The impact of offenses on the logistics process during the transportation of cargo

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Abstract. At the present stage of logistics infrastructure development, many different barriers that have a negative impact on the entire process of cargo transportation appear. Since each stage of cargo delivery is part of a single logistics chain of transportation, interruptions at any stage entail nonfulfillment of contractual obligations by the transport company. In the work, the main focus is on the study of the causes of obstacles to the transportation of cargo. As a rule, the reasons under consideration have a technological or legal nature of occurrence. For technological reasons, we understand the negative processes associated with the organization of transportation, namely: the construction of economically unprofitable cargo delivery routes; the wrong choice of transport, as well as the incorrect construction of the logistics chain in general. The legal reasons for the transportation of cargo are related to the commission of various kinds of offenses by people involved in the process of cargo delivery, which entail negative consequences for transport companies. In turn, law-enforcement agencies are obliged to respond to certain offenses committed at all stages of cargo transportation. Therefore, legal barriers associated with the toughening of the procedure for checking goods appear, which affects the timing of their delivery.

1 Introduction

The development of our country's economy is impossible without the development of its logistics system and structure. Special attention should be paid to the creation of systems that make it possible to increase the efficiency of material flow management, which improves all economic activities. Proper formation and further development of logistics systems is the key to successful activity on world markets and integration into the modern structure of the world economy. In the future, the level of competition and market activity will increase, and customer requests will also increase. As a result, enterprises will have to look for new ways to reduce costs and improve the quality of services. Realizing the huge contribution of logistics to increasing business profitability, company owners will increasingly have to turn
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2 Materials and methods

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The main directions of logistics development in the near future can be considered the following:

- improving the normative and legal nature framework;
- motivating the work of well-known transport organizations;
- monitoring of delivery chains of cargo flows and channels of finished goods placement;
- unity of the information system in the field of transport development;
- scientific analysis and training of highly qualified employees of the logistics industry who will understand the specifics of the processes’ organization within logistics science.

Currently, the following types of logistics activities are actively developing: transportation, forwarding, warehousing, inventory management, customs clearance, coordination of the company's logistics process, organization of strategic planning and management of the corporate logistics system, etc. The trend of globalization and integration within supply chains has also increased. There is an increase in the number of companies with logistics departments and services [2].

The logistics process is a set of operations to bring the cargo flow from the manufacturer to the customer, as well as related operations. Acceptance and preparation of cargo for transportation, rolling stock supply, loading, transportation, sorting, reloading to another mode of transport, unloading, warehousing, delivering to the customer [3].

The transport and logistics process is understood as the performance of loading and unloading operations, cargo transshipment, short-term and long-term storage, cargo handling, performing the necessary customs procedures, forwarding and reconsignment of cargo, ensuring cargo delivery, a full range of service and commercial services.

The main element of the transport process is cargo transportation, all other elements are subordinate to it. The transportation process includes the operation of the rolling stock from the moment it is loaded, its movement with the cargo until it is placed under unloading. This process is multi-stage and multi-operational, with a large technological, operational and economic heterogeneity of operations.

The structure of the transport process also includes:

- cargo flow marketing;
- development based on the materials of surveys of cargo flows: rational traffic routing, providing for the opening of new and changing the direction of existing traffic routings;
selection of the type and determination of the required number of rolling stock for transportation;

determination of the scope of appropriate use of cars and road trains, depending on the specific conditions of transportation, type and properties of cargo, performance indicators of cargo transport;

rationing of motor vehicles' speed;

the choice of systems for organizing the movement of motor vehicles using rational modes of drivers' work;

coordination of the road transport work with other modes of transport;

analysis of road conditions in order to develop effective and safe routes for the movement of rolling stock;

providing efficient and safe transportation of cargo by motor vehicles;

application of economic and mathematical methods and calculations to improve the efficiency of the use of rolling stock and reduce transportation costs;

vehicle traffic management;

operational control over the automobile rolling stock work and its use.

Special attention in the transport process is paid to the use of various methods that ensure:

timely delivery of cargo in batches of the required sizes;

safety of the quality and quantity of the transported cargo;

действия compliance with safety and traffic safety requirements;

fuel economy;

environmental protection;

compliance with the requirements of labor legislation.

Participants: sellers (cargo shippers), intermediaries (forwarders, logisticians), carriers, state services (customs), customers (cargo receivers).

The service sector should function in such a way as to fully meet the requirements of customers with as little cost as possible.

The most significant components in assessing the quality of services provided may be the following:

environment (interior, equipment, personnel appearance, etc.);

reliability (just-in-time execution);

responsibility (guarantees of performance of services, the desire of staff to help the consumer of services);

completeness (availability of certain skills, necessary knowledge and competence of the staff);

accessibility (ease of establishing contacts);

security (absence of risk and distrust on the part of the consumer of services);

politeness (amiability, correctness of the staff);

sociability (the ability of staff to communicate with the consumer of services in an accessible and understandable language);

mutual understanding (sincere interest in the consumer of services, the ability to take his place).

The transport service of clients for the transportation of cargo also includes:

selection of the appropriate packaging according to the physical features of the goods (cargo);

marking, barcodes and special designations on the packaging;

the use of unified transport containers, the formation of cargo units, packaging and containerization;

choosing the optimal (rational, acceptable) mode of transportation and vehicles;
the most complete use of the carrying capacity of vehicles through proper loading;
- compliance with technologies during loading and unloading operations;
- the use of modern technologies and approaches to the organization of placement, accounting of goods and stocks in warehouses and terminals;
- application of modern information technologies and computer support [4].

A great attention is paid to the problems of the transportation organization, both from government institution and commercial logistics companies. Nevertheless, illegal acts committed both at the facilities of the transport industry and in adjacent segments of the industry structure have a significant impact on the quality of the logistics process organization.

The negative consequences of offenses that occur at various stages of logistics processes have a significant impact on the business reputation of a transport company, as well as on the transport industry in general. For example, in multimodal transportation, a violation in one of the stages of the logistics chain affects the cargo delivery time. We agree with the opinion of E. N. Gavryushkova that the multimodal transportation system is a progressive logistics technology, but it has neither a clear and consistent scientific and legal justification in our country, nor its wide and comprehensive practical application [5]. This puts all parties of the international transportation process in conditions of uncertainty, increasing risks, increasing the cost of the transport services market and unpredictable, sometimes unjustifiably high financial losses [6]. We come to the conclusion that violations in the logistics chain of cargo transportation have an impact on the financial losses of individuals or legal entities that are the customer for cargo transportation.

Analyzing legal precedents on offenses, technological violations, as well as interviewing police officers on transport, the following types of illegal activity can be distinguished. Illegal acts related to storage, transportation, transfer and other illegal effects on the transported cargo:
- deliberate understating of the tariff class of cargo, in order to reduce the transportation fee;
- receiving and giving bribes for the supply and cleaning of wagons on the way of non-public use out of the schedule;
- commercial bribery of legal entities related to the improvement of cargo transportation conditions. For example, when choosing the order of wagons delivery for unloading;
- opening of containers and packaging, removal of part of the contents with further masking of traces of penetration to the cargo;
- intentional underloading of the delivered goods with masking under damage or theft en route or without it;
- intentional overloading of the delivered goods (actual shipment of cargo exceeding the quantity specified in the shipping documents) in order to create excesses among accomplices from among the materially responsible persons of the consignee for their further sale or manufacture of unaccounted products;
- false weight, cheating in accounts, incorrect determination of the quantity (seats, weight, volume) accepted from the sender for cargo transportation. The excess created in this way is stolen;
- removal of a part of the attachment to the packaging or individual places, using imperfection of locking devices to enter the container (creating a skew and opening the container without violating the serviceability of the seal and twist), or penetration to the cargo for this purpose by breaking the seal with its further suspension ("preserving" its commercial serviceability for visual inspection);
drawing up fictitious commercial acts for virtually non-existent shortage of cargo, supposedly revealed in wagons that arrived with both serviceable seals and commercial defects; for underestimating the actual amount of excess cargo identified during sorting of wagons. The excess created in this way is stolen;

setting fictitious marks about the shortage of cargo within the limits of the norms of natural loss, or an acceptable discrepancy in the indication of weights and railway waybills.

theft of cargo from containers and wagons by cutting holes. [7].

Therefore, other negative circumstances affecting the logistics process of cargo transportation are:

- inappropriate technical quality of transport equipment (wagons, cars, etc.) when sending various types of cargo;
- force majeure circumstances in which there is a complete or partial loss of cargo, or the delivery time of cargo increases, and that’s why the shipper and (or) the consignee incurs financial losses;
- the cargo delivery contract or the purchase and sale contract of one of the parties to the transaction is incorrectly executed (the wrong product is issued, the wrong volume);
- the departure address is incorrectly specified;
- incorrect cargo transportation planning;
- theft of diesel fuel oil (is a separate type of illegal act) from gathering-locomotive, which can lead to delays in the delivery of cargo;
- illegitimate increase in the time of customs control when importing cargo.

Let’s consider one of the most important factors influencing the transportation of cargo from the territory of a foreign country. Since foreign transportation, as a rule, involves multimodal (mixed) transportation, and many companies, in practice, are often in a difficult situation. The reason is that the documentation of multimodal transportation has problems at the legislative level.

International multimodal transportation is understood as transportation, that involves the use of several modes of transport, one carrier is responsible for delivery, transportation is carried out accompanied by one transport document [8]. Currently, this concept has no legislative consolidation. Also, in scientific works there are statements regarding the fact that even when using one type of vehicle, such transportation can still be considered multimodal, i.e., we observe the presence of some contradictions.

One of the legal barriers to an effective logistics process is the passage of the cargo through customs control procedures, which has a great impact on the delivery time of goods. In addition to the deadlines, customs control checks the proper quality of goods and their technical characteristics. For example, motor vehicles, the delivery of which can be carried out by mixed transport: by sea vessels from the territory of a foreign state and by rail, or by car transporter truck on the territory of the Russian Federation.

Registration and inspection of imported motor vehicles are handled by the Federal Customs Service of the Russian Federation (hereinafter referred to as the FCS of Russia), in the structure of which there are regional offices. According to the FCS of Russia, 249.3 thousand vehicles were imported across the state border of the Russian Federation in 2022. In turn, the number of car purchase and sale transactions on the Russian market in 2022 amounted to: 687 thousand units and 4 million 864.7 thousand units on the secondary market.
3 Results and discussion

When passing customs control, the following documents are issued for the imported motor vehicle: electronic passport of the vehicle (EPTS), cargo customs declaration (CCD), customs receipt order (CRO), Motor Vehicle Safety Certificate (MVSC), if the consignee is a legal entity, a contract of sale and an act of transfer of the vehicle are executed, Vehicle Type Approval (VTA). VTA (Vehicle Type Approval) is a certificate that confirms the legality and safety of technical characteristics for a specific car model that has not been previously used on the territory of the country.

When studying the practical activities of the FCS of Russia, the following objective factors can be identified that affect the increase in the timing of the logistics process in multimodal transportation of motor vehicles:

- customs clearance of cars that arrive within the framework of "gray" and parallel imports. The documents (purchase and sale agreement, etc.) indicate the cost of the car, which is less than the market value, and the engine power is also underestimated in order to understate customs duties. In most cases, the problem concerns the supply of foreign cars to Russia from the EAEU countries. If unscrupulous sellers-importers are identified, they will have to pay the difference from the lowered customs rate.
- in the documents of the MVSC or VTA, the understated engine power of the vehicle may be indicated, or if the car is a hybrid, the total engine power is not considered.
- customs clearance of cars, under the guise of new ones, not previously registered in other countries, as a whole batch with the VTA document.

The main purpose of people engaged in committing crimes when importing vehicles is to reduce customs duties. However, when the facts of illegal actions are established, the car may be confiscated and the entire cost of customs duty must be paid. Thus, due to the crimes committed during the import of imported cars, the time for checking all vehicles increases, which in turn has a negative impact on the logistics process of transporting cars.

The most effective functioning of multimodal transportation is possible if these issues have relevant legal regulation and the barriers existing in the implementation of international transportation are eliminated.

One of the ways to eliminate legal barriers is the interaction of employees of the FCS of Russia and the Ministry of Internal Affairs of Russia in order to identify and solve crimes related to motor vehicles. We propose an interdepartmental instruction that should regulate the procedure for obtaining information from the FCS and the Ministry of Internal Affairs of Russia. It is necessary to specify the rights and obligations of employees of the Department of Internal Affairs and customs authorities to provide information (procedure, grounds, deadlines). Also, the instruction "on the procedure for joint actions of divisions of internal affairs bodies and customs authorities in the detection and disclosure of crimes committed using vehicles" should regulate the organization of joint activities in order to prevent, detect, suppress and disclose crimes related to motor vehicles.

In the interdepartmental instructions of the Ministry of Internal Affairs and the FCS of Russia, it is necessary to regulate the creation of a unified information database. Since, at present, complete information about motor vehicles is in the information databases of the two departments.

At the same time, it seems necessary to conclude an agreement on information interaction between the FCS and the Ministry of Internal Affairs of Russia, which will have a coordinating nature, while joint regulatory legal acts have an organizational and technical nature. Thus, we propose to create a single, interdepartmental integrated database of vehicles, integrated use at the federal level, on the basis of the Federal Government Department of the Main Information and Analytical Center (hereinafter-FGD MIAC of the Ministry of Internal Affairs of Russia).
Affairs of Russia), with the right of access of the territorial Department of Internal Affairs and customs authorities. Currently, a major role in international multimodal transportation is assigned to the trade process within the framework of the EAEU. In 2015-2022, the mutual trade of the EAEU member states increased by 87% - from 44.5 billion to 83.3 billion dollars. Foreign trade has grown by 59%," - according to the information report "Eurasian Economic Integration", prepared within the framework of the year of the Russian chairmanship in the bodies of the Eurasian Economic Union. Since the creation of the union, GDP has grown by 7.3% ($2598.4 billion), agricultural products - by 26% ($170 billion), industrial production - by 16.9% ($1639.2 billion).

4 Conclusions

In conclusion, we can say that, within the framework of increasing the efficiency of transportation of motor vehicles in the EAEU countries, it is necessary to create a single integrated database of motor vehicles (registered, imported from other countries). Also, the introduction of information in the Electronic Passports System about vehicles, not only manufactured in the country, but also imported from other countries.

We believe that this factor will help to reduce the number of illegal acts related to the illegal import of cars into Russia, thereby improving the logistics process of delivering motor vehicles.

As for the organization of logistics processes themselves, it is necessary to: improve technologies, including the use of new technologies and automation; develop infrastructure (seaports, railways, highways, warehouses, etc.) and timely update the vehicle fleet to transport the necessary goods in the right quantity; improve the quality control system, simplify procedures for registration of cargo transportation; train qualified specialists; apply modern information systems. Logistics has a comprehensive impact on the economic development of the country. If the role of logistics is properly understood, the government can be successfully developed in economic, political and social relations.

References