

## RAILWAY ACTIVITY IN UZBEKISTAN

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**Abstract:** In the article, the development prospects in the railway sector of our country, the trends of improving the theory of quality in railway transport were studied and considered. The impact of the efficiency and quality of the transportation process on production and living conditions of the population was studied. Proposals were made to improve the economic efficiency of production and economic activity of structural units of railway transport.

**Key words:** highway, road line, high-speed train, aerodynamic, microprocessor, passenger;

During the years of independence, great work was done on the formation of new steel tracks (highways) in Uzbekistan. The Navoi-Uchkuduq-Sultonuvaistog-Nukus railways were built in the Kyzylkum deserts, a combined rail-road bridge across the Amudarya was built, and the Tashguzar-Boysun-Kumkurgan railway was built in difficult mountain conditions. was built.

Important importance is also attached to the modernization of the existing railway network. 2 large investment projects were implemented with the funds of the Asian Development Bank, and the roads were restored on the Tashkent-Samarkand-Bukhara section, and the laying of optical fiber communication lines over 600 km long on the Keles-Bukhara section was completed. Electrification of the Tokmachi-Angren railway line has been completed. The construction of the New Yangiyer-Jizzakh and Yangiyer-Farhod railway lines has been completed.

In 2008, Uzbekistan Railways JSC and Talgo (Spain) purchased 2 high-speed passenger electric trains in order to organize the first high-speed passenger traffic from Tashkent to Samarkand in the region of Central Asia. an agreement was signed.

From October 8, 2011, the high-speed train "Afrosiyob" (manufactured by the Spanish company "Talgo") was launched on the Tashkent-Samarkand-Tashkent route 161/162.

The new high-speed train will run between the cities of Tashkent and Samarkand along with other electric trains serving this route. The high-speed "Afrosiyab" train covers 344 km of railway distance in two hours and fifteen minutes. The maximum speed is 250 km/h.

"Afrosyob" includes 2 locomotives and 9 comfortable wagons:

- 2 VIP class wagons (11 seats in the wagon);
- 2 Business class (26 seats in a carriage);
- 4 economy classes (36 seats in the carriage);
- 1 wagon-bistro

The modern look of the train is given primarily by its aerodynamic design, which is optimized for impact pressure waves and side winds. The length of the electric train is 157 m,



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UIF = 8.2 | SJIF = 5.94

the height is 4 m. All salons are equipped with soft, comfortable reclining seats and a built-in table, as well as a video monitor. All areas of the train are designated non-smoking areas.

All cabins of the carriages are equipped with hangers for clothes and space for large luggage, as well as traditional luggage shelves. The carriage is equipped with the necessary conditions for disabled people, and the third carriage also has special handrails with a push button to call a railway employee to place a wheelchair. In the train area, the floors are at the same height, which helps to transport a wheelchair.

Electrification of Uzbekistan's railways on the basis of direct current began in 1971. One of the last projects was the electrification of the Tokymachi-Angren railway section, which was implemented in 2010. The length of the electrified sections reached 1601 km due to the commissioning of the specified railway section.

The purpose of the project was to change the existing diesel traction on this section to AC electric traction, which will lead to the completion of the transition of all railway lines in the Tashkent region to modern technologies.

New technologies - SCADA remote control system, communication system, traction substations, microprocessor centralization system, axle and telecommunication electronic computing systems have been implemented throughout the site. The power supply system was built taking into account the movement of trains at a speed of up to 160 km per hour.

During construction, 3 bridges with a total length of 265 m, 2258 electric towers, electric substations, 6 buildings and structures for duty stations and centralized power supply posts equipped with modern equipment and control devices to ensure train traffic safety was established.

Currently, the investment projects of electrification of the Marokand-Karshi, Karshi-Termiz railway sections, construction of the newly electrified Angren-Pop line have been implemented.

On June 22, 2016, the official opening ceremony of the implementation of a large and promising project of cooperation between Uzbekistan and China - the Angren-Pop electrified railway and the Kamchik tunnel took place.

One of the most important aspects of the official opening ceremony of Angren-Pop electrified railway and Kamchik tunnel was the participation of the First President of the Republic of Uzbekistan Islam Karimov and the President of the People's Republic of China Xi Jinping. The whole world watched as the leaders of the two world-famous countries pressed a special button to turn on the semaphore, allowing the "Uzbekistan" passenger train to pass through the Kamchik tunnel.

The purpose of the construction of the Angren-Pop electrified railway line is not only to create the possibility of freight and passenger transportation by rail between the regions of the Fergana Valley and other regions of our country, but also China - Central Asia - Europe. it was intended to be the most important link of the new international transit rail corridor. A 19.2-kilometer tunnel was built in the section of the 123.1-kilometer Angren-Pop railway that passed through Kamchik Pass. During these construction processes, Chinese experts admired the potential of Uzbek railway workers, and Uzbeks praised the skills of the Chinese. The great victory of labor was achieved ahead of time due to the hard work and cooperation of both sides.

In 2017, during his state visit to the People's Republic of China, President Shavkat Mirziyoyev met with representatives of Chinese business circles. It was at this conference that



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infrastructure.

the head of state expressed special gratitude to the Chinese company "China Railway Tunnel Group" for the successful construction of the Kamchik pass of the Angren-Pop railway. Also, within the framework of this visit, effective agreements were reached between the joint-stock company "Uzbekistan Railways" and the leading construction companies of the PRC regarding the development of many areas, in particular, the transport and communication

Today, modern high-speed passenger trains serve the population daily on the Tashkent-Andijan-Tashkent route through this railway. Two passenger trains a week on the route Andijan - Bukhara - Andijan, once a week on the routes Andijan - Urganch - Andijan, Andijan - Moscow - Andijan. In addition, dozens of cargo trains pass through the Angren-Pop electrified railway every day, delivering goods to their destination.

In particular, more than 413 thousand 162 passengers were served by this railway, and 7395.6 thousand tons of cargo were transported. Also, 1718 new jobs were created.

One of the important issues is the implementation of a number of projects for the renewal of the community's locomotive fleets, passenger and freight cars. The serial production of passenger and freight wagons was mastered at the enterprises of JSC "Uzbekistan Railways". These are, in particular, compartment wagons equipped with an aircooling device, the most popular types of freight wagons - closed, tankers for oil products, semi-wagons, etc.

In addition, great importance is attached to the localization of the production of spare parts, components and parts for railway infrastructure and rolling stock and the development of import substitution.

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