

The study and analysis of the single order market is a complex process due to the presence of a large number of random factors. For the same reason, the process of servicing such orders is a significant difficulty. This study is useful for finding a rational strategy for the carrier's behavior, because it reflects which areas of transportation are attractive, ordinary and unattractive.

THE UNIFIED SYSTEM OF THE FARE PAYMENT IN ISTANBUL

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The world is developing quite rashly. Every year it moves to a new level of improvement. Now our life can't be imagined without technologies e.g. bank cards. Everyone can leave home with the bank card and solve any problem without cash on you.

Every single day the world economy means to withdraw cash from everyday life. It helps to stabilize economic processes in countries. Paying by card allows excepting the height of the informal economy. It is also true for transport. The unified system of the fare payment has been introduced in Ukraine recently. It allows taking into account everyday passenger traffic and filling the local budget. Using card people can pay for all means of public transport: tram, trolley, underground, bus. The government of the other cities also includes cable car and local train. While such type of system was launched in Ukraine only in 2017 and keeps developing, in Istanbul it has been working since 2009.

Istanbul public transport is highly developed. It covers an area of more than 5700 square kilometers. The public transport includes buses, trams, dolmuş minibuses, underground, local trains, ropeway, cable cars and ferries.

As I mentioned before the unified system of the fare payment works in Istanbul very well. The public transport is part of the IETT - Istanbul Electric Tram and Tunnel Operations. This is an organization, which provides public transport services in Istanbul and is run by Istanbul municipality.

In Istanbul the public transport payment is made with a once-only e-ticket or a special card – Istanbulkart. Paying in cash is only allowed on dolmuşes, taxi, buses Havaist (the new airport of Istanbul) and Havabus (Sabiha Gokcen International Airport) and the ferries of the private companies.

There are four types of Istanbulkart:

- ANONIM Istanbulkart – You must pay for full rate. This card is mostly used by tourists;
- MAVI Istanbulkart - monthly subscription;
- INDIRIMLI Istanbulkart – special reduced fares on public transport for students, teachers, pensioners who are over 60 years old;
- UCRETSIZ Istanbulkart - for disabled people, pensioners who are over 65 years old, civil servants.

The main advantage of the Istanbulkart is the fare payment by this card is lower than by the once-only e-ticket, because there are special reduced fares for Istanbulkart users. For example, one transport trips on tram, underground, bus, cablecar, state ferry costs 3,5 lira or 9,69 hryvnias. When you transfer to other transport in two hours, you will pay less. By the way, the transfer to the other line of the underground is transfer too.

- one transfer – 6,92 hryvnias;
- two transfers – 5,26 hryvnias;
- three – five transfers – 3,32 hryvnias.

It is quite comfortable. For instance, you take a bus to get to Rumeli Fortress and pay for full rate. You need one hour to go around the sight. Then you take a return bus and pay less, because you have had a transfer. This system reduces the fare payment substantially.

Considering that Istanbul public transport transitioned to the electronic fare payment system completely, Istanbulkarts' spread is a well working process. Special machines and terminals are used for buying the cards and located at every turn. There are two types of the machines – a yellow terminal, which is called “Biletmatik” and a blue terminal, which is called “Istanbulkart”. I would like to explain how to buy the card using the yellow terminal. Firstly, you should choose language.

Then you need to push “Istanbulkart-13 TL” in the menu (since September 2021 the price of the Istanbulart is 13 lira – 34, 09 hryvnias). Confirm your actions. Now you can take away your card. It should be pointed out the yellow terminal doesn't give change unlike the blue terminal. If you insert large bills into validator, the change will be transferred on the card.

Because of the last events related to spreading Covid-19, HES-code is used all over Turkey. This is a personal code is introduced by Istanbul Ministry of Health to keep track of infected people. This is necessary to connect the code with the Istanbulkart since January 15, 2021. Otherwise all cards won't work.

The Istanbulkart stopped being a simple travel ticket for a long time. The technical capabilities of the card allow using it for making contactless payment in different spheres of life: in stores and malls, to enter museums and entertaining centers, in restaurants, online stores, parking, beaches etc. This is pretty small investment with unlimited serviceable life. Even creditcards are changed more often than Istanbulkarts.

The unified system of the fare payment creates comfort conditions for the citizens of Istanbul. It helps to save money and move with the times. Ukraine is also moving in this direction and rather quickly. I think in Ukraine this system will be developed at this level eventually.