



## Challenges

Ensure the safest and most enjoyable experience for participants and spectators at the 2011 International Ice Hockey Federation World Championships and beyond.

## Solution

SLOVNAFT ARÉNA security personnel manage the Avigilon high-definition surveillance solution using the Avigilon Control Center network video management software (NVMS) with High-Definition Stream Management™ (HDSM) technology. The Arena has 99 Avigilon HD 3 MP and 12 Avigilon HD 11 MP cameras that monitor the area 24 hours a day. SLOVNAFT ARÉNA also installed an Avigilon analog video encoder to integrate a Pan-Tilt-Zoom (PTZ) camera in the seating bowl into the Avigilon high-definition surveillance system. SLOVNAFT ARÉNA stores seven days of continuous surveillance video on an Avigilon Network Video Recorder (NVR).

## Benefits

SLOVNAFT ARÉNA monitors its entire seating bowl with just 12 Avigilon HD 11 MP cameras and can achieve complete facial and license plate recognition using the Avigilon 3 MP cameras for fast and accurate identification. Security personnel leverage Avigilon's digital zooming capabilities and image quality to identify and remove rowdy guests and can successfully share surveillance video with local police. SLOVNAFT ARÉNA now enjoys the lowest crime rate of all public arenas in the Slovak Republic.

- Heightened public safety
- Significantly lower crime rates
- Decreased infrastructure costs

Market: Stadium  
Location: Slovakia  
Partner: Scanlock

## Featured Products



ACC Software



3 MP HD Camera



11 MP HD Pro Camera



Analog Video Encoder



Network Video Recorder



## SLOVNAFT ARÉNA in Slovakia Creates Safe Spectator Experience for 2011 International Ice Hockey Federation World Championship with Avigilon High-Definition Surveillance System

SLOVNAFT ARÉNA, Slovakia's oldest hockey rink, is home to the leading Slovak ice hockey team, HC Slovan. Located in the capital city of Bratislava, SLOVNAFT ARÉNA recently underwent an extensive renovation in preparation for the 2011 International Ice Hockey Federation (IIHF) World Championship, extending its seating capacity to 10,000 spectators, and adding a new training hall, along with a 760-car underground parking garage. As sports and entertainment events around the globe continue to attract larger crowds, the threat of crime, vandalism, and violence becomes greater and so too does the need for strict safety requirements to ensure patron safety. Working closely with the 2011 IIHF Security Committee and local agencies, SLOVNAFT ARÉNA deployed the Avigilon high-definition surveillance system as a key part of its security plan to ensure the safest and most enjoyable spectator experience possible.



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### A Team Approach to Security

Working alongside the IIHF Security Committee, local law enforcement, fire, and emergency medical response teams, SLOVNAFT ARÉNA made security a priority to ensure the successful execution of the 2011 IIHF World Championship. Representing Slovakia on the world's stage, SLOVNAFT ARÉNA wanted to demonstrate its proficiency in hosting a safe and positive global event. “With more than 350,000 fans and 16 teams at the 2011 IIHF World Championship, we took a team approach to design a foolproof security plan, of which surveillance was a key component,” said Stanislav Jankovic, chief of security at SLOVNAFT ARÉNA during the 2011 IIHF World Championship. “We continue to reap the rewards of our decision to deploy the Avigilon high-definition surveillance system by delivering the highest level of security at all our events.”



## Complete Coverage with Fewer Cameras

Working closely with Scanlock, SLOVNAFT ARÉNA looked at surveillance solutions from several vendors, but selected the Avigilon high-definition surveillance system for its ability to deliver superior image clarity across the entire arena with fewer cameras. “We chose Avigilon because it is a multi-megapixel solution that delivers higher resolution footage and wider coverage with less infrastructure needed,” said Jankovic. In fact, the Arena is able to monitor its entire 10,000-seat stadium with only twelve Avigilon HD 11 MP cameras. “We can achieve perfect image clarity with fewer cameras, making the Avigilon high-definition surveillance system the most valuable solution for us.”

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## Avigilon at Play

SLOVNAFT ARÉNA security personnel manage the Avigilon high-definition surveillance solution using the Avigilon Control Center network video management software (NVMS) with High-Definition Stream Management (HDSM) technology. The Arena installed 99 Avigilon HD 3 MP cameras to capture the highest quality images both day and night. These cameras monitor all entrances and exits, arena aisles, parking garage, and open spaces, while twelve Avigilon HD 11 MP cameras monitor the seating bowl. SLOVNAFT ARÉNA also installed an Avigilon analog video encoder to integrate a Pan-Tilt-Zoom (PTZ) camera in the seating bowl into the Avigilon high-definition surveillance system. SLOVNAFT ARÉNA stores seven days of continuous surveillance video on an Avigilon Network Video Recorder (NVR). The surveillance system is monitored live 24/7.



## Image Clarity for Identification

Image clarity is a top requirement for SLOVNAFT ARÉNA because it relies heavily on surveillance video — both live and recorded — to identify patrons who are behaving in a disruptive or disorderly fashion. “Avigilon delivers the high resolution image quality and advanced management features we need for live monitoring and video playback to help us positively identify people in the stands,” explained Jankovic. “In fact, we are able to identify the faces of each seated guest, and if the seat is empty, we can even zoom in close enough to read the seat number.” SLOVNAFT ARÉNA also relies on the performance of the Avigilon high-definition surveillance system to capture the license plates of vehicles as they enter and exit the parking garage.

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## Improving Public Safety

During the 2011 IIHF World Championships, SLOVNAFT ARÉNA security personnel were able to zoom in and identify several rowdy guests and quickly remove them before they became a greater threat to public safety. “We shared the surveillance video with the local police who were able to investigate each incident and convict the perpetrators accordingly,” added Jankovic. “With the advanced zooming and search capabilities of the Avigilon solution at our fingertips, we can identify known perpetrators before they even enter the building, further enhancing our public’s safety.”

## Expediting Investigations

SLOVNAFT ARÉNA leverages the extreme image clarity of the Avigilon high-definition surveillance system combined with the advanced search and playback features of the Avigilon Control Center software to conduct investigations efficiently and effectively. “The Avigilon Control Center software is a user-friendly and powerful solution that allows us to conduct searches quickly for fast resolution,” commented Jankovic. “In fact, I have never used such a fast search engine,” Jankovic added. “And the quality of recorded video is so amazing that we have dramatically improved our investigation success.”

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## Simplified Management, Strong Support

“Due to the system’s ease-of-use and simple graphical user interface, our security team was able to successfully use the Avigilon Control Center software within minutes,” commented Jankovic. Under pressure to have the system installed and running in time for the 2011 IIHF World Championship, SLOVNAFT ARÉNA relied heavily on the Avigilon team to deliver the knowledge and support required to meet its specific requirements in a short timeframe. “The Avigilon team demonstrated a high level of professionalism and technical expertise throughout the design and installation process and continues to provide solid support when needed.”

## A Slovakian Success

Working in close collaboration with the IIHF and local emergency services to create the safest and most secure experience for participants and spectators at the IIHF 2011 World Championships, SLOVNAFT ARÉNA deployed the most advanced surveillance system possible, and now enjoys the lowest crime rate of all arenas in the Slovak Republic. “With the Avigilon high-definition surveillance system installed, we have significantly reduced vandalism, theft, and fan disturbances to create a safer, more enjoyable, and positive environment for all our patrons,” concluded Jankovic. “We highly recommend the Avigilon high-definition surveillance system for its high image quality, fast search engine, and unfaltering reliability.”