

The MOSY* system creates intelligent police cars.

E-government in practice with help of Axis IP cameras.



Organization:
Ministry of Interior of
Slovak Republic

Location:
Slovak Republic

Industry segment:
Government

Application:
Safety and security,
remote monitoring

Axis partner:
Soitron s.r.o.

Mission

The Ministry of Interior of the Slovak Republic "National electronic vehicle registration services" project (abbreviated as NEV), also known as "intelligent police cars", is a comprehensive solution that contributes to greater property protection and greater security. As part of this project, police cars in Slovakia have gradually been equipped with special computer equipment, including cameras. The Ministry of Interior announced a tender won by Soitron s.r.o. Within 3 years, it has been applied to 2,380 police cars, while a complete camera system solution was delivered to 780 vehicles.

Solution

The experiences with the NEV pilot project have shown that deploying and integrating new technologies, especially for police cars, may be difficult, so Soitron has come up with its own new MOSY* system that addresses this issue in a comprehensive way. MOSY* provides a uniform modular platform with all the latest technologies that may be quickly, easily, and safely integrated into any police vehicle.

Result

Cameras combined with the m*Patrol application perform several functions – from recording incidents around the vehicle to car license plate scanning and continuous searching of police databases to help with improved detection of stolen vehicles, for example. If a camera scans a stolen car's licence plate, the system notifies the patrol in the vehicle. The total daily number of licence plates checked by all the deployed vehicles is a few million. The m*Patrol software also serves for video recording, storing and processing.

“The policeman is supposed to be here for the people and should not be overwhelmed with a lot of administration and writing different reports. By automatically logging in, the policeman may easily and quickly complete their daily summary and daily report. They do not have to spend as much time with administrative work, and can save their working time for the people.”

Jan Gero, director of the MOSY* division at Soitron.

Effective police

The main task is to help the police to resolve problems and to save time on the field patrols, which may then be used for their more effective work. The heart of the hardware part is the specialised Q*BOX “device” developed by Soitron. It includes extensive communication tools and separate intelligent power-management which monitors battery status and automatically manages and, if necessary, also disables all the system parts ensuring that the crew is never prevented from leaving the car due to a loss of energy.

The Q*BOX device has several digital and analog inputs, its own router, two independent Wi-Fi modules, 3G, 4G, GPS, and so on. Additional devices are connected to the Q*BOX, e.g., a document reader, Sky*Tab tablet (Soitron brand), printer and keyboard, and cameras.

Cameras and video recording

Axis network cameras have been used in the solution as they have proven to be one of the most appropriate solutions for the given requirements. In the original solution, AXIS Q1604 Network Cameras with HD resolution and WDR technology were used. Thanks to the WDR, this camera can not only capture an image of outstanding quality on a bright sunny day, but also at night, because it can handle very extreme light conditions, e.g., when one is blinded by the lights of upcoming vehicles, or in bad weather, which is otherwise a big problem.

Modular cameras on the scene

At the present time, however, the modular AXIS F Series solution is also considered. Depending on the configuration, the cameras not only capture the image in front but also behind the vehicle, or inside the rear seat area to monitor a contained person. The software part of the solution is based on the company's m*Patrol application, which is responsible, among other things, for video management, vehicle identification, connection to police databases, screening, communication with the dispatch centre, vehicle location monitoring, as well as vehicle status monitoring.

Smart applications

The software part of the solution is the company's m*Patrol application, which can also run on mobile devices. The software further provides communication and the exchange of messages among mobile units and the dispatch center, as well as crew navigation, fine management, and multiple other features. Its job is to help the police and save time in the field.

Protection of both the public and police

It is important to mention that the solution is also a major anti-corruption measure that protects both citizens and the police themselves in performing the service. Thanks to the cameras, some interesting cases have already been solved. It has, for example, identified a policeman brutally beating a female driver of an escaping vehicle after a chase, demonstrating that the system also protects people from dishonest policemen. Policemen also used collected data with licence plate numbers scanned in the vicinity of several criminal offences to track offenders (using so-called Big Data in practice).

The space for different system extensions is still open. Today, the police have a very powerful tool that makes their field work more effective and significantly helps them meet their duties. The camera and software options are still open.

About Soitron s.r.o.

Soitron, s.r.o. has been operating on the European IT market for more than 26 years. The Company's philosophy is to continually move forward, and this is why it is the leader in introducing unique technologies and innovative solutions. Soitron offers its clients solutions and services in the field of IT infrastructure, communications solutions, IT security, IT services and outsourcing, cloud solutions, applications, and IT consulting. Its product portfolio includes, among other things, solutions for intelligent police cars that Soitron offers under its MOSY brand name. Soitron has subsidiaries in seven countries – Slovakia, United Kingdom, Czech Republic, Bulgaria, Romania, Poland, and Turkey. The annual turnover of Soitron, s.r.o. exceeded EUR 51 million in 2016, and the Soitron Group turnover exceeded EUR 122 mil.



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