CASE STUDY

Axis cameras protect perimeter of White Shore Village.

The village's perimeter video surveillance system significantly improves safety and reduces number of security personnel needed.

Organization:
Belyi Bereg
(White Shore) Village

Location:
Moscow, Russia

Application:
Perimeter security

Axis partner:
UNIMAX, ITV

Mission

The client requested the design and installation of a highly reliable, robust perimeter video surveillance system to improve security at the site and reduce the number of security personnel needed to patrol the village perimeter.

Solution

Given the long perimeter and the client's specifications for detailed observation of sites within the surveillance area, Axis' partner, UNIMAX decided to install an IP video surveillance system using Axis network cameras with 3 megapixel resolution. A dedicated fiber optic cable infrastructure was developed to transfer video data over a large distance. Special all-weather cabinets made by UNIMAX were installed along the perimeter to protect network equipment.

Result

In the end, only 40 network cameras were needed to ensure surveillance along the rather long perimeter sections; this resulted in significant cost savings in installation work. The new system significantly improved the efficiency of the site security service and reduced the number of security personnel for around-the-clock patrols. The system is expected to pay for itself in savings in 2 years.

AXIS COMMUNICATIONS

53760/EN/R2/1311

"The video surveillance system we've installed using Axis network equipment has increased our level of security, saved money, and improved the competitiveness of our village in the eyes of both current and potential residents. We see no reason to doubt that installing this system will be beneficial at similar sites."

Vitaly Alekseevich Kalashnikov, Telecommunications Operation Manager.

Basis for installed IP surveillance system

White Shore Village is located on the beautiful shore of the Moscow River, 16 km from Moscow. The village plan takes into account the local landscape, natural wooded areas, and bodies of water, and constitutes over 50 hectares (500,000 square meters). The village administration has always paid special attention to the comfort and safety of the village residents (both security and property). Protection of the perimeter is one of the main objectives in ensuring the safety of any gated residential complex. There are various approaches to perimeter security, but one of the most effective is to install a video surveillance system.

High resolution allowed installation of cameras relatively far apart, thereby saving costs on installation work, network infrastructure, materials, and so on. The cost estimate for the White Shore Village video surveillance system shows that the system is expected to pay for itself in 2 years, and this is just from the direct savings of reducing the perimeter patrol personnel.

Project features

In order to ensure high image detail, AXIS P1346-E Network Cameras were used for security monitors. These cameras can observe what is going on along the village perimeter at any time of day or night. Part of the village boundary runs along the open shore of the Moscow River. AXIS Q6035-E Dome Network Cameras are used to monitor wide, open sections of the perimeter. The cameras have IP66 protection and operate over a temperature range of –40 °C to 50 °C, so they can successfully function even in Russia's harsh winters (as shown by numerous successful installations).

Data from the cameras is transmitted to the system server using fiber optic cables. This network can transfer data over several kilometers without any loss or distortion. Switches along the perimeter are located in insulated cabinets with an automated microclimate control system. Data on the operation of each cabinet is transmitted to the security station, where the operation of microclimate control actuators can be continuously monitored. This means the system can quickly react to abnormal situations to avoid loss of the system segment and failure of expensive facility equipment.

The stationary equipment in the project consists of VIDEOMAX servers controlled by Intellect software from ITV. All information from the cameras is displayed on 8 monitors. The security tactics and information display algorithm were designed to make operating the system as easy as possible.