The object of research is the processes of data exchange between subjects of foreign economic activity when performing customs procedures, namely, the introduction of a new computerized transit system NCTS within the framework of improving and harmonizing customs procedures. One of the most problematic areas is the lack of knowledge and awareness in the implementation of reforms on trade facilitation measures, and therefore there is a need to be able to reduce costs at the border, and costs associated with foreign trade transactions.

The perspective is considered and the assessment of the state of modern customs policy is carried out on the example of Ukraine, the mechanisms of application of customs instruments for regulating foreign trade during the digitalization of customs are determined. The dynamics of export-import operations of Ukraine with other countries is analyzed. In 2020, exporting companies estimate the work of customs significantly better by 15% compared to 2019. Among enterprises of various sizes, micro-enterprises often report problems at customs, and the greatest problems are considered to be overstatement of customs value of goods and outdated equipment of customs control zones. It is shown that one of the ways to improve the efficiency of customs procedures is to minimize personal contacts between the customs officer and the client, transfer most of the transactions online, use electronic services and mobile applications. Also, in the near future, a large-scale reconstruction of checkpoints is planned to reduce queues. It is found that the customs clearance procedures are not sufficiently automated, and the customs authorities are entrusted with many obligations. Thus, the customs authorities of Ukraine are forced to control goods during customs clearance more carefully than in the EU countries. The average duration of customs clearance of imported goods by the customs authorities of Ukraine is from 1 to 4 hours, depending on the region, while in developed countries such clearance takes only a few minutes.

The conducted research is interesting for the participants of the international transport market. Since for business enterprises the use of one transit declaration for the delivery of goods from one country to another (from the customs office of departure to the customs office of destination), according to the general transit procedure, reduces the cost of customs procedures and the time required for their passage. Consequently, it reduces queues at the border, which means a faster flow of goods.

**Keywords:** customs formalities, state customs service, subjects of foreign economic activity, computerized transit system NCTS.

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1. **Introduction**

In a period of the present and uncertainty about the development of export-import operations, the main task of each state is not only the development of foreign trade, but also the possibility of timely receipt of goods in domestic markets without significant delays and costs. Significant fluctuations in trade flows across the customs borders of states occur due to the discrepancy between the customs legislation of various countries [1].

A significant increase in the conclusion of foreign trade contracts within the framework of the implementation of export-import operations can be achieved by applying the principles of the Kyoto Agreement on the simplification and harmonization of customs procedures. It should be noted that the effectiveness of the introduction of such approaches can significantly increase as a result of bringing them to uniform international standards. At the same time, effective services of customs inspectors in customs clearance of export-import operations will increase the competitiveness of transport companies in transport and logistics supply chains [2, 3].

However, the problem is that it is during customs formalities and customs procedures that certain difficulties arise. The difference in the customs legislation of different countries, situations are possible regarding the duplication of stages of customs control, the need for additional supporting documents of customs value and customs payments become an obstacle to international trade [4].
The studies carried out on the example of Ukraine show quite good indicators of export-import operations. However, Ukraine should make more efforts to harmonize and simplify customs procedures and develop cross-border cooperation. Integration of the Ukrainian market of transport services and simplification of customs clearance procedures with the countries of the European Union (EU) in terms of the development of the regulatory framework is one of the urgent tasks today. Therefore, there is a need for more substantiated research on the implementation of a preliminarily exchange of information about objects of customs control, depending on their type and purpose of movement across the customs border of the state, as well as other information regarding the customs business.

So, the object of research is the processes of data exchange between subjects of foreign economic activity when performing customs procedures, namely, the introduction of a new computerized transit system NCTS within the framework of improving and harmonizing customs procedures. And the aim of research is to study the need to introduce a new computerized transit system NCTS as a means of increasing the efficiency of the provision of transport services when performing export-import operations.

2. Methods of research

One of the main principles of customs should be equal and simple rules that are understandable for each participant in customs relations arising from the movement of material objects across the customs border [5, 6]. Therefore, in order to modernize and improve the state of the State Customs Service of Ukraine (hereinafter – SCSU), it is necessary to take into account international trends in the development of customs infrastructure and its European integration. The country's obligations to international organizations and EU countries on international trade, unification of rules, cooperation and improvement of the processes of foreign economic activity (hereinafter – FEA) is a prerequisite for the development of export-import relations.

So, the SCSU on November 4, 2010 signed an order «On approval of the regulation on a SCSU unified automated information system». This was the beginning of the electronic automation of customs processes, which will simplify customs formalities for transport companies and launch an online portal for state customs services [7].

Modern SCSU must be given the speed, convenience of providing services by information processing; customs infrastructure – to have a unified customs system, which aims to quickly exchange information both with customs posts inside Ukraine and with neighboring countries. Therefore, the digitalization of customs processes has been one of the leading issues for improving the customs system in Ukraine for several years.

For example, Ukraine has an exchange of preliminary customs information with neighboring countries with Moldova and Belarus. With these countries, the state cooperates with the PAIES system for the information that is available in the customs declarations of the countries and PRINEX, which requires information available when goods and vehicles are moved across the border. In addition, at the SCSU checkpoint «Novi Yarylovychi – Nova Guta», an experiment is being carried out on the procedure of simplified registration; Hungary, within the framework of a pilot project, is using a system for the exchange of preliminarily customs information on goods and vehicles when moving across the border. For the military conflict with the Russian Federation, the exchange of preliminary customs information is suspended. It partially cooperates with the Republic of Poland, however, an agreement was reached on the assessment of a pilot project for the exchange of information at the checkpoint «Rava Ruska – Hrebinne» and the possibilities of extending such an exchange to other checkpoints. The prospect of increasing the volume of information exchanged by the customs authorities of both countries to speed up customs procedures, as well as timely warning and response to emergencies on the border between Poland and Ukraine is being discussed.

Already in 2018, during a meeting of the customs committee of the Public Council under the State Fiscal Service of Ukraine (hereinafter referred to as SFS), the public was presented with the concept of smart customs, which includes:

- intelligent system of risks, a single portal for the provision of permits, which is necessary for the issuance of 31 types of permits;
- electronic declaration – the implementation of automatic customs clearance;
- management and control over all supply chains;
- use of high-tech technical means of customs control using scanning devices;
- post customs control and post audit, providing for the administration of customs payments [8].

The first step in fulfilling the SCSU order «On the SCSU unified automated information system» was the creation of a personal account, in which it is possible to:

- check the customs declaration;
- check the classifications of goods, invoices for payment of customs duties, the general declaration of arrival online and detailed information in the Unified State Information Web Portal «Single Window for International Trade».

The portal reduces the time for carrying out customs formalities, customs clearance, idle time at checkpoints at customs control, automates the work of customs, increases the carrying capacity of customs posts and reduces offline document flow. This significantly speeds up the customs process and creates more open conditions for citizens involved in foreign trade. The introduction of such a system will reduce the «mechanical» errors of a person, since the data is checked automatically, and will reduce the time and risks, and the occurrence of such a problem.

An important stage for the implementation of the Association Agreement between Ukraine and the EU, the functioning of the free trade zone and Ukraine’s gaining membership in the Convention on the Joint Transit Procedure (hereinafter referred to as CJTP) is joining the New Computer Transit System NCTS. The basis of the system and convention is the integrity of the customs transit system in the movement of goods between the EU member states, the countries of the European Free Trade Association (EFTA), Turkey, North Macedonia and Serbia. The essence of the NCTS operation is the processing of a part of the data by the system, which are common for all contracting parties. At the same time, the transit declaration is submitted in electronic format to the customs office of departure. According to the CJTP, it is envisaged to bring customs control procedures, own classifiers of documents, data formats and the structure of codes of customs departments in line [9, 10].
Ukraine is a transit country that is located at the intersection between Europe and Asia, therefore the implementation of the NCTS system is a significant component of modern transit relations. The system will not only improve the attractiveness of the country in this area and the transportation capacity of foreign economic activity, but also has more global goals: transparency of transit transportation, reduction of smuggling and control over the movement of goods, optimizes the time for passing customs control. In the geopolitical space, it will improve the status of Ukraine in its transit and will make it possible to have an attractive view of the Ukrainian industry in the international space.

Also, within the framework of free trade between Ukraine and the EU, the SCSU launched a mechanism for issuing electronic certificates EUR.1, which give preferential rules for passing customs [11]. In fact, this certificate for the transportation of goods is a certificate of origin of goods, which are issued by the customs authorities at the place of customs clearance of goods or at the place of state registration of the exporter.

One of the innovations is the approval by the Cabinet of Ministers of Ukraine of the draft Law of Ukraine «On Amendments to Section XI of the Customs Tariff of Ukraine on the unification of import duty rates for light industry goods» on November 18, 2020. Both for the customs service and for subjects of foreign economic activity, this project has a positive effect on the development of both light industry and the acceleration of customs operations. Prior to the adoption of this draft law, a problematic issue for Ukrainian trade was the establishment of different rates of duties, and their identification required complex and costly laboratory tests, led to irrational use of budget funds, as well as to delays in customs clearance of goods [12].

3. Research results and discussion

All the above and other innovations that are introduced in the SCSU lead to the introduction of digitalization into the structures and the reform of the customs service. These are the ways of European integration, bringing Ukraine to the best level of foreign economic activity and strengthening its position as a transit country. To analyze customs reform, according to the results of the fifth wave of a survey of the Institute for Economic Research and Policy Consulting (Kyiv, Ukraine) within the framework of the project «For Fair and Transparent Customs», a survey of exporters and importers was conducted [13]. This survey is objective, since 1045 enterprises took part in it, namely: micro-enterprises (42.3 %), small enterprises (28 %), medium-sized enterprises (21.4 %) and large enterprises (8.2 %).

The survey results are shown in Fig. 1, 2.

Thus, 7.9 % of the surveyed exporters declared obstacles in the implementation of exports in 2020, and this indicator, compared to the previous survey, has decreased several times (Fig. 1).

As of 2020, the main disadvantages of exporters are the absence of simplified rules of origin of goods, a long wait for export clearance at customs and the unpredictability of Ukraine’s trade policy.

Thus, according to the results of the study (Fig. 2), in 2020, importers stated that the presence of obstacles to imports decreased compared to previous years.

Importers identify the main obstacles in the implementation of foreign economic activity: the lack of transparency in determining the customs value of goods, the complexity of customs and tax legislation, high rates of customs payments [15].

Since the introduction of modern technologies in the SCSU and after the signing of international treaties, Ukraine has not only undertaken obligations to adhere to the agreements, but has also begun to gradually reform the customs service. During the reform, an important step was the introduction of digitalization, which had a significant effect and positive changes. Importers and exporters believe that there are positive changes, but the existing shortcomings must be corrected tirelessly. The simplification of the rules of origin has been fully launched, the non-transparent definition of the customs value of goods is not fully understood, the length of time waiting for export clearance at customs is still one of the priority issues that need to be improved and reformed.

There are still shortcomings in the legislation of Ukraine, it is a cornerstone in relations between the state and subjects of foreign economic activity and international economic relations. Thus, the complexity of customs and tax legislation, high rates of customs payments and unpredictability of trade policy are holding back the development of international trade in Ukraine and export capacity.

So, e-Customs is, firstly, a progressive and innovative approach to international interaction between Ukraine and the world in matters of international foreign trade and partnership, as well as a mechanism for optimizing the collection of customs services and combating smuggling [16, 17]. Secondly, it is a process that can’t effectively develop and operate without interaction with other authorities within the country.

It has long been clear that the SCSU reform is inevitable, because the work of the service is influenced not only by the factor of automation of processes and acceleration of work, but also for a better approach, it is necessary to deal

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Fig. 1. Share of exporters faced obstacles at customs [14]

Fig. 2. Share of importers faced obstacles at customs [14]
with issues of high-quality and efficient administration of the structures of the customs service. Everything should work like a clock with its own mechanism of clear interaction in the customs structure, and with identical authorities for high-quality interaction and obtaining a double benefit to the authorities. Also, all processes are undoubtedly influenced by the legislation of Ukraine, it is necessary to constantly bring them into line, because no matter how many ideas for the development of customs relations without a legislative base, all these innovations can’t work.

For the purpose of SCSU transparency and control, it is necessary to constantly conduct independent public monitoring of the work of the customs authorities. The constant introduction of digital technologies in customs is necessary to reduce the influence of the human factor, improve performance in the fight against corruption, smuggling, and reduce «mechanical» errors in paperwork. It is necessary to improve the quality of administration of the provision of customs services and introduce strict administrative and criminal liability of customs officials for their actions in accordance with the legislation update [18].

Therefore, another factor in the introduction of innovative technologies in the SCSU reform is the fact that the whole world lives in a market economy and strives for globalization - world economic integration, which is necessary to simplify world trade. Therefore, in such conditions Ukraine needs to be a competitive state and fight for its place in the world economy.

The direction of simplifying customs relations through digitalization is one of the priorities at present, as the World Customs Organization fully supports all development initiatives in improving customs relations, due to the fact that the world is now striving to globalize relations between countries. Customs relations are key in the globalization of the world, in which, by simplifying and creating a global unified customs system, it makes it possible to have a beneficial partnership in interaction between countries. Globalization and process automation is the future of the world, therefore it is necessary to strive for complete process automation.

4. Conclusions

It is found that customs clearance procedures are not sufficiently automated, and the customs authorities are entrusted with many obligations that could be performed more efficiently at other stages of the supply chain as part of export-import operations. For this, it is necessary to optimize and simplify customs procedures in trade between Ukraine and the EU, in order that each side has a minimum of customs formalities requirements for goods that come from the other side. Thus, the list of reciprocal steps to adapt legislation and its implementation that countries must take to strengthen the customs system is much deeper, provides for the unification of norms, procedures, information exchange systems and avoiding duplicate checks at customs.

It is revealed that the most significant shortcomings in the implementation of customs formalities are the lack of automation of individual customs processes (this means that the customs authorities must fully apply control measures for the goods of large companies) and insufficient control of the turnover of goods within the country. Thus, the customs authorities of Ukraine are forced to control goods during customs clearance more carefully than in the EU countries. This means that simplification of customs clearance procedures with the use of modern information technologies and access to them for all participants in the international trade process is one of the most important activities of interested parties on the way to harmonize customs relations. Customs procedures in each country are based on international standards, but Ukraine’s positions in the ratings on international trade remain low. Therefore, it is worth implementing a strategy aimed at using innovative technologies, automation and simplification of customs procedures. It is this approach that will help turn the country into an attractive export-import operation, and as a result, will improve the efficiency of regulation.

It should be noted that the stimulation of strengthening coordination between customs authorities and subjects of foreign economic activity should improve the efficiency of inter-sectoral cooperation between various ministries, departments, and as a result, strengthen the customs system as a whole.

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