# Unification of technical solutions used in customs control as a factor in the development of economic systems

*Yaroslav* Stupak<sup>1</sup>, *Elmira* Syzdykova<sup>2</sup>, *Baldyrgan* Jazykbayeva<sup>3</sup>, *Larisa* Shirshova<sup>1,4</sup>, *Ainur* Issayeva<sup>3</sup>, and *Shakizada* Niyazbekova<sup>5\*</sup>

**Abstract**. Support solutions and promote the sustainable development of customs, investigate and formulate measures for the management of an innovative control model. It is difficult to underestimate the positive effect of the policy pursued by the FCS, which is also implemented on the basis of the recommendations of the World Customs Organization and the provisions of the Kyoto Convention of 1999. The time for customs formalities has been significantly reduced, electronic declaration centers have been established, allowing for the registration of goods located on the territory of different customs posts. At the same time, the number of contacts of declarants with officials has been minimized due to the categorization of foreign trade participants and the improvement of the risk management system, which allows achieving maximum efficiency with minimal invested costs of the customs authority for conducting this control. However, such an active process of introducing technical means, without which it is impossible to imagine the functioning of customs authorities today, cannot remain without flaws, manifested mainly in customs document management.

### 1 Introduction

The introduction of technologies and their continues improvement has been an integral task of the customs service for over a decade, which makes the Federal Customs Service one of the leading state structures for the automation and informatization of customs procedures and forms of control. During this time, many information—oriented projects have been developed and implemented, among which electronic declaration of goods, remote provision of information about goods and vehicles planned for import in order to make a preliminary decision by customs authorities, as well as many other electronic services that

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<sup>&</sup>lt;sup>1</sup>Financial University Under the Government of the Russian Federation, 125993 Moscow, Russian Federation

<sup>&</sup>lt;sup>2</sup>Karaganda Buketov University, 100024 Karagandy, Republic of Kazakhstan

<sup>&</sup>lt;sup>3</sup>Karaganda university of Kazpotrebsoyuz, 100009 Karagandy, Republic of Kazakhstan

<sup>&</sup>lt;sup>4</sup>Russian Presidential Academy of National Economy and Public Administration, 119571 Moscow, Russian Federation

<sup>&</sup>lt;sup>5</sup>Moscow Witte University, 115432 Moscow, Russian Federation

<sup>\*</sup> Corresponding author: shakizada.niyazbekova@gmail.com

significantly speed up customs formalities of participants in foreign economic activity: a convenient personal account, various payment systems simplifications in the form of special customs cards, which will allow spending less time on paying customs duties, taxes and other fees. Taking into account all of the above trends in the informatization of customs authorities, the authors of this paper propose to consider possible problems and solutions related to the conversion of some elements of the customs document flow [1–8], [16–20].

### 2 Methods

The purpose of this study is to analyze the importance of the digital economy in the modern economic system of Russia and the world, to identify the directions of its further development and formation. The theoretical and methodological basis of the study was the scientific works of domestic and foreign researchers studying the application of modern information technologies in the process of making managerial decisions. During the research, methods of general scientific analysis and comparison, tabular and graphical visualization techniques of calculations, methods of induction and deduction were used in the formation of conclusions of the study.

# 3 Results

During a brief analysis, it was found out that some problems lie mainly in the document flow of customs inspection acts. For example, the Order of the Federal Customs Service of the Russian Federation dated 29.07.2011 N 1555 "On approval of the Instructions on the procedure for filling, registration, storage, accounting of acts of Customs inspection (inspection) of goods transported across the Customs Border of the Customs Union by Individuals for Personal Use in accompanied baggage" still regulates the filling, accounting and storage of personal baggage of individuals in paper form, in connection with which it raises a lot of coordination issues, namely, how effective and rational is the mechanism of departmental control in relation to an incorrectly drawn up paper inspection report, when there is a huge distance between the higher customs authority and the unit that made the mistake. For example, we can take the Siberian customs post, where employees incorrectly issued a customs inspection certificate of baggage, in connection with which the head of this functional unit or another person who does not hold the position of a customs officer requests departmental control. The Siberian Customs Administration, which is a higher customs authority, requests within 3 days, which is quite a long time, this paper act, which lasts for 20 days, checks for the correctness of its compilation and its legal validity. As you might guess, paper document flow significantly slows down the control, and also carries additional costs for sending declarations, acts and other customs documents [9–15].

The interaction of the RTU and the main directorate of customs control after the release of goods by the FCS of Russia is much more complicated. Let's take the same Siberian Customs Administration, which within 1 working day sends conclusions on the results of the departmental inspection to the State Customs Committee of the Federal Customs Service of Russia, which, in turn, conducts departmental control of the decision made by the lower customs authority within 10 days. The problem lies in the fact that in the considered example, the Siberian Customs Administration (Novosibirsk, 74 Timiryazev Street) and the State Customs Committee of the Russian Federation (11/5 Novozavodskaya Street, Novosibirsk Moscow) are located at a considerable distance. This means that the coordination of the actions of these structural units will be limited only to the request of paper customs documents and official correspondence. If there is a need to verify additional

documents and information, as well as persons involved in the violation of the official charter or, in this case, those guilty of incorrect compilation of the Administrative Division, the State Customs Committee of the Russian Federation will be forced to send its employees directly to the Siberian Customs Administration with an internal audit. It is expensive and not rational, the fastest way to get there is by plane, which will take a lot of budget funds and time [21–31].

Thus, the author believes that the solution to this problem will be the creation of an electronic register of inspection acts specifically for individuals transporting goods for personal use, and not for persons with the status of participants in foreign economic activity for whom the journal is already available. The author proposes to develop with the help of a software tool a certain interdepartmental journal of inspection acts of individuals and accompanied baggage, which will allow storing the full information about the customs inspection performed by customs officers, an example of which is indicated in figure 1.

Number of ACI

Date of drawing up ACI

Place of inspection

3

Grounds for customs inspection

Full name of the official who conducted the inspection

Full name of the person in respect of whom the inspection was carried out

Results of the inspection of a person or baggage

Attached scan of ACI

8

Figure 1. Electronic interdepartmental register of administrative divisions.

Note: ACI – the Act of Customs Inspection.

This magazine is intuitively simple and easy to use by customs officials, and does not reflect a special innovation in the field of information technology used by customs authorities. However, the author suggests using the optical character recognition system in cases where the customs inspection report is handwritten.

Quite often, personal customs inspection or inspection of accompanied baggage is carried out in places where the employee is not able to fill out an act using a computer. That is why this system will significantly speed up the process of translating handwritten text into printed text, followed by uploading this act to an interdepartmental electronic journal when such an opportunity arises.

The system itself, which has been improving for the second decade, is a combination of artificial intelligence and software that effectively recognize handwritten text. It is enough to upload a photo of a handwritten act to a computer application, and within half a minute you will receive a printed version of the text. As an example, we can take Convertio, in which the author uploaded a scan of a part of the act written by him by hand. Within a short amount of time, a printed version was received [32–44].

In the resulting version, there are errors in recognizing some of the Cyrillic letters, as well as the offset of printed lines. However, it is impossible not to recognize the fact that this application significantly speeds up the conversion of a handwritten act into a printed one, even allowing minor errors that can be corrected in a short period of time. In addition, the support of this innovation by the state may lead to the creation of a domestic analogue that does not depend on foreign developers and at the same time is completely confidential.

Another way that reduces the cost of creating an electronic journal and at the same time has an equally positive effect is to create a simple electronic database for storing copies of administrative divisions. The mechanism consists of the following sequence: first, the act is scanned, then its electronic copy is uploaded to a computer, in which, in turn, the act signed

with an enhanced qualified signature is uploaded to the section "Attached scan of the administrative Division" with the assignment of a unique identifier (identification number). UNIDO (figure 2).



Fig. 2. Sustainable development directions.

The second innovation that the author of the article would like to suggest is the binding of an electronic interdepartmental journal to the personal account of a citizen on the Public Services website. The reason for the proposed proposal is to simplify the access of civilians to customs documents and improve their storage [30-35].

It is no secret that after conducting a personal customs inspection, according to Article 329 of the Customs Code of the EAEU (figure 3), a copy of the administrative act is handed to a citizen, however, the storage of a paper act has a number of drawbacks: it can be lost, damaged, and the storage of this paper is often not rational, unless this citizen files a lawsuit on the fact of violation of his rights during customs inspection.



Fig. 3. Eurasian Economic Union.

Summing up, the following can be distinguished: the problem of paper document circulation of acts of personal customs inspection (inspection) and baggage inspection of individuals who are not participants in foreign economic activity was analyzed, along with

which a solution was proposed to create an electronic journal similar to the one available to the customs authorities of the administrative division registration journal, but focused on ordinary citizens [36-44].

# 4 Discussion

The theory of sustainable development is the result of the great debate around the "growth limit theory" in the 1970s. After the Second World War, economically developed countries experienced rapid economic growth for more than 20 years, and developing countries as a whole sought rapid economic development, but these commendable economic achievements were accompanied by huge consumption of various resources, especially non–renewable resources, as well as rapid growth of the world population and increasingly serious environmental pollution.

Faced with these situations, since the 1960s, some environmentalists, environmental workers and economists have studied the main problems facing the long-term economic development of mankind. By 1972, members of the Club of Rome, led by American futurist Dennis Meadows, wrote in the book "The Limit of Growth". He puts forward the famous "growth limit theory" and views on "sustainable" development, which caused a huge resonance and debate around the world. His pessimistic conclusion is objected to by many people, but the view of "sustainable" development has attracted everyone's attention.

The basis of sustainable development was described by the American agricultural scientist Lester Brown in the book "Building a Sustainable Society" in 1981, where the strategic vision is as follows:

- 1) Change the traditional development model based on simple economic growth and ignoring ecology and environmental protection;
- 2) Transition from a resource-oriented economy to a technological economy with integrated consideration of social, economic, resource and environmental benefits;
- 3) Through the adjustment and rational placement of the industrial structure, the development and application of high-tech technologies, the introduction of clean production and civilized consumption, improving the efficiency of resource and energy use, reducing waste emissions and other measures to coordinate the relationship between the environment and development, so that socio-economic development can not only meet the needs of modern people, but also and not to affect the needs of future generations that pose a danger, and ultimately ensure the sustainable and stable development of society, economy, resources and the environment.

Sustainable development requires the adoption of a development model that protects the total amount of natural resources and ecological integrity, so that the way of life can ensure coordinated development in terms of resources and the environment. The content includes

- Poverty eradication in order to stop the depletion of resources, but also requires reform of the economic and political system
  - Clean or cleaner processes to reduce environmental pollution;
  - Population growth is slowing down to reduce the demographic burden on nature;
- Environmental costs are internalized to reduce the outflow of harmful excrement and the treatment of hazardous waste, so that the way of life can be changed both with the destruction of resources and with environmental pollution.

Ensuring and developing the potential for sustainable development should reflect the degree of achievement of the Sustainable Development Goals, that is, the level of abilities that can ensure the following: balance between man and nature; balance between environment and development; balance between economic efficiency and social justice;

balance between development (innovation) and protection (inheritance); balance between material production and spiritual abundance; a balance between free competition and common norms.

The basic principles to be followed by sustainable development mainly include the following:

1) The principle of justice. Justice here refers to equality of opportunity and choice. Justice here has two meanings: on the one hand, it refers to intergenerational justice, that is, vertical justice between generations, and on the other hand, it refers to horizontal justice between the same generations. Sustainable development should ensure justice not only among modern people, but also between modern people and future generations.

This is one of the fundamental differences between sustainable development and traditional development models. Justice is not given enough attention in the traditional development model. From an ethical point of view, future generations should have the same rights as modern people to put forward their needs for resources and the environment. Sustainable development requires that modern people take into account their own needs and consumption, but also assume historical responsibility for the needs and consumption of future generations, because compared to generations, modern people are in an uncompetitive position in the development and use of resources. Justice between generations requires that no generation is dependent on another, that is, all generations should have the same opportunities and space for choice.

- 2) The principle of stability. Refers to the ability of an ecosystem to maintain productivity when it is disrupted. The resource environment is the basis and condition for human survival and development. without a resource environment, it is impossible to talk about human survival and development. The sustainable use of resources and the maintenance of ecosystem sustainability are the main conditions for the sustainable development of human society. Sustainable development requires that people adjust their lifestyle in accordance with the conditions of sustainability and define their own consumption standards within the framework of environmental opportunities. The sustainable principle of sustainable development reflects the principle of equity of sustainable development from a certain point of view.
- 3) The principle of harmony. Sustainable development requires harmony. As noted in the report "Our Common Future", "In a broad sense, the strategy of sustainable development is to promote harmony between people and between people and nature. If everyone, considering and organizing their own actions, can take into account the impact of this action on others (including future generations) and the ecological environment, and can act sincerely in accordance with the principle of "harmony", then between humanity and nature, and only in this way can sustainable development be achieved [45].
- 4) The principle of demand. The traditional development model is based on the traditional economy, and the goal it pursues is economic growth. It ignores the limited resources and develops production based on the market. This model of development not only exposes the world's resources and environment to unprecedented pressure and continues to deteriorate, but also some major

the materials needed by humanity are still unsatisfactory. Sustainable development, on the other hand, insists on equity and long-term sustainability, develops people based on human needs and pays special attention to human needs.

Human needs are determined by social and cultural conditions, are the result of interaction and joint determination of subjective and objective factors and are related to human values and motivations. First of all, human needs are a kind of system (here called the system of human needs), which is a single whole formed by the interconnection and interaction of various human needs. Secondly, human demand is a process of dynamic

change. In different periods and at different cultural stages, the old demand system will continue to be replaced by new demand systems.

- 5) The principle of high efficiency implies that, unlike traditional economics, efficiency here is measured not only in accordance with its economic productivity, but, more importantly, it is measured in accordance with the degree of satisfaction of people's basic needs. This is the overall comprehensiveness of human development and overall efficiency.
- 6) The principle of phasing is aimed at meeting the needs of modern people and future generations. With the passage of time and the continuous development of society, the content and level of human needs will continue to increase and improve. Therefore, sustainable development itself implies a continuous step—by—step process from a lower level to a higher level.

# 5 Conclusion

At the same time, a generally effective conversion of handwritten acts into printed ones using an optical character recognition system was proposed. In sustainable development, the technology together with the electronic journal will reduce the costs of registration, storage and registration of personal inspection certificates, and also make the interaction of various functional units as comfortable as possible (figure 4).



Fig. 4. Sustainability.

In addition, the author considered the possibility of linking the electronic journal to the website of public services, which would greatly facilitate the interaction of a citizen with customs authorities.

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