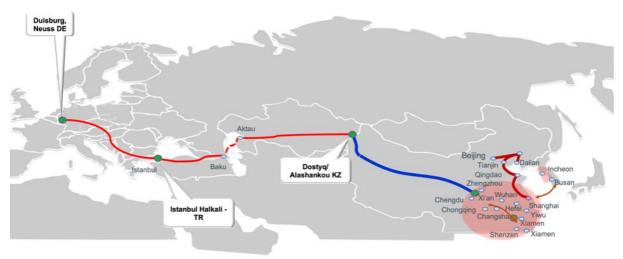


Figure 4. China – Europe (the Middle Corridor via Kazakhstan through the Caucasus, Azerbaijan, Georgia and Turkey to Europe)



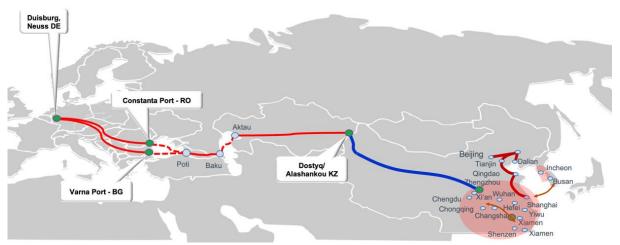


Figure 5. China – Europe (The Middle Corridor via China - Kazakhstan - Baku – Poti – Constanta (Romania) / Varna (Bulgaria)

Conclusions. The Trans-Caspian International Transport Route, known as the Middle Corridor, is a multilateral institutional development linking the containerized rail freight transport networks of the People's Republic of China (PRC) and the European Union through the economies of Central Asia, the Caucasus, Turkey, and Eastern Europe.

In the event of a major military conflict that would affect all or most of Ukraine, there is practically no other convenient route for railways to maintain the China-EU road. It seems more likely that there will be a strong pressure from business on political leadership and the maintenance of the existing transport routes through Belarus and Ukraine. Even in the event of changes to the map, regardless of who will be in power in this area, the complete abandonment of the above-mentioned. The roads seem very unlikely.

The Middle Corridor can't take over all the cargo volume and capacity from the Northern Corridor of New Silk Road (through Russia). The corridor can meet for about 3-5 per cent of the total capacity of classic routes. Volumes transiting through northern routes passing through Russia reach approximately 1,5 million TEU. This corridor has bottlenecks and limitations like efficient operations or lack of vessels in the Caspian Sea. Also, the port of Constanța is heavily congested. The middle corridor could be a good option, but they need to invest in new infrastructure and improve the crossing of the Caspian Sea.

The transportation need is burgeoning over the Middle Corridor and the new services commenced give a positive perspective for 2022. In May 2002, an overall session of the Trans-Caspian International Transport Route association estimated increase of container traffic compared to 2021 and increase in cargo volumes. The container traffic will be doubled. Kazakhstan



Railways inform that the traffic boost to approximately 50 000 TEUs transported through the Middle Corridor in 2022. Cargo volume will increase 6 times. It means that the Middle Corridor will reach 3,2 million tons of transported cargo in 2022.

During the overall session, organized in the Turkish capital Ankara, the association's representative agreed that the hoping prognosis also carries new tasks needing debate and engaging in.

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Стаття надійшла до редакції 23.02.2022 р.

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ОСНОВНІ АСПЕКТИ РОЗВИТКУ МІЖНАРОДНИХ ТРАНСПОРТНИХ ПЕРЕВЕЗЕНЬ В ЄВРОПЕЙСЬКОМУ ЕКОНОМІЧНОМУ ПРОСТОРІ.

Анотація

24 лютого 2022 року збройні сили Російської Федерації здійснили збройну агресію на територію України. Через вторгнення в Україну міжнародні залізничні експедитори шукають нові маршрути. У статті описано про новий транспортний шлях з Китаю до Європи — Середній коридор. Який розпочав діяльність у 2013 році, в цей час національні залізничні компанії Казахстану (КТХ — Казахстан Темір Жоли), Грузії (АТ «Грузинська залізниця») та Азербайджану (АDУ — Азербайджанські залізниці) [11, 13] створили Координаційний комітет з розвитку коридору. Цей маршрут розроблено в липні 2015 року, коли в Азербайджан прибув перший пілотний потяг з контейнерами від Китаю. У жовтні 2016 року Казахстан,



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i Грузія прийняли Азербайджан документ про відкриття Асоціації Транскаспійських міжнародних транспортних маршрутів зі штаб-квартирою в столиці Казахстану Астані. З цього часу, асоціація продовжує вдосконалювати рух по коридору. Транскаспійський міжнародний транспортний маршрут, також, відомий як Середній коридор. Він є відносно невідомим для Китаю та Європи в рамках ініціативи «Один пояс, один шлях» (BRI). Цей маршрут був розроблений, щоб дати нові та інші можливості для північних маршрутів Нового шовкового шляху. Основний маршрут Нового шовкового шляху - перевезення вантажів через Росію, Казахстан та Білорусь, щоб в'їхати в Європу на кордоні з Польщею. Середній коридор є альтернативою класичним маршрутам Нового шовкового шляху [12]. Середній коридор є альтернативним і ще одним в'їздом з Китаю в Європу через Чорне море. Маршрут неухильно набирає популярності. Середній коридор – це нова можливість для всіх країн на цьому маршруті. Транскаспійський міжнародний транспортний маршрут, який з'єднує Китай і Європу через Каспійське море, є наступним із коридору ініціативи «Один пояс і шлях». Війна в Україні також дає новий динамізм розвитку [5].

Ключові слова: залізничні вантажні перевезення, середній коридор, інтермодальні перевезення, BRI