

Airport Case Study

Bangkok's Suvarnabhumi Airport

Bangkok's Suvarnabhumi Airport formally opened in late September 2006 after many years of planning and construction. Thailand hopes the new \$4 billion airport, designed to handle 45 million passengers and three million tons of cargo a year, will surpass rivals Singapore and Malaysia as the region's most important aviation hub. Its seven-story terminal is one of the largest in the world, covering an area equal to 100 (US) football fields. The airport was designed to accommodate an increase in annual capacity up to 120 million passengers.



The Challenge

Overall, Suvarnabhumi (su-wanna-poom) Airport was planned for maximum flexibility, scalability, and performance to serve passengers and accommodate future growth; hence all deployed systems, including security, had to meet the same exacting standards. From the outset, airport management sought security technology that was 100% IP-based and would never need replacing—only upgraded and expanded. The planners envisioned an IP-based platform that would provide the highest levels of security, but also could integrate and manage across multiple systems and databases to provide greater operational efficiencies and even generate revenue streams.

The chosen security platform was slated for multiple locations throughout the airport itself, but in the back of the planners' minds was always the consideration that the platform be able to extend and integrate with other security systems at our around the airport, or even in Bangkok, several miles away.

The Solution

The DVTel intelligent Security Operations Center (iSOC) platform, was selected as the primary command and control management software and to provide IP network video surveillance for what will eventually number thousands of surveillance cameras located throughout the airport's passenger terminals, concourse buildings, parking areas, baggage inspection rooms, and baggage conveyor areas. Recently, the KingPower duty-free operation with 180 individual stores, also chose the iSOC to manage over 500 cameras covering the 43,000 square feet (4,000 square meters) of luxury duty-free shopping.

The Highlights

As the **command and control center**, the iSOC accesses and correlates data from 16 different integrated systems including access control, flight and gate information, fire alarms, building automation, HVAC, elevators, and other data sources.

For the **King Power operation**, the iSOC enables management to conduct a central surveillance operation while each of their retail customers can also manage surveillance for their own store or stores. This "layered management" approach ensures excellent coverage and response and redundant monitoring.

Video is available at command centers and on designated desktops, but also via wireless to official's hand-held devices anywhere in the airport complex.

In a near **fully-automated process**, the iSOC substantially increases operational efficiencies by accessing flight arrival and departure information to turn on and off lighting, HVAC, and other systems at the appropriate gate area. Once a plane departs, cameras sweep the gate area to confirm there are no passengers and personnel. Upon confirmation, the iSOC shuts down all systems until the gate is needed for a new flight and it activates the systems anew.

For King Power, the iSOC is **integrated with the POS** system so that transaction data (credit card or cash) and boarding pass information is time-stamped onto the appropriate video. Such security and data management capabilities enable King Power to offer their customers better service, and individual shop owners will, in turn, have better protection against theft and improved inventory control.

Future plans include expanding the number of cameras; adding various video analytics capabilities, including DVTel SceneTracker video stitching software; and integrating additional systems and data into this single command and control management system.



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