

Axis cameras help keep Bangkok drivers moving.

Genius Traffic installs Axis network cameras to help monitor traffic around Bangkok.



Organization:
Genius Traffic and
Bangkok Metropolitan
Administration (BMA)

Location:
Bangkok, Thailand

Industry segment:
Transportation

Application:
Traffic management

Mission

The Genius Traffic Company was commissioned by the Bangkok Metropolitan Administration (BMA) to provide a traffic monitoring and driver information system to alert drivers of traffic congestion and incidents. Traffic congestion in Bangkok slows average car speeds around the city to just 9 km/h - the new system would monitor traffic conditions at key intersections around Bangkok.

Solution

The BMA approached Genius Traffic, a subsidiary of Thailand's Forth Corporation, to commission a traffic monitoring system that would allow their central control staff to visually monitor the traffic conditions at more than 40 key intersections around Bangkok, and in turn allow staff to feedback traffic information to drivers on the roads via display signs. The installation included 50 AXIS 213 PTZ and 180 AXIS 211 Network Cameras.

Result

The new traffic monitoring system is delivering vital information for Bangkok drivers with regards to incidents on the road network. The AXIS 213 PTZ Network Cameras offer advanced remote monitoring with pan, tilt and zoom functionality - allowing Genius Traffic monitoring staff to control any of the 50 network cameras from their desktop PCs. The cameras also offer full day/night functionality switching from color, black or white or infra-red mode. Once an incident has been detected, the staff at the monitoring center then sends a message to the relevant Genius Traffic display signs to inform drivers.

"We wanted to provide real-time information to drivers to make informed traveling decisions. The solution from Genius Traffic and Axis helps us monitor and update drivers effectively."

Ms. Chansiri Suksri, Project Engineer of Genius Traffic System Co. Ltd.

Traffic management for a growing city

On an average day 2.6 million cars are on the roads in and around Bangkok, and every day another 500 cars add to the already congested roads. Bangkok drivers spend on average 22 days per year stuck in their cars. Pollution and accident levels are also very high. City authorities have invested heavily in mass transit schemes such as Skytrain and underground subway system to try and address the problem.

The BMA recognized that traffic congestion is high on the priority list for Bangkok and has a stated aim to ensure drivers in the metropolis spend less time in their cars. Initiatives have included giving commuters more information on public transport; creation of 150 'request' taxi stands which automatically request a taxi for queuing customers and the installation of journey information display boards at the bus stops for bus commuters.

For the roads, the BMA understands that if drivers are better informed about road conditions ahead, they can take some action to avoid queuing in traffic jams when accidents and incidents occur. Genius Traffic display boards are designed to clearly communicate real-time traffic information. About 50 Axis network cameras are located at more than 40 key intersections around Bangkok, which can be controlled remotely to pan, tilt or zoom to investigate incidents and traffic conditions.

Smoothing traffic flow

The combination of images received via Axis network cameras placed at key road intersections, the staff at the control center, and the information displayed on the Genius Traffic display boards, is helping Bangkok drivers to make better informed decisions about their road journeys. Axis network cameras offer flexibility to the control center staff as any of the cameras can be controlled on any of the center's computers. The image quality provided by the cameras ensures any incident can be evaluated precisely at full frame rate.

In addition to the AXIS 213 PTZ Network Cameras monitoring key traffic intersections, AXIS 211 Network Cameras are deployed on the entry lanes of these intersections so staff at the control center can monitor the occupancy rate which considers the time vehicles are occupying the intersections. The AXIS 211 Network Camera is a fixed camera which features a varifocal DC-iris lens ideal for outdoor light conditions. Images provided by the AXIS 211 cameras helps staff gauge the seriousness of a traffic situation, and where an entry or exit lane is blocked, the information can be relayed on display boards further up the road so drivers can decide whether to attempt to enter a congested road area.

The cameras also monitor the Genius Traffic display boards to feedback to the control center the current messages that are being displayed, ensuring whether the display boards are functioning properly.

"Traffic congestion is ranked as one of the top problems for the Bangkok metropolis. We are working on a wide range of projects across the city to firstly encourage commuters to switch to public transport, such as the recently opened subway and extensive extensions to our existing mass transit network. In addition," says Ms. Chansiri Suksri, Project Engineer of Genius Traffic System Co. Ltd.