

EastLink Melbourne deploys Axis' and Citilog's traffic surveillance solution.

EastLink Melbourne seamlessly installs Axis encoders in combination with Citilog's Automatic Video Incident Detection System (AVID).



Organization:

EastLink

Location:

Melbourne, Australia

Industry segment:

Transportation

Application:

Automatic incident detection, remote monitoring, traffic management

In collaboration with

Axis: Citilog (an Axis company)

Mission

EastLink is the 39km freeway in Melbourne's South East suburbs connecting the Eastern, Monash, Frankston and Peninsula Link freeways. EastLink is a vital transport corridor carrying more than 240,000 vehicles per day, a 77% increase compared to the first months after opening in 2008. The freeway passes through two 1.6km tunnels, and in those tunnels EastLink has an Automatic Video Incident Detection System as part of its critical safety systems.

This system is paramount in detecting stopped or slowing vehicles in the tunnels, enhancing road user safety and providing EastLink's traffic control centre with vital real time information through video analytics.

Originally supplied and installed by Citilog, EastLink came to Axis as its AVID system required a hardware upgrade to support the latest features required by the operation team.

Solution

EastLink had a requirement to upgrade their video detection solution including new hardware and migrating to an IP solution. Axis was the first point of call for such a solution, offering its encoders. Stuart Lindsay, Engineering Manager at EastLink, talks about the project: "The video signals that EastLink gets back from its Video Incident Detection Cameras in the tunnel are analogue, and as EastLink was looking to move to IP in the future it was required to make sure that its system was future proof. We took this as the first opportunity to move into the digital IP realm."

Result

The final solution offered full business continuity with a seamless switch to a digital solution without interfering with the live system. This flexibility provided a fully functional AVID system and enabled safe operation; the system has delivered a higher reliability compared with the legacy system, and is more robust against hardware failures.

“Encoding the video to IP also allowed us the benefit of implementing a full hot standby detection system in our disaster recovery center. It was impractical to run the amount of cables necessary for analog video to the DRC, where AXIS P7216 Video Encoders allowed us access to the video streams from anywhere on the network. In the case of any failure or maintenance tasks, this work can be carried out with zero impact to operations.”

Tim Hartfield, Systems Technician at EastLink.

Reliability and flexibility

One of the main challenges faced by EastLink was that of business continuity and ensuring that there is no gap in the service delivery to our customers. Mr Lindsay continues: “We have a live tunnel so we had to build the new system in parallel to the old system as we couldn’t be without a critical safety system – for obvious reasons. To ensure the detection software was operating correctly, site acceptance testing was completed while only requiring a single, short, night-time tunnel closure. Cut over to the new system was seamless. A well planned and executed job.”

EastLink required a way of digitally encoding the analog system to IP, so after extensive technical research by Tim Hartfield, Systems Technician at EastLink, and Mr Lindsay, the combination of Axis and Citilog’s offering, was an ideal choice given that the original system was also Citilog.

The latest Citilog Automatic Incident Detection System was installed, along with AXIS P7216 Video Encoders to take analogue data and change it into multiple video streams for the purpose of analytics.

“The results have been excellent with the combined solution providing the upmost confidence in reliability and safety. Everything has been fantastic,” Mr Lindsay said. “We have already had conversations with an Australian wide toll road provider who came to look at how well our solution was operating and we highly recommended Axis and Citilog. What has impressed us the most was the level of technical support that has been offered and continues to be offered.”

Tim Hartfield, Systems Technician at EastLink, added: “Encoding the video to IP also allowed us the benefit of implementing a full hot standby detection system in our disaster recovery center. It was impractical to run the amount of cables necessary for analog video to the DRC, where the AXIS P7216 Video Encoders allowed us access to the video streams from anywhere on the network. In the case of any failure or maintenance tasks, this work can be carried out with zero impact to operations.”

“The level of support has definitely put Axis in good standing for further work as EastLink moves to upgrade our CCTV across the whole tunnel from analogue to IP. Because of the relationship we have built with Axis, especially the team in Melbourne, it’s given us confidence in Axis’ technical ability, the technical ability of Axis products and Axis’ ability to support us locally and into the future.”

