



Bus Station Management System

The Bus Station Management System consists of the following components:

- UNIKART program package for ticketing
- Access control for the platform
- Automatic vehicle identification

Software package for ticketing

In order to obtain complete automation of the bus station operations we have developed software package for tickets booking and sales. The software package can be customized according to the certain needs of the users.

The UNIKART software package enables centralized sales of bus tickets in suburban and intercity bus traffic. The managing of the platform is the special feature of this software. The passengers control is conducted on the departure and the bus control on the departure and arrival gates.

Unikart automate following working processes of the bus station:

- Booking and ticketing in intercity traffic for up to 60 days in advance

- Ticketing and issuing of monthly tickets in suburban traffic
- Complaint and cancellation of the wrongly issued tickets
- Collection of the platform fare and the drivers testimony issuing
- Automated records of the vehicle departures and arrivals – dairies of buses departures and arrivals
- Full control and records of passengers' entrance to the platform provided by the tripod turnstile, which minimize the abuse
- Two level system security – resources and data levels
- Multi-passport protection from abuse and unauthorized access
- Easy data base management (management of the time tables, price lists, daily and monthly calculations, bus activation, early departures etc.).

The platform access control

The access control to the platform is provided by the tripod turnstile equipped with the bar code or RFID cards' reader.

The software for ticketing enters the serial number of each bus ticket sold on the counter into the data base. The serial number is being printed on the ticket as a bar code, at the moment of sale or during its production in the pressroom. The software that manages the operations of the turnstile accesses to the data base which contains numbers of the sold tickets over the computer network.

Passengers use bought tickets to enter the platform. Employees enter the platform using their RFID cards.

Tripod turnstiles ITGbtt-0x are placed on the gates so that people can pass only by foot, one at the time.



Automatic vehicle identification

Presented system offers automatic vehicle identification in the moment when the vehicle passes near the barrier on the entrance or exit of the garage facilities. The RFID system enables identification of the approaching vehicle without a need for a vehicle to stop or driver to open the window. Thus, the throughput is significantly increased since the vehicles are not retained on the barrier.

This is possible because the transponder installed on the vehicle sends the RF signal which carries the information about its serial number. The reader detects the signal and compares the received data with the one in the data base. Afterwards, depending on whether the entrance is granted or not, the reader sends the appropriate command to the barrier. The data concerning time, date, number of barrier and the ID of the vehicle are being archived into the computer.