

Trials Design and Management

Risk and Reward

The Terminal 5 baggage system at London Heathrow will use technology for which precedents Analytical Decisions worked with the system supplier to define the scope of the system and, in parallel, was responsible for defining the entire trials significant cost and potential programme delays in commissioning had they not been discovered during the trials programme. The value of the



Test and demonstration system installed at London Heathrow

exist, but it does so at a scale and in a way that is unique at the airport. While this brings the opportunity to deliver improved performance it is not without risk.

The Approach

In order to increase confidence in operational performance Analytical Decisions developed a proposal to construct a test and demonstration system Heathrow. The proposal was accepted and, at an investment of just under 1% of the overall capital cost of the baggage system, the system was built in a British Airways hanger at Heathrow. Construction started towards the end of 2002 and the system was handed over in April 2003 for trials to begin.

programme. Analytical Decisions was then asked by BAA to provide the trials manager for the programme, which concluded at the end of 2003.

The trials themselves covered two distinct aspects: equipment performance characterisation and operational trials.

Performance characteristics measured included: sustained baggage acceptance rate via flow through check-in hoists, in-system times, effectiveness of toppling devices, sorter handling characteristics and discharge performance of spiral chutes from sorter.

The Results

These trials revealed a number of issues that would have incurred

results has far exceeded the costs of the trials programme, justifying the whole concept.

Buy-In

Of equal importance were the operational trials. These provided the opportunity for future users of system (handlers maintainers) to try out the system and provided us with valuable feedback. While this confirmed the soundness of the basic design, a number of improvements were suggested, for example on the configuration of some physical and controls interfaces. We now have the informed "buy-in" of the key stakeholders in advance of the system entering production design.