Keeping an eye on suburban crime.

Suburban Anti-Crime Initiative installs network video monitoring system.

Organization:
Cingulum Security
Services

Location:
Johannesburg,
South Africa

Industry segment:
City surveillance

Application:
Pro-active approach
to security and crime
prevention

Mission

Four suburbs comprising 900 households in the north of Johannesburg, South Africa, wanted to reduce crime in the area and improve the effectiveness of the security patrols. They needed a solution that would provide early warning of potential criminal activity so they could move from a reactive to a preventative strategy.

Solution

Cingulum Security Services, the company contracted by the home owners, installed and now manages a network of 32 Axis network cameras. The cameras are strategically placed to cover the main access points and areas of higher security risk. These are monitored from a central control room which is in permanent radio contact with armed response teams and static guards who are alerted to suspicious activity.

Result

Rapid response to suspicious movements has made the criminal element aware that they are being monitored. Residents have experienced a reduction in incidents and feel more secure in their homes.

AXIS®
COMMUNICATIONS

30776/EN/E2/0802

"Response means the battle has already been lost. The war against crime is necessitating a more proactive approach, with more emphasis on early detection and prevention of crime."

Geoff Schapiro, Director, Cingulum Security Services.

Pro-active security

The surveillance system forms the backbone of what Cingulum term a Tactical Intervention Programme.

"To move past response to early detection and prevention of crime, you need field intelligence, and that is what the cameras give us," says Geoff Schapiro, Director of Cingulum Security. "Video surveillance has great advantages. Technology does not fall asleep on duty or take lunch and tea breaks. It's in action 24/7."

The 24/7 control room has three operators on duty rotating functions on a 15-minute basis. They are trained to monitor the screens for suspicious activity and react to radio requests from the field personnel to track vehicles and pedestrians.

As there is constant activity on the cameras during the day, most of the monitoring is triggered by guards; at night, when activity dies down, motion detection is activated to highlight activity for the operators. The constant communication between the control room and field personnel makes for highly effective team management.

The cameras used are AXIS 221 Day & Night Network Cameras that can operate in low light conditions, producing colour images down to 0.65 lux and automatically switch to mono for operation down to 0.08 lux. In practice, available street lighting is usually sufficient for good quality color images.

Cameras covering public areas operate at VGA resolution (640x480) using Motion JPEG for best quality. The images are generally good enough to read licence plates: the control room works closely with the South African Police Service and can perform real-time checks on registration numbers to identify immediately whether a vehicle is stolen or has false plates.

"Using IP simplifies the system and so reduces the number of points of failure. Transmitting IP over long distances without loss of quality is easy, uses common inexpensive technology and is simple to route to different places as needed. The cameras are robust and come back on line after a power failure without human intervention. Best of all, the video is directly transmitted to the control room – having no tapes or spinning disks in the field ensures reliability and prevent criminals stealing the evidence."

IP lowers TCO

The cameras are connected to the control room over line-of-sight (LOS) microwave, or ADSL, with 16 cameras on each system. Images are transmitted at 4 to 6 fps over LOS, 2 to 4 fps over ADSL. Using standard network elements made for a simpler design and lower Total Cost of Ownership (TCO) that far outweighs the higher cost of network cameras. "Unquestionably, IP is the future."

AXIS ®
COMMUNICATIONS