# Axis cameras at the heart of Nevelsk smart city system.

Improved incident detection rate and regulation enforcement with new surveillance solution.



## Organization:

**Nevelsk City** 

#### Location:

Nevelsk, Russia

## **Industry segment:**

City surveillance

## Application:

Safety and security

# **Axis partners:**

Kriljon Service, ITV/AXXON

#### Mission

Nevelsk is a far eastern port city located on Sakhalin Island and the administrative center of Nevelsky District of the Sakhalin Region. The geographical specific of the city is its spread along the coastline from the north to the south for more than 9 kilometers. The framework of the Safe City Program included Axis network cameras in the city video surveillance system and the cameras have been installed in the main street of Nevelsk and in crowded areas.

#### Solution

The Directorate of Internal Affairs of the Sakhalin Region has been using Axis cameras for implementation of different projects in the territory of the region for a long time. Axis equipment has proved to be high-quality, reliable and high-tech. That is why an Axis solution was chosen for the Nevelsk video surveillance system as well. The project included installation of 26 high-speed AXIS Q6035-E PTZ Dome Network Cameras and one outdoor fixed AXIS P1346-E.

#### Result

Today, the city surveillance system in Nevelsk includes Axis cameras integrated with Intellect software provided by ITV. All the functions of the network cameras are used: Power over Ethernet (PoE), Active Gatekeeper and Video Motion Detection. Recordings from the video cameras are sent to state authorities (the Ministry of Internal Affairs, the Main Directorate for Road Traffic Safety) and saved in the archive.

Since the summer of 2014, when the solution was put in use, law enforcement officials have managed, with its help, to record, solve and prevent a significant number of crimes, mainly thefts and hooliganism, road traffic incidents and speeding violations.

Photos: Dmitry Alyoshin



"Axis equipment for the Safe City System was recommended by the Directorate of Internal Affairs of the Sakhalin Region and by our system integrator Kriljon Service. In less than a year of system usage, we feel that our choice of solution was correct: IP cameras with extraordinary detail upon zooming in allow us to identify any license plate number of the speeding car as well as the face of the suspect driver. As a result, not only the incident detection rate, but also discipline in the streets has improved."

Chistyakov Sergey Nikolaevich, head of the Ministry of Internal Affairs in Nevelsk city.

## Peculiarities of implementation

The territorial spread of Nevelsk and its status as a port city, in which a significant number of the Federal Security Service facilities are located, contributed to the specific character of the project. The specialists from the integrator company had to use long cable runs of fiber-optic communication lines and cooperate with local internet service providers to manage projects successfully.

Power supply for Axis network cameras is provided with the use of the Power over Ethernet (PoE) technology over a standard Ethernet network twisted pair cable. The advantage of this method is most evident in the street infrastructure, where use of standard methods of power supply is difficult or nearly impossible.

# Camera functions

Nevelsk's Safe City System is based on AXIS Q6035-E PTZ Network Dome Cameras (pan-tilt-zoom cameras with remote control). Beside the excellent detail and high quality of image (HDTV-resolution 1080p, 20x optical zoom with auto focus), the distinctive features of these cameras include extended remote control and target detection functions: automatic route surveillance and panning. The device has support for 50/60 fps with HDTV resolution 720p for capture of quick movements (for example, moving cars).

The Active Gatekeeper function of AXIS Q6035–E which allows monitoring of movements, also has extensive use: the camera automatically detects movement and tracks the target path in the area of its coverage.

## Day and night duty

"The end users – the law enforcement authorities – have at their disposal live video from 27 Axis cameras with the possibility of viewing archived video and control of the tilt of each camera. There is only one large motor road in Nevelsk; that is why the majority of cameras are located along it. There were cases when officials from the department of Internal Affairs observed how a drunk driver tried to get into his car and thanks to IP cameras and reaction of police control he was immediately stopped," said Andrej Pinchuk, sales manager of Kriljon Service.

Of course, in such a critical sphere of application as protection of citizens' lives, cameras must remain functional at any time of the day or night and in any season of the year. AXIS Q6035-E has Arctic Temperature Control function, which allows it to remain functional at a temperature down to minus 40 degrees centigrade. Improved visibility in low light conditions is ensured owing to Wide Dynamic Range. Axis equipment is protected against ingress of water (in particular heavy rain), ice buildup and mechanical damages.

A separate pressing task to be solved by officials from the Department for Road Traffic Safety with the help of the video surveillance system is control of speed violations, which are the most common traffic offenses. The second part of Safe City Project ready for implementation in Nevelsk in the near future is to provide integration of Axis cameras with a system for detection of traffic rules violations.









