COMMEND

Reading Station

Fourway Communication, UK

Mobility and Service

Photos: Commend UK / Network Rail

Project Details

Customer

Fourway Communication, UK

Project Type

Security and building management systems

Technical Data

14 x GE 300 Servers for Lift Communications

2 x GE800 Servers for EVC and Intercom System all networked together via a dedicated IP network

14 x EVC Outstations & AFILS for Refuge Areas

2 x IP Audio & Video Intercom Stations

4 x Dedicated Master Stations (WS Series and MS199DR) managing and controlling the system

Fully Monitored with Battery Back Up - Meeting the requirements of EN81-28 and BS5839 Part 9

COMOPC Server for Interfacing with the BMS

Security and Communication
Case Study Commend UK

The Challenge

Reading Station underwent an £895m redevelopment comprising a new track layout, five additional platforms, two new station entrances, and a new 30-metre wide passenger footbridge to provide **quick, step free access to platforms via new lifts and escalators.** As part of this programme, it also upgraded all of its security and building management systems, central to which was a new intercom technology. As the principal communications contractor, Network Rail appointed Fourway Communication as the proven specialist; Fourway Communication itself turned to integrated intercom solutions provider, Commend UK. Commend UK understands the rail environment and the very strict requirements placed on the technology specified – especially since the equipment was to be installed within only three metres of an electrified line. As such, Commend has attained Network Rail Approval for all of its core intercom products and its emergency voice communication equipment, and its technology is designed in accordance with BS5839 (Part 9) and BS9999. Following thorough testing, Commend's products have been approved and certified by Network Rail as being safe and fit for purpose for full national use (including sub-surface stations) on all of the rail infrastructure.

The Outcome

The requirements for the design of the Communications Systems at Reading station were for fully integrated Emergency Voice Communications (EVC), Induction Loops (AFILS), General Security Video Intercoms and Lift Communications Systems across the station. Commend has also supplied its COMOPC Server to be the central connection between the Intercom system and the building management system (BMS).

The Solution

The hard wired EVC, AFIL and IP video intercom units are connected to a central communications server, which in turn is networked to separate Lift Communication Systems at each of the 14 lifts across the station.

Each separate lift system comprises the car, top of car, pit and motor room stations and operates as a stand-alone system with each one being managed by a Commend **GE300 Server**. These are all networked to the Central **GE800 Server** for call forwarding and monitoring as well as traditional telephone connections to cater for any network failure.

Commend's GE800 is a new generation of IP Intercom server that enables the transmission of 16kHz speech communication, video and control capabilities, emergency calls and public address announcements. Subscriber cards are also included with built-in speech storage for individual messages (waiting information and alarm messages) to be stored and played back anywhere across the whole system, at any time, and its audio monitoring feature automatically initiates a call – for example when somebody screams for help. Calls from the EVC Outstations, located in the platform refuge areas, are answered by a dedicated EVC Master Station in the control room allowing for full control of the refuge areas by station staff in the event of an emergency. Fire Brigades can use the EVC Master Station to assist with their evacuation and control the station whilst on site.

Video Intercom Stations are also located at the station's reception and goods yard entrances to enable the station staff to view and speak with visitors via dedicated audio and video handsets in both the station control room and reception to aid security.

Commend UK and Fourway Communication were able to draw on both companies' expertise and experience with this type of project, and worked together on the design, ensuring the appropriate products were used from the Commend portfolio.

Short Profile of Reading Station

Fourway has been established in telecommunications since 1949, and is now an experienced and leading provider of **turnkey telecoms** and associated projects to the **rail industry**. This service is offered directly to infrastructure owning clients as a Principal Contractor or as a subcontractor to other contractors, and is available throughout the UK.

Security and Communication for Railways, Buses and Cable Cars

Products and Integration for a true end-to-end solution.

Fourway Communication installed a similar system at London Kings Cross using Commend Technology. The project engineer of Fourway Communications, therefore knew that he was working with a trusted partner:

Network Rail had predefined requirements for Reading Station and Commend was able to work within those requirements

Ed Darby
Project Engineer, Fourway Communication

Real life makes for the best stories

How do Commend solutions cope with the tough real-life communication and security challenges at locations all over the world? Real-life answers to this question are provided by the many case studies on customer projects. - www.commend.com

Your local Commend contact person will be happy to answer any further questions regarding individual solutions.

Secure communication systems by Commend

Can you imagine a system that millions of people rely on every day, where every word counts? This is the world of Commend! Secure, reliable communication is our passion.

As global market leader with over 40 years' experience in developing voice technology, we have integrated video and interfaces to third-party equipment that complies with international norms and standards. Commend is the natural choice for hands-free voice communication systems all over the world.

Other Projects

Brunel University, UK

Vienna International Airport, Austria

Northumbrian Water Group, UK

A strong worldwide network.

COMMEND is represented the world over by local Commend partners, ensuring enhanced security and communication with tailored Intercom solutions.

www.commend.com

The ORIGINAL OpenDuplex®
Natural Communication

16 kHz
eHD Voice
Audio Bandwidth

High Volume

Background Noise Suppression

Loudspeaker-to-Microphone Monitoring

Loudspeaker Line Monitoring

Induction loop module