Case Study

Excellence in KVM and Video

IHSE KVM extenders transmit critical data between Airport building and ATC tower at Sofia Airport

The Customer

The state-owned 'Bulgarian Air Traffic Services Authority' (BULATSA), provides air navigation services over the Republic of Bulgaria. Located in Sofia, the organization has 45 years of experience and over 1,000 employees.

The Challenge

BULATSA recently upgraded the air traffic management system architecture at Sofia Airport. The old system was spread across several networks and buildings, generating significant system administration and maintenance workloads. The upgrade aimed to relocate all equipment in one central equipment room (CER) in the main building and extend the signals to workstations located around the airport, some in buildings several hundred meters away.

Seven workstations are housed in the visual control room at the top of the control tower. Three undertake Advanced Surface Movement and Guidance Control System (A-SMGCS) duties. Two workstations are part of the main Air Traffic Management system and two workstations provide a fallback ATM system. Each workstation comprises a monitor, keyboard/mouse and strip printer.

The Solution

The chosen solution uses IHSE KVM extenders to provide bidirectional signal transmission over fiber cabling, bridging the large distances between buildings with no visual image quality loss and near-zero latency. All computer signals are handled simultaneously; in this case DVI video at 1920 x 1200 resolution, USB-HID for keyboard and mouse input and serial signals for strip printer output.

Operators can access real-time data and instantly respond to it. Small interface (CON) units are all that are required, discretely located at the operators' desks. The system operates as though the computers were located alongside the desks.

The Benefit

IHSE's KVM extenders provide real-time access to the most relevant and up-to-date information with 24/7 reliability for operators in the tower. Whether they need to view weather conditions or respond to emergency situations, the KVM system enables BULATSA's ATC specialists to maintain the total operational safety level throughout Sofia Airport.

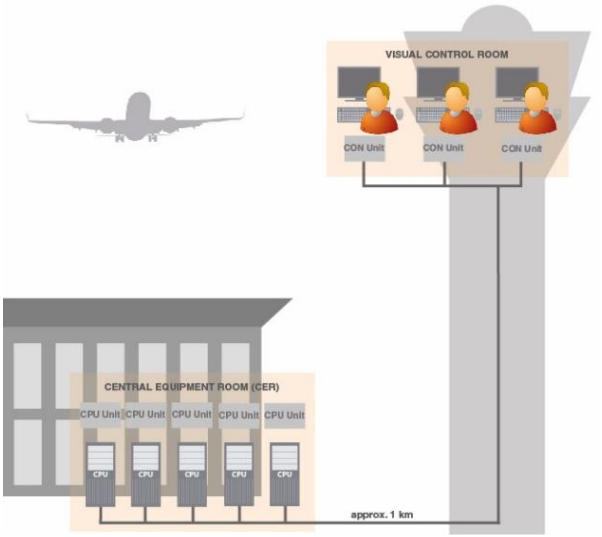
In addition to removing noisy, heat-generating processing units form the operators' environment, making it quieter and more comfortable, centralizing the equipment in the CER improves security, ease of maintenance and environmental management.

BULATSA is highly satisfied with the IHSE system. Its quality of manufacture and system functionality delivers the level of performance that is critical to high security applications like air traffic management with 24/7 operation. An extension to the KVM system is planned for implementation shortly.

When decisions matter, correct information is essential. Delivering that data reliably and accurately requires the highest standard of KVM technology. IHSE products provides that standard, ensuring that operators have access to it, whenever, and wherever, it is needed.

"The KVM system was extremely quick and easy to install, so we were up and running with only a minimal amount of delay. It has been totally reliable since installation which gives us great confidence in these products."

Iavor Pavlov,
Head of Surveillance, BULATSA



Functional diagram

BULATSA main building

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