

ORGANIZATION OF THE MOVEMENT OF SUBURBAN ELECTROPOIESIS ON SINGLE-ZONE PLOTS

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ABSTRACT

To bring passenger transportation to the European level as much as possible to increase the interest of tourists visiting Uzbekistan to railway transport and to meet the exteriors of passengers at "Uzbek Railways" JSC and provide them with quality service is now a modern requirement. This article describes the behavior of the suburban electropoiesis, which serves on single-zone plots.

Key words: *Suburban electropoiesis, metro, tram, station duty, zone, movement of trains*

Passenger transport is of great socio-economic importance as it plays an important role in life support in society. Many modes of transport are involved in processes related to passenger transportation, namely: rail, road, air, sea, river and others. The optimal distances of the service radius of each of them will depend on several factors. One of the main goals of these transportations is to maximize the demand of the population for transportation through the efficient and low-cost use of technical means.

The demand for passenger traffic is characterized by an increase in passenger traffic within the city, between major cities and beyond. Integrated public transport, including rail transport, subways, trams and buses (even private transport bicycles or electric cars) are used in urban and regional markets not only for public purposes, but also for recreation and leisure, which in turn is used in the transport market. leads to an increase in the share of passenger traffic. This can be caused by an imbalance.

The main technical means of passenger transport - rolling stock, automation, telemechanics, road and other devices must have a high level of reliability [1].

Given that many railway facilities and equipment serve both passenger and freight traffic, the optimal parameters of their operating technologies are selected for both types of traffic. The technical means of passenger service provide high speed (ie 160 km / h in the near future, and then up to 200 km / h on separate sections), traffic safety, optimal weight of passenger and suburban trains, ease of passenger trains and their service at railway stations. ensure the accuracy of train data (information on train arrival and departure times), the minimum time required for passengers to re-board the train, and at the same time the high efficiency and cost-effectiveness of passenger transport [2].

The role of warnings given to passenger trains is unique, so the warnings should be given by road workers at least 3 hours before the time of validity by the power supply, and the duty officers send them to the train drivers [3].

The T-J and X-T stops of the suburban electric train and the distances between them are of great importance. The amount of traffic between stations is determined by the following formula based on the volume of passenger traffic in the zone and the accepted capacity of the passenger train:

The number of zones is calculated by formula 1:

$$K = \Pi \sqrt{\frac{A \tau}{a_p}}, \text{ зона} \quad (1)$$

here Π – the number of geographic stops at the site. $\Pi = 23$

$A_{\dot{y}p}$ – the average passenger turnover passing through a stoppoint or intermediate station at rush hour.

$$A_{\dot{y}p} = \frac{A_{np} * Y}{\Pi * 100}, \text{ passenger}$$

$A_{\dot{y}p}$ The value of is calculated from formula 2

$$A_{\dot{y}p}^{cp} = \frac{7500 * 12}{100 * 23} = 40 \text{ passenger}$$

here γ – in% of daily passenger turnover during peak hours

τ - The time taken for the train to stop, accelerate and decelerate at each stop is calculated by formula 3.

$$(3) \quad \tau = \tau_p + \tau_s + t_{cr}$$

$$\tau = 3_{\text{мин}} = 0,05 \text{ hour}$$

a_p – the calculated capacity of the train is calculated from formula 4.

$$a_p = \frac{a_{\text{мин}} + a_{\text{маx}}}{2}, \text{ passenger} \quad (4)$$

$a_{\text{мин}}$ – the number of seats on the train;

$a_{\text{маx}}$ – the maximum number of passengers in a train car, except for the number of seats on the train.

$$a_p = 760 \text{ passenger}$$

following:

$$K = 1,17 \approx 1_{\text{зона}}$$

The results of the calculations and the movement in the zone are shown in Figure 1:

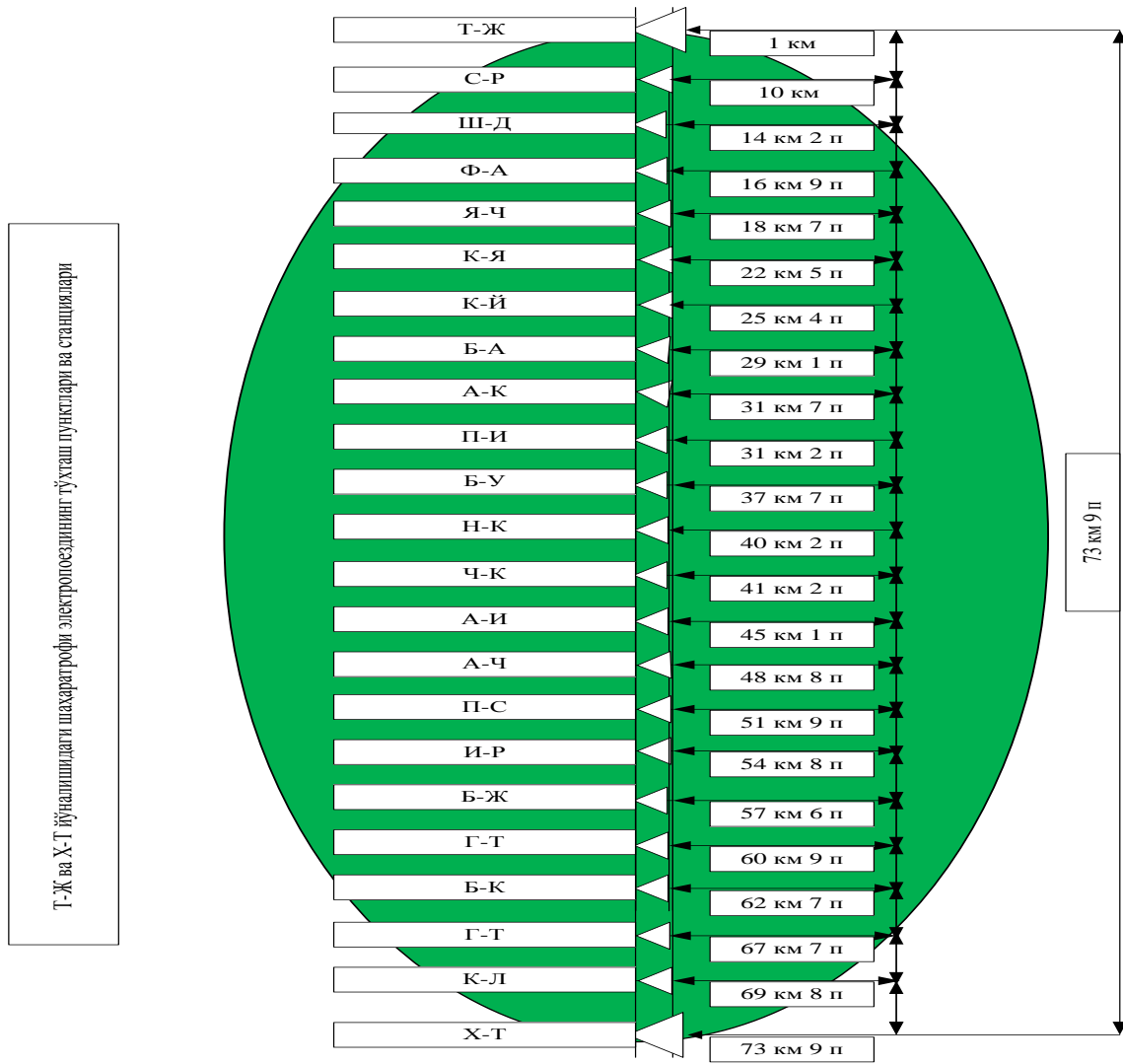


Figure 1. T-J and X-T suburban electric train stops and stations

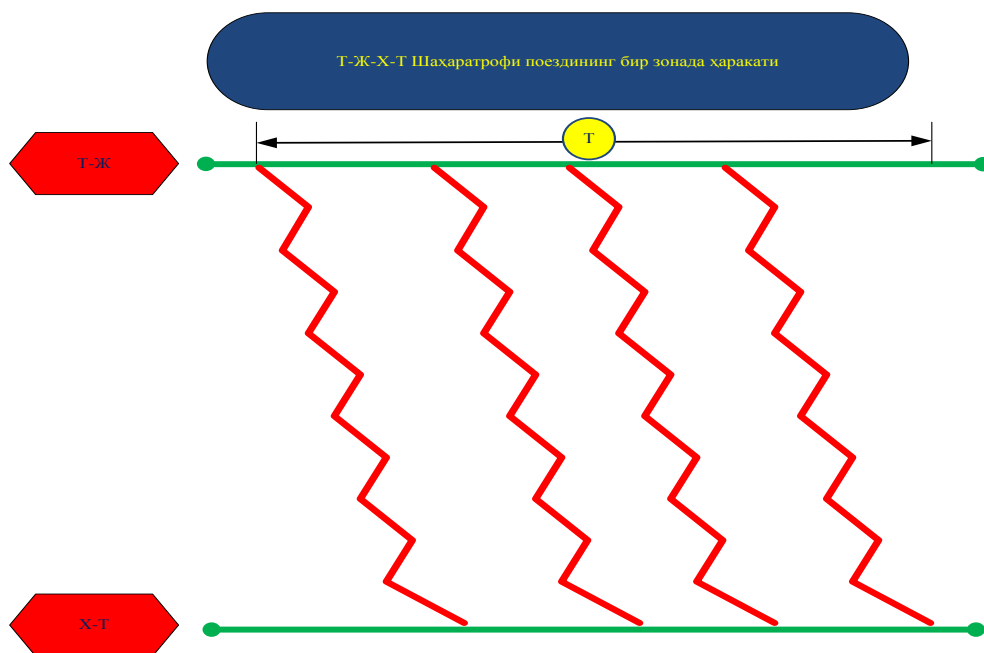


Figure 2. The movement of a T-J-X-T suburban train in a single zone.

In conclusion, it can be said that the ongoing reforms in passenger transport of JSC "Uzbekistan Railways" are bearing fruit. The above calculations show that the total length of the suburban electric train on the route "T-J and X-T" is 73.9 km. This electric train travels in its own direction every day and in turn serves the population by bringing passengers closer and closer, in some cases requiring the automation of warnings for trains to arrive on time. It is known that in order to increase the coverage of passenger transport services, reducing the travel time of trains, improving the quality of services is a modern requirement. The solution to reduce travel time is to increase the number of trains by purchasing new electric trains, as well as moving from station T-J to station X-T.

We will be able to increase the number of passengers by increasing the schedule of passenger-intensive trains. The newly purchased electric train will save energy. Most importantly, it will increase passenger traffic and, in turn, affect the growth of the economy of JSC "Uzbekistan Railways".

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