

Better CCTV for the Millennium – Ten Years On!



With Cardiff's prestigious Millennium Stadium, Wales' premier venue for sporting and entertainment events, coming up to its ninth birthday, the stadium's managers decided that it was time to upgrade the site's CCTV installation to take advantage of the many technology advances that have been made since the stadium originally opened.



Working with expert independent CCTV installer, Building Management Solutions of Caerphilly, an SSAIB registered company, the managers looked carefully at a range of possible upgrade options before deciding that a solution based on equipment from Siemens Building Technologies would best meet their needs.

“The decision was, in part, based on previous experiences with Siemens CCTV equipment,” said Alex James, Managing Director of Building Management Solutions, “which have shown it to combine excellent performance with reliability and value for money. Another important factor was the wide range of equipment offered by Siemens, which includes, for example, versatile day/night dome cameras and high-capacity DVRs that deliver excellent picture quality.”

At the Millennium Stadium, the original CCTV installation used PTZ cameras throughout. As part of the upgrade, Building Management Solutions is replacing these on a phased basis with the latest Siemens Solaris dome cameras, which are far less obtrusive and require virtually no



maintenance as they are completely sealed. Dome cameras with either 18x or 26x zoom capabilities are being fitted, depending on the application.

In addition to full day/night operation, a further benefit of the Solaris Dome cameras is a wide dynamic range function, which allows them to capture detail in the highlights and shadows of images even in difficult lighting conditions. This is particularly useful in the outdoor areas of the Millennium Stadium, where part of the scene covered by the camera can be in bright sunlight while other parts are in deep shadow, and also at building entrances, where persons entering are often strongly backlit.

A substantial proportion of the sites 70 existing cameras have already been replaced and the remainder will be replaced in the near future. The existing camera cabling has been retained, as careful examination by Building Management Solutions had shown this to be in good order and entirely adequate for the needs of the upgraded installation.

As part of the upgrade project, Building Management Solutions has completely refurbished the site's two CCTV control rooms. New video matrices from the Siemens Visilynx range have been installed to give a total capacity of 115 camera channels. Since only 70 of these are currently in use, this gives wide scope for future additions to the installation.

The VHS video recorders previously in use have been replaced by five modern Siemens DVRs that between them provide a total storage capacity of 7.5 terabytes. This change means that inconvenience and poor image quality associated with VHS tapes are now things of the past. Even more important, the very large storage capacity allows real time images to be recorded 24/7 with all recordings retained for a minimum of 35 days, and the use of digital



technology means that the stored images can be searched quickly and easily to find events of interest.

With the previous system, only low frame rate time-lapse images, which provide far less useful information in the event of an incident, were recorded at those times when the stadium was not being used for an event.

The old CRT monitors in the controls rooms have been replaced with new high-quality flat-screen plasma units. The Level 1 control room, which is used primarily when there is no event at the stadium, now has a large quad display monitor, and a smaller spot monitor. Operators can transfer images from the quad display screen to the spot monitor simply by clicking and dragging them.

The new arrangements in the main control room, which is used on event days, are similar, except that two quad screens and three spot monitors are provided.

“The key aim of the CCTV installation at the Millennium Stadium is help ensure the safety of the public,” said Alex, “With the new upgrades, it is able to fulfil this role better than ever before, since the operators can now zoom in more quickly and accurately on incidents, and the images – both live and recorded – are of much higher quality. An important bonus, however, is that the installation is proving useful in many other ways.”

For example, a riverside walkway passes through the site and is covered by the CCTV system. Recently the police were concerned about activities taking place on this walkway, the



CCTV team at the Millennium Stadium were able to supply them with high quality images to help further their investigations.

“Our new CCTV system is an important ingredient in our ongoing quest to ensure that the Millennium Stadium retains its prized position as one of the UK’s most popular and prestigious sporting and entertainment venues,” said Gerry Toms, Stadium Manager of the Millennium Stadium. “It’s helping us to give our visitors a safe and comfortable experience and, with the newly introduced 24/7 recording, it’s also helping us to keep the site secure and to protect it against theft and vandalism.”

“The system is an important asset and the upgrade, which has been carried out with a minimum of disruption, is proving to be not only well worthwhile, but also to be excellent value for money.” Visit Building Management Solutions at www.bmssw.com

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