

Preventing crime in smaller towns and municipalities without external funding.

Sokolnice Municipality takes active approach against crime with tailored surveillance system using Axis network cameras.



Organization:
Sokolnice Municipality

Location:
Czech Republic

Industry segment:
City surveillance

Application:
Safety and security, law enforcement, traffic monitoring

Axis partner:
COMIMPEX spol. s.r.o.

Mission

The South Moravian municipality of Sokolnice has decided to build its own surveillance system. The locals have never worked with such technology before. Installation of the surveillance system was top priority for municipal council in field of crime prevention. According to the assignment, the municipal police were to be in charge of the system.

Solution

In Sokolnice, in contrast to some other municipalities that have had some experience with surveillance systems, the project with network cameras was built from scratch. From the technical perspective, a problem with powering outdoor cameras located on street lights was to be resolved. The cameras' task is to transfer footage to a unified storage, which is secured due to personal data protection. The integrator had to find a suitable Internet service provider. The surveillance system takes into account utilization of smart functions, such as license plate recognition.

Result

There are total of 16 cameras operating in Sokolnice. Eight of them are located on the shopping centre building, school facade, parking and scrapyards. Four cameras are located on the facade of the chapel covering each cardinal point and two are at the beginning and two at the end of the municipality. These monitor incoming and outgoing cars. The municipality established a close partnership with the Internet service provider, Vivo Connection, which provides dedicated connectivity for the surveillance system. An agreement with Eon, the electricity provider, has also been concluded. The cameras are powered from a public source and from a back-up battery in case of outages. The recorded video content is gathered in a unified storage within a dedicated network. CxC, a proprietary video management system from Comimpex is used.

“The system is invulnerable since a dedicated network is involved, where all circuits meet in a single protected location.”

Jan Hotovec, Comimpex.

Modern technology monitors traffic

The models deployed in Sokolnice are AXIS P5534, AXIS P3214-VE and AXIS P1425 Network Cameras. These are located in the town center on the school, church, parking place, as well as outlying scrapyards. Because this is a pass-through municipality, town administration has opted to install four cameras for traffic monitoring, two at the entry and two at the end of the municipality. AXIS Q1604, featuring an excellent picture and night vision thanks to supplementary lighting, are equipped with licence plate recognition software. However, this LPR function is still in development and preliminary testing. “For this purpose, we are building a connection to the database of stolen cars,” Jan Hotovec from Comimpex elaborates on the plans. The camera will identify a moving car and record its licence plate. A text format of the license plate is generated from the image, which is then compared with the database of stolen cars. Everything is done automatically and about once a day the collected data are reported. After approval and commissioning of the system, the report should also be automatically sent to the police through a selected channel. They will then evaluate the usefulness of the recording for further investigation at their discretion.

Crime prevention: An active approach

Comimpex has completely designed the surveillance system solution, including the optical cabling infrastructure. Usually, all projects are very similar: Upon consultation with the municipality administration and mandated personnel, locations that are problematic in terms of vandalism or due to a potential threat of mugging or theft are identified and equipped with cameras. The surveillance system should help reduce vandalism, such as damaging building facades, damaging shop windows, as well as crime such as thefts, including from cars parked on the town square.

A prominent example is the ransacking of scrapyards, as thefts of metals and also trespassing on these premises located outside the centre has happened. The operator can search within the system in a particular timeframe and at the same time use the function of up to six times playback speed to facilitate searching. Thus the system may be used for purposes of evidentiary procedure, e.g., in case of petty thefts or damage to property. Similarly to other cases, the surveillance system was funded from the town budget as an investment, based on a decision of the municipality council. The municipality did not utilize other sources for funding, such as a variety of public funds.

Energy and Internet connection is a must

Sokolnice addresses independent powering also in the field of energy provision. In accordance with an already tested model, e.g., in the Mokra-Horakov municipality, an agreement with energy provider Eon, which provides all-day delivery of energy to lampposts, was concluded. During the process of surveillance system installation, before connection of the cameras to the grid, the network cameras were recharged using solar panels. This, of course, involved only remote areas, such as secondary raw material storage (ecological storage) or entrance and exit to the municipality.

Close cooperation also takes place with the local Internet service provider, Vivo Connection, which provides connectivity through their dedicated optical network. The ISP always provides an access point with all the necessary parameters in a particular location. This solution has the advantage that sensitive data, e.g., with personal information, do not pass through public networks and their abuse is not a threat.



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