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INCREASING THE EFFICIENCY OF LOGISTICS MANAGEMENT IN RAILWAY TRANSPORT

Mamura Narimanovna Kushakova*

*Senior Lecturer,
Faculty of Economics, Tashkent State Transport University,
Tashkent, UZBEKISTAN

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ABSTRACT

The article provides information on the reasons for the emergence of uniform technological processes at the junction points of mainline and industrial railway transport. The role played by uniform technological processes in ensuring the efficiency of logistics management on the railways in various historical periods is shown. The existing difficulties associated with the development and implementation of unified technological processes are reflected.

KEYWORDS: *Uniform technological process, railway transport, logistics management, supply chain, junction point, freight transportation, regulations.*

INTRODUCTION

Currently, the effectiveness of the organization of mass transportation of goods by rail is largely determined by the rhythmicity and cyclicity of transport processes. The formation of reliable supply chains aimed at ensuring them is a rather complex task that requires taking into account a large number of influencing factors at various stages of cargo handling and movement. One of these factors is the synchronization of the technology of operation of railway stations of the adjacent tracks of industrial enterprises and terminals.

Logistics (transport logistics) is the planning, control and organization of the management of the transportation of goods and other operations performed in the process of delivering finished products to their destination. Logistics includes all processes that save time and space in the area of cargo flows of goods, finished products and materials within certain social systems that satisfy the supply needs and requirements of these systems. But, given the great importance of railway transport in the economy of Uzbekistan, this issue can be considered, to some extent, from a "departmental" position. **[1]**

The state of the theory of calculation of car flows and the existing software for automated systems for organizing car flows have a decisive influence on the adoption of appropriate practical decisions by specialists involved in this field. It is these factors that determined and put on the agenda the issue of logistics in rail transport as such; it was then that the word became not only fashionable among railway workers, but also necessary. At the same time, the essence of logistics by users of railway transport services often comes down to the problems of reducing the costs of financial and industrial groups, which actually own the main means of production and control over the primary industries (oil refining, coal, metallurgical, chemical, pulp and paper, etc.), which determine the main volumes of transportation. Their creation has led to a

fundamentally new relationship between cargo owners and rail transport. For rail transport, transportation is a time-consuming process, time costs depend on many random factors and can only be estimated on average - according to technological standards.

Modern logistics processes at the junction of these transport systems, as a rule, are characterized by the presence in them of a large number of participants (cargo owners, owners of transport and logistics infrastructure, rolling stock operators, carriers, forwarders, outsourcers, etc.) pursuing their goals and interests, which do not always meet the overall goal of the supply chain.s a consequence, this circumstance negatively affects the quality of the logistics processes being formed and implemented.

Back in 1944, academician V.N. Obraztsov noted that "the junction of railway transport with industrial transport is a sore point of the transport problem. The fact that in this case the transport facilities belong to two owners, the constant clashes between them, the struggle for their interests - all this contradicts the state interests. Because of this, cars are delayed, downtime and mileage increase, fuel consumption, overload is often complicated, etc." **[2]**. The way out of the current situation V.N. I saw samples in the organization of the work of interacting organizations according to a single technological process (hereinafter - ETP), that is, in the unification of the control system for the movement of wagons on the railway and an industrial enterprise.

The introduction of the first unified technological process at the stations of the nodes of the railways of our country took place during the years of the Great Patriotic War. It is quite obvious that during this period, the main task that was set for railway transport was to make its work as efficient as possible from the standpoint of meeting the needs of the front and rear enterprises and minimizing the resources consumed. the unified technological process has certainly contributed to the achievement of this goal. An analysis of the results of the introduction of the first unified technological process showed that they made it possible to more than halve the unproductive idle time of wagons on the railway tracks of industrial enterprises **[3].** These data directly testified to the expediency of continuing work on optimization and mutual coordination of transport and logistics processes on mainline and industrial railways. Since 1947, the replication of TP on the railway network has begun everywhere.

Direct implementation of the unified technological process should be carried out on the basis of a document approved by authorized representatives of owners of interacting railway infrastructures. The specified document should include the order of shift-daily planning, time standards and the sequence of various operations (shunting, cargo, acceptance, etc.), the order of information interaction between the employees involved, etc. At the initial stage of the development of a single technological process, there were no strictly defined regulations on the composition and structure of this document. In the works of V.N. Obraztsov there were some recommendations, but no more. In addition, the legislative status of the unified technological process was unclear.

The situation changed in the 50s of the XX century. In 1953, the Ministry of Internal Affairs of the Uzbekistan put into effect the first regulatory document methodically regulating the development of a single technological process **[4].** A little later, in December 1954, the Council of Ministers of the Uzbekistan approved the Charter of the Railways of the Uzbekistan, containing provisions on the need to develop a unified technological process. One of the key ones was article 114 of this document, which stated that "the work of railway sidings of large

enterprises (with a turnover of 100 wagons per day or more) with locomotives should be carried out on the basis of a single technological process of the railway sidings and the junction station, providing for the use of advanced working methods to accelerate turnover wagons at the railway station and access road".

Starting from this moment, the unified technological process received the status of an official regulatory document, mandatory for development.

The period of the 70s of the last century is characterized by the integration of technologies of production and distribution enterprises and railway transport into a single system. From this moment on, the role of a single technological process in the organization of supply chains is also changing. From documents aimed primarily at optimizing logistics processes at the junction points of transport systems, a single technological process is transformed into documents, the performance of which directly affects the efficiency of operational work on the railway network as a whole. **[5]**

This transformation of the role of a single technological process in logistics management also required changes to the norms regulating the procedure for their development. On June 17, 1970, the Ministry of Internal Affairs of the Uzbekistan approved new guidelines for the development of a unified technological process. From the point of view of the tasks solved by a single technological process, this document was certainly more progressive than the 1953 analogue, however, it quickly ceased to meet the requirements for a single technological process, including linking the work of railways with adjacent trunk transport systems (mainly by sea and inland waterway).

At the end of 1983, a third document appeared, symbolically called "Temporary Instructions" Despite its name, this document has been the regulatory basis for the development of a unified technological process for more than 35 years.

The changes in the structure of economic relations that took place at the end of the XX — beginning of the XXI century, the emergence of new equipment and advanced technologies, the increase in the number of participants in logistics processes and the expansion of forms of their interaction formed new requirements for a single technological process. Currently, from the point of view of increasing the efficiency of railway logistics management, the unified technological process is aimed at solving the following priority tasks

* fulfillment of applications accepted by the carrier for the transportation of goods;

* cargo delivery and delivery of empty rolling stock for loading on time;

* optimization of the number and technology of operation of locomotives and wagons involved in transportation, regardless of their affiliation;

* ensuring the most rational use of technical equipment of interacting enterprises;

* formation of the necessary conditions for the introduction of advanced logistics systems and cargo management technologies.

As the experience of implementing a single technological process at the present stage shows, these tasks can be successfully solved.

Another sign of the qualitative development of a single technological process is the expansion of the boundaries of their coverage. If earlier they synchronized the technology of operation of a railway station and one adjacent enterprise, now, if there are several enterprises of different owners adjacent to one station, they can all be linked into a single technology of operation. The same situation is possible if the railway tracks of one enterprise are adjacent to several stations. Similar to a single technological process are called complex.

It is also worth noting that at this point in time, the development and implementation of a single technological process are associated with a number of difficulties.

Firstly, there is no regulatory document defining the composition and structure of a single technological process. The "Temporary Instructions" adopted in 1983 fell under the mechanism of the "regulatory guillotine" on May 22, 2019. Any analogue of this document, at least temporary, has not yet been adopted, despite the fact that in accordance with paragraph 5.13 of the Order of the Ministry of Transport of Uzbekistan dated June 18, 2003 No. 26 **[6],** a single technological process should be developed according to the approved methodology of the Ministry of Transport of Russia (now the Ministry of Transport of Russia, as the successor).

Secondly, the process of development and coordination of a single technological process on railways is not clearly regulated. The only exception is the Uzbekistan Railway, which has a quality standard defining these issues.

CONCLUSION:

Rail Transportation First invented for use in the early 19th century, rail transport quickly became vital for the expansion of the western world and has played a pivotal role in the realm of logistics for over two centuries. In modern practice, rail is used more exclusively for the largest and heaviest payloads (bulk cargo) traveling across land. The vast majority of railway infrastructure connects highly populated areas with large unpopulated strips of land between them making rail ideal for long-distance and cross country hauls. Canada, for example, is very sparsely populated between coasts so anything shipped more than 500 miles often requires a rail transport. Rail transport is confined to a more limited infrastructure than road transport. As a defining trait, locomotives (trains, monorails, etc.) are confined to a traced path going between point A and B with very few points of divergence. Railways are costly and time consuming to construct and only a few new railways have been constructed since the early 1900's. Additionally, railways are limited to semi-level geographic areas making construction increasingly laborious. Thus, railways are primarily only accessible in large metropolitan areas. This attribute makes rail one of the primary players in the intermodal transportation. Within the confines of the railway system, the rail vehicle is not influenced by traffic, points of diversion, and switch offs between modes. This makes the rail the most dependable mode for making long hauls across land with minimal damage. Trains commonly carry bulk cargo items such as coal, corn, iron, ore, and wheat, items that would be uneconomical to ship by truck.

From what is stated in the article, it is obvious that since the appearance of the first unified technological process, they have begun to play a huge role in improving the quality of the work of railways in the organization of supply chains. The subsequent development of the theory and practice of the introduction of a single technological process allowed to expand the possibilities of their use in solving various logistics tasks, such as reducing the turnaround time of the car,

providing a transportation plan, creating the required conditions for cyclical transport processes, saving material and financial costs for the organization of supply chains, etc. The current difficulties in the development and implementation of a single technological process are not critical, but they require solutions that will allow the fullest use of this tool to improve the efficiency of logistics management in railway transport.

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