

increase the volume of rail transportation of Ukrainian goods. This requires attracting external sources of funding for the modernization of domestic railway infrastructure and deepening cooperation with European partners to use Ukrainian rolling stock on the railways of EU countries.

A comprehensive approach to increasing the efficiency of using the railway infrastructure of border stations, considering the peculiarities of servicing international freight flows with different track gauges, has been proposed. The obtained results can be used to substantiate the feasibility of improving the technology of border station operations located at the junctions of different track gauges.

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**IMPROVEMENT OF WAGON FLOW MANAGEMENT
TECHNOLOGY IN THE RAILWAY NETWORK BASED ON THE USE
OF INFORMATION TECHNOLOGIES**

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The geographical location of Ukraine and the significant volume of cargo flows directed towards Europe create prerequisites for integrating Ukraine's transport network into the international transport system. The presence of a powerful transport system and railway infrastructure enables Ukrainian railways to participate in transportation along international transport corridors.

Ukraine's international transport corridors remain key freight corridors, even with a decrease in transit traffic volumes. The goal of their development is to increase the efficiency of foreign trade transportation by ensuring optimal conditions for the functioning of the transport system as a whole. For the successful integration of Ukrainian railways into the European Union, it is necessary to improve the technology for advancing international wagon flows.

Currently, due to the mismatch of technical and technological parameters of the railways of neighboring countries, international wagon flows are idle while waiting for certain operations to be performed. To improve the operation technology of railway transport, technological modernization of the transportation process management system is necessary.

The purpose of this study is to reduce the unproductive idle time of rolling stock during the advancement of wagon flows in international traffic through the application of intelligent technology elements.

The lack of a global unified regime complicates international railway transportation. Internal transportation rules create difficulties for international operations. National operating rules, signaling systems, and safety standards differ between countries, causing problems and requiring additional staff training to ensure safe operations. Formalities unrelated to transportation, such as visas for train crews and customs procedures, lead to additional delays and costs.

Countries engaged in international railway transport share common problems:

- Delays of wagons at border stations;
- Additional customs checks and lengthy border crossing procedures;
- Lack of standardization in documents required by different countries;
- Bilateral checks from both sides of border crossings;
- Different technical standards for rolling stock;
- Weak infrastructure.

Due to the increase in regional integration and internal trade, railway transport will be more utilized for international transportation. Countries need to harmonize their technical standards, operating rules for transport documents, tariff structures, and wagon exchange rules.

However, there are several obstacles to the efficient transit of trains. Primarily, this concerns the discrepancy between transit transportation indicators in Ukraine and international requirements regarding speed, cargo integrity, continuity, tariffs, and service prices. This leads to increased delivery times and delays in the advancement of international transit trains on Ukrainian railways. The efficiency of organizing international freight transportation significantly depends on the well-coordinated operation of the border transfer station

Developing a set of measures to reduce the duration of wagon idle time at the station is an important factor in improving the operation of Ukraine's transport complex. The advancement time of international trains can be influenced by implementing a decision support system (DSS) at the station. An interactive computer-based decision support system, implemented on the basis of an automated workstation (AWS) for operational personnel, will help improve the process of advancing wagon flows under the conditions of an international transport corridor.

Implementing a DSS will allow selecting the most rational way to pass international trains through the station. By proactively notifying and calculating the passing time, it will enable the realization of priority passage for international trains.