milestone

SOUTH EAST WATER



Integrated IP Video and Access Control Help Australian Water Utility to Control Assets and Improve Operations

Institutional Profile

South East Water provides water, sewerage and recycled water services to residential, commercial and industrial customers - more than 1.7 million people in Southeast Melbourne. Its service region covers 3,640 square kilometers from Port Melbourne to Portsea. South East Water manages a water and sewer network made up of more than 24,000 kilometers of pipeline, 81 water pump stations, 259 sewage pump stations, nine recycled water pump stations, eight water recycling plants, and one storm water treatment plant, totaling more than \$3 billion of infrastructure and assets.

Legacy CCTV Challenges

Asset monitoring and CCTV have a central role to play in the organization's success, by protecting investments, reducing site costs and helping to respond to issues more rapidly. South East Water saw an opportunity to upgrade its existing mix of standalone legacy monitoring systems with a more integrated, flexible platform that could support the organization's ambitious technology and innovation strategy.

Organization

South East Water

Location

Melbourne - Australia

Industry Segment Industrial

System Integrator(s)

Elaren Security

Milestone Partner(s)

Axis, Inner Range

Solution

XProtect Corporate, LPR, Access, Smart Client and Milestone Mobile **Number of cameras** 400

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Open Platform IP Video Solution

South East Water selected an open platform, IP network-based solution. The company currently has about 400 Axis network cameras running on Milestone XProtect Corporate video management software. The Milestone open platform is also integrated into an Integriti access control system from Inner Range and a Supervisory Control and Data Acquisition (SCADA) system, which acts as the alarm monitoring unit.

The organization has 20-30 employees using Milestone, many of whom are monitoring assets using Milestone Mobile on their phones or tablets. It has also placed cameras on certain remote assets using 3G and 4G wireless. The camera data is set to record on motion in the Milestone software.

South East Water used Johnson Controls for its initial integration and camera setup, but for the new Frankston headquarters, turned to a Melbourne-based Milestone Partner, Elaren Security, who provided the installation and integration of the Inner Range Integriti access control system and HID EasyLobby integrated with the Milestone XProtect VMS. Elaren Security carried out the HLI (high-level integration) work, including mapping for the access control and VMS systems, license plate recognition (LPR) video analytics, and the upgrade of all remote sites.

SE Water, under the direction of Andrew Forster-Knight, Group Manager of Intelligent Systems at South East Water, performed the majority of the backend network integrations itself.

Centralized, Integrable, Mobile Advantages

With its adoption of the Milestone open platform paired with Axis network cameras, South East Water is able to monitor its assets with a centralized, integrated solution that is easy for employees to use. Axis cameras provide comprehensive coverage to offices and remote facilities, as well as street and underground sewage and drainage systems. Milestone Mobile's Video Push notification allows South East Water to quickly respond to incidents like major infrastructure damage, burst pipes, sewer spills and other critical events that can all be streamed in real-time from operators' phones to the control room.

South East Water Chooses Open Platform

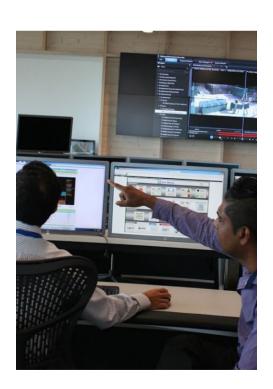
Andrew Forster-Knight, Group Manager of Intelligent Systems at South East Water, said that the company decided on an open architecture platform early in the search process.

"Our most important criterion in choosing a new system was that it be an open platform," said Forster-Knight. "With Milestone we had an almost unlimited amount of choices when it came to camera vendors and third-party applications, reducing integration costs and maximizing the value of existing infrastructure."



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Andrew Forster-Knight Group Manager Intelligent Systems South East Water



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Ease-of-use was also a key factor. Using the intuitive step-by-step wizard, team members with little previous experience can add any kind of camera and have it instantly pop up in the video client.

Milestone Helps Keep Assets Secure

With infrastructure located across inner Melbourne, security is an important consideration for South East Water. Graffiti presents a particular challenge, yet before Milestone and Axis, the video image quality wasn't always good enough to assist police investigations.

"The new solution means we have the ability to send ultra-high quality AVI video directly to the police, which they know will be admissible in court," said Forster-Knight.

Integration with Access Control and LPR Provide Added Benefits

Access control integration is also enhancing South East Water's security processes. Using the XProtect Access module, South East Water is able to integrate Milestone's video management and user interface with Integriti, South East Water's access control system. This extra level of integration combines the verification of Milestone video with access control events, from a central client.

"All of the cameras and door locking can be controlled from the mapping within either the Milestone VMS or the Integriti access system," said Sam Chisholm, Partner and Director, Elaren Security. "This type of high level integration is the sort of project Elaren takes great pride in."

South East Water is also using XProtect LPR, a license plate recognition (LPR) add-on product fully integrated in the XProtect Smart Client interface, to streamline employee parking.

"We Installed and programmed the license plate recognition system to interact at a high level with the Integriti access control system to control entry and exit from the sites multi-level carpark," said Chisholm.

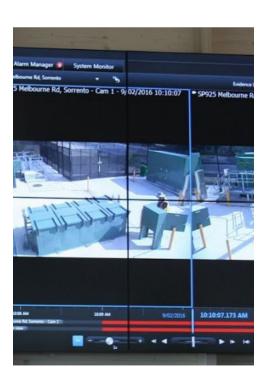
Employees can enter buildings with swipe cards or a Bluetooth-connected smartphone app. Now, with XProtect Access video verification, South East Water can confirm there are no unauthorized personnel entering offices or treatment plants.

"It would have been a time-consuming process to have everyone use a swipe-card to access the lot, so we designed our new building with LPR," said Forster-Knight. "XProtect LPR automatically opens our parking lot gate when a permitted license plate is identified. Plus, we have eyes on every car in the lot, so we can proactively respond to any incidents that may arise."



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Sam Chisholm Partner and Director Elaren Security



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Axis Proves Best in Brand

South East Water has standardized with Axis cameras, based on their low failure rate, competitive pricing and integration capabilities.

"We're using Axis pinhole cameras, PTZs and things like license plate recognition, so it's great to have a one-stop shop like Axis where team members only have to learn one system," said Forster-Knight.

Axis cameras can be placed in both indoor and outdoor facilities, even within residential and rural sewage and drainage systems, due to the rigorous waterproof and dustproof-testing Axis does on every camera.

Milestone Mobile Paying Dividends

South East Water is also seeing the benefits of Milestone Mobile Video Push capability, which has greatly improved operational efficiency by allowing engineers to relay the details of complex issues instantaneously to its command center.

"In the past, when an engineer would go to inspect a problem with a sewage pipe, we wouldn't receive the information for hours or possibly days," said Forster-Knight. "Now, using Milestone Mobile, video can be recorded and immediately sent to our command center, where we can evaluate the cause and take appropriate action. It means we can respond to problems faster, and the impact to customers is reduced."

Planning for the Future

In 2016, South East Water is already planning for the future.

"We are working on installing cameras in certain underground sewer environments provided they can hold up to the terrain," said Forster-Knight. "We are leveraging new technologies right across our business in order to deliver better value to customers, and Milestone is playing an important role."





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Andrew Forster-Knight Group Manager Intelligent Systems South East Water

Milestone Systems is a global industry leader in open platform IP video management software, founded in 1998 and now operating as a stand-alone company in the Canon Group. Milestone technology is easy to manage, reliable and proven in thousands of customer installations, providing flexible choices in network hardware and integrations with other systems. Sold through partners in more than 100 countries, Milestone solutions help organizations to manage risks, protect people and assets, optimize processes and reduce costs.

