



Entrance to T5 Terminal at Heathrow Airport



## Customer Success Story

# BAA/Heathrow Airport Middlesex, United Kingdom



A Control Screen at T5 Terminal at Heathrow

### About BAA/Heathrow Airport T5 Terminal

The T5 Terminal at London's Heathrow Airport was one of Europe's largest construction projects, funded by BAA at £4.2 billion. Initial planning for the facility, with a planned capacity of moving 30 million passengers a year, began in 1985 leading to a national design competition in 1989, then a four-year public inquiry, the longest ever on record. Permission was granted in November 2001 to begin development, a major step in providing BAA its first new gateway at Heathrow since Terminal 4 opened in 1986. Construction of T5 remained steady and on time as the terminal's March 30, 2008 opening day approached. BAA sought a comprehensive solution to deliver a very intelligent control room to operate the new T5 Terminal.

### ICONICS Software Deployed

ICONICS GENESIS32 OPC Web-enabled HMI/SCADA suite was selected by Ultra Electronics Airport Systems, a "first-tier" supplier for T5's Building System Integration (BSI) and the BAA Systems Team.

### Project Summary

The new terminal was designed to be a fully integrated facility, monitored through a central Terminal Service Centre (TSC) and mobile devices. A common user interface was needed to access heating, ventilation, lighting, fire, elevator, CCTV, and security systems as well as to centralize alarm management and automate system interaction.

At its opening, T5 included over 50 different systems, producing a massive tag count of over 3 million, handled easily due to the robust nature of GENESIS32. In addition, by using open industry standards based on OPC, the resulting architecture has been designed to provide flexibility for future expansion and integration, as required by the customer.

### Benefits of the System

The ICONICS platform as implemented by Ultra provides better information to the users than any previously designed model, allowing the terminal operators to respond more quickly to changes and situations. It provides a global view of all operations within the building and allows drill down, by pan and zoom, to any asset or area of interest.

Allowing connectivity with many industrial devices and control systems through a common interface, OPC was

fundamental to achieving seamless integration within the BSI and giving users the ability to both see and react to cause and effect within the terminal. One extremely important feature was future flexibility in both technical and operational spheres. During the selection process, this was a strong driver for Ultra's and BAA's selection of ICONICS as the core of the BSI.

### Key Features

BAA and Ultra Electronics Airport Systems brought ICONICS on board due to several factors, including:

#### *Minimizing Risks*

- Development of standard symbols/properties
- Consistent Tag structure and display creation
- Minimum number of interfaces



*Baggage Claim at Heathrow Airport's T5 Terminal*



*Heathrow Airport's T5 Terminal*

### Conclusion

ICONICS, one of the world's largest suppliers of controls software front end packages, clearly demonstrated a defined development path and road maps designed to keep their product at the forefront of the market and deliver an extended, useful lifecycle of their solutions for BAA.

### Key Features (Cont'd)

#### *Meeting Requirements*

- Flexibility in using BSI in an airport terminal
- Simple maintenance via off the shelf product
- Complex functionality via point and click

#### *Keeping Pace with Industry Developments*

- Open industry/IT standards (SQL, OPC, OLEDB, XML)
- Deployment on Microsoft OSs and Internet Explorer
- Mobility via Pocket PC integration