

In its turn, the Customs Services of the Republic of Belarus inform their colleagues on a number of issues like:

- the facts that may cause the deterioration of the situation at the border and on the border territory;
- the attempts made by specially organized criminal groups to involve the military personnel of the border services of the Republic of Belarus into criminal activities;
- the new ways, forms, and methods of illegal movement of goods and vehicles across the state border;
- the persons or groups of persons engaged in illegal activities on the border area; the information about their accomplices as well as tactics and with a separate request about persons who are administratively liable for the violation of the national and international customs legislation.

Summing up, it is important to highlight that the interaction between the customs and border services of the Republic of Belarus plays a big role in the country. These services ensure the implementation and proper conduct of both customs and border control of goods, citizens, and vehicles. The interaction between the customs authorities and the border services ensure the economic security of the Republic of Belarus and the protection of the state border of the Republic of Belarus. The interaction of these services can be considered as a mutual assistance, mutual support, and mutual cooperation. Without close contact between the customs services and the border services it would not be possible to carry out the control at borders efficiently, as it is done currently.

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«Technical means of detection and identification of explosives»

Research area:

Modern technical means as a basis of the effective border management.

Until recently for search of explosives canine services which possess such advantage, as ability to find out vapours of explosives in a mode of real time at their concentration in air to 10-16 g/sm³ were involved. To implement such a function in technical devices is not an easy task,

which is now largely solved and implemented in modern gas analytical devices - measuring devices, analyzers to determine the qualitative and (or) quantitative composition of gases.

It is worth noting that the sensitivity of the canine nose is both a great advantage and a disadvantage. The essence of the advantage is the ability of the dog to pick up the smell of explosives at a distance of 1-3 metres in low concentrations of substances in the air.

The disadvantages include the large variety of factors that distract, annoy, and interfere with a dog's ability to perform its actions. In addition, very often the organizers and perpetrators of terrorist attacks use all possible methods to mask the scent of explosives travelling across customs borders, including offenders who may try to incapacitate the dog, even to the point of death. In addition to these factors, weather and climatic conditions, especially humidity, local turbulence, and temperature, affect the performance and duration of dogs.

Additionally the use of dogs to facilitate the search and identification of various types of explosives, special equipment (customs control equipment) can be used to help Customs administrations provide reliable information about the cargo being handled.

Examples include the devices in service with the Belarusian and Russian customs services for the detection and identification of explosives:

1. Pilot-M portable explosive vapour detector;
2. Spray for detection of explosive traces «Poisk-HT»;
3. EVD-2500 Explosive Vapour Detector.

Portable explosive vapour detector «Pilot-M».

«The Pilot-M» is a portable explosive vapor detector designed to detect explosives in unsealed cavities and traces of explosives on the surface of the inspected objects. Detection occurs by taking air samples from the surface or from the interior cavity of the inspected objects and analyzing samples for characteristic components of explosive vapors.

The sampling device allows the collection of particles and explosive vapours onto metal concentrator nets, which allows sampling in highly dusty and smoky environments where the direct use of the detector is difficult or there is a risk of contamination¹.

Spray for detection of traces of explosives «Poisk-HT».

Chemical indicators of explosives «Poisk-HT» are kits of express analysis of explosives, which are used for detection and identification of explosive objects by their trace amounts on human hands, clothes, postal parcels, correspondence, as well as on other suspicious objects.

¹ Pilot-M manual, 2021. - 2-3 p.

Explosive identification kit «Poisk-HT» is often used in the field, at public events, as well as by commercial companies in checking any goods for explosive objects. It can also be used by civilians. The kit detects explosives such as tetril, RDX, TNT, octogenes (sensitivity $1,0 \cdot 10^{-6} \text{ g/cm}^3$)¹.

Explosive Vapor Analyzer EVD-2500.

The EVD 2500 is capable of detecting a wide variety of explosives, including ICAO markers. On-board preparation takes just under 60 seconds and on-board analysis takes 15 seconds. There is no radioactive source, no carrier gas and no consumables.

The sample is taken through a special suction nozzle. The analysis results are shown on the LCD display. In the event of an alarm an audible signal is emitted².

The movement of prohibited substances, including explosives, is a growing problem worldwide and requires the use of high-quality and highly accurate technical means of customs control.

To complete the picture of this study, it is worth comparing the performance of two similar technical means: «EVD-2500 and Pilot-M. The comparative characteristics of these devices are presented in the table below.

Table - Comparative characteristics of two technical devices of the same type

Indicator	«EVD-2500»	«Pilot-M»
Ready for operation	Not more than 60 seconds	Not more than 10 seconds
Time of response about presence of explosives	Not more than 10 seconds	Not more than 1 second
Indication of the presence of explosives	Graphical, photic, audio	Audio, graphical
Samples memory function	Yes	None
Operating temperature range	-5°C to +55°C	+5°C to +40°C
Rechargeable battery operable	Yes	Yes
Weight	3 kg	1.8 kg

Analyzing the performance of the devices, we can conclude that the portable explosive vapor detector «Pilot-M» in some technical characteristics is inferior to the explosive vapor analyzer «EVD-2500», but it is more convenient for operational work despite the lack of such features as saving information about the selected samples and light indication.

¹ Lavanda-U [Electronic resource]. - Access mode: <https://www.lavanda-u.ru>. - Access date: 21.04.2022.

² Autoclear «Introsopes and analysers» [Electronic resource]. - Access mode: <https://www.intro-scop.ru>. - Access date: 21.04.2022.

To summarise the results of the study, it should be noted that the use of technical means of customs control facilitates and increases the efficiency of customs authorities. Such machines can be used both independently and in co-operation with canine services.

A significant advantage of gas analyzers is their portability and operability, as well as their immunity to external stimuli. As in any other area of customs activity, the effectiveness of the use of technical means of customs control depends directly on the functionality of the apparatus itself and on the experience and qualifications of the employee using it.

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«Customs logistics in Belarus at the present stage»

Research Field:

Customs and Business: Cooperation Challenges

Since our country is located almost in the very center of Europe, it has become a significant player in the regional market of transport and logistics services.

The Republic of Belarus is a transit country. It is crossed by two international transport corridors: Cretan Corridor II (Berlin - Warsaw - Minsk - Moscow - Nizhny Novgorod), Cretan Corridor IX (Helsinki - St. Petersburg/Moscow - Kyiv - Chisinau) and its branch IX (Kaliningrad/Klaipeda - Vilnius - Minsk - Kyiv - Chisinau).

Our country ensures the safety and efficiency of transit. Transportation services are provided by road, rail, air and inland water and pipeline modes of transport.

Logistics is the process of controlling the movement and storage of raw materials, components and finished products in the economic turnover [2]. The customs component in logistics is an important element in ensuring the effective functioning of the entire logistics system as a whole. The main goal of customs logistics is to optimize foreign economic activity.

The Republic of Belarus, has a certain technological lag in this area. The reasons for this economic phenomenon are the following:

- the country are few links between manufacturers, suppliers and consumers, which must be combined into one system;
- the creation of logistics systems requires significant investment and so on;

In order to reach a new level in the field of logistics, the Government worked out a development program. In 2017, the Concept of the logistics system of the Republic of Belarus was adopted for the period until 2030. The main purpose of the document is to identify