A NEW CONCEPT OF OPERATING MODEL OF RAILWAY
TRANSPORT FOR SINGLE WAGON LOAD AND GROUP DEPOSITS
FOR RAILWAY TRANSPORT OF UKRAINE

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A new concept of operating model of railway transport for single wagon load and group deposits for railway transport of Ukraine.

In the conditions of crisis phenomena with the economy of Ukraine there are structural changes in demand for freight transport by rail for the carrier Ukrainian Railway. Against the background of competition with road transport, carriage and group shipments become uncompetitive and unprofitable for rail transport. The volumes of transportation are reduced and entail a reorientation of railroad customers to motor transport. So, in order to change the situation on the market, it is important to apply a new concept of the operational model of rail transportation for carriage and group shipments. One of the best practices is the organization of single wagon load and group shipments by the carrier company «SBB Cargo» on the Swiss railways.

In 2017, the management of «SBB Sargo» confirmed that the model of organization of single wagon load, is a strategic business of the company. The company has developed the concept of "Wagonload Transport 2017" along with 30 the main shippers. From the middle of December 2016 a new schedule of trains was introduced, which foresees the movement of train formations between the main sorting stations of the country with the division of the day into phases. Formation of wagons and group shipments to trains and their movement on the network takes place on the basis of a decrease in the impact on the peak phases of passenger trains. For freight traffic a new schedule is created with daily three phases (early
phase, peak time, freight traffic). These phases are arranged so that they do not affect the movement of passenger trains in the morning and evening rush hours. In terms of transport time, rail transport is becoming more competitive in comparison with automotive. The new schedule is set as follows way to avoid overloading the rail network. This means that the railway infrastructure will be used much better than before. It will be implemented by the existing system "CIS-Online", which will allow the reservation of a freight train for a place for their own cars.

So, single wagon load and group shipments are becoming more transparent and based on customer requirements, which allows adapting the technology of transportation of the railroad to the growing logistics requirements. The introduction of the above described approach will improve the competitiveness of long distance carriage and group shipments and reduce the risks in the shipping process for the consignor.

References:


ANALYSIS OF DATA MODEL TYPES FOR BIG DATA REPRESENTATION

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The process of building an information model of a region is complicated by the diversity of data models, as well as the presence of different levels of data aggregation. One of the popular technologies for developing territorial management systems is Big Data. Methods of machine learning and data visualization allow you to process and graphically present the results of the analysis of large volumes of data (millions of tuples).

A data model is a collection of tools for describing data structures for an application or class of applications. The data model includes data types, data structures, a system of operations, means for describing constraints. Big Data technologies are associated with the need to process information of various types: structured, semi-structured, unstructured.