In for the long haul

With Dubai International Airport enjoying rapid expansion, Dubai Civil Aviation wanted an intelligent security solution that would keep staff, visitors and property safe and secure and integrate with existing third party systems without disruption to business as usual.

Honeywell
THE CUSTOMER
Dubai International Airport, the first airport to be built in the United Arab Emirates, has witnessed phenomenal development. It has two terminals and accommodates 100 airlines that connect to over 140 destinations. In order to meet increasing demand, a second stage expansion (2002-2006) includes development of a third terminal for the exclusive use of Emirates Airlines, a mega cargo terminal, flower centre and apron area.

THE CHALLENGE
The customer, Dubai Civil Aviation (DCA), wanted a sophisticated security system that could integrate with third party systems. It wanted the installation to be carried out with minimum disruption to business-as-usual.

“Airports are mini-cities – a hub of activity bringing together passengers, baggage, aircraft, cargo and the public in a dynamic and fast-moving environment. This poses unique issues for ensuring the safety of all those who enter the facility,” explains Omar Jassim Bin Adai, Senior General Manager, Engineering Services Directorate.

“We wanted a security solution that had proved itself in a challenging scenario and one that could easily integrate with the other systems. Honeywell technology fulfilled this requirement and, with a local team to hand, we had the advantage of readily-available expertise.”

THE SOLUTION
Honeywell Middle East installed an intelligent security solution made up of access control (biometric and proximity card readers), alarm monitoring, and CCTV surveillance.

The different functions are linked together via a common platform – Honeywell Enterprise Buildings Integrator™ (EBI). This also provides a third party interface to the Airport Pass Management and fire alarm systems.

The EBI database currently manages some 50,000 active cardholders, 20 different access levels and some 7,500 status/control points. 400 doors are monitored and controlled across the terminal buildings. 810 CCTV cameras are working 24/7 and, with the majority integrated to Honeywell Digital Video Manager™, prompt alarm-based event recording. They replace traditional VCRs with high-definition recordings that will stand up in court. The EBI also interfaces with the Oracle Time and Labour (time and attendance) software for payroll applications.

To cater for the growing demands of the Airport, Honeywell provided a fully redundant EBI Security Management system on Distributed Server Architecture. 24 EBI stations communicate with the Central over the LAN. The EBI also integrates with the existing fire alarm system. While this is considered standalone for listing purposes, alarms have been mapped over to the EBI to facilitate real-time viewing of all the emergency exits monitored by EBI both under normal circumstances and in the event of an emergency.

Open architecture allows the Honeywell EBI to work in tandem with third party technologies. Using a CHOM (Cardholder Object Management) interface, it integrates with the Airport Pass Management System (APMS). It means that card/access details can be sent to the Police for verification.

They run a check against their criminal records and relay the information to designated Airport personnel who, in turn, print identity cards from the photo ID system for those people given security clearance.

The local Honeywell team in Dubai was actively involved in this project from the outset – right from initial design, to project management, installation, commissioning and final training of DCA operators.

KEY BENEFITS
Dubai International Airport is safe and secure; its visitors, staff and assets are protected round-the-clock. With an intelligent security solution, the customer can monitor, view and control the entire Airport security net from one common platform. Nothing happens without the operators’ knowledge. All alarms and events are monitored, acknowledged and acted upon regardless of where they occur. The risk of false alarms – and with this the need for expensive evacuation – has been slashed. Live video links to all alarms give a clear visual indication of the area under threat and enable the appropriate security action. And, with the digital video recording system providing video backup from all cameras for 30 days, the customer can retrieve any clips from any camera based on time, date and location. The integrated photo ID system provides a further safety net ensuring that only authorised personnel can issue cards from the APMS. Everyone working at the Airport is (Police) security cleared.

As well as improving security, the installation of open systems protects the customer investment long term and ensures that Airport running costs are reduced over time.