



British Airport Authority

BAA is the world's leading airport company at the heart of the world's transport network. Each year, the company serves 128 million passengers, and 67% of the UK total, at its seven UK airports: Heathrow, Gatwick, Stansted, Southampton, Glasgow, Edinburgh and Aberdeen. More international travellers use Heathrow than any other airport in the world, making it the world's busiest international airport.

BAA has used CEM's AC2000 AE (Airport Edition) system to control access at its UK airports for over fifteen years. Today, the seven airports combined have more than 3500 card readers installed and over 240,000 active cardholders with the systems handling more than 4.5 million card swipes per month.

For over ten years, the three London airports - Heathrow, Gatwick and Stansted - have been networked, allowing their valid cardholders to go from one airport to another. This equates to a linked system with more than 3000 readers, handling 218,000 active cardholders, making it the largest airport system in the world.

CASE SUMMARY

Location:

Heathrow
Gatwick
Stansted
Glasgow
Edinburgh
Aberdeen
Southampton

System:**CEM:**

AC2000 Airport Edition (AE)

This link has been successfully extended in 2004 to include all seven BAA airports.

Helping BAA run airports more efficiently...

From its initial installation, CEM has worked with BAA to develop the system in response to each airport's needs and to offer more than simply an access control solution. Over the years, functionality has been added to each system in response to changing legislation in the aviation industry and as the airports grow. Today, the system provides an integrated business solution that is continuously designed to help BAA run its airports more efficiently.

From using VIPPS (Visual Imaging Pass Production System) to control the issue and invoicing of operational access control cards, to configuring readers to assist in the movement and segregation of passengers, CEM has provided BAA with a dedicated airport security management system.

The CEM readers allow doors to operate in a variety of modes as required in the airport environment. Other than simply providing individual staff access, specified readers are configured at each of the BAA airports to permit passengers to enter a controlled area and to allow airline staff to easily segregate arriving and departing passengers.

At Heathrow, the system sends broadcast data to the readers and monitor units. For instance, if a quiet evacuation of an area is required, the system is programmed to unlock a number of doors. This means in the event of an emergency threat, the area can be evacuated without having to trigger the fire alarm system to open doors.

At Stansted airport, the card system holds details of card usage at every control point. Card transaction

data includes the card number, date and time used, directional status (in or out) and the transaction outcome. This transaction data, besides producing tracing information, is also passed on to an external payroll system or used with the CEM Time & Attendance module for calculation of working hours. The system can even trace cardholders as the cards are used. Once a cardholder is added to the trace list, the system displays a window showing the card reader at which the card is being used next.

At Glasgow, CEM S600 card readers are used to enable or disable check-in desks or baggage belts. Before a check-in desk can be used, the operator must swipe a card. If valid, power is provided to the desk and belt. The system opens the flight information system, which displays the active check-in locations for various flights. The data can also be used to invoice airlines for the use of shared check-in desks.

A major application at Gatwick is a loading bridge monitoring system. Sometimes referred to as an air jetty, it is designed to reduce maintenance costs and increase the control of a loading bridge. There had been concern that it was difficult to track the use and status of air bridges. To address this, the AC2000 AE system links a loading bridge to a CEM S600 card reader. Before the bridge can be used, a valid swipe must be made on the reader.

CEM also helps BAA control access of vehicles. The Airside Management System is in use at Heathrow to gather meaningful technical information about vehicles in use at the secure airside area, while Gatwick and Stansted use readers to control and manage access of vehicles and passengers to their car parks.

Additionally, CEM developed the Taxi Management System to ensure the fair allocation of taxis at

Edinburgh airport. Authorised drivers swipe at a CEM reader to indicate their arrival, while booking software in the taxi office designates an assignment and sends notification to the driver and passenger via a screen at the taxi rank. This system successfully assists in managing passengers at busy periods.

CEM's advanced people counting system is helping improve the operational efficiency of Gatwick's shuttle service. The PedMon system has been installed since 1996 to count the number of people on the train platform. It enables operators to know exactly how many people are in the transit zone to efficiently schedule trains between the North and South terminals.

Securing airports of the future...

As BAA airports evolve, major development plans are commonplace and construction areas need to be secured. CEM provides a range of portable readers to assist this. BAA uses the CEM S3010 hand held reader at temporary checkpoints and for random security spotchecks. The pre-downloaded database held in the mobile card reader ensures only authorised cardholders can gain access to construction sites.

Major upgrade

In 2003, CEM completed a major project to upgrade the system hardware and software across all seven airports. This ensured the systems would continue to offer an exceptionally high level of resilience well into the future. As well as reducing the risk of hardware failures, the £1 million upgrade has provided a common platform to optimise IT support across all airports.