

# ATOC Drives Revenue for UK Rail Industry

**Successful collaboration between Capgemini, IBM and HP together with almost 40 other stakeholders, delivers modern reservations system for fastest growing rail industry in Europe.**

## The Situation

The Association of Train Operating Companies (ATOC) in the UK wanted a new National Reservations Service (NRS) to deliver enhanced levels of service to customers and operational benefits to Britain's 26 Train Operating Companies.

## The Solution

Together with Capgemini, ATOC was able to deploy a state of the art reservation system based on innovative technology, within a complex stakeholder and supplier framework.

## The Result

In the first three months of operation, NRS had already exceeded its 99.5% availability target. On average, over 150,000 seats are booked daily on UK trains.

In excess of 120 transactions are handled every second with a capacity of 700. NRS can handle over 1.5 billion transactions every year. Not including the Internet, the system supports about 3,000 end users and over 1,600 output devices.

**“Capgemini's collaborative approach was a strong factor in achieving the demanding deadlines we set, and one that clearly differentiated them from other potential suppliers. Effective stakeholder management was key to delivery success, and there can be no doubt that Capgemini's collaborative approach was an important contributor to this.”**

Steve Pickman,  
Head of Programme Delivery,  
ATOC – Rail Settlement Plan



### How ATOC, IBM, HP and Capgemini Worked Together

One of the best things to come out of the 1997 privatization of the UK rail industry was the formation of the Association of Train Operating Companies (ATOC). As well as being the official voice of the passenger rail industry, it also provides members with a range of services that enable them to comply with statutory requirements in their franchise agreements and operating licenses.

Playing a pivotal role at the heart of an integrated transport network, ATOC is dedicated to meeting customer needs. This was the driving force behind their commitment to creating a new, modern reservations system that would enhance service levels and improve yield management.

Customers needed a more flexible service. For example, they needed to book complex multi-stage journeys, be able to specify requirements with precision, or make, amend or cancel reservations nearer to the time of travel.

The 26 UK Train Operating Companies (TOCs) needed better, real-time data on bookings and occupancy rates – right up to the moment of a train's departure – in order to achieve a better match between supply and demand. They wanted to increase average occupancy rates, make strategic decisions for effective marketing (including pricing), and improve operating performance and profitability.

The TOCs were determined to introduce a world-class, 21st century National Reservations Service. ATOC, through its subsidiary RSP, took charge of the project.

### A challenging task

ATOC recognized that the project was ambitious. The large number of stakeholders – 26 TOCs, travel agents, five retail organizations, nine other suppliers (including IBM and HP) - called for exceptional capabilities in terms of co-ordination.

Being a long time leader in delivering real business benefit to clients and an established presence in the sector, Capgemini demonstrated skills in partnership and collaboration to manage many stakeholders and sub-projects. It also had proven capabilities in advanced systems integration. Capgemini was selected as the prime contractor for NRS.

### First things first

An important first step was to get consensus from all with clear, realistic goals. Capgemini used methods like its innovative Accelerated Solutions Environment to bring together all the stakeholders, assess information, achieve consensus and make decisions. In the design phase, over 80 workshops for 200 people were facilitated over a three month timeframe. Parties focussed on not just agreeing requirements and deliverables but how things would be done up front.

### Innovative architecture

Capgemini proposed the establishment of a service-orientated architecture (SOA) to allow retailers non-proprietary access to the service and its data, basing the solution on standard open published interfaces (SOPis) utilizing XML. Adopting a service-led approach to design and delivery created the foundations for a more flexible and adaptable architecture for ATOC. Future enhancements and integration could be carried out more easily and with less risk to the business.



***“Collaboration was essential given the complexity of the stakeholder map. We simply couldn’t have achieved what we have any other way”***

**Steve Pickman,  
Head of Programme Delivery,  
ATOC – Rail Settlement Plan**

The new solution involved an innovative combination of IBM's WebSphere Business Integration Suite and J2EE Application server, connected to a HP NonStop™ S8 6006 server. Capgemini took an application it had developed in Danish State Railways whose services were wrapped and extended to provide a solution tailored specifically to ATOC's requirements.

### **Accelerated development**

Capgemini's Advanced Development Center in Aston was selected to host the development. ATOC co-located their team (including TOC users) to the center to work alongside key members from all other organizations. The team from Capgemini included specialist knowledge from Capgemini Denmark to help with the development. Developing the majority of the solution in a standards-based Java environment enabled existing COBOL functionality to be re-used and extended rapidly with latest tools and techniques.

### **Collaboration in action**

Willingness to listen to new ideas and adapt solutions is another important element of success. All sides demonstrated flexibility. A recent example was a new way of working together for an add-on to the core system. Flexibility doesn't mean losing sight of fundamentals. A solid methodology and governance process was established at the outset to ensure that rigorous discipline was applied throughout. An ethos of commitment to the benefits of teamwork underpinned the many partnerships—Capgemini's as well as ATOC's. It ensured a spirit of collaboration, and facilitated a 'can do' attitude throughout to get real value when needed. Capgemini's established partnership with IBM and HP yielded added benefit.

### **Mitigating risk**

Of utmost importance to ATOC was to mitigate risk. In recent times, several public sector organizations have encountered challenges with new system deployment, coupled with major media-grabbing events adversely impacting the rail industry. The industry could ill-afford a public failure of the NRS. Issues reported in the development of NRS or delay in implementation would attract adverse attention. And any outage would stop passengers reserving seats and affect revenues of retailers selling rail tickets.

### **Managing change by targeting value**

Management of change is always challenging, even more so when it involves so many stakeholders. Aligning over 40 stakeholders in advance of any change is a strong testament to the success of the project. The key to ensuing buy-in was by targeting value. In particular, long distance operators wanted to maximize revenues and passenger numbers similar to the approach used by low cost airlines.



***“With Capgemini’s help, Britain now has the most advanced and sophisticated rail reservation service in the world. It gives customers real benefits by enabling them to travel exactly how and when they want, and helping train operators to provide services that passengers want. The new service is a significant further step towards the achievement of world-class standards on Britain’s railways, and a vital response to the ever-increasing popularity of travel by train in the UK.”***

**Antony Lain,  
Chief Executive,  
ATOC – Rail Settlement Plan**



### Realizing the benefits

The system provides a new revenue management capability that is being used by all major TOCs to maximize productivity on their services. They have total control over product availability and are able to implement their own strategies and policies in isolation from any other Train Operator. This gives them the ability to innovate and respond to market forces much faster than before.

The automation of the timetable change activity has freed up knowledgeable staff to take on higher value roles within the Train Operators. They are now making revenue generating decisions, rather than just keeping data up to date. For example, the solution provides TOCs with 'self-service' capability for train configurations. TOCs can create, maintain and change revenue management groups. As TOCs have to re-bid for rail franchise licenses, the ability to manage revenue will be critical for shareholder returns.

Of critical importance, the solution has the ability to run complex, high-volume on-line enquiries for availability, seat and ticket booking at the same time as large batch reporting services. Reporting, such as Guards and Assisted Passenger Status can be delivered to stations to facilitate effective management of passengers with special needs, e.g. disabled persons.

The system processes in excess of 120 transactions per second and can cope with up to 700, equating to over 1.5 billion transactions a year. There are 3,000 end users, not including the Internet and over 1,600 output devices. On average, over 150,000 seats are booked daily (35 million annually) on UK trains.

**ATOC Rail Settlement Plan  
Industry Awards:**

**Winner**  
HSBC Rail Awards 2005  
Information Technology Excellence of the Year  
National Reservations Service

**Winner**  
Business Achievement for Public Sector  
British Computer Society 2005  
National Reservations Service

**Medallist**  
Technology Award  
British Computer Society 2005  
National Reservations Service

**Highly Commended**  
Innovation in Customer Service  
Railway Industry Awards 2005  
National Reservations Service

### Looking to the future

The successful deployment of NRS was followed by Capgemini being awarded a 10-year (renewable) outsourcing contract to deliver a full range of applications and infrastructure management services on NRS. The system provides a reliable reservation enquiry and booking service for rail customers to buy and reserve seats. Discounted prices are controlled by TOCs according to demand on each service. It therefore also allows the TOCs to realize greater yield from each train and hence greater profitability arising from increased occupancy.

Studies report that the UK rail industry represents the fastest growing in Europe. Successful collaboration between ATOC and Capgemini, together with the TOCs, IBM, HP and all other stakeholders, ensures that the NRS is at the forefront of resulting opportunities for the sector.



### About Capgemini and the Collaborative Business Experience

Capgemini, one of the world's foremost providers of Consulting, Technology and Outsourcing services, has a unique way of working with its clients, called the Collaborative Business Experience.

Backed by over three decades of industry and service experience, the Collaborative Business Experience is designed to help our clients achieve better, faster, more sustainable results through seamless access to our network of world-leading technology partners and

collaboration-focused methods and tools. Through commitment to mutual success and the achievement of tangible value, we help businesses implement growth strategies, leverage technology, and thrive through the power of collaboration.

Capgemini employs approximately 61,000 people worldwide and reported 2005 global revenues of 6.954 billion euros.

More information about our services, offices and research is available at [www.capgemini.com](http://www.capgemini.com)

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