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Business-process modelling of basic customs procedures in EAEU  
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**Abstract**

Customs procedures improvement is conducted to reduce the time of customs control. Reducing customs control time will lead to reducing operating and transaction costs of participants of customs control procedures as well as of participants of foreign economic activities. Business-process improvement models of basic customs procedures has a hierarchical structure to carry out specification on several levels. The model comprises official sequence of actions and stages of the data processing in software.

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**Introduction**

Considerable attention is given to customs procedures improvement at the modern stage of customs system development in Russian Federation. The system of customs procedures is the main part of customs system. Changes in procedures of a customs business-process can have a critical influence on the results of customs control, efficiency and effectiveness of customs procedures. The development of analysis system and risk management, achievements in information technology and electronic data interchange, etc. create new requirements and provide opportunities for improving customs procedures. These requirements and opportunities are taken into account in the practice of customs regulation, but there is no clear approach to the business processes of customs procedures and capacity assessment of the international standards implementation of customs procedures in the Russian conditions. The application of standards without the creation of appropriate conditions can significantly reduce the effectiveness of customs control.

The object of the research is business processes of basic customs procedures.

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The research subject is business-process modelling of customs procedures.

The aim of the research is business-process modelling of basic customs procedures in EAEU.

**Status of the problem.** Russian scientists are actively engaged in solving of issues related to the acceleration, simplification and harmonization of customs procedures, as well as the determination of customs activity indicators. Frame-works for harmonization and simplification of customs procedures are revealed in the works of Russian scientists such as Daniltseva A.V. (Daniltsev A.V., 2004), Dumulen I.I. (Dumulen I.I., 2004), Korniyakov K.A. (Korniyakov K.A., 2003), Shamakhova V.A (Shamakhova V.A. & Kozhankova Y.A., 2012). The works of Russian Customs Academy scientists such as Kosenko V.P. (Kosenko V.P. & Oposhnyan L.I., 2005), Makruseva V.V. (Makrusev V.V., 2015), Oposhnyan L.I. (Kosenko V.P. & Oposhnyan L.I., 2005) etc. are devoted to the problems of assessment of customs activity indicators. Theoretical and practical aspects of interaction between customs authorities and participants of foreign economic activity during the customs control of goods transported across the customs border have become the objects of research of a number of Russian and foreign scientists. The leading role in the development of solutions to theoretical and practical problems in this area belongs to the scientists of the Russian Customs Academy: Makrusev V.V. (Makrusev V.V., 2015), Novikov V.E. (Novikov A.B., 2005, Novikov V.E., 2007), Kuprinov E.P. (Kuprinov E.P., 2006) and etc. The issues of interaction between customs authorities and participants in foreign economic activity were also studied in a number of dissertation research projects of post-graduate students and applicants of the Russian Customs Academy. It should be noted that business processes of customs procedures were not sufficiently developed in these works. This proves the relevance of the subject.

**The concept of customs procedures and their classification.** Considerable attention is given to customs procedures improvement at the modern stage of customs system development in Russian Federation. Serious steps have been taken since the adoption of a new version of the Customs Code of the Russian Federation in 2003. The definitions of "customs procedures" and "customs treatment" are contained in Article 11 of the Customs Code of the Russian Federation. Customs procedure: all clauses and provisions of this Customs Code stipulating the sequence of customs operations for determining the status of goods and/or means of transport for customs clearance purposes.

By decision 17 of 27 November 2009, the Interstate Council of the EurAsEC adopted the Customs Code of the Customs Union, the provisions of which are applied to date. However, the Agreement on the Customs Code of the Eurasian Economic Union was signed on April 11, 2017, which did not come into force. It should be noted that the process of improving customs procedures is progressive and this process is reflected in the new Customs Codes. This process is also driven by the emergence of new economic integration groupings.

The customs procedure is a purposeful and orderly process, including a logical sequence of actions in relation to goods and means of transport. The procedures are carried out by participants in foreign economic activity (hereinafter referred to as foreign trade participants) and customs authorities, completed by a legally significant event (determination of the status of goods and means of transport for customs purposes) in the implementation stage (Bakaeva O., 2010).

In practice, it is customary to define the customs procedures as certain sets of actions preceding the placement of goods under the selected customs regime. All such actions are designated by the term "customs clearance" which is not de-fined in the Customs Code. All customs procedures are contained in Section 1 "Customs clearance" of Part II "Customs procedures" except for customs regimes (Section 2 of Part II) and special customs procedures (Section 3 of Part II of the Customs Code) (Andreev A.F., 2010). The term "customs procedures" according to International Convention on the Simplification and Harmonization of Customs Procedures refers to only those sets of actions that fall under the term "customs procedures" in the Customs Code of the Customs Union. The set of actions involving the placement of goods under the selected customs procedure (customs control in Russia) are referred to "customs formalities preceding the filing of a declaration of goods" according to the Convention. Figure 1 shows the classification of customs procedures.

The application and development of business processes of customs procedures are determined by the objectives of a broader institution such as customs system. According to Article 1 of the Customs Code, the customs system incorporates the methods and the facilities applied to ensure the observance of customs-tariff regulations, prohibitions, and restrictions stipulated by the effective Federal Law of the Russian Federation on the State Regulation of Foreign Trade Activities associated with conveyance of merchandise and means of transport across the customs border (hereinafter referred to as customs-tariff and non-tariff regulation). We can conclude from this definition that the main purpose of the customs system is to achieve the fullest application of the established set of

regulations in regard to specific foreign economic activity objects (goods and means of transport conveyed across the customs border of the Russian Federation). The effectiveness of the customs system is determined by the achievement of this purpose.

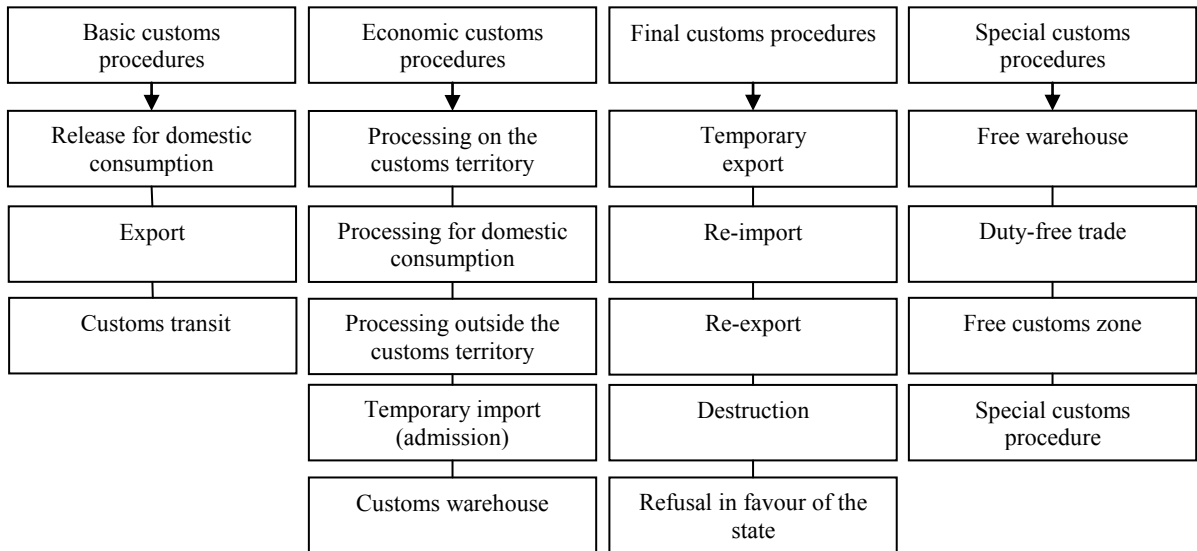


Fig. 1. Customs procedures

**Business-process modelling of basic customs procedures.** The business-process model of customs control includes a description of business processes, presented graphically as technological schemes of performing customs control in accordance with the regulatory acts of the Eurasian Economic Commission and Federal Customs Service of Russia. The developed schemes of the basic customs procedures presented on Figures 2, 3, 4 (acronyms and abbreviations: CC CU – the Customs Code of the Customs Union; CC RF – the Customs Code of the Russian Federation; FL – Federal Law; Art. – Article). The models comprises official sequence of actions and stages of the data processing in software. They also have a hierarchical structure to carry out specification on several levels.

The application of customs procedures plays a fundamental role in achieving the goal of customs system. The regulatory measures established by the state are committed partially and the specified impact is not always extended on a specific object such as the transported goods across the customs border due to the complexity of applying all the established restrictions to a specific set of export-import sending.

The main indicator of the effectiveness of the customs system is the degree of the regulatory impact on the flows of export-import transactions (Yatsushko A.N., 2001). The implementation of resource-intensive customs procedures is considered by the world community as an additional non-tariff barrier in foreign trade. At the same time, it is recognized that over-simplification of customs procedures could lead to the reduction of the degree of the regulatory impact on the flows of export-import transactions or the effectiveness of the customs system. The process of customs procedures development, regardless of the proposed concepts and models for such development, is aimed to find a reasonable balance between reducing the customs procedures costs and increasing or maintaining the same level of reliability indicators.

The realization of the provisions of the International Convention on the Simplification and Harmonization of Customs Procedures in a given State is characterized in practice by the absence or presence of so-called difficulties in the implementation of international trade as well as by the results of customs procedures improvement. The effectiveness and efficiency of customs procedures are suggested to be evaluated using time and cost indicators in terms of export and import. Such indicators are calculated with the help of "Doing business" project. The result of such calculations is rating of countries on the degree of favorable conditions for international trade.

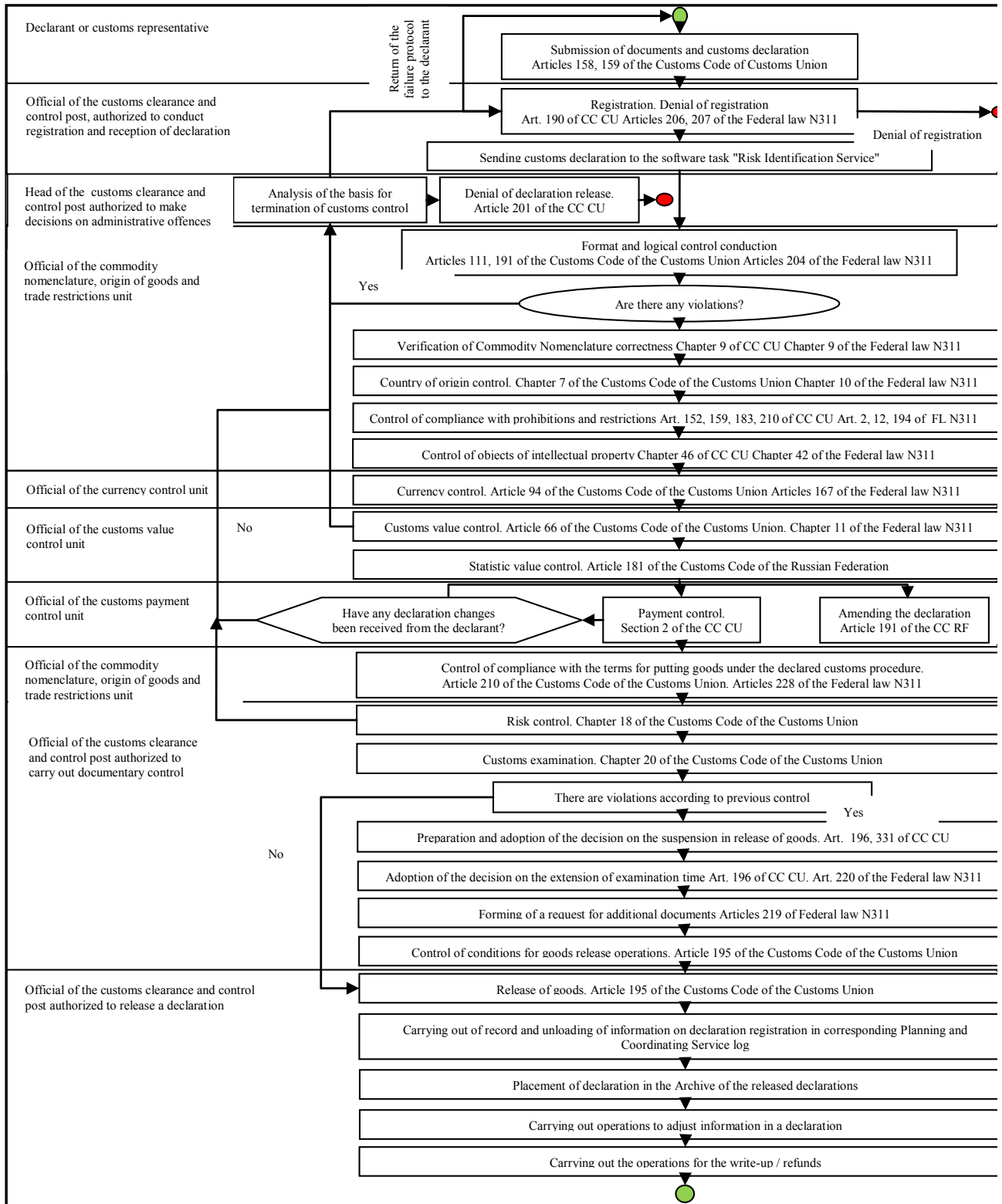


Fig. 2 - Release of goods procedures for domestic consumption

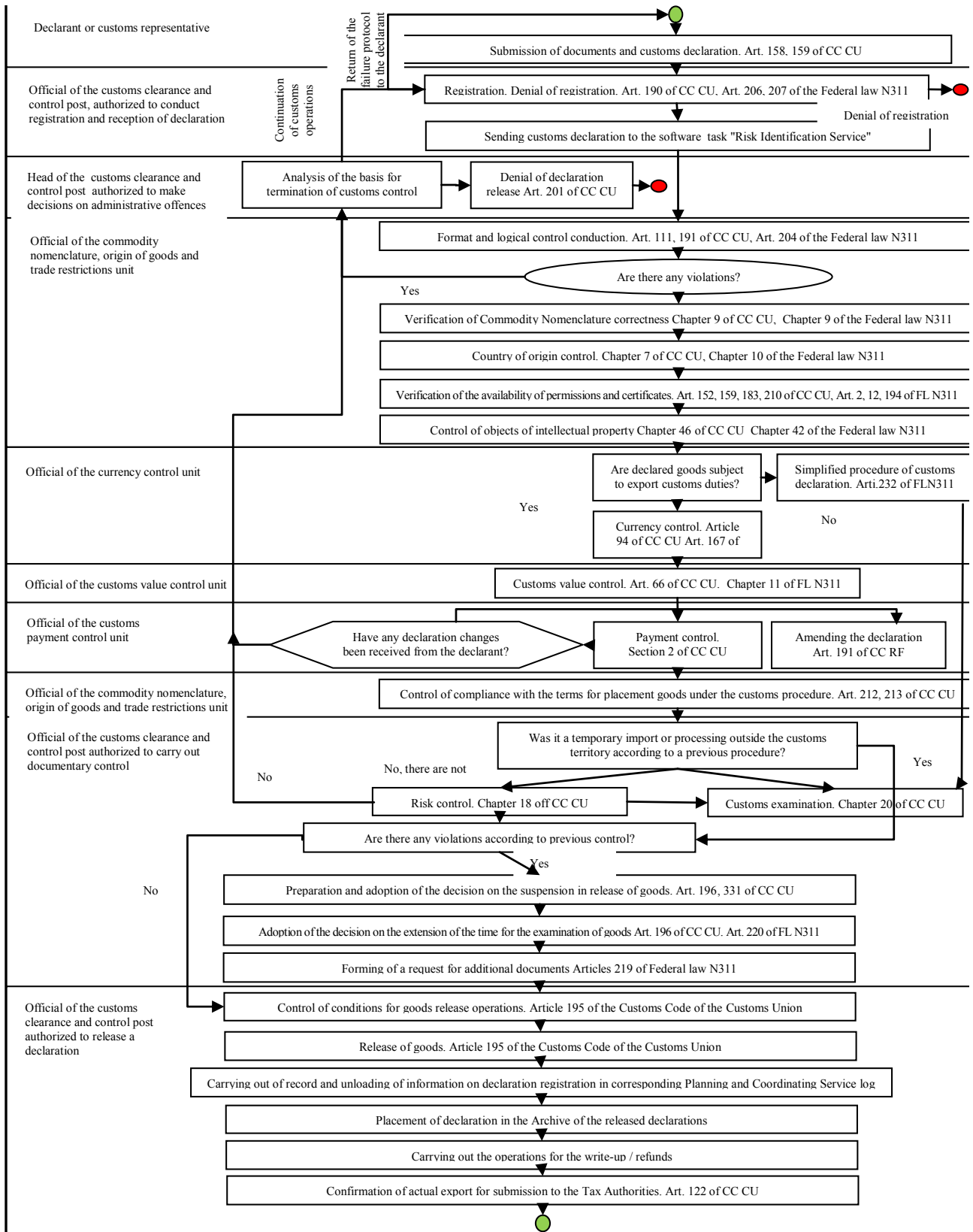


Fig. 3 - Export

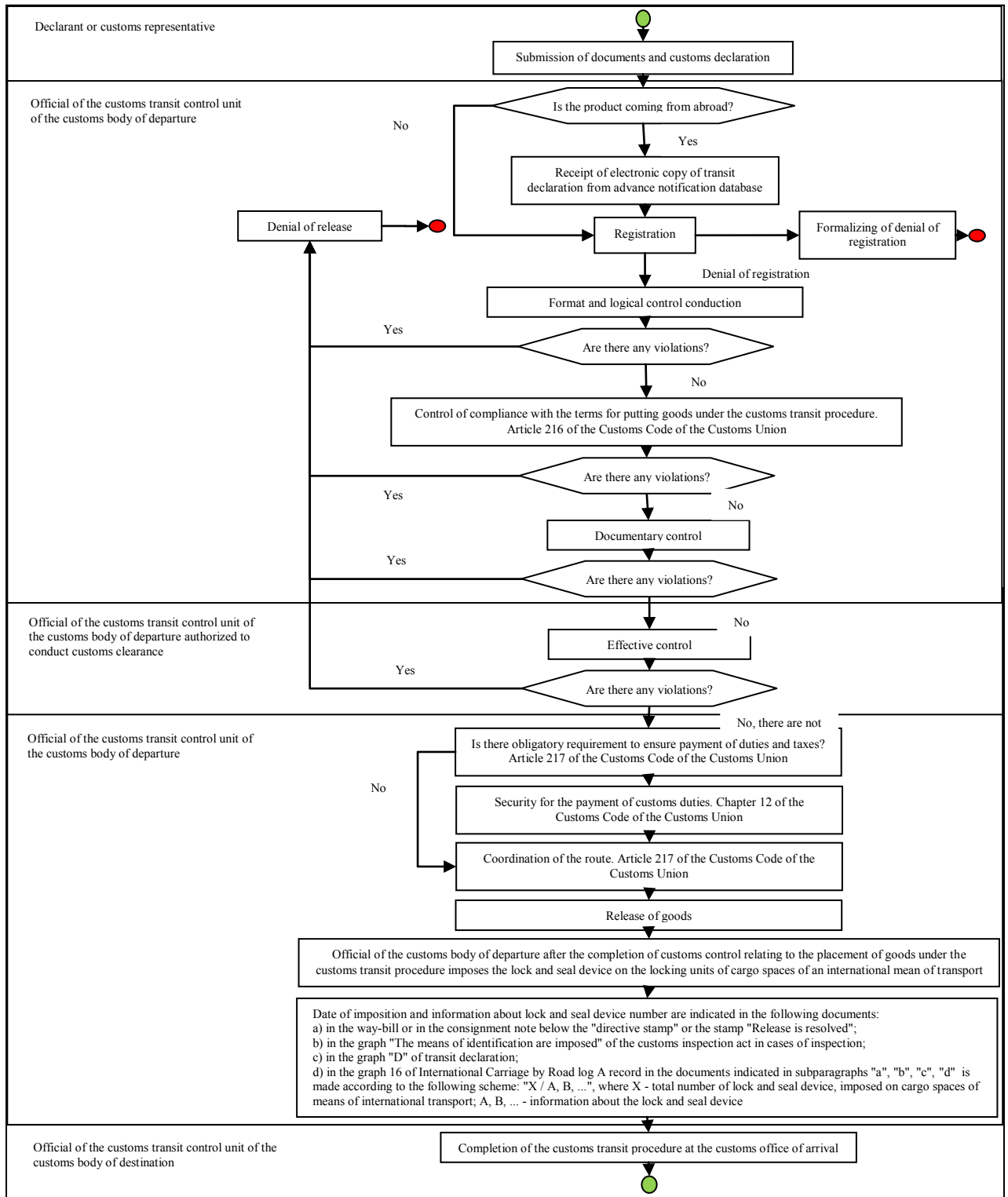


Fig. 4. Customs transit

Table 1. Indicators for assessing the customs procedures effectiveness and efficiency in the EEA and EU countries

Indicators		Border control and customs control in terms of export		Completion of documents in terms of export		Border control and customs control in terms of import		Completion of documents in terms of import			
		International trade, %	International trade rating	Time (hours)	Cost (USD)	Time (hours)	Cost (USD)	Time (hours)	Cost (USD)	Time (hours)	Cost (USD)
EEA	Country										
	Armenia	86,45	48	39	100	2	150	41	100	2	100
	Belarus	93,71	30	5	108	4	140	1	0	4	0
	Kazakhstan	63,19	119	133	574	128	320	2	0	6	0
	Kyrgyzstan	0	0	0	0	0	0	0	0	0	0
	the Russian Federation	57,96	140	96	765	25	92	96	1125	43	153
	Austria	100	1	0	0	1	0	0	0	1	0
	Belgium	100	1	0	0	1	0	0	0	1	0
	Bulgaria	97,41	21	4	55	2	52	1	0	1	0
	Great Britain	93,76	28	24	280	4	25	3	0	2	0
	Hungary	100	1	0	0	1	0	0	0	1	0
Germany	91,77	38	36	345	1	45	0	0	1	0	
Greece	93,72	29	24	300	1	30	1	0	1	0	
Denmark	100	1	0	0	1	0	0	0	1	0	
Ireland	87,25	47	24	305	1	75	24	253	1	75	
Iceland	80,27	66	36	655	2	40	24	655	3	0	
Italy	100	1	0	0	1	0	0	0	1	0	
Cyprus	88,44	45	18	300	2	50	15	335	2	50	
Latvia	95,26	25	24	150	2	35	0	0	1	0	
Lithuania	97,7	19	9	58	3	28	0	0	1	0	
Luxembourg	100	1	0	0	1	0	0	0	1	0	
Malta	91,01	40	24	325	3	25	2	230	1	0	
the Netherlands	100	1	0	0	1	0	0	0	1	0	
Poland	100	1	0	0	1	0	0	0	1	0	
Portugal	100	1	0	0	1	0	0	0	1	0	
Romania	100	1	0	0	1	0	0	0	1	0	
Slovakia	100	1	0	0	1	0	0	0	1	0	
Slovenia	100	1	0	0	1	0	0	0	1	0	
Finland	92,44	33	36	213	2	70	2	0	1	0	
France	100	1	0	0	1	0	0	0	1	0	
Croatia	100	1	0	0	1	0	0	0	1	0	
Czech Republic	100	1	0	0	1	0	0	0	1	0	
Sweden	98,04	18	2	55	1	40	0	0	1	0	
Estonia	99,92	17	2	0	1	0	0	0	1	0	

Excessive requirements of the customs authorities are treated as additional non-tariff barriers from the point of view of participants in foreign economic activity. Such barriers are not regulatory, despite the fact that they raise the price of goods in the domestic market, because they are not applied selectively. Negative assessment of such barriers on the part of participants in foreign economic activity is associated with a decrease in their profits from foreign trade operations due to the direct costs of complex customs procedures, as well as a significant decrease in turnover of supplies. At the same time, the decrease in profits of foreign economic activity participants can be compensated by increasing the prices of their goods in the market of the importing country (Afanasieva A.V., 2009). Despite the fact that it can lead to some reduction in demand and supply of goods to the country, the buyer will have to pay for additional barriers. Taking into account that the barriers are not selective relating to regulatory impact (for example, they do not apply only to "sensitive goods"), additional funds for overcoming the barriers don't become the state's income unlike customs duties. For this reason there is a negative assessment of such barriers by either the state and society. Therefore, the state and the participants in foreign economic activity are interested in lowering of such barriers. Their interests are somewhat different. The lowering of the barriers is important for the participants of

foreign trade activities despite the degree of reliability of customs procedures in terms of ensuring the application of control measures. Such lowering of barriers should be provided on the conditions of equally application to all participants in foreign economic activity, otherwise the prerequisite for unfair competition will be created. The lowering of the barriers is important for the state on the conditions that the reliability of customs procedures remains at least at the same level and increases at best, while such reforms costs should not exceed their useful results (Popova D.A., 2014). The efficiency of customs procedures is determined by the state from the standpoint of its own interests, taking into account the interests of foreign economic activity participants.

The main negative indicators of the application of customs procedures in terms of their increase, regarded by the participants of foreign economic activity as an additional non-tariff barrier are:

- time of customs clearance of the consignment of goods transported across the customs border;
- customs duties, if they are significantly higher than the cost of rendered services for customs clearance, customs escort, etc.;
- need for the placement and the storage duration of the goods in the temporary warehouse at high rates of storage tariffs;
- labor intensity of workflow and the number of documents required for customs clearance,
- proportion of inspections.

Reduction of any negative indicator in the process of improving customs procedures is considered as increasing the effectiveness of the application of customs procedures on the conditions that the positive indicators do not decrease. Implementing international experience of successful improvement of customs procedures, it is necessary to analyze the features, factors and conditions of the country and the degree of their difference from the level of the same factors in the country or group of countries successfully applying improved customs procedures (Bludova S.N., 2007). Significant differences can cause a decrease in the effectiveness of the reformed customs procedures. When the customs procedures of the EU countries are economical (in terms of time and costs) and at the same time the customs legislation of these countries is almost completely observed, other countries tend to apply such customs procedures in their customs practice. However, it turns out that significant acceleration and reduction of customs procedures costs mean significant decreases of reliability, which can lead to the decrease in the protective and fiscal functions of customs authorities. As a result the country's loss is incommensurable with the savings of customs authorities funds and foreign trade participants in the process of facilitating international trade. Rationality of customs procedures improvement should be based on an assessment of the characteristics of the economy, the practice of foreign trade activities of the country and other factors closely related to customs activity.

It is possible to concertize the reasons for factors improvement as well as threats and costs that can arise based on the described essential characteristics of customs procedures, such as objectives, the positive and negative effects of the application of customs procedures, both for the state and for participants in foreign economic activity

Factors or drivers of customs procedures development:

1. Complicating the practice of foreign economic activity, the emergence of fundamentally new types of commercial and logistical operations that are not covered by existing customs procedures;
2. Globalization of international trade, simplification and increase of workflow transparency within transnational corporations, which does not require the use of too complicated customs procedures;
3. The pursuit of full compliance with measures of customs and tariff and non-tariff regulation of foreign trade activities applying customs procedures;
4. The desire to reduce the additional barrier arising, as a result of efforts to implement customs procedures;
5. Development of information technologies and electronic data interchange;
6. Integration of customs services of different countries, which requires the harmonization of technologies of their activities, document formats and data circulating in international trade;
7. Political decisions of the country's leadership. For example, accession to the World Trade Organization, accession to the International Convention on the Simplification and Harmonization of Customs Procedures.

Restrictions and costs of customs procedures reforming:

1. Over-simplification of customs procedures can lead to the decrease in their effectiveness, i.e. the degree of compliance with measures of customs and tariff and non-tariff regulation of foreign trade activities;
2. Acceleration and simplification of customs procedures in favor of participants in foreign trade activities can lead to unreasonable expenses for customs authorities;



3. The customs procedures development can come at a price in terms of re-equipment, training of personnel, the reorganization of customs authorities units;

4. The use of information technology and electronic data interchange is associated with the need to improve the fault tolerance of information systems and information security;

5. Political decisions can not always be weighed against the possibility of their implementation. However, such opportunities appear with state support or the support of international organizations. For example, paragraph 1.6. According to the SAFE Framework of Standards, countries implementing framework standards should show political will, while the World Customs Organization and other partners should help such countries.

**Conclusion.** Analyzing concrete ways of customs procedures improvement, it is necessary to weigh and compare the positive and negative aspects that could arise as a result of such improvement. At the same time, efficiency as a balance between positive and negative aspects is evaluated in different ways from the position of the state and from the position of the business community. It is also important to evaluate how the ratio between the "costs" and "results" of the current activities of customs authorities will change as a result of customs procedures development and whether the customs procedures development costs will be justified.

It is important to note the need for differentiation of participants in foreign trade. This will allow to divide respectable participants in foreign trade and potential offenders, thereby reducing control operations in relation to the first category of persons and strengthened control over the second. The assignment of the status of an authorized economic operator will be an important tool in this case. For this purpose it is necessary to amend the Customs Code to determine the requirements for the transporter in order to obtain the status of an authorized economic operator. These actions will accelerate the flow of goods, reduce the requirements for the list of its obligatory requirements, exercise customs control at the destination of goods. Customs authorities carry out customs regulation exclusively within the framework of administrative and legal relations. Other forms of relations are not implemented. That is contrary to the current trends of the development of the world practice of foreign trade customs regulation, which is based on assistance, cooperation, public-private partnership between customs and business. It may be proposed to create a specialized training system in order to resolve this problem. The main task of such system will be an interactive educational training. It could help to systematize knowledge and improve professional competence. According to the above research, it can be said that increasing the effectiveness of interaction between customs authorities and participants of foreign economic activity will reduce the time, labor intensity and, ultimately, reduce the customs procedures cost in the context of high intensity of trade in the border zone of the Customs Union both for the state and for participants of foreign economic activity.

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