

## IMPROVING MEASURES TO INCREASE TRAFFIC SAFETY AT RAILWAY STATIONS

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Among the main tasks to ensure the competitiveness and quality of transport services on the railway, a special place is occupied by compliance with the appropriate level of traffic safety [1]. Constant control and analysis of traffic safety are mandatory components of the work of all structures of Ukrzaliznytsia. According to the analysis of the technology of operation of railway infrastructure facilities, the most important causes of traffic safety violations at railway stations are [2]:

- uncoordinated actions of operational staff;
- incorrectly calculated value of braking of couplings on marshaling yards;
- insufficient fixing of rolling stock on the tracks of station parks;
- obstacles on railway tracks;
- departure of a train on an unprepared route.

To achieve a high level of safety in railway transport, it is necessary to implement effective technical measures and solutions simultaneously with the improvement of legal documents and organizational and preventive measures [3].

The introduction of automated traffic control systems at railway facilities is a modern and relevant means of improving traffic safety at stations through more efficient use of railway infrastructure. The automated control system of shunting work is intended for support of decision-making of operational personnel. By analyzing operational data, it develops a dynamic model of the station, contains information about shunting and train operation, forms dynamic models of dislocation of trains, locomotives and cars on all tracks of the station.

The control system of shunting work makes it possible to report the use of shunting locomotives at the station, taking into account the information recorded by ACC, which, in turn, improves the level of traffic safety.

The biggest effect when using the system can be achieved if it equips all railway stations within the control area of the train dispatcher. The use of satellite navigation of mobile units expands the functionality of the system by tracking shunting locomotives throughout the station. The use of shunting control system allows to increase the level of train safety, streamline the control process, simplify and reduce its cost, helps to improve the quality and reliability of the transportation process.

The introduction of a new management technology of shunting work involves ensuring economic efficiency by reducing rolling stock downtime, reducing the number of damage to rolling stock by improving the efficiency of transport resources. But no less important effect is the increasing of the traffic safety level by reducing losses from erroneous decisions, reducing the time to make operational decisions, increasing their efficiency and timeliness. Such indicators are the basis for the formation of traffic safety in railway transport.

Дієпарура:

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[3] Ohar, O. M. Transport accidents distribution at ukrainian railways according to categories depending on severity of consequences / O.M. Ohar, O.V. Rozsocha, G.V. Shapoval, Y.V. Smachylo // Nauka ta progres transportu. Visnik Dnipropetrovs'kogo natsionalnogo universitetu zaliznichnogo transportu, 2018. - №3 (75). - P. 7-19.