

British Airport Authority Limited

EXECUTIVE SUMMARY

REASONS FOR ENGAGEMENT

- Decrease operational expenditures associated with maintenance of separate voice and data networks
- Improve telecommunications services offered to tenants
- More efficient, holistic approach to planning, designing and implementing airport changes
- Expert assistance to help prepare, plan and design a complex next-generation IP communications network

WHY CISCO SERVICES

- Cisco's reputation
- Prior relationship with Cisco
- Deep technical competency and experience working with other large, complex designs
- Competent, proactive project management expertise
- Knowledge transfer

BENEFITS REALIZED

- Decreased operating costs (three-year payback)
- Implementation with negligible impact on operations
- Successful design with minimal hardware costs
- Improved flexibility
- Easier IT monitoring and support

Company Overview

With 2006 revenues of £2.2 billion (US\$4.3 billion) and over 12,000 employees, British Airport Authority (BAA) Limited is the world's leading airport company, owning seven UK airports (London Heathrow, London Gatwick, London Stansted, Glasgow, Edinburgh, Aberdeen and Southampton), holding a 65% stake in Naples Airport and owning retail management contracts at three major US airports (Baltimore-Washington International, Boston Logan and Pittsburgh).

BAA is responsible for security, property management, retail facilities, fire services, cargo and telecommunications services at all airports that it manages. It is considered a world-leader in security during this time where acute security is mandated by government and customers alike.

Reasons for Engagement

In order to maintain the highest level of customer satisfaction, lower operational expenditures, and adopt a holistic approach to planning, designing and implementing new airports, BAA decided to undertake a major unified communications technology initiative. BAA knew they would need to scale their unified communications network for superior customer service with efficient economics. Additionally, the company sought to move away from managing new airports or major additions to existing airports on a project by project basis.

One of the most immediate benefits of this unified communications project was reducing operational expenditures. Like many companies, BAA had been operating with an IP network for all data communications and a circuit-switched PBX network with separate copper cabling for all voice communications. Consolidating the network onto a converged IP platform with a multi-protocol label switching (MPLS) backbone is a massive undertaking, but will pay for itself in three years time based on reduced carrier charges and drastically lower support expenses for the two separate networks.

According to Andy Clarke, Project Manager for the Network Projects division of BAA Limited: "there's company-wide cost savings associated with moving to a new technology platform. Additionally, the existing telephony system had a number of points of failure and resilience issues, and was due for a technology refresh."

BAA was looking for objective, independent experts to help them prepare, plan and design for this complex undertaking, in a way that was optimized for their unique network needs and would allow them to accommodate the constantly changing needs of their member airports and tenants. They were ultimately looking for a partner that would help them align their network with their broader business and technical objectives: a secure, scalable network that can support future growth and government compliance.

Why Cisco Services

BAA ultimately selected Cisco Services for the preparation, planning and design of this project for its reputation, technical competency and experience, proactive project management and ability to train internal staff well. Cisco provided a proven track record of success and familiarity, being a partner of BAA Limited for many previous projects. Andy Clarke said "They [Cisco] were known to have a strong design resource available and BAA have a good relationship with them [Cisco]."

Additionally, Cisco engineers provided a wealth of technical knowledge and relevant experience. Andy Clarke described them as "highly knowledgeable on their products, completely up-to-date in their training, and have at their fingertips the full library of Cisco information that they can pull off the shelf."

Andy Clarke believes this deep technical expertise and knowledge actually resulted in better value. "In terms of meeting deliverables, the number of days required is actually quite low. From a budget perspective, we found Cisco [Services] provided good value for the money." And BAA did not receive just cost savings, as the IP infrastructure consolidation from Cisco Services will allow for greater productivity and faster uptime/availability in the future at BAA.

The Solution

Cisco Services planned, designed and helped implement the unified communications infrastructure to which BAA's voice and data networks would be migrated. "The project was the first step towards IP telephony. The transit network is a backbone to BAA's future IP platform that is now well advanced." Andy Clarke said "the project put in place the infrastructure to enable BAA to place its traffic onto its MPLS network, reducing call charge costs, and connecting up to new public switched telephone network connections. Cisco [Services'] involvement was the full design of the components of the transit network, working with some of our designers in-house, [doing] the build and the test of that infrastructure, [then training] and handing over to operations."

Benefits

- **Lower Operational Expenditures:** The most tangible, immediate benefit from this project will be reduced operating expenditures. This comes primarily from lower carrier usage charges and lower support costs. Because the voice and data will be on the same system, support can be shared across systems (as opposed to having separate support for voice and data). Andy Clarke reported, "from [a] support perspective we're now bringing voice and data together, which means a single support model for hardware items, a single help desk point, and all the synergies of bringing voice into the data environment." There is no longer a need to have engineers and help desks devoted to each individual component. "The annual costs are considerable, and those project costs will drop significantly as a consequence of this" said Andy Clarke.
- **Improved Flexibility:** Part of this cost reduction comes from the increased flexibility of the system, which will also allow BAA to respond more quickly to constantly changing tenant needs and airport configurations. According to Andy Clarke, "at any one time there are literally hundreds of projects taking place to build new piers, new office locations, moving airlines from one place to another, changing the terminal environment from what was a retail outlet into a lounge or vice versa. Many of these change projects have a telephony requirement and [prior to this implementation] an associated cost using our support partners for that telephony work." Moving to a UC platform will allow BAA to manage these changes internally with greater flexibility and at lower cost.
- **Cost Avoidance:** Cisco's planning, design and implementation services helped to ensure that the architecture would maximize these UC benefits while avoiding costly redesign and troubleshooting after the original implementation. Cisco Services engineers brought their unparalleled product knowledge and design expertise to help BAA execute this project on schedule, on budget and with less hardware than they had originally anticipated needing. "Our original [design] concept had considerably more complexity and hardware involved. We planned to do protocol conversion via a convertor on each of our 60 connecting lines. [Cisco Services enabled us] to eliminate all 60 of these and put in two Cisco PGW [softswitches], which was a clearly cost and complexity reduction," said Andy Clarke.

- **Knowledge Transfer:** Another major benefit of using Cisco Services for this engagement was their ability to transfer knowledge and train internal BAA staff on the management and operation of the new system. According to Andy Clarke, “their ability to communicate complex technical problems in a non-technical forum (for management summaries and for project meetings) was extremely good. It’s unusual to find that blend of good technical knowledge and good communication skills.” In addition to the immediate benefits of training BAA staff on managing the new system, this knowledge transfer will enable future business-driven projects to be rolled out that will further improve BAA’s productivity.
- **Flexible Resourcing:** Cisco Services’ solid project management capabilities also proved valuable to BAA. In any project of this magnitude, scope changes and shifting circumstances are very likely to occur. In this particular project, “we had a number of changes to the original plan that was caused by BAA internal issues, and the [Cisco Services] project manager was able to re-plan resources effectively. The project manager gave us good [perspective] when forced to change scope and was able to provide us with resources when we needed it.” As Andy Clarke put it, “the project manager added value in terms of efficient scheduling of resources, providing cover during leave periods, and managing escalations and issues effectively.”

Conclusion

The first phase of the engagement has been concluded satisfactorily and professionally by Cisco Services, and Andy Clarke expects positive business changes upon completion of the project. “Ultimately, we will move to a single billing platform. We will be able to provide greater resilience and continuity, improved continuity plans for the airports, better inventory management, better capacity planning for circuits, and greater visibility of our asset base. This is a step towards a number of business improvements that will be realized over the next few months.” As a result of these changes, Andy Clarke anticipates a payback on this upfront investment within three years.

For more information

For more information about Cisco Unified Communications services, visit www.cisco.com/go/ipcservices or contact your Cisco service account manager.

This interview for this story was conducted and documented by **Chadwick Martin Bailey**, and sponsored by Cisco Systems.

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