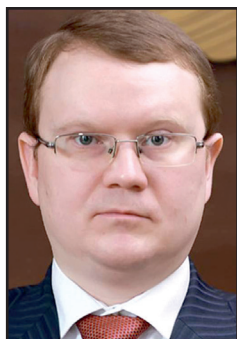


State Border Checkpoints. Problems and Solutions



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ABSTRACT

The article deals with development of the system of border checkpoints operating within the objects of transport infrastructure.

A classification of three blocks of tasks related to infrastructure, control technologies, and administration has been proposed.

The necessity of unification of requirements for design, construction, reconstruction, equipment and technical equipment of buildings, premises and facilities necessary for organization of

border, customs and other types of control carried out at checkpoints, their integration with transport infrastructure facilities (sea and river ports, airports, railway stations) at the design stage are explained.

Optimization approaches are proposed, including use of promising information technology in organization and operation of border checkpoints. In addition, it is concluded that it is necessary to organize training and advanced training of specialists in this field on the basis of transport universities.

Keywords: *state border, transport, checkpoint, transport infrastructure, information technology.*

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Introduction. The length of the state border of the Russian Federation is more than 61 thousand km. Russia has borders with 16 states on land and sea. Many territorial entities of the Russian Federation are borderline, and more than 13 thousand kilometers of the Russian state border first appeared at the beginning of the post-Soviet period.

The Transport strategy of the Russian Federation for the period up to 2030 [1] provides for creation of a single system and information environment of multimodal technological interaction of various types of transport, cargo owners and other participants in the transportation process, as well as customs, border and other state control bodies in order to create a single transport space of Russia on the basis of a balanced priority development of an efficient transport infrastructure, as well as to increase transit capacity and efficient use of international transport corridors.

At present, checkpoints across the state border are the link to which particular attention should be paid.

The checkpoints across the state border are complexes of structures and information systems that allow to proceed with state control at the border (within sea and river ports, airports, railway and automobile stations) in order to ensure safety of society and the state. Cross-border flows of goods and cargo pass through checkpoints, as well as international passengers do.

As of May 2019, there were 313 functioning checkpoints in the Russian Federation out of 386 established. Of those there were 108 road, 56 railway, 82 air, 56 sea, 7 mixed, 3 river and land, and one pedestrian checkpoint*.

* <https://www.mintrans.ru/file/429805>.

Persons, vehicles, cargo, goods, and animals passing through the state border are subject to border and customs control, and in cases established by international treaties of the Russian Federation and federal laws, to other types of control comprising sanitary and quarantine, veterinary and phytosanitary control.

To carry out state control at the checkpoints, the necessary buildings and structures and 19 information technology systems were developed, including passport (border) control system; non-contact measurement of body temperature; inspection of baggage and hand luggage, inspection of vehicles and goods, radiation monitoring, etc. [2].

The systems ensuring operation of checkpoints are departmental systems of state control bodies (including the Federal Customs Service of Russia, Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing and Federal Service for Veterinary and Phytosanitary Surveillance), while capital construction objects are under the jurisdiction of the Ministry of Transport of Russia (Rosgranstroy Federal State Establishment).

To solve the problems of checkpoint operations expressed through loss of time and increase in costs of crossing the border, it is necessary to consider three series of tasks with regard to:

1. Infrastructure.
2. Technology.
3. Administration.

The *objective* of the author is to consider various problems related to functioning of state border checkpoints and their possible solution.

The author *uses* general scientific and engineering methods, comparative analysis, scientific description.





1. Infrastructure

Currently, only 20 % of checkpoints comply with the Uniform standard requirements for equipment and material and technical logistics of checkpoints across the external border of the Customs Union member states, and 2/3 of checkpoints need substantial renovation and modernization. Promising technologies, such as automated border and customs control, as well as electronic follow-up of cargo and passenger international transportation are practically unavailable for use [3].

There are no uniform standards for design of special buildings and structures required by state control bodies. At present, the requirements made during design of checkpoints by state control bodies oblige developers to create and maintain redundant infrastructure.

In addition, the practices of designing checkpoints on the basis of departmental standard requirements introduced by state control bodies in 2008 show that design period of a checkpoint has increased due to the need to obtain numerous approvals, and construction costs also grew due to issuance of inflated «formal» technical requirements by state control bodies to customers that do not take into account the existing transport infrastructure and the volume of cargo flows.

On the other hand, the analysis showed that the current regulatory legal acts do not require that design solutions should integrate transport infrastructure facilities with the infrastructure of a checkpoint. In this regard, subsequent

creation of necessary checkpoint facilities on the territory of already existing transport facilities is very difficult and requires expensive work to rearrange communications, to rebuild individual structures of transport facilities, etc.

In this regard, it is necessary to unify the requirements for design, construction, reconstruction, technical equipment of buildings, premises and facilities necessary for organization of border, customs and other types of control carried out at checkpoints, to integrate them with transport infrastructure facilities (sea and river ports, airports, railway stations) at the design stage, as well as to simplify the procedure for coordination of technical specifications and the project itself [2].

There is a need to clearly determine area allocated for state needs by a single regulatory document for organization of workplaces of employees and to reduce it (exclusion of costs linked to premises not intended for checkpoint operations).

2. Technology

The technology of operation of a checkpoint is linked to the regulations of state control bodies and is directly expressed in the layout and architecture of the checkpoint, its technical design, and also affects the cost of construction and operation.

At present, the outdated technology of operation of checkpoints is superimposed on the new transport infrastructure, as a result of which the effect of innovations used in design and

construction of transport facilities is simply lost. As a result, «traffic jams» appear at the border.

In particular, the currently existing time limit for passport control of 1 statistical passenger is up to 3 minutes per person, although the real time needed for passport control does not exceed 1 minute. Having projected those 3 minutes to the infrastructure component, we shall see that the infrastructure is redundant due to excessive number of passport control booths, while considerable areas of terminals are withdrawn from the commercial turnover of transport companies, and staff of controllers is artificially inflated.

It is advisable to take measures to introduce automated border and customs control at checkpoints and reduce the estimated time required for processing of 1 passenger to 1,5 minutes [4].

3. Administration

It should be noted that the most complete effect of the upgraded infrastructure of checkpoints can be achieved, provided:

- planning of passage of vehicles, cargo and passengers;
- monitoring of checkpoint operation;
- prompt response in case of emergency situations.

In order to improve the quality of work of checkpoints, we consider it expedient to take measures for development and implementation of a system of automated planning and control of vehicles and cargo passage at international checkpoints. Obviously, in the context of development of digital transport and digital logistics in Russia, this option will significantly enhance the new transport paradigm. And the inverse conclusion is that the «analog checkpoint» will continue to slow down modernization and development of the infrastructure framework of the economy.

Conclusions and suggestions. Study priorities.

The study of processes that take place in the border area is now becoming one of the basic topics in the ongoing interdisciplinary research. Researchers of various specialties are engaged in a wide range of borderland issues: geographers, economists, lawyers, political scientists, military, environmentalists, etc. [see, e.g., 5–7]. However, such studies' topics as organization of work and operation of international checkpoints within a single

transport system, to our deep regret, do not draw due attention.

There are no education either advanced training courses devoted to those issues in transport universities or in other higher schools.

In order to improve the quality of operations of international checkpoints and develop their infrastructure, it is necessary to have personnel trained to solve the assigned tasks. In this regard, it seems appropriate to develop appropriate professional standards, updated qualification requirements for specialists and managers, to begin training and to develop skills of the staff responsible for operation of technically complex cross-border transport infrastructure facilities. Russian University of Transport can become a pilot site for training specialists in this field.

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