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# Research of the state of customs clearance of cargo at the Ukrainian border transfer points

Abstract. In international transportation, waiting in line for customs clearance often takes several times longer than the actual customs clearance. This article aims to show the influence of the technological and technical component of the customs process on its effectiveness, as well as the need to improve the methods of customs control during international transportation. The analysis of data on the current state of export transportation in Ukraine allowed us to identify the reasons for delays at border customs posts during international cargo transportation. The existing measures to improve customs procedures with cargo were reviewed. The prospects for carrying out technological operations and developing technical solutions to increase the efficiency of customs services and reduce the time of cargo clearance are outlined.

Keywords: customs clearance, international transportation, customs checkpoints, border transfer points

## Introduction

At the beginning of the war, more than a half of Ukrainian enterprises terminated their activities partially or completely due to the destruction of enterprises and infrastructure, the occupation of regions, a high level of uncertainty and risks, the severance of logistical and production ties, and the forced mass migration of the population. These factors also affected the country's transport sector, whose enterprises make up 11% of the total number in industry [1]. The export and import components of freight transportation have also undergone significant changes. After blocking the sea ports for transportation, the export cargo flow was directed to the western Ukrainian border crossings. But the carrying capacity of the EU infrastructure currently cannot provide the larger volumes of transportation of Ukrainian exports, which there is a need for [2]. The number of railway crossings is insufficient to ensure the transfer of goods on tracks of different widths, their capacities, as well as rolling stock from neighboring countries. In addition, the process of transferring goods by railway is accompanied by lengthy registration by custom service, which causes additional downtime and reduces the attractiveness of the domestic transport service and Ukrainian enterprises.

## **Literature Review**

There are a number of scientific works devoted to the issues of effective customs service at border checkpoints. The circle of scientific interests covers all types of transport used for modern international cargo transportation. Among the domestic authors of theoretical works and practical developments, P. Pashko, L. Prus, O. Hodovanets [3], B. Moroz [4], O. Desiatniuk [5], L. Ivashova [6], H. Nazarova, L. Kononenko [7] should be singled out. Prominent figures of the foreign scientific community on issues of effective customs service are Zheng Chang, Dong Yang [8], Dan Elliott, Carlotta Bonsignori [9] and others.

At the same time most of the available researches are focused not on the technological, but on the legal, economic and financial components of the customs process – an increase in revenues and fees, the introduction of charging in accordance to modern international standards.

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#### The purpose and tasks of the study

The purpose of the work is to study the current state of transportation of international cargo through border railway crossing points, which will provide an opportunity to determine the main directions for improving the customs clearance of cargo at Ukrainian customs. To achieve the goal, the following tasks were set:

- analysis of statistical data on the volume and duration of customs clearance of international cargo on Ukrainian railways;
- determination of the reasons for delays at customs checkpoints;
- development of promising directions for improvement of customs clearance of cargo.

Presentation of the main research material. According to the results of 2022, cargo exports from Ukraine decreased by more than 38% [Fig. 1]. At the same time, the reduction occurred in all types of transport, but taking into account the fact that before the war more than 90% of goods were exported through sea ports, export logistics underwent significant changes. In 2022, ports provided 54% of export volumes [10]. The fall in imports was not as significant as that of exports, as the volume of purchases of foreign goods fell by less than a quarter of the pre-war level.

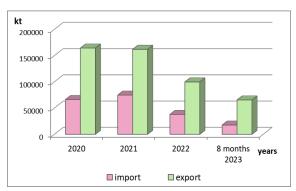


Fig. 1. Dynamics of volumes of international transportation in Ukraine

The analysis of the export of goods by nomenclature in the pre-war state and during it showed that not only the volumes of transportation, but also the share of types of goods in the total volume have changed [11]. Thus, despite the decrease in the volume of exports of such strategically important cargoes as grain and seed crops and vegetable oils in 2022, their percentage share in exports increased. The same trend is observed with products of the chemical and wood industry. At the same time, the share of exports of metals, mineral cargoes, and other categories of cargo decreased due to the damage and shutdown of many industries. This indicates a reduction in the nomenclature of goods exported last year.

Queues at the border remain the main reason for the delay of cargo during customs control during export and import for several years in a row [Fig. 2]. This situation became particularly acute with the beginning of the military invasion of the territory of Ukraine. Forced sharp reorientation of cargo flows from sea transport to rail as a result of the blocking of ports caused the inability of checkpoints to process the entire volume of incoming cargo in a timely manner. In addition, the foreign transport infrastructure was not ready to serve the number of Ukrainian rolling stock, which several times exceeds their carrying capacity [12]. This leads to queues at domestic border railway stations and disrupts the flow of service at them.

After the closure of the sea routes of the grain agreement, part of the grain exports were directed through the Danube river ports in the direction of Romania. The discrepancy between the throughput capacity of the river infrastructure and the significant technical capacities of seaports and ships caused queues at the approaches to shipping channels.

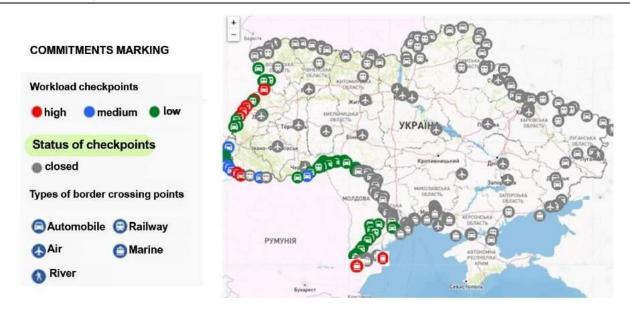


Fig. 2. Ukrainian checkpoints map

Among other reasons for delays in the transportation of international cargo, it should be noted about internal ones, which require effective solutions, in particular, problems in the implementation of customs procedures. The analysis of the causes of the significant

length of procedures during customs control in [13] made it possible to divide them into three groups: technological, technical, and document processing problems (Fig. 3).

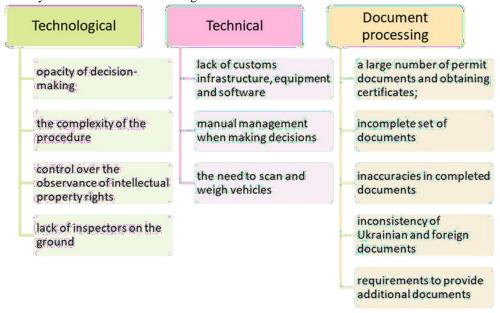


Fig. 3. Causes of the lengthy duration of procedures during customs clearance

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At the same time, importers emphasized the lack of transparency in determining the customs value of goods, the complexity of customs and tax legislation. Exporters note the unpredictability of Ukraine's Customs policy and the low quality of transport infrastructure. But common problem in international transportation for both exporters

and importers is the imperfect regulation of customs procedures.

Thus, the assessment of the procedures faced by entrepreneurs when transporting goods will provide an opportunity to develop measures aimed at reducing both the duration of these operations and waiting for their

fulfillment. The elimination of the identified causes of cargo delays during customs control and the assessment of business regarding the procedure for its implementation are aimed at increasing the attractiveness of domestic goods for international partners.

According to The Customs Code of Ukraine, customs clearance of goods and vehicles should take about one day after submission of all necessary documents. With the beginning of the implementation of the Single Window service [14] the number of companies using it has increased in recent years. Due to the simplification of the document submission procedure using an electronic Single Customs Document, this principle of customs clearance is considered one of the most effective solutions in the world. According to this reform, the control bodies must make a decision regarding the release of the goods within 4 hours from the moment of receiving the documents from the enterprise. The companies interviewed as part of the study [13] were divided in their assessment of this service: half noted that the time of passing customs procedures really does not exceed 4 hours, the other half declared that there had been no changes. Such results are related, first of all, to the absence of a legal basis and a developed algorithm of actions of customs officials, which did not allow to establish a clear interaction between Customs and control services.

The Verkhovna Rada of Ukraine adopted a draft law on changes to The Customs Code in accordance with The Customs Code of the EU. But the main difference between the effective work of the European Customs and the Ukrainian one is the ability to carry out most customs operations in self-service mode using automated systems. The level of automation of domestic Customs is one of the main indicators by which the effectiveness of border crossing procedures is evaluated. In 2022, according to the "automation" indicator, Ukraine was assigned an indicator of 0.92. According to this criterion, Ukraine significantly lags behind other countries with income levels below the average (1.12) [15]. The still insufficient level of automation of customs procedures imposes certain limitations. Risk management mechanisms in the process of implementation are not supported by information technology. The electronic payment system is in the process of being integrated with the automated declaration and cargo processing systems. Only some of the duties, taxes and charges can be paid electronically.

As a part of the ongoing implementation of European standards in the national Customs, the reform involves the implementation of several projects. Among them there is the introduction of joint checkpoints and a joint database with EU countries. This should double the speed of registration procedures, reduce transport and time costs for the registration of goods in related services. Further digitization of all processes and introduction of an electronic queue are aimed at ensuring transparency and

availability of services. In addition, the customs service works to ensure a sufficient number of personnel and 24-hour service at checkpoints, and where possible – to move inspection beyond the border.

Optimization of customs operations is an integral condition for compliance of control services with modern challenges of international trade relations. No less important are innovations that would introduce automation of customs procedures and simplification of customs clearance. In particular, these innovations include:

- automatic registration of customs declarations;
- automatic determination of the scope of necessary verification measures;
- introduction of an online customs value calculator;
- operation of the online complaints system, which provides communication in electronic form;
- the unification of the customs tariff, which involves the reduction of dozens of duty rates types to a few:
- integration of the customs system with other systems of state bodies and private structures for automatic exchange of information;
- gradual reduction of documents for customs clearance.

Therefore, fully automatic customs clearance will become potentially available for all enterprises. Automatic customs clearance will allow to simultaneously solve several tasks: reduce the cost of import and export of goods for Ukrainian enterprises; improve general business conditions and realize the country's logistics potential; reduce the role of the "human factor".

## Conclusion

Bringing the technology of conducting customs operations with international cargo into compliance with the established norms and reducing queues while waiting for their fulfillment are the primary tasks for the Customs and transport service of Ukraine. This will contribute to the protection of the interests of business and the state in the domestic and foreign markets of the country, the introduction of an effective mechanism for implementation of domestic and foreign economic policy, and compliance with the contractual obligations of participants in international trade by increasing the capacity of checkpoints and reducing the duration of inspection of customs control facilities. The key answer to the issue of speeding up customs procedures and avoiding delays in the advancement of international cargo lies in the systematic development of technology for performing customs procedures in accordance with international standards and modern technical support of customs with automated decision support systems. The implementation of such measures will primarily affect the activities of representatives of Ukrainian business and the employees

of regional customs. As active participants in the customs process, they are interested in the development and implementation of effective work algorithms during control of the correctness of the determination of the customs value, legality and justification of decisions regarding cargo delays. The gradual implementation of customs reforms and their acceleration based on a clear strategy corresponds to the directions of implementation of European practices and legislation within the framework of the association agreement with the EU, as well as the formation of a positive image of Ukraine in the global business environment and the acceleration of its European integration processes.

#### References

- 1. Діяльність вітчизняних підприємств під час війни в Україні: дослідження реального стану та потреб (липень 2022). Київ: Центр ресурсоефективного та чистого виробництва, 2022. 23 с.
- 2. Problems of export transportation by railway transport of Ukraine. National Institute for Strategic Studies. URL: <a href="https://niss.gov.ua/en/node/4508">https://niss.gov.ua/en/node/4508</a> (accessed: 04.09.2023)
- 3. Пашко П. В., Прус Л. Р., Молдован Е. С., Слободян В. В. Митний контроль та митне оформлення в морських пунктах пропуску: проблемні аспекти та напрями удосконалення: кол. моногр. / заг. ред. Т. В. Руда, А. В. Артеменко. Хмельницький, 2020. 236 с.
- 4. Мороз Б. І., Дяченко О. О. Розробка автоматизованої системи митного контролю на морському транспорті. *Системні технології*, 2014. Вип. 5. С. 55–64.
- 5. Десятнюк О., Харкавий М. Новітня парадигма реалізації митного контролю в умовах спрощення митних процедур. *Ефективна економіка*. URL: <a href="http://www.m.nayka.com.ua/?op=1&j=efektyvna-ekonomika&s=ua&z=3857">http://www.m.nayka.com.ua/?op=1&j=efektyvna-ekonomika&s=ua&z=3857</a> (дата звернення: 05.08.2023).
- 6. Івашова Л. М., Кийда Л. І. Діджиталізація митних процедур: сучасний стан та перспективи розвитку митної справи. *Публічне управління та митне адміністрування*, 2019. № 3 (22). С. 218-230.
- 7. Назарова Г.Б., Кононенко Л.В., Васильєв О.В. Митне оформлення у системі митного контролю: сучасний стан та напрями удосконалення. *Таврійський науковий вісник. Серія: Економіка*, 2023. Вип. 16. С. 249-57.
- 8. Zheng Chang, Dong Yang, Yulai Wan, Tingting Han. Analysis on the features of Chinese dry ports: Ownership, customs service, rail service and regional competition. *Transport Policy*, 2019. Vol. 82. P. 107-116. DOI: https://doi.org/10.1016/j.tranpol.2018.06.008.
- 9. Dan Elliott, Carlotta Bonsignori. The influence of customs capabilities and express delivery on trade

- flows. *Journal of Air Transport Management*. 2019. Vol. 74. P. 54-71. DOI: https://doi.org/10.1016/j.jairtraman.2018.09.007.
- 10. Freight transportation by railways of Ukraine for 12 months of 2022. Report of the cargo transportation monitoring department of JSC "Ukrzaliznytsia". Department of commercial work. Kyiv, 2023.
- 11. Economic statistics / Economic activity / Transport and communications. URL: <a href="https://www.ukrstat.gov.ua">https://www.ukrstat.gov.ua</a> (accessed: 05.09.2023).
- 12. The "Paths of Solidarity" initiative is a tool for the practical integration of Ukraine into the EU, the results of the discussion. URL: <a href="https://europewb.org.ua/initsiatyva-shlyahy-solidarnosti-ye-instrumentom-praktychnoyi-integratsiyi-ukrayiny-v-yes-rezultaty-dyskusiyi/">https://europewb.org.ua/initsiatyva-shlyahy-solidarnosti-ye-instrumentom-praktychnoyi-integratsiyi-ukrayiny-v-yes-rezultaty-dyskusiyi/</a> (accessed: 06.09.2023).
- 13. Simplification of trade procedures in Ukraine: evaluations and expectations of business. Kyiv. 2021. 275 p.
- 14. The Single Window for international trade. URL: <a href="https://mof.gov.ua/uk/the\_only\_window\_for\_international">https://mof.gov.ua/uk/the\_only\_window\_for\_international</a> trade-472 (accessed: 28.08.2023).
- 15. Trade Facilitation. 2023. URL <a href="https://www.oecd.org/trade/topics/trade-facilitation">https://www.oecd.org/trade/topics/trade-facilitation</a> (accessed: 28.05.2023).
- Г. І. Шелехань, О. М. Мкртичьян, А. О. Афоніна. Дослідження стану митного оформлення вантажів у пунктах пропуску на кордоні України **Анотація**

У міжнародних перевезеннях очікування в черзі на митне оформлення часто займає в кілька разів більше часу, ніж саме митне оформлення. Дана стаття має на меті показати вплив технологічної та технічної складової митного процесу на його ефективність, а також необхідність удосконалення способів здійснення митного контролю при міжнародних перевезеннях. Аналіз даних щодо поточного стану експортних перевезень в Україні дозволив виявити причини затримок на прикордонних митних постах під час міжнародних вантажних перевезень. Розглянуті існуючі заходи щодо удосконалення проведення митних процедур з вантажами. Окреслено перспективи проведення технологічних операцій та розробки технічних рішень для підвищення ефективності роботи митних служб та скорочення часу оформлення вантажів.

Збільшення обсягів вантажів, що перевозяться з України до інших європейських країн залізницею в останні місяці, призвело до збільшення часу очікування на митних та прикордонних залізничних станціях. У деяких місцях на перетин кордону в автомобільних пунктах пропуску доводиться чекати до

7 днів, а на залізничних пунктах пропуску — до 25. Це зумовлює тривалий термін доставки, що стає причиною зниження вартості цих вантажів та їх привабливості для іноземних покупців. Існує небагато наукової літератури з питання часу очікування під час митного оформлення. При цьому більшість наявних досліджень зосереджено не на технологічній, а на економічній та фінансовій складових митного процесу — збільшенні доходів і зборів, запровадженні тарифікації відповідно до сучасних міжнародних стандартів.

Тому, по-перше, необхідно розробити технологічні заходи щодо вдосконалення митного обслуговування з метою скорочення часу перебування вантажів під митним контролем. По-друге, впровадження сучасних технічних рішень допоможе пришвидшити митний огляд та уникнути великих черг на кордоні.

**Ключові слова:** митне оформлення, міжнародні перевезення, митні пункти пропуску, прикордонні пункти пропуску

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