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THE IMPACT OF DIGITALIZATION ON THE EFFICIENCY OF CHECKPOINTS

Влияние цифровизации на эффективность деятельности пунктов пропуска

The aim of the work is to study the impact of digitalization on the efficiency of checkpoints.

Digitalization of checkpoints is the introduction of new technologies aimed at optimizing and speeding up the processes of crossing the state border. Such technologies include electronic document management, automated data processing system, biometric identification and traffic flow analysis. Practice shows that the introduction of digitalization contributes to the accelerated movement of goods and vehicles through checkpoints and significantly increases the efficiency of customs authorities and carriers.

One of the most striking examples of the impact of digitalization on the activities of checkpoints is the electronic queue system, which significantly increases the convenience of crossing the border. Using the example of the Brest international automobile checkpoint, this system has demonstrated the successful results of its application. It provides a pre-booking of the border crossing time, which allows you to evenly distribute traffic flows and avoid congestion of vehicles at the entrances to checkpoints. The driver can go through the electronic booking procedure in advance through the official portal belarusborder.by , pay for this service (only in Belarusian rubles), arrive at the entrance to the service waiting area in front of the checkpoint at the appointed time, register and after opening the barrier, enter the waiting area to the designated parking space. Then you need to wait for the registration number of your car to appear on the electronic scoreboard, leave the service waiting area at the booked time and proceed to the checkpoint [1].

The operator of the electronic queue system at road checkpoints is RUE Beltamozhservice. The Company manages the electronic queue and ensures its proper functioning. On the belarusborder website.by provides information about waiting areas and the number of registered vehicles, traffic patterns, etc.

RUE Beltamozhservice is the operator of waiting areas with an electronic queue system at the following road checkpoints: Kamenny Log, Benyakoni, Berestovitsa. For a comfortable stay of citizens in the waiting areas of RUE Beltamozhservice, additional services are provided (a store, hot meals, parking for trucks, cars and buses, physical comfort services) [2].

The electronic queue system determines only the time of entry to the checkpoint. Border, customs and other types of control are carried out by everyone crossing the border in accordance with the established procedure [3].

Currently, the electronic queue system greatly simplifies the work of carriers who can track the movement of their vehicles in real time. As a result, the waiting time is significantly reduced and the checkpoint capacity is increased.

An equally important area of digitalization is the introduction of automatic border control systems that provide biometric identification of citizens. The trial operation of this complex was carried out at the Minsk National Airport and at the Brest checkpoint. The automatic border control system allows citizens of the Republic of Belarus over the age of 18 who have a biometric passport to pass border control without the participation of a border patrol. The system automatically reads and verifies biometric data, verifies the legality of border crossing and, if the result is positive, opens access for following [4]. It not only reduces the time required to pass through border control, but also reduces the burden on staff, increasing the security and accuracy of data verification.

Thus, the successful implementation of digital technologies in the activities of checkpoints contributes to a significant increase in their efficiency. Digitalization makes it possible to speed up the passage of control procedures, reduce the administrative costs of participants in foreign economic activity, increase throughput and ensure transparency of all processes. The development of electronic booking systems, automatic control systems and the integration of information resources create the basis for the formation of «smart borders» that meet modern security requirements and international logistics.

References

1. Система электронной очереди транспорта в пункте пропуска «Брест» // Государственный пограничный комитет Республики Беларусь. – URL: https://gpk.gov.by/media/videogalereya/sistema-elektronnoy-ocheredi-transporta-v-punkte-propuska-brest-/ (дата обращения: 08.11.2025).
2. Система электронной очереди как инструмент совершенствования порядка пересечения Государственной границы Республики Беларусь // РУП «Белтаможсервис». – URL: https://declarant.by/ru/news/sistema-elektronnoy-ocheredi-kak-instrument-sovershenstvovaniya-poryadka-peresecheniya-gosudarstvenn/ (дата обращения: 10.11.2025).
3. В белорусском пункте пропуска «Григоровщина» заработала система электронной очереди // ATI.SU. – URL: https://news.ati.su/news/2018/01/29/v-belorusskom-punkte-propuska-grigorovschina-zarabotala-sistema-elektronnoj-ocheredi-545731/ (дата обращения: 11.11.2025).
4. Быстро и удобно. В пункте пропуска «Брест» апробируют автоматический комплекс погранконтроля // БелТА. – URL: https://belta.by/regions/view/bystro-i-udobno-v-punkte-propuska-brest-aprobirujut-avtomaticheskij-kompleks-pogrankontrolja-700002-2025/ (дата обращения: 09.11.2025).