



CASE HISTORY

Stalexport Autostrady Malopolska S.A.

Aitek's software for Polish motorways

The 61-kilometres motorway connecting Katowice to Krakow is a major gateway to the Eastern European markets. Running this heavily trafficked route requires high-standard technology and efficient automation.



An all-Italian project

In order to meet customer needs, Stalexport Autostrady Malopolska S.A., a motorway operator company subsidiary of the Italian holding Atlantia, has met customer needs by revamping toll collection systems and meeting EU standard compliant.

A leader in toll collection systems design and a technology spin-off of the Atlantia holding, Autostrade Tech have contributed to the project with system design, civil works and system centre development.

Aitek added value

A +20-year partnership with the Autostrade group for the development of the toll collection system along 2,700 kms of Italian motorways means that Autostrade Tech have chosen to rely on Aitek's know-how for the design of the toll collection software at the Krakow-Balice and Katowice-Brzezinkowice toll plazas.



Toll lane software

Owned by Autostrade Tech, Polsky toll-lane software is a complex array of procedures and applications for the daily management of thousands of transits and payments. Aitek are proud to take care of the maintenance and upgrade of Polsky.

Twenty toll-lanes at every toll plaza record an average of 87,000 daily payments (*source: Stalexport, 2016*). Autostrade Tech and Aitek have jointly designed a software platform that is able to support and accommodate any payment type, from OBU devices, cash (in zloty, euro or US dollar), to credit cards/fuel cards and RFID-supported rechargeable debit cards (managed by contactless-POS).

This toll-lane software meets European needs for interoperability by allowing drivers from different countries (including France and Italy) to make e-toll payments through on-board units purchased in their country of origin.

This solution integrates a set of software modules, each performing a specific task within the transit and toll-payment process. Modules range from driver devices controlling field-devices (detection and classification sensors, barriers, traffic lights and user displays) to interfacing with on-board e-toll units (OBUs), to the management of payments and shift timetabling duties. Each module is linked via IP to the centre and to the other modules for better process control and faster data transfer.

For each out-bound vehicle, the system stores data and images acquired from IP video-cameras located on each toll lane. Transit messages and data on takings are automatically forwarded to the Control Centre, where they are processed for traffic statistics (subdivided by vehicle type or time interval) or general administration purposes (takings subdivided by operator, shift-work turnover, time interval and payment type).

Not just tolling... web services for drivers

In order to offer outstanding customer care, Autostrade Tech relies on Aitek's web technology and know-how for the design of a Customer Relationship Manager (CRM) for staff use and a Web Portal for customers and end users.

Developed via a bespoke version of the Vtiger open-source software and customized modules for the management of RFID and OBU devices, the CRM is currently in use at the Customer Service Points by the toll plazas in Balice and Brzeczkwice. This application manages customer data, stores Customers Service Point takings subdivided by shift, and interfaces with the invoicing system for all-around best customer relations ranging from transit card top-ups to after sales.

A Wordpress-based web portal allows users to create an account where transit passes may be purchased and topped-up. Customers can also use the portal to check their passes for transit history and residual credit or to purchase new OBU devices and RFID cards.



Main functionalities

- 40 toll-lanes at two toll-plazas
- +87,000 daily payments
- Payment types: cash, OBU devices, to credit cards/fuel cards and RFID-supported rechargeable debit cards
- Real time transit data acquisition for statistics
- Customer Relationship Manager for staff use
- Web portal for customer services





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