

## TECHNOLOGY RISES TO CHALLENGE

# A REAL WORLD TEST FOR CAMERA

**How a local authority has gone about putting a new CCTV monitoring system through its paces, in the real world.**



Luton has a track record of getting the best out of its town centre CCTV scheme. More than 130 cameras are monitored 24-365 by a team of control centre operators who have collectively played their part in more than 6,000 arrests and who have on several occasions received commendations from the police for their work. These have included helping to identify a serial rapist and several persons involved in the Marcus Hall murder and in a drug dealing investigation. The scheme covers Bury Park, High Town, Market Square and a residential area at Hockwell Ring. Despite the success of CCTV, Luton like other local authorities wishes to drive down operating costs while staying effective. Hence they were prepared to take a look at Viseum, a new technology that offers what the makers call 'an unmonitored intelligent CCTV camera which watches all that is going on around it, but only takes notice when something unusual happens'. Luton were introduced to Viseum by CCTV camera manufacturer Forward Vision who identified the control centre as a partner to test the

product firm's claims. Quadrant Video Systems Plc, who have for years installed and maintained cameras on behalf of the council, were keen for the council to test the effectiveness and credibility of Viseum; they believed it offered a potential upgrade path for the existing cameras that would achieve the council's objectives.

### Suitably challenging

At a meeting with representatives from Luton's CCTV management team, Quadrant and Viseum identified a number of suitable locations where product effectiveness could be fully tested. Of these, it was felt that Hockwell Ring, a residential hi-rise estate to the north of the town centre, would be a suitably challenging environment for the product to prove its worth. It was agreed that Quadrant would install a Viseum system at Hockwell Ring and that the council would conduct an evaluation during a three-month trial period. The product would be judged in a number of ways. Firstly, would it operate in accordance with the manufacturers claims? Would

it provide a deterrent to crime and anti-social behaviour, increase the public's perception of safety by reducing the fear of crime, assist the emergency services, and gather evidence for the detection and prosecution of offenders? And finally - could it achieve all of this with no interaction of control centre operators?

### 360-degrees

A ring of up to eight 'reference' cameras provides 360-degree surveillance. The product's software continuously analyses the images from each of the cameras and if any suspicious activity is detected, the 'camera head', a fast reacting PTZ camera located at the centre of the Forward Vision manufactured housing, is directed to zoom in and follow the incident. The images are digitally recorded on site but can be remotely retrieved by the control centre over an IP link at any time. Gary Crucefix of Luton Borough Council's Capital and Asset Management department has been involved with the trial. He said "It is a valuable feature of the software



**Pictured: Stuart Thompson of Viseum at Hockwell Ring on the outskirts of Luton**

# CCTV Case Study

that unlike a human operator it can watch more than one event at a time without suffering from information overload or loss of concentration. The images obtained are of high quality and will certainly be extremely valuable for taking cases to court. A particular benefit is the fact that each event is captured in two simultaneous camera images, which are time-linked, watermarked and tamper-proof - high quality evidence of this type is very helpful. The ability to access the system remotely creates great flexibility - for example being able to access the system from multiple locations is a most valuable facility. I also found the system very easy to operate. In the first place, the pre-set profiles remove the need for any complicated set-up procedures; however, I also found that I could manipulate the individual settings extremely easily if I wished to."

**Below and right:  
The Viseum  
product in  
operation outside  
a high rise at  
Hockwell Ring**

## Library access

Gary added: "It is extremely useful to the user to have access to a library containing a variety of surveillance profiles, which greatly simplifies selecting appropriate trigger parameters. A further benefit is the ability to change profiles automatically over the course of the day or week, so that the system looks for different things at different times. Navigating the event archive is particularly easy, and stored events are presented in such a way that operators can find what they are looking for quickly and with little effort."

## Building manager

In practical terms the product is helping the police to prosecute offenders involved in two serious crimes on the Hockwell Ring



**Above: Gary Crucefix in the Luton Borough Council CCTV control room**

housing estate. In addition it has detected a number of misdemeanours, which the council have acted on. The council's local building manager as well as other members of the community has reported a reduction in petty crime. He said: "The local undesirables have been deterred by the physical presence of the camera unit which is installed out of reach, high up on a vandal-proof pole. They see it constantly moving and have no idea if anyone is watching it 'live'. What they do know is that their activities will be analysed and recorded by the system and so they have moved on."

## Cost

There has to be a business case for investing in any technology. So what are the costs involved and how do they compare with conventional CCTV solutions? To make a fair comparison one has to take into account the full cost of monitoring and maintaining a CCTV camera. The purchase and installation of a pole mounted, dedicated PTZ CCTV camera with fibre optic link would be in the region of £25,000. To these needs to be added operator and maintenance costs. The cost of staffing a single camera 24-7 is about £5,000 a year. The total cost therefore per 'staffed' camera, amortised over five years is about £10,000 a year. The cost of purchasing a Viseum system, amortised over the same period is about £5,000 per annum. Thus there is the potential saving of 50 per cent a year, per



camera. Gary Crucefix and his colleagues have identified 11 camera locations that would suit the technology. Gary plans to work closely with the product firm and installer, to develop additional features, which will allow Viseum to fully integrate with the Luton council control centre. The objective is to develop a CCTV monitoring and control centre assisted by 'virtual' operators. □