The municipality of Sliven implements Axis network cameras to provide a safer city environment.

Video surveillance system provides municipality's security company with the necessary tools for effective crime prevention and rapid reaction possibilities.

Organization:
Sliven municipality

Location:
Sliven, Bulgaria

Industry segment:
City surveillance

Application:
Ensuring a safer urban environment

Axis partners:
Solytron, Video Component Bulgaria, NetAvis

Mission

In 2007, the Municipality of Sliven, Bulgaria, started the implementation of a strategic video surveillance project: 24x7 monitoring of all places of key importance on the territory of the city, to be completed by 2011. This project is a vital part of the local authorities' strategy for safe city environment and a higher standard of life for its citizens.

The video surveillance system is aimed to arm the security company, owned by the local municipality, with powerful tools for effective protective actions:

> Crime prevention
> Rapid reaction in case of incidents – 24x7 monitoring gives the supervisor an opportunity for immediate connection to the police, fire brigade or first aid services, as soon as an incident is detected
> Protection of municipality property, e.g. recently renovated school facilities

The key requirements for the video surveillance system are: extreme reliability of the overall solution, excellent picture quality and capability to support advanced software applications (e.g. vehicle registration plates' recognition).

Solution

The Municipality of Sliven assigned the project implementation, which includes design, installation, set-up and maintenance of the video surveillance, to VIDEO COMPONENTS BULGARIA (www.vcbulgaria.com) - a company specialized in IP-based video surveillance solutions with more than 14 years history in designing, installing and maintaining video surveillance systems. The company is a member of a Bulgarian-German group, who is the main supplier of such systems for the REWE supermarkets in Germany.

AXIS COMMUNICATIONS

"My colleagues from the security department were very careful when choosing both equipment and a professional company to install and maintain the system. Now we are sure that Axis was the right choice – the image quality is excellent and the general system performance perfectly meets our expectations."

Mr. Jordan Lechkov, Sliven's mayor.

An IP-based solution was chosen for this project in order to build a modern hardware platform, which provides both high image quality (no sensitive analog video signal transmission, no video amplifiers needed for the long connections, much less sensitivity to external interferences) and various options for data collection, processing and storage delivered by the digital content.

VIDEO COMPONENTS have designed a scalable solution based on Axis network cameras. The video feeds from the cameras are transmitted by fiber optic cabling and are received in the main command center to be displayed on a set of monitors and recorded by a specially designed video storage solution: fully reserved video servers, Super Micro and external storage disk arrays managed by LSI RAID controller. NETAVIS video surveillance management software is used for the management and monitoring.

Result

The first phase of the project included monitoring of several key city areas – all entrances and exits, the local market, all major crossroads in the city center, two schools and a social services' residential complex. This step of the system implementation was completed successfully in 2007 and the security team command center has already full visual access to key city areas. Sixty five cameras in total were installed around the town – forty eight AXIS 211, ten AXIS 211M, six AXIS 223M Network Cameras and one AXIS 232D+ Network Dome Camera.

The system is fully operational and has demonstrated excellent functionality, performance and reliability:
> Multiple cameras live-view for online monitoring
> Excellent image quality with sharp details, both in standard and max zoom lens mode, delivered by Axis megapixel cameras
> Video recording (including automatic recording with pre-set time)
> Intelligent programmable system for motion detection
> Video/image export in protected file format to be used for evidences in trials

> Moving objects counter for preliminary set areas – to be used for statistical purposes and traffic analysis
> Full records back-up for 14 days period
In 2008 the system's extension continues with the installation of more cameras and more disk space for enhanced storage capacity to reach 100 TB in total.

State-of-the-art IT technology for safer urban environment

Modern digital video surveillance technologies bring new opportunities for the security experts – not only remote live monitoring and database search of video recordings, but also additional functionality based on the digital format of the information. For example, automatic vehicle registration plates' recognition is available today and human face recognition is coming tomorrow. Nowadays, it is easy to connect network cameras to an existing IT infrastructure and to benefit from high image quality and information transfer reliability in any local or metropolitan area network, as well as globally through the Internet. Thus network camera installations can help both the city authorities and the local police to be much more effective in crime prevention, criminals' tracing and saving of human lives, in case of any accident detected. The Municipality of Sliven and the city mayor are pioneers in establishing a special municipality-owned security company, armed with modern video surveillance systems to protect both citizens and municipal property.

"The safety and well-being of our citizens is the most important thing. Therefore, together with infrastructure improvement investments and social activities, Sliven Municipality puts a lot of effort toward preventing crimes, and to guarantee fast notification to the emergency services, whether it would be the police, an ambulance or the fire brigade, in case of any accidents detected," said Mr. Jordan Lechkov, Sliven's mayor. "My colleagues from the security department were very careful when choosing both equipment and a professional company to install and maintain the system. Now we are sure that Axis was the right choice – the image quality is excellent and the general system performance perfectly meets our expectations."