

## Venue Management Solution

# The O<sub>2</sub>



### Customer

- AEG Europe, United Kingdom

### Industry

- Venue Management

### Challenges

- To create a flexible, reliable and resilient infrastructure for voice, data and IT communications throughout the venue
- To maintain security while optimising the customer experience and simplifying staff management

### Solution

- A fully-converged IP communications solution with a single integrated network infrastructure for all voice, data and IT communications
- Time and attendance system based on RFID cards
- Smartcard technology offering potential for cashless payments
- NC2500, the world's brightest DLP (Digital Light Projecting) cinema projector

### Results

- Voice solutions provide flexibility, reliability, and resilience
- Time and attendance system gives the management team up-to-date staff information
- The O<sub>2</sub> hosts Europe's first purpose built digital cinema complex

The company behind The O<sub>2</sub> is AEG, headquartered in the US and well known for delivering many exciting venues, such as STAPLES Center in Los Angeles. Even for AEG, The O<sub>2</sub> was one of their most ambitious projects. It has music clubs, cinema complex with cutting-edge digital projectors, major exhibitions, over 20 bars and restaurants. There is also a large indoor arena which accommodates 23,000 audiences. AEG's vision for The O<sub>2</sub> is the world of entertainment under one roof.

From the outset, AEG Europe set out to make The O<sub>2</sub> the number one international venue. They recognized that to operate and manage such a large complex venue, they would have to utilize the best of cutting-edge technology and networking. NEC supplied the cutting-edge technology required to operate and manage the venue.

As a Founding Technology Partner, NEC leveraged its solutions and competencies. It delivered digital projectors to the cinema complex, RFID solutions, and the backbone technology in the form of a fully-converged IP infrastructure to support both fixed and wireless voice and data communications.

### Challenges

To realize the vision AEG required a partner that could provide the most advanced technology in the world. After thorough research on products and the ability to deliver complete technology solutions, AEG chose NEC.

The challenge was to create a flexible, reliable and resilient infrastructure for voice, data and IT communications throughout the venue. The solution had to support communications for some 2,500 employees and a varying number of visitors, enabling them to access communications, regardless of their location in the venue. Access control was a key requirement – to maintain security while optimising the customer experience and simplifying staff management.

The infrastructure had to support other sophisticated applications and accommodate growth in line with anticipated future needs. Finally, the project had to be completed in an extremely tight timescale.

## Solution

Only NEC could supply the variety of technologies needed for such an ambitious project. With its many divisions NEC can demonstrate its power as a multi-solution provider.

From IP telephony to network solutions, servers to venue management, various kinds of cutting edge technologies bring benefits to The O<sub>2</sub>.

The voice solution supports employees, plus visitors, which is facilitated by a series of the UNIVERGE SV7000 NATIVE IP servers. Redundancy is in the form of duplicate servers to handle voice traffic and replace the primary server in case of failure.

A sophisticated time and attendance system, based on RFID cards, gives the management team up-to-date staff information on the number of employees. It also provides employee skills profiles on-site for different events. This provides the right people in place for every event.

With smart cards, AEG could learn more about its customers and staff, and deliver the best possible services and offering potential for cashless payments.

A loyalty scheme powered by RFID technology, computers, servers and laptops could also be provided as part of the solution.

NEC's RFID technology also adds a new dimension to a trip through music history.

Through the RFID technology, visitors enjoy an enhanced and unique experience at the British Music Experience; the world first interactive permanent exhibition contains a wide and varied collection of both genuine musical artifacts and interactive experiences using digital technologies. Visitors are issued with Smart-tickets which they can use throughout the exhibition to drive interactive exhibits and collect items of interest, creating a unique personalised record of their visit to take home with them. When visitors leave the exhibition a "myBME" content trail is electronically created ready for them to view.

NEC Entertainment goes to the next level at The O<sub>2</sub>'s digital cinemas.

The O<sub>2</sub> hosts Europe's first custom-built digital cinema complex in Europe and features the latest NEC projectors, with a 22-meter NEC screen – the largest in Europe.

The NC2500 is the world's brightest DLP (Digital Light Projecting) cinema projector and also the world's first DLP projector for screens up to 30-meters wide. High contrast and bright imagery provide precise 2048 x 1080 resolution.

Lesly Saville Chief Marketing Officer AEG;

"One of the great things we've found working with NEC is that they don't just take the brief if you like and then go off and execute. They add real value along the way as part of the process. And one of the projects we've been working on is, we wanted to introduce a loyalty scheme using RFID technology and NEC actually helped us scope what

the defined project should be as part of the overall process and from an AEG perspective that was real added value because one and one made three."

## Results

The technology that NEC has been able to provide to The O<sub>2</sub> demonstrates the breadth and depth of NEC's technologies.

David Payette President and CEO NEC UK;

"The O<sub>2</sub> is one of the most exciting, largest and diverse entertainment venues – certainly in Europe, if not the world. AEG like to call it 'a world of entertainment under one roof' and none of that could be sustained or optimized or made as effective as it is without the technological innovation, project management, systems integration that NEC brings to bear in the support of the project. And to be a part of that is a really exciting thing."

The O<sub>2</sub> has become the world's most popular venue and entertainment complex, a true testament to the partnership between AEG and NEC.

The project has established a potentially long-term fruitful relationship between the two companies. "We knew this was going to be a major undertaking. Fortunately, NEC adds such value along the way that 1 + 1 makes 3 – AEG and NEC together," says Lesley Saville.

## About

AEG is well-known for developing STAPLES Center, which hosts the world's top concert entertainers, and is home to the Grammy's, the Los Angeles Lakers and Clippers basketball teams, and the LA Kings hockey team. On the site of the rejuvenated Millennium Dome, The O<sub>2</sub> represents a new era of entertainment and venues. There's an entertainment district, an 11-screen cinema multiplex – three of which are digital (including Europe's largest digital screen – 22-meters), more than 30 restaurants and bars, even an ice rink.