

Safeguarding sporting moments

Kim Carmichael from the British Security Industry Association (BSIA) looks at how technology is being used to safeguard thousands of supporters at stadiums across the sporting sector

Denise Lewis winning the Olympic Heptathlon Gold, Michael Vaughan's team claiming the Ashes and England scoring five goals to Germany's one are all linked together as some of history's greatest sporting moments. They are also linked in another way – through the systems and procedures that act behind all of these scenes to make sure that each event is remembered for its sporting spectacle only.

The professional sports industry – with its high profile celebrities, big business sponsors and multi-billion

pound investments – is rarely out of the media for long. While scores of supporters teem into events, such as the estimated 100,000 England fans who attended the World Cup in Germany last summer, security measures implemented behind the scenes work to make sure that events like this run as smoothly as possible.

In the case of the 2006 World Cup, security was recognised as being crucial and subsequently the organising contract required the local organising committee (LOC) to submit a detailed security concept at least one year in advance.

“PLANES CONTROLLED THE SKIES, FORBIDDING CIVILIAN PLANES FROM ENTERING A 5.4 KILOMETRE EXCLUSION ZONE AROUND FOOTBALL STADIUMS DURING MATCHES – TO PREVENT A 9/11-STYLE ATTACK”

During the event, Awacs (Airborne Warning and Control System) planes controlled the skies, forbidding civilian planes from entering a 5.4 kilometre exclusion zone around football stadiums during matches - to prevent a 9/11-style attack, and robots were used to check stadiums for bombs before matches.

Such is the nature of the modern sports industry with its international spotlight that a new generation of systems is currently being developed for use in public areas, including stadiums to be used during the 2012 Olympics. Visitors will be required to enter via a so-called 'tunnel of truth',





Both the Metropolitan Police and the London Borough of Islington can remotely view CCTV images from cameras within the Emirates Stadium site at their respective control rooms

capable of checking large numbers of people simultaneously for weapons, explosives and biohazards. The tunnel will incorporate a CCTV face-recognition system that compares pictures of visitors with stored images of known or suspected terrorists.

Although these measures are available in times of heightened security, the operators of large venues, such as sports grounds, also face a wealth of challenges, such as hooliganism or vandalism on a daily basis.

This means that security must be considered at every stage.

Lord's Cricket Ground in St John's Wood, London, is not only the spiritual home of cricket, with a distinguished 200 year history, it is also a vibrant sports arena, hosting major international matches, cup finals and county games throughout the summer.

Security at Lord's is obviously a major concern - especially at key events and the ground requires a security system which is discreet yet highly effective. In 2005, a

“THE TUNNEL WILL INCORPORATE A CCTV FACE-RECOGNITION SYSTEM THAT COMPARES PICTURES OF VISITORS WITH STORED IMAGES OF KNOWN OR SUSPECTED TERRORISTS”

completely new CCTV system was installed which incorporated 90 cameras, complete with monitoring and recording equipment, and 17 access control points. The security solution, supplied by a BSIA member company, enables users to connect multiple PC workstations to allow monitoring and control of the system across any number of separate sites - including remote locations, via TCP/IP technology. This is particularly important for the installation at Lord's as it



allows security monitoring at a number of peripheral points in the ground as well as centrally.

Images from the 90 cameras are processed through a powerful, integrated video matrix system – and then fed into the Digital Video Monitoring System (DVMS) to allow for event-triggered video recordings. The system can view real time and recorded footage simultaneously, as well as search events to pinpoint an incident and synchronise all the cameras to the time of an incident and watch it unfold.

The 17 access points, which have all been fitted with proximity readers to control entry, are linked to an administration PC and supported with cameras placed in key locations.

As Lord's carries its 200-year tradition well into the future, its security systems can be expanded and upgraded as new technology options arrive.

The construction of Arsenal Football Club's new home at the Emirates Stadium cost a staggering £390 million. The club needed to effectively safeguard the stadium's 60,000 match day visitors. To do so, the stadium implemented a BSIA member company's CCTV image transmission system.

The system enables three key safety functions. Firstly, the control room at Emirates Stadium can view and record images from CCTV cameras in the area surrounding the stadium that are not directly connected to the Emirates control room. These include public space surveillance

CCTV from the Borough of Islington and also CCTV cameras at the public transport hubs involving Transport for London (TfL). The system ensures that supporters experience safe and reliable access to and from local tube stations, two underground lines, Victoria and Piccadilly lines, national rail and the many bus services that provide access to the local area.

In addition, both the Metropolitan Police and the London Borough of Islington can remotely view CCTV images from cameras within the Emirates Stadium site at their respective control rooms. This allows them to view and review any situation that develops, as well as allowing them to proactively monitor areas of the stadium. They will also be able to record and store CCTV image data from the stadium for later review or for use for evidential purposes in court, if required.

Finally, in the event of a serious incident which causes the stadium control room to be evacuated, the technology implemented means that both the Metropolitan Police and the London Borough of Islington control rooms can take over control of the CCTV system within the Emirates Stadium site, effectively providing a choice of 'back-up' control rooms.

As this small sample of current activity has shown, stadium security is driving a huge variety of technological innovation and employing imaginative strategies. With the existing high levels of risk unlikely to diminish greatly in the foreseeable future and the

“AS LORD'S CARRIES ITS 200-YEAR TRADITION WELL INTO THE FUTURE, ITS SECURITY SYSTEMS CAN BE EXPANDED AND UPGRADED AS NEW TECHNOLOGY OPTIONS ARRIVE”

numerous other challenges routinely posed, the impressive progress we have witnessed thus far may be just the beginning of the race.

The British Security Industry Association is the only trade association that covers all aspects of the professional security industry in the UK. Its 570+ members provide over 70% of UK security products and services and adhere to strict quality standards.

For more information, see www.bsia.co.uk, email info@bsia.co.uk or telephone 0845 3893889.