

ANALYSIS OF THE METHODS OF TECHNICAL AND TECHNOLOGICAL EVALUATION FOR RAILWAY INFRASTRUCTURE PROJECTS

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The methods of technical and technological evaluation of projects on Ukrainian Railways are, to a large extent, outdated and need to be perfected. Technical and technological evaluation of projects requires a comprehensive study of the object on the model through experiments, as well as improving the information environment, which allows to obtain its full characteristics as a system, and to determine the functional dependence of the parameters of this system and external factors. There are various design solutions and regulatory requirements for the design and operation of railway stations. To determine the required design standards, an analytical method is used, i.e. determining the patterns of design and individual capabilities of the station.

Automation of design systems and development of decision support systems are needed to improve the information environment for project evaluation and design of railway infrastructure. Automated design provides for a high level of resource utilization to develop an effective design solution. The process of automated design of the railway infrastructure object consists of successive stages of formation of the electronic analogue of the drawing in accordance with the norms and requirements for the object. The schemes of railway stations and nodes are considered to be information structures that require, for their implementation, considerable time to carry out the whole complex of design work. The transition to computer-based technologies for the development of station projects results in the appropriate information environment use to provide drawing of the elements of track development.

Thus, the railway infrastructure needs reliable and effective development, namely, the improvement of project evaluation methods using simulation models, technological research of projects with the implementation of computer modeling, the principles of choosing the methods and the technologies, as well as creating a set of intelligent automated analysis systems.

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