

REINFORCEMENT OF SPEED AND HIGH-SPEED RAILWAY LAND PAVEMENT BUILT IN SANDY CONDITIONS

Gali-Askar Rustamovich Khalfin
Muslimakhon Tokhirboevna Yakhyaeva
Shoirakhon Tokhirbaevna Yakhyaeva
(Tashkent State Transport University, Uzbekistan)

Abstract. The article considers a set of tasks and their solutions for the formation and development of the country's railway infrastructure, as well as the factors and conditions that contribute to the creation and development of a high-speed railway network.

Key words: speed and high-speed railways, modern transport system, investment climate, geosynthetic materials, traffic safety of trains.

A set of tasks for the formation and development of the country's railway infrastructure that meets the requirements of international standards and norms in accordance with the technical parameters of high-speed and high-speed traffic on the railways of Uzbekistan, ensuring reliable and safe operation of railways, faster delivery of passengers and goods related to.

The solution of these complex tasks involves the development and implementation of a system of measures aimed at the following goals at all levels of government:

- Improving the competitiveness of the railway company, without which it is unthinkable to increase its share in the market of passenger transport services;
- Ensuring free access to passenger transport services for the general population, including pensioners, schoolchildren, students and other relatively low-income groups;
- Improving the investment climate aimed at the priority development of relatively inexpensive, safe and environmentally friendly modes of passenger transport.

Railway terrain, which is open to external environmental influences (train load and natural-climatic factors), dynamic (time-dependent), has a clear purpose, such as stability, is manageable with sufficient information about its condition according to diagnostic and monitoring results (by making structural, structural, technological and other decisions) is a complex geotechnical system.

The problem of ensuring the stability of the road has become a topical issue for railways around the world as bullet loads and rolling stock move speeds increase, they increasingly lead to deterioration of the main technological parameters of the landfill, especially under conditions of use of loose soils in the main area of the landfill (salinity, loose foundation, high groundwater level).

Railways must ensure safe and smooth movement of trains at the specified maximum speeds in accordance with the strength, stability and condition of the ground and all its elements in accordance with the PTE-TFQ. Land surface facilities (OZP) must provide long-term stability of the elements with maximum speed, rated load density and mass of freight trains.

To this end, one of the most important tasks today is to eliminate the deformations and defects of OZP, to improve the existing structures of the earth's crust, as well as to offer new technologies for the development and strengthening of new ones.

The purpose of the work is to improve the existing structures of the landfill and to develop new and working technologies for its strengthening, as well as to develop practical recommendations for strengthening the landfill of high-speed and high-speed railways [1].

The main objectives of the study are:

- Study of the experience of high-speed and high-speed railways to strengthen the ground (review of methods and technologies)

- Analysis of the physical and technical processes of the construction of the landfill in the process of its restoration and in the conditions of application of weak soils in the main area of the landfill (salinity, weak base, high groundwater level).

- Determining the effectiveness of the use of geosynthetic materials and anti-deformation structures in landfill facilities [1].

- Selection of constructive-technological and organizational solutions for the implementation of the proposed methods.

- Development of practical recommendations for strengthening the surface of high-speed and high-speed railways.

The main factors and conditions that contribute to the creation and development of high-speed rail network in different countries of the world are as follows:

- reducing the time of delivery of passengers and cargo on the road in the form of improving the quality of transport services and attracting new customers;

- increasing the popularity of rail transport, which is ideally suited for the organization of land transport, which is relatively inexpensive, fast, convenient and has minimal impact on the environment;

- less specific energy consumption compared to other types of land transport;

- the possibility of increasing the level of traffic safety of trains by eliminating one-level intersections and designing passenger lines separately from freight lines;

- opportunities for the development of ancillary areas of economic and social activity, such as tourism, construction of new housing, recreation, creation of trade zones [2];

- increasing the diversity of services in the field of public transport services, which, on the one hand, will create new jobs in the service sector, on the other hand, will raise rail transport, the general level of culture to a new, higher level and the development of new services gives an unprecedented scale of motivation.

References:

1. Tajibaev Sh.A. Research on the application of promising ways to strengthen the subgrade of high-speed and high-speed railways of Uzbekistan. (Master's thesis). Tashkent 2016.
2. Ashpiz E.S., A.M. Nikonov, A.I. Hasanov et al. Railway track: Textbook / FGBOU "Training and methodological center for education in railway transport". -544 p. 2013.
3. Olimov, Shirinboy Sharofovich. "THE INNOVATION PROCESS IS A PRIORITY IN THE DEVELOPMENT OF PEDAGOGICAL SCIENCES." (2021).
4. Muzafarovna A. N., Jurayevich J. Q. The role of islam in folk decorative art of Bukhara //Asian Journal of Multidimensional Research (AJMR). – 2020. – T. 9. – №. 5. – C. 347-350.
5. Odilova, M. O. "IMPROVING THE PEDAGOGICAL POTENTIAL OF BIOLOGY TEACHERS USING COMPUTER PROGRAMS." *International Engineering Journal For Research & Development* 5.9 (2020): 4-4.
6. Salimovich, Sharipov Sohob, and Nematova Mohibegim Fazliddinovna. "Dictionaries in Modern Life." *International Journal on Integrated Education* 2.6: 166-168.
7. Bafaevich, A. B., & Baratovna, A. M. (2021). The Importance of Teaching Methods of Fine and Applied Arts. *Middle European Scientific Bulletin*, 9.