

# SHEFFIELD RE-CONTROL

## Project Summary

**Client:** Network Rail

**Timescale:** July 2015 - Ongoing

**Linbrooke Disciplines:** Telecommunications

**Linbrooke Services Utilised:** Option development, design, project management, installation, test and commissioning

## Customer Objective

To coordinate with the signalling re-control project to re-control the Sheffield signal box telecommunications to the York Rail Operating Centre (ROC) in order to enhance rail services nationwide.

## Project Overview

As part of a larger programme, intended to enhance lineside telephones across the nation, Linbrooke are contracted to develop a suitable design, construct, install, test and commission the transfer of all lineside telephone circuits from the Sheffield signal box to York ROC.

We are responsible for the migration of over 300 telecoms circuits, of which circa 200 are Signal Post Telephones (SPT's), 50 are Point Zone Telephones (PZT's) and the remaining comprise a variety of direct lines to stations, fringe signal boxes and railway control centres.

*“After demonstrating expert planning and collaborative efforts, Linbrooke are already well on their way to ensuring this project is delivered successfully and efficiently”*

– Patrick Hall, Project Manager

## Linbrooke Project Scope

Completing a wide range of GRIP 4 to GRIP 8 works, Linbrooke are required to:

- Transfer the signallers' communications from Sheffield's signal box to the York ROC
- Redesign and reduce the 5 existing Human Machine Interfaces (HMI's) into 2
- Replace the existing concentrator (Siemens HiPath Version 5) with FTN-X compatible concentrator (Aastra MX-One remote Line Interface Module (LIM) telephony server) to allow transmission to the York ROC's existing MX-One concentrator which is to be re-configured to allow the same
- Identify, test and install power for the remote LIM at Sheffield Power Signal Box (PSB)
- Test and jumper the 325 telephone circuits prior to the entry into service transfer due to take place during the wider signalling re-control
- Re-label existing telephones during commissioning
- Recover and provide existing concentrator to NR as spare

Utilising innovative thinking, Linbrooke designed an option that leverages Network Rail's newly installed FTN-X network to transport circuits between Sheffield and York using Ethernet and Transmission Control Protocol/Internet Protocol TCP/IP to connect a Sheffield based MX-ONE LIM to the York ROC system.

## Benefits of working with Linbrooke

Linbrooke are renowned for our strong industry relationships – including our positive interactions with equipment suppliers – Northgate, Aastra and Cisco. We also work well with Network Rail's TENE design team.

We are a Cisco registered partner with exceptional knowledge of operational telecoms, concentrator systems MX-one and Cisco equipment.

With our quality driven 'can do' ethos, Linbrooke are able to deliver a wide scope of works and provide innovative solutions. To ensure successful project delivery, we consistently provide:

- A strong, detailed understanding of the technical scope
- A full turnkey understanding of telecoms, FTNx and Power
- An impeccable health and safety record.
- A highly skilled and experienced work force
- The size, ability and flexibility to react quickly, effectively and safely to changing circumstances
- A multidisciplinary ability to provide alternative network solutions