

FORMALIZATION OF THE PROCESS OF ASSESSING THE STATE OF RAILWAY STATION INFRASTRUCTURE

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Recently, railway transport in Ukraine has been operating under conditions of military conflict. The railway infrastructure has suffered significant damage and requires measures for its restoration. Due to the unsatisfactory condition of railway station infrastructure, deviations from the train schedule occur. Additionally, the suboptimal state of railway station infrastructure can lead to emergency situations. Hence, there is a need for research aimed at assessing the state of railway station infrastructure.

The infrastructure of railway stations and the placement of essential devices on them should ensure the smooth movement of wagons and locomotives within the station, the possibility of mechanization and automation of loading and unloading operations, minimal passages for road transport, and more. When developing railway station projects, it is essential to consider isolation of mainline and maneuvering operations, adequate levels of throughput and processing capacity.

The assessment of infrastructure condition should take into account the results of current inspections of station tracks, turnouts, signals, lighting devices, and other elements. It allows identifying urgent technical issues that require prompt resolution.

The evaluation of railway station infrastructure is a top priority task. The unsatisfactory condition of individual elements of the railway station infrastructure hinders the quality and timely execution of train operations. On the other hand, excellent infrastructure does not guarantee the high efficiency of station operations. To ensure reliable and safe train movement through the railway station according to the established schedule, it is necessary to ensure the effective execution of operations outlined by the station's technological process.

Train delays at a railway station can be caused by factors such as the unsatisfactory state of the station's infrastructure, ineffective organization of work, poor condition of the train, and so on. This can lead to disruptions at adjacent stations due to deviations in the train schedule.

To assess the state of railway station infrastructure, it is necessary to compare the actual time taken to perform train operations with the normative time established by the station's technological process. This will help identify the causes of delays in specific elements of the railway station infrastructure and develop a set of measures aimed at addressing them. Therefore, the formalization of the process of assessing railway station infrastructure is a relevant and crucial issue.