

## Guarding the stadium and assisting with football training simultaneously.

National Training Center SFZ Poprad chooses unique solution of Canex EYRIE System with Axis network cameras.



**Organization:**  
National Training Center  
SFZ Poprad

**Location:**  
Slovak Republic

**Industry segment:**  
Stadiums/Venues

**Application:**  
Safety and security,  
remote monitoring

**Axis partner:**  
Canex s.r.o.

### Mission

The National Training Center of the Slovak Football Association (SFZ) in Poprad serves the representative teams of the Slovak Republic in all age categories and is also suitable for the organization of competitions, qualifications as well as friendly matches. The stadium offers above-standard conditions with top service, including modern conference rooms. During recent reconstruction, it was necessary to install a new camera system. SFZ was familiar with Axis cameras and the Canex unique solution with camera nests, which were used in the Slovakian stadium in Bratislava. They wanted to use the same in Poprad, but they got much more.

### Solution

By law the total monitored area in the stadium and its immediate surroundings must have a definition of at least 100px per meter, which is, however, insufficient for purposes of identification. Canex applied a combined system using several cameras in one point with added PTZ, by which they achieved a definition of more than 500px per meter with at least 10 fps using a lower number of cameras.

The cWatch operating software and Canex's own development for unique control of the Axis PTZ cameras has been used as reliable VMS proven itself in more than a thousand installations. The entire control of the Canex Eyrie System has a highly intuitive interface based on touchscreen monitors.

### Result

After just three minutes, anyone is able to operate the Canex Eyrie System. The operator just needs to see the specific place in a wider shot and almost immediately gets a close-up image. The system serves as a preventive tool and can be connected to other system as well. Currently, for example, the camera system is connected to an information board and large screen for visitors. At the same time it can also be used within the training process, when moving cameras can be directed at specific parts of the playing area to record training or monitor maintenance when there are no matches. Thus, within the price of the security solution, which is required by law, the customer also receives additional functions as a bonus.



**“We wanted to build the system not only because it is required by law, but in order to provide sufficient data to increase safety during mass events. From the very beginning our aim was to provide the customer with more than just a safety solution in line with the law.”**

Ivan Boďa, Canex s.r.o.

### Infrastructure is the key

For the entire system to be successful, a qualified data network proposal and correct integration of camera nests with precise calibration are extremely important. If the nests are suitably deployed, a good overview of everything that is happening in all the grandstands can be achieved by means of just a few modules, with no need to use hundreds of other cameras. The basis for the network is an optical circle, to which all technologies are connected, thus avoiding any problems during integration with entrance turnstiles.

### Satisfy the law with added value

The law requires use of cameras in the stadium. The solution described, however, provides the customer with important advantage. Thanks to integrated camera nests, a number of expensive cameras with high definition can be avoided. HD cameras have a lower frame rate due to data flow, and despite that, it is possible to achieve a perfect overview of what is happening in the stadium even at a definition which several times exceeds the minimum requirements defined by law.

“Based on previous experience, we defined 10 fps as the minimum frame rate, which is sufficient speed to capture each incident, including flashes of flares, which could be ignited by a fan in the crowd,” Ivan Boďa said. “We would satisfy the law even with fewer fps, but what sense does it make if we only focus on laws when it is possible to provide the final consumer with much more provably applicable added value? This was one of the requests of the client, who wanted to map every incident exactly for use as possible evidence in infringement or criminal proceedings in sufficient quality for the needs of the police.”

The system serves as a preventive tool and at the same time, it can be used within the training process. Outside matches, moving cameras can be directed at specific areas of the playing area and can be used to record the movement of players during training or to monitor the maintenance. The owner or coach can thus view the current picture or create record anytime, also remotely. Of course it is not a solution for professional sports analysis using specialized software but it is a certain added value, which can be used in this concrete solution without further investments. Thus, for the price of the security solution required by law, the customer also gains further additional functions included in the price of investment.

### First 4K cameras

For perimeter protection, 4K Axis cameras were applied, which proved to be an interesting and economical way to supervise larger areas. They were not used in the solution itself to supervise the auditorium because at the time of execution, the lens did not satisfy the solution needs. In the future, however, such cameras might provide new interesting possibilities.

