

## IMPROVING THE EFFICIENCY OF INTERNATIONAL SUPPLY CHAINS VIA OPTIMIZING THE FUNCTIONING OF CUSTOMS TERMINALS

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**Abstract.** *Purpose* – improving the efficiency of international supply chains via optimizing the functioning of customs terminals.

*Research methodology* – analysis of the performance of customs terminals.

*Findings* – simplification of customs control and customs clearance through the application of electronic customs (e-customs) declarations; brings customs procedures in Ukraine closer to European and world standards and significantly facilitates the work of law-abiding foreign economic entities.

*Research limitations* – today, Ukraine's customs legislation makes it possible to use electronic declarations (e-declarations) without any restrictions by all willing companies that are registered with the customs authorities and provides for the possibility of filing an e-declaration in all customs regimes without exception. The declarant only needs an electronic digital (e-digital) signature. Upon request, an enterprise may obtain an electronic digital key in the territorial units of the Accredited Key Certification Center for free.

*Practical implications* – a reduction of customs clearance time.

*Originality/Value* – an analysis of the work of customs in the territory of Ukraine was conducted, and measures were proposed to optimize the functioning of customs terminals.

**Keywords:** customs, customs clearance, customs regime, customs declaration, e-declaration, customs tariff.

**JEL Classification:** M30, M31, M39, L66.

**Conference topic:** Digitalization of Business Process: Trends, Challenges, Solutions.

### Introduction

Today it is impossible to imagine the work of customs authorities without strong information and technical support. E-document administration has become an integral part of electronic interaction, both with participants of foreign economic activity and with customs authorities of foreign countries.

Modern information technologies allow to form corresponding services for participants of foreign economic activity and for state bodies that serve foreign trade turnover, as well as promote the development of the architecture of information bases and mechanisms of their interaction, which in turn minimizes the influence of the state body on foreign economic activity, the possibility for abuse of its employees.

The use of information technology in the activities of modern customs improves and facilitates the process of customs clearance and customs control, increases the throughput capacity of checkpoints at the state border. The information system of customs bodies is one of the largest information systems in the country. The general state of development of modern information technologies in the customs authorities is limited by the possibilities of information infrastructure and the quality of data transmission channels. Many crossing points, especially at remote borders, use a low-speed data link with the use of satellite equipment.

The article provides the determination of “Electronic customs”, the components of the customs policy of Ukraine as a system of principles and directions of state activity in the sphere of ensuring of its interests and security; it studies the concept of customs security as the condition of protected national interests in the field of customs.

The article discusses the current state of affairs in the implementation of e-declaration in Ukraine and the definition of the objectives and main elements of its system. Authors recognize the decisive role of e-declaration in the context of simplification and harmonization of customs procedures. A significant part of the research is devoted to the study of the time of customs clearance. The paper also provides a theoretical basis of customs risk management system functioning and possibilities of granting further simplifications of customs procedures by application of risks-oriented tools of customs control are analyzed, peculiarities of customs risks profiling in the context of customs security of Ukraine protection are generalized. The incarnation of modern informational technologies by Customs service of Ukraine, without which it is impossible to collect and process large amounts of data is an up-today hot topic.

Special attention is paid to the theoretical and practical bases of implementation of customs policy and customs security of Ukraine, its features, summarizes international experience and identifies promising areas for development. The role of the "E-Customs" concept in the formation of a new information form of customs control is determined.

In this study state and prospects, implementation of the Safe framework of standards to secure and facilitate global trade, as a means of improving new technologies of the customs-logistics in Ukraine is considered. Described the global differences between modern transportation and expeditionary processes and the processes of customs control and clearance of goods moving through the customs border, from those used earlier. The problem issues of Ukraine's implementation of the Agreement on the simplification of trade procedures were determined, and ways of their solution were proposed.

## **1. Analysis of recent researches and publications**

In the literature, the main direction of optimization of the functioning of customs terminals is the introduction of e-declaration of foreign cargo. Let us consider the stages of introduction of e-declaration of foreign trade in the customs authorities of Ukraine (Kuniev, Korostashova, Mazur, & Shaposhnyk, 2006; Volyk, Kashcheev, & Dorda, 2011).

In the first stage (1992–1993) the system of collecting and processing electronic copies of cargo customs declarations (CCD), which contained software “Inspector”, was developed by the specialists of the Information Center of the State Customs Committee of Ukraine. A participant in foreign economic activity (FEA) filed a custom cargo declaration to the customs authority. The inspectors of the specialized units (customs statistics) entered information into the program “Inspector” and thus formed an electronic application form.

The information entered into the database was recorded on magnetic storage media (floppy disks) and was transmitted from each customs authority to the data computing center’s (DCC) department with the help of the courier service. After the processing of this information, statistical reports were prepared for the leadership of the State Customs Committee, as well as customs statistics of Ukraine's foreign trade.

The procedure for the formation of electronic copies of CCDs from paper originals was quite labor-intensive and required a large number of operators. The deadline for submitting this information to the DCC was several days.

It is known that the development and implementation of computer technology become more effective when implemented on the basis of a single system project. Therefore, in 1993 the concept of creation of the Unified Automated Information System (UAIS) of the State Customs Service of Ukraine was developed.

In the second phase (1994–1995), with the aim of improving and accelerating the information exchange within the customs system, the organization of efficient functioning of the automated system of customs clearance, improvement of quality and completeness of data collection of customs statistics, the State Customs Committee of Ukraine started introducing into the customs authorities the departmental system of e-mail based on Lotus Development Corporation software – Lotus cc: Mail.

At the same time, brokerage firms began to be formed in the country, which provided assistance to foreign economic entities in the field of the declaration of goods and vehicles and was intermediaries between customs authorities and foreign economic operators. The abovementioned companies filed an electronic copy with the filled-in paper copy of the CCD. Specialized software has made it possible to significantly reduce the time to check the declaration.

Performing both tasks that arose in the first stage, experts of the State Customs Committee, first, transferred to the subject of foreign economic activity and the customs broker a labor-intensive procedure for the formation of an electronic copy of the CCD with its subsequent verification in the customs authority – software “Customs broker” was created for customs and customs brokers, as well as developments of specialists of the Information Center of the State Customs Committee, and secondly, using the Lotus cc: Mail software in the e-mail system decided the issue of the rapid transfer of information directly from the customs authorities to the DCC with the help of a modem connection. With the expansion of foreign economic relations of Ukraine and the further increase in volumes of foreign economic operations, the flow and scope of customs information have sharply increased.

Already at the second stage there appeared problems of further automation of customs clearance, control of the import of motor vehicles into the territory of Ukraine, control over the delivery to the customs of excisable goods, etc.

A decision was made about the creation of an operational control system. The reliable functioning of such a system required the creation of a transport satellite network.

Since January 1996 the third stage of introduction of the UAIS in the customs authorities has begun.

One of the biggest problems since the formation of the State Customs Service of Ukraine was the control of the delivery of goods at the customs office of destination. There was no system for electronic control of delivery of goods at the customs office of destination, it was virtually impossible to pre-verify the data specified in the declarations. This began to use “dirty” businessmen to import into the territory of Ukraine highly liquid goods without payment of import duties and other taxes and fees.

This state of affairs did not satisfy the leadership of the country, and in 1996, the State Customs Service began to develop a system of “Control of delivery of goods at the customs office of destination”.

In 1997, in compliance with the requirements of current law procedure on simplifying the procedures for control of the import of excisable goods, the State Customs Service developed an appropriate mechanism, namely: the passage of goods into the customs territory of Ukraine by the customs authorities is carried out only if there is an electronic copy of a cargo customs declaration of ED type (excise declaration) in the central database.

Simultaneously, the normative documents of the State Customs Service introduced the passage of all cargo without exception to the address of the subjects of foreign economic activity (FEA) only if there is information about their accreditation at the customs office of destination, in the central database.

With the help of modern information technologies, a three-tier client-server system was built with user access to the central database server resources through a web-server. The development and phased introduction of software and information complexes (SIC) of the UAIS of the State Customs Service began.

In 1998, the fourth stage of the development of the Eurasian Customs Service of the State Customs Service began. In the same year, taking into account the unsatisfactory development of terrestrial communication channels in Ukraine, the transport network of satellite communication (TNSC) was introduced into commercial operation, which included: 246 satellite communication stations, 6 radio relay stations, and communication equipment. Such a large-scale work in the shortest time throughout the country was conducted for the first time not only in Ukraine but also in Eastern Europe.

By the Decree of the CMU of September 17, 2008, No. 1236-p, the Concept for the creation of a multifunctional integrated system “E-Customs” was approved. Previously, the developed practice allowed laying the foundations for the full introduction of the system of e-declaration of foreign trade cargoes with the use of the Internet in the practice of customs bodies and subjects of foreign trade operations. After the consolidation of the e-document administration system and digital e-signature system in the legislation of Ukraine, the customs business in Ukraine began to operate in almost 100% mode of remote e-declaration of foreign trade volumes in 2015–2016.

The creation of a multifunctional integrated system “E-Customs” is aimed at strengthening Ukraine's customs security, adapting the Unified Automated Information System of the State Customs Service and the new computerized transit system of the European Union, prompt receipt of actual and reliable information on intentions for foreign economic operations, creating conditions for accelerating customs procedures control and customs clearance, improvement of social and informational services of the population, and the State Customs Service information infrastructure (Bondarenko & Tkachyk, 2018; Borisenko & Kveliashvili, 2016; Gontareva, Hutsul, Tkachyk, & Miroshnik, 2018; Ivashova, 2016; Kolyada & Ryaboy, 2017; Kuniev et al., 2006; Novik, 2017; Riaboi, 2015; Volyk et al., 2011).

In 2013, the State Fiscal Service of Ukraine became the legal successor of the Unified Automated Information System previously created in the customs authorities, which combines all the software and technical components necessary to automate the processes of customs clearance and control.

The UAIS interacts with the “QD Professional”, “MdOffice”, “DiamondBridge” and other software systems developed in Ukraine, which are used by commercial enterprises for the provision of goods declaration services and document processing.

With the help of such software complexes one can:

- fill in any type of customs declaration and automatically generate an electronic copy of it;
- to issue auxiliary documents for customs clearance.

Flexible algorithm construction allows:

- when filling out the customs declaration, use reference, and information databases;
- use the format-logical control of its filling and eliminate possible errors that occur when it is filled;
- control the correct input of information;
- make an automatic calculation of customs payments;
- display and fill in the templates required for customs clearance of documents.

Each such software complex has:

- information and reference block of legislative and normative legal acts, conventions and international agreements on the implementation of foreign economic activity;
- integrated customs tariff, built on the principle of the relationship of the code of goods under the Ukrainian Classification of Goods for FEA with administrative and economic methods of regulation of FEA.

The integrated customs tariff allows to get detailed information for customs clearance of any product, taking into account the purpose of its movement across the customs border of Ukraine, as well as information on rates of duty, excise duty, value added tax, legally established privileges under customs clearance, required permits, etc. Such information allows foreign economic entities to make informed decisions and to avoid diverse risks when performing various transactions with goods crossing the territory of Ukraine.

E-mail from the declarant of the subject of FEA by channels of the Internet comes to the postal server of the State fiscal service of Ukraine. In addition to the e-customs declaration, the electronic mail contains all the necessary documents for customs clearance. With the help of the central level software program "E-declaration", a message is received, checked for SPAM, an e-digital signature certificate (hereinafter EDS) is checked, an EDS is checked, control over the correctness of filling a declaration is made. After that, the electronic message becomes readable by the customs authority to which it was sent by the declarant (hereinafter referred to as the CA). Information on the acceptance by CA of the e-customs declaration (hereinafter ECD) is sent to the central SFS server and, further, to the declarant, who prepared the ECD. After completing ECD registration, the declarant receives an e-mail. The work on each ECD is carried out by a territorial CA in accordance with the procedure established by the legislation of Ukraine, solely with the use of the facilities of the automated customs clearance system "Inspector-2006", which is acting in the composition of the UAIS, and covering all customs control processes both inside the country and at the border. ACCS "Inspector-2006" was put into operation by the order of the State Customs Service of Ukraine of 25.01.2007 № 48 and is intended for automated registration of customs documents in the structural units of the customs body involved in the process of customs clearance of cargoes.

With the help of the ACCS "Inspector-2006" the following main tasks were realized:

- automated support for the customs clearance technology adopted by the customs authority, and based on the normative documents of the State fiscal service of Ukraine and the customs authority;
- introduction and format-logical control of electronic copies of the documents required for customs clearance, and for customs declarations (CDs) and their verification according to the criteria of risk;
- keeping a database of the customs authority – the main repository of information on customs clearance – electronic copies of CDs, other documents involved in the process of customs clearance, data on the passage of technological stages of registration, and so on;
- exchange of information with other departments of the customs body with the use of cryptographic information security;
- formation of information for the purpose of its further introduction into the UAIS of the State fiscal service.

One of the main modules of the ACCS "Inspector-2006" has been the integrated in it Automated Analysis and Risk Management System (AARMS), which allows to create risk profiles of any complexity with the use of such innovative approaches as fuzzy logic algorithms (fuzzy logic) and accounting of positive and negative history of previous customs clearance.

The server and telecommunication equipment of the UAIS has been constantly upgraded. Today, the UAIS hardware base has two data centers (main and backup), equipped with powerful modern equipment. The international experts have recognized the UAIS not only as the first information customs system of such a level in Europe but also as one of the best for today.

A module "Single Window" is also introduced as a part of the UAIS, which organizes and simplifies the communication of carriers and declarants with other controlling bodies. Also, the accession of Ukraine to the European Convention on a Joint Transit Procedure with the National Implementation module NCTS in the ACCS is also relevant.

The further development of the automation of customs clearance processes, the development of the UAIS, the implementation of a unified IT policy for all customs offices of Ukraine is one of the main factors in ensuring the simplification, unification, and effectiveness of customs control.

In order to verify the correctness of the declared customs value of the ACCS "Inspector-2006", it is possible to carry out the analysis of prices for similar goods according to preliminary customs clearance.

The program automatically checks the availability of the amount required to pay all payments by CD on the account of the enterprise and makes a write-off of the amount after the completion of the CD registration.

ACCS "Inspector-2006" in its turn allows not only to receive and accumulate information about goods crossing the Ukrainian border but also to possess all the information on the types of control carried out from the first crossing of the border to the release for free use of any product, including information on the process of administering customs clearance procedures.

This system is a functional analog of such advanced European customs clearance systems like the German "AT-LAS" and the Polish "Tsilyna", which are a model and an example for imitation in the development of any custom IT systems, including the well-known software system ASYCUDA System. ASYCUDA is a versatile product that is being adapted to various tasks faced by customs authorities from different countries and is generally provided to UNCTAD countries (United Nations Conference on Trade and Development). For the first time, this system has been put into operation in the countries of the Economic Community of West African States (ECOWAS), and currently is used by other countries participating in UNCTAD.

The problem place of ASYCUDA is its centralization (working with a central database server), which creates a significant load on the server and makes it impossible to conduct customs procedures in the event of a failure or lack of communication with the central server. In addition, ASYCUDA can not quickly adapt to changes in customs legislation, its risk management system does not contain ready-made profiles, they must be created. The implementation period of the system takes about two years. According to a preliminary analysis, this system is surpassed even by outdated versions of the ACCS “Inspector-2006”, namely:

- is not adapted to Ukrainian legislation;
- requires revision in the part of the settings under the existing risk profiles,
- requires compliance with the by-laws of the SFS according to the criteria for the availability of modules for the checkpoint and customs clearance;
- requires a more detailed verification of the interface of information exchange with system manufacturers (which are already installed at checkpoints at the state border of Ukraine and in places of customs clearance).

According to the findings of the ACCS specialists, “Inspector-2006” is a well-developed system, built on a distributed, centralized principle, and covers all customs procedures in terms of both the passage of goods across the customs border of Ukraine and customs clearance within the country.

## **2. Methodology**

The research is devoted to the implementation of the project “Electronic customs”. According to the objectives that articulate the states for their customs, it formulates the General concept of the definition of “Electronic customs” and discusses the issue of improving customs administration with the aim of ensuring the customs security of the state.

The research is dedicated to solving actual scientific and economic issues related to the provision of customs security. Theoretical, methodological and applied principles of formation and functioning mechanisms of customs security are reviewed covered. Special attention is paid to the development of approaches to the analysis and management of risk situations in customs, determining the direction of the introduction of multifunctional complex system “Electronic Customs” for improvement of customs procedures, developing methods for determining the status of customs security.

The research aims to research the simplification of customs procedures in accordance with the provisions of the International Convention on the Simplification and Harmonization of Customs Procedures. Established that effective implementation of the task of the Convention will significantly simplify customs procedures for the integrated management of supply chain; ability to check the goods; implementation review of the application of modern technology; provide prior electronic information; evaluation of performance and security. It is recommended to introduce the concept of “single window” and authorized economic operators in the national customs area, which will provide a significant simplification of customs procedures.

The methodology of the study is an analysis of the time of customs clearance of customs declarations and its influence on the implementation of customs policy and customs security of Ukraine

Important priorities in the use of information technology in the field of foreign economic activity (FEA) is the introduction of a comprehensive risk management system and the development of e-declaration systems (Cantens, 2015; Kęsek, Boroda, & Józwick, 2016, Gwardzińska, 2012; Komarov, 2016a, 2016b; Kostenko, 2016; Maksimova & Sagaryova, 2014; Nelipovich, 2018). The role of information technology is highlighted in the International Convention on the Simplification and Harmonization of Customs Procedures (Hoffman, 2018a; Hoffman, Grater, Venter, Maree, & Liebenberg, 2018b; Jablonskis, Petersons & Ketners, 2018; Kyoto Convention, 1978), which:

- provides the maximum practical use of information technology;
- considers information technologies as one of the principles of customs clearance, the implementation of which facilitates the simplification and harmonization of customs procedures;
- establishes a standard rule for the use of information technology and electronic communications to improve customs control.

The current Ukrainian legislation provides two ways of declaring goods in electronic form, which are different from the procedure for the transmission of electronic information:

- data transmission with the help of a direct link between the customs authority and the declarant through the information terminal when the latter is connected to the local computer networks of the Unified automated information system of the State fiscal service of Ukraine (in the case of providing a customs declaration in paper form, the introduction of its electronic copy is carried out, also with the help of the information terminal);
- submission to the customs authorities of the information in electronic form using the Internet.

The implementation of the e-declaration of goods procedure allows to form the necessary conditions for the application of information technologies at a qualitatively new level and ensures the implementation of e-document administration between customs and foreign economic entities using the e- digital signature mechanism.

The electronic form of declaration is focused on the implementation of a unified algorithm of automated processing of the information declared in the customs declaration, at the level of customs with the implementation of automated format-logical control, risk analysis and issuance of various warnings for officials of customs authorities, carrying out customs control and customs clearance of goods. The positive result of the application of e-declaration of goods is confirmed by the experience of customs authorities of the majority of foreign countries.

The above concept is based on the Laws of Ukraine of 22.05.03 № 851-IV “On e-documents and e-document administration”, and dated 22.05.03 № 852-IV “On e- digital signature”.

In the Ukrainian customs system, the only state policy for e-document administration has been implemented since 2003. The Unified Automated Information System (UAIS), which integrates all the software and hardware components necessary for automation of customs clearance and control processes has been established and successfully operates in the State Fiscal Service of Ukraine.

### **3. Results**

In accordance with Part 1, Article 255 of the Customs Code of Ukraine (hereinafter referred to as the Code), customs clearance is completed within four working hours from the moment of presentation of the body of revenues and duties of goods, commercial vehicles, subject to customs clearance (if, according to the Code, goods, commercial vehicles are subject to presentation), submission of a customs declaration or document, in accordance with the law, replaces it, and all the necessary documents and the information provided for in Articles 257 and 335 of the Code.

According to Part 2 of Article 255, the term specified in part one of this article may be exceeded at the time of execution of the relevant formalities only in the following cases:

- 1) execution of customs formalities outside the place of location of the body of revenues and duties agencies in accordance with Article 247 of the Code;
- 2) written confirmation of the wishes of the declarant or his authorized person to submit, in accordance with the Code, additional documents or information about the external economic operation or characteristics of the goods;
- 3) conducting researches (analysis, examination) of samples and samples of goods if goods are not issued in accordance with part twenty-first Article 356 of the Code;
- 4) detection of violations of customs rules, if goods are not issued in accordance with part five of this article;
- 5) suspension of customs clearance in accordance with the Law of Ukraine “On State Market Inspection and Control of Non-Food Products”;
- 6) submission of additional documents in accordance with Part 3 of Article 53 of the Code within the period stipulated by it, the termination of which shall be stopped upon receipt of such documents by the customs (the customs post) or the written refusal of the declarant or the person authorized by him in their delivery;
- 7) suspension of customs clearance in accordance with Articles 399 and 400 of the Code.

If the goods are declared using preliminary or periodic customs declarations, the customs clearance for these declarations ends at the time not exceeding four working hours from the moment of their submission.

The exceeding of the term specified in part one of Article 255 shall not be allowed in connection with the execution of the body of revenues and duties of special operations, checks and other measures, which are not transactions carried out within the framework of customs control procedures, by the law-enforcement bodies and internal security subdivisions.

The customs clearance is considered to be completed after the completion of all customs formalities determined by the Code according to the declared customs regime, which is confirmed by the body of revenues and duties by placing the relevant customs provision (including by means of information technologies), other statements on the customs declaration or a document, which, according to the legislation replaces it, as well as on the goods and accompanying goods and transport documents in the form of their presentation on a paper carrier.

In the main, customs clearance of goods and vehicles is carried out in the following customs regimes:

- import (release for free administration) is the customs regime according to which foreign goods after payment of all customs payments established by the laws of Ukraine on the import of these goods and the fulfillment of all necessary customs formalities are issued for free administration in the customs territory of Ukraine;
- export (final export) – a customs regime, according to which Ukrainian goods are issued for free administration outside the customs territory of Ukraine without obligations for their re-entry;
- transit is a customs regime in accordance with which goods and/or vehicles of commercial purpose are transferred under customs control between two bodies of revenues and duties of Ukraine or within the area of activity of one body of revenues and duties without any use of these goods, without payment of customs payments and without application of measures of non-tariff regulation of foreign economic activities.

Indicators of the duration of customs clearance are given in Figures 1–2.

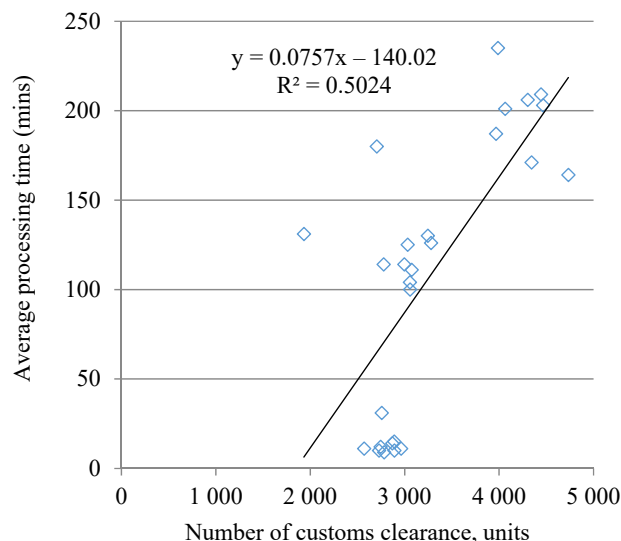


Figure 1. Analysis of time of customs clearance of customs declarations by the Kharkiv customs for the period from 01.01.2016 to 30.09.2016 (source: own developed)

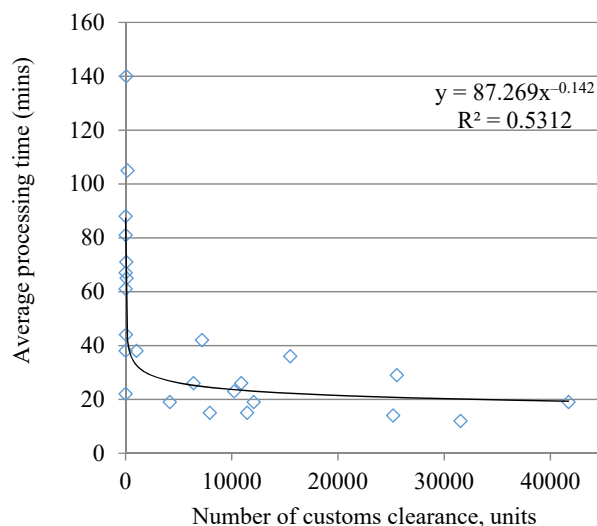


Figure 2. Analysis of time of customs clearance of transit customs declarations by customs of Ukraine for the period from 01.01.2016 to 30.09.2016 in the context of customs (source: own developed)

In accordance with the Target value of the List of Key Performance Indicators (KPI) of the SFS of Ukraine for the period from October 1, 2016 to December 31, 2017, approved by the order of the SFS of Ukraine dated 10.20.2016, No. 880 “On Approval of the Key Performance Indicators of the SFS”, the maximum time limit for customs clearance in the customs regimes for import, export, and transit of goods for which AARMS has not generated a list of customs formalities is planned at the level: import – 75 minutes, export – 30 minutes, transit – 15 minutes. (in the 2nd half of 2016: import – 115 minutes, export – 45 minutes, transit – 18 minutes).

#### 4. Discussion

Kharkiv Customs SFS is actively working on the introduction of an e-document flow procedure within the framework of the “E-Customs” system. So, in 2011, at the beginning of the implementation of this system, the proportion of documents submitted to the customs in electronic form was less than 1% (the e-declaration was carried out by 42 enterprises, which issued 3 879 e-declarations), then for the 9 months of 2013 e-customs documents comprised 78.49% of the total number of customs declarations, which were issued by 434 enterprises.

As of November 2016, the number of electronic customs declarations at the Kharkiv Customs SFS reached 99.6% of the total number of customs declarations processed (the e-declaration was carried out by 861 enterprises, which issued 78,942 e-declarations).

E-declaration is made using the e-customs declaration, certified by e-digital signature, and other e-documents or their requisites in the cases established by law (part two of Article 257 of the Customs Code). The customs declaration and other documents submitted to the revenues and duties bodies by the Customs Code, drawn up on paper and in the form of e-documents, have the same legal validity (part three of Article 257 of the Code).

Customs registration begins with the receipt by the customs authority of the e-customs declaration or electronic document that replaces it. The format of customs declarations, which are submitted as e-documents, is based on international standards of electronic data interchange. The forms of customs declarations are approved by the CMU Resolution № 450 and are fully in line with the forms of customs declarations introduced by the Convention on the simplification of formalities in trade in goods. This Convention is concluded between the European Economic Community (EEC) and the Republic of Austria, the Republic of Finland, the Republic of Iceland, the Kingdom of Norway, the Kingdom of Sweden and the Swiss Confederation on Facilitation of Trade in Goods.

The fact of acceptance of an e-customs declaration is certified by an official of the customs authority by placing a seal of customs security with the use of information technologies.

At the same time, the customs authorities are obliged to give the declarant the opportunity:

- receive from the customs the notification about the date and time of receipt of the e-customs declaration;
- to independently record in the e-customs system of clearance the fact and time of submission of the customs declaration.

The conditions and procedure for declaring, the list of information necessary for the implementation of customs control and customs clearance, are determined by the Customs Code. The unified procedure for the execution of customs formalities in the course of customs clearance of goods with the use of a customs declaration on the form of a single administrative document, which is submitted to the customs authority as an electronic document, is established by order № 631.

## **5. Limitations**

At present time, “E-Customs” is a multifunctional integrated system that exists in the customs authorities of the country and combines information and communication technologies and a set of mechanisms of their application and provides an opportunity to improve the quality of customs regulation and improve customs administration in order to ensure the customs security of the state by (Peterson, 2018; Willmot, 2007):

1) technological support of the continuous bilateral flow of electronic information from the bodies of state power, subjects of foreign economic activity, customs administrations of other states to the customs administration of the country, its accumulation and processing;

2) introduction of the newest procedures for automation of customs control and registration processes and their support; creation and technical support of organizational and technical systems for the functioning of complex automated procedures for assessing the quality of customs performance;

3) information support for law enforcement activities, control over the movement of goods and other functions assigned to customs authorities.

E-customs system is one of the most important steps in the transition to a qualitatively new level of information technology that can not be implemented without switching to electronic document management.

The e-declaration procedure is available for each subject of foreign economic activity, which is registered in the body of revenues and duties. Systematic work on the settlement of issues of e-declarations by the bodies of revenues and duties and their use by other government bodies had a positive impact on the transition of enterprises from the paper to an electronic form of declaration (Weerth, 2009; Lux, 2007).

In accordance with part four of Art. 257 of the Customs Code in the system of the central executive authority, which ensures the formation and implementation of the state tax and customs policy, was created an accredited certification center of keys, which provides free of charge all necessary e-digital signature services to the territorial authorities of the said central executive body at the regional and local levels and enterprises.

Today, Ukraine’s customs legislation makes it possible to use e-declarations without any restrictions by all willing companies that are registered with the customs authorities and provides for the possibility of filing an e-declaration in all customs regimes without exception. The declarant only needs an e-digital signature. Upon request, an enterprise may obtain an e-digital key in the territorial units of the Accredited Key Certification Center for free.

Due to interaction with other public authorities, the scope of use of e-declarations is expanding, which makes the e-declaration procedure more attractive for business entities.

Thus, in particular, on the basis of issued e-customs declarations today it became possible:

- to carry out state registration of vehicles;
- carry out operations of removing export-import operations on currency control, selling foreign currency for enterprises to carry out settlements on foreign trade operations with goods;
- to confirm the actual export of goods outside the customs territory of Ukraine.



Further development and improvement of the e-declaration procedure within the framework of the “E-Customs” system provides for the practical implementation of the Procedure for the exchange of information between customs and other state bodies through electronic means of information transmission, approved by the CMU Resolution № 463 of 21.05.2012.

## Conclusions

E-declaration of foreign trade goods of business entities allows to optimize the time and cost of business, creates favorable conditions for the development and acceleration of trade, reduces the differences between the customs procedures of the EU countries.

An analysis of the practice of customs services in Europe testifies that from year to year they gradually deviate from fiscal functions and are increasingly focusing on creating the most favorable conditions for the development of foreign trade, as well as protective work. These steps are an objective consequence of the creation of a transparent customs legislation, a controlled market and the transparent operation of enterprises in these countries. Recent developments, in particular regarding e-declaration, also indicate that the Ukrainian state will sooner or later come to this.

Thus, the simplification of customs control and customs clearance through the application of e-customs declarations brings customs procedures in Ukraine closer to European and world standards and significantly facilitates the work of law-abiding entities of foreign economic activity. With regard to customs, the systemic simplification of customs control procedures moves the attention of customs authorities towards selective control of goods. In this case, analysis and risk management are of particular importance. Active work in this area of specialists of the relevant departments and specialized customs offices of SFS of Ukraine ensures the effectiveness of e-declaration, promotes the development and introduction of new technologies for the provision of services to economic entities, selection, and management of requests during the customs clearance of foreign trade cargoes in an automated mode.

All innovations concerning the new technology of registration of foreign trade cargoes in electronic form with the use of the Internet require continuous improvement of the legislation of Ukraine regarding the provision of e-services, especially as regards the control of customs clearance of goods, which are subject to preferential regimes for payment of customs duties, as well as for the provision of other provided legislation benefits. The system of e-declaration requires improvement of the legislation in the part of the mechanism of identification with the use of technical means of control (scanners, basters, photo, video fixation, etc.), which, accordingly, allows to maintain the system of administration of all forms of customs control in real time, allows at different levels of customs clearance to provide effective control over the implementation of customs procedures, to respond promptly to signs of possible customs offenses with the use of customs control in amounts sufficient for the meeting.

The convenience of this form of customs clearance has long been proven by world experience. The International Convention on the Simplification and Harmonization of Customs Procedures (Kyoto, 1978) and the Customs Code of the European Community provides for the submission of e-declaration.

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