

NAME OF PERSON Paul McSharry
NATIONALITY British
HOME LOCATION Wellingborough, Northants
POSITION Principal Engineer



QUALIFICATIONS Incorporated Engineer (IEng)
Member of the Institution of Engineering & Technology (MIET)
Member of the Institution of Railway Signal Engineers (MIRSE)
Working towards IRSE Design Manager Licence (1.1.145)
Working towards IRSE Signalling Project Engineer Licence (1.2.230)
HNC (Electrical and Electronic Engineering) 1985
ONC (Electrical and Electronic Engineering) 1983
BSI Trained Internal Quality Auditor
Signal Assessment Tool (SAT) Trained
Detailed Assessment (DA) Workshop Facilitator Trained
PTS and IWA Competent
Railway Communications

KEY EXPERIENCE A professional railway signalling and systems engineer with 28 years experience (10 years at Senior Level), having effective project management, project engineering and communication skills. He is experienced in system specification, design and application of both modern and traditional signalling systems as part of both renewal & development projects.

Paul has experience of electromagnetic compatibility and system compatibility issues, implementation of safety critical processor based systems, safety assessments as well as safety and product approval processes. He also has experience of track renewal and track replacement projects and has developed key skills in the area of multi disciplinary co-ordination and co-operation. He has held positions of key responsibility within Railtrack (now Network Rail) and maintains strong relations with HQ and Territory based Signal Engineering teams.

EXPERIENCE

July 2000 to date **Managing Director, Kilborn Consulting Limited**

September 1997 to June 2000 **Director, Naseby Signalling Associates Limited**

Work undertaken during this period: (1) Feasibility Studies and related work:

Currently managing the production of the detailed designs for the upgrade of an AOCL Level Crossing to ABCL status at Ferrybridge Power Station. The work is being carried out in accordance with Network Rail standards and is due for completion in January 2011.

Currently providing the S&T engineering input to GRIP Stage 2 Fast Track Enhancement Project relating to the double tracking of the Soham Branch in the Anglia area. The work includes development of the S&T works required to accommodate the proposals, development of Bills of Quantities and support to the estimating process, production of signal engineering requirements documentation together with associated Signalling Sketches and input to final Option Selection Reports. Attendance at, and input to, Opening and VM/QRA meetings, as well as site surveys, has also been required.

Currently providing the S&T engineering input to GRIP Stage 2 Fast Track Enhancement Project relating to the capacity improvements at Queenstown Road. The work has included development of the S&T works required to accommodate the proposals, development of Bills of Quantities and support to the estimating process, production of signal engineering requirements documentation together with associated Signalling Sketches and input to final Option Selection Reports. Attendance at, and input to, Opening and VM/QRA meetings, as well as site surveys, has also been required.

Recently provided the S&T engineering input to GRIP Stage 2 Fast Track Enhancement Project relating to the Braintree Branch Capacity Improvements in the Anglia area. The work has included development of the S&T works required to accommodate the proposals, development of Bills of Quantities and support to the estimating process, production of signal engineering requirements documentation together with associated Signalling Sketches and input to final Option Selection Reports. Attendance at, and input to, Opening and VM/QRA meetings, as well as site surveys, has also been required.

Paul has recently carried out Signalling Maintenance Management Systems auditing on Docklands Light Railway, specifically upon the infrastructure Maintainer, Serco Docklands, covering all levels of the organisation from senior management through to area signal maintenance engineers. Sample audits of equipment were undertaken across the system and condition assessments were carried out to validate data held by the infrastructure controller. A comprehensive series of audit reports and recommendations were produced.

Recently completed the provision of S&T engineering input to GRIP Stage 1 to 3 Fast Track Enhancement Project for Willington C Power Station. The scheme necessitated the development of proposals for the provision of Oil Discharge Sidings and a connection to Network Rail infrastructure near Stenson Junction. The work included development of the S&T works required to accommodate the proposals, development of Bills of Quantities and support to the estimating process, input to the GRIP Stage 3 Option Selection Report together with associated Signalling Sketches.

Attendance at, and input to, Opening and VM/QRA meetings, as well as site surveys, was also required.

Provided/led the S&T engineering input to GRIP Stage 1 to 3 Fast Track Enhancement Projects being developed in the Anglia and Wessex areas. These schemes have included proposals for the following works: new station at Beam Park on the LT&S Railway; new British Gypsum sidings at Purfleet; Platform Extensions at Stansted Airport; new/extended platforms at Roydon Station; additional train stabling at Cambridge sidings; 10 Car Platform Extensions at 36 No. stations in the Wessex area. The work has included development of the S&T works required to accommodate the proposals, development of Bills of Quantities and support to the estimating process, production of GRIP Stage 3 OPS documents together with associated Signalling Sketches and input to final Option Selection Reports. Attendance at, and input to, Opening and VM/QRA meetings, as well as site surveys, has also been required.

Acted as Design Manager and RDE for the resignalling of Ferrybridge Power Station railway for which Kilborn Consulting Limited developed the detailed designs for the new signalling system, which was installed tested and commissioned over two phases in August 2008 and December 2009.

Led the GRIP Stage 4 Telecoms feasibility work and the intrusive survey work associated with the Wessex Package A and Package E Platform Extension multi disciplinary feasibility projects on Network Rail Infrastructure, affecting a total of 19 stations. This includes production of a GRIP 4 Telecoms Approval In Principle Reports for both the Operational Telecoms and Station Security and Information Systems.

Provided/led the Signal & Telecomms engineering design development input for the following multi disciplinary feasibility projects on Network Rail Infrastructure:

- The GRIP 4 studies for Axminster Area Capacity Enhancements.
- The GRIP 2 and 3 studies for Wakefield Westgate Station Redevelopment.

The work includes preparation of reports on signalling asset condition, signalling equipment and wiring correlation, outline project specification, Operational Telecoms and Station Security and Information Systems, preparation of signalling scheme plans, recommendations for signalling controls and inputs into reviews covering the design and construction of the works.

Numerous inspections to identify Signalling and Telecomms assets and infrastructure as part of bridge repair or replacement works during the period 2005 to date.

Provided/led the Signal Engineering design development input into the GRIP 4 studies for the multi disciplinary Tunbridge Wells 12 car turn-back siding feasibility project. The work includes preparation of reports on signalling asset condition, signalling equipment and wiring correlation, outline project specification, operational telecommunications, preparation of signalling scheme plans, recommendations for signalling controls and inputs into reviews covering the design and construction of the works.

East Midlands Parkway Station: Provided/led the Signal Engineering design development input into the GRIP4 studies for the development of a new station at East Midlands Parkway on the Midland Mainline, a multi disciplinary feasibility project. The work included preparation of reports on signalling asset condition, signalling equipment and wiring correlation, outline project specification, operational telecommunications, preparation of signalling scheme plans, recommendations for signalling controls and inputs into reviews covering the design and construction of the works.

Engaged by the RAIB to provide specialist support and expertise in the investigation of incidents and accidents on UK railway infrastructure. Recently assisted in the investigation into the derailment of a freight train in Maltby, South Yorkshire. Remit included the production of method statements, providing a tester to carry out the investigation, liaison with the RAIB and production of final report to the satisfaction of the RAIB.

Hull Docks Branch Line GRIP 3 & GRIP 4 Studies: As part of a multi disciplinary feasibility project, provided/led the signal engineering design development input into the GRIP 3 and GRIP4 studies for upgrading the Hull Docks Branch Line from handling currently 10 trains each way per day to handling 24 trains each way per day. The work included preparation of reports on signalling options, signalling asset condition, signalling equipment and wiring correlation, preparation of signalling scheme plans, recommendations for signalling controls and inputs into reviews covering the design, construction and ongoing maintenance of the upgraded line, as well as consideration of operational telecommunications.

Orpington Station: Assisted in the production of the Signal Sighting Issues Report in support of the AIP phase of the project under the DfT Step Free Programme for the provision of a passenger footbridge with lifts at Orpington Station to provide disabled access between the station platforms.

GRIP 2 Feasibility Studies: St Helens and St. Albans Stations: Provided signalling consultancy support to White Young Green, supporting the Client's multi-disciplinary team, and carried out detailed assessments as part of the GRIP 2 feasibility studies of the impact upon the infrastructure arising from the proposed station re-development works at St Helens and St. Albans Stations. As well as signalling related issues, the work included consideration of operational, retail and business telecommunications.

W10 Gauging Assessments (GRIP 3 & GRIP 4): Working in support of White Young Green as part of a multi-disciplinary team, Paul carried out detailed assessments of the impact upon the infrastructure arising from the proposed introduction of W10 Gauge freight trains on two specific infrastructure routes.

Feasibility Studies - Fitment of AWS: Completed the production of Feasibility Reports relating to the fitment of AWS equipment on a number of freight only branch lines on the Anglia area of Railtrack Eastern Region arising from the publication of the new RGS GE/RT8035.

Overrun Risk Assessments: Led the production of Overrun Risk Assessments for a large number of signals in the Network Rail Anglia Region.

Work undertaken during this period: (2) Infrastructure Condition Assessments:

Level Crossing Condition Assessment Surveys (SICA): Currently in the role of Project Manager and lead Project Engineer, leading a team of 8 staff in an assignment to carry out Signalling Infrastructure Condition Assessments (SICA) at approximately 700 level crossings in South East and London North West Territories. Working with Network Rail HQ and Territory based Signal Engineers, this was a significant project aimed at providing Network Rail with data for the development of infrastructure renewal plans over the next 10 years. The production of output reports including recommendations for each crossing is a key part of the assignment.

Primary Signalling Infrastructure Condition Assessments: Carried out SICA surveys at approximately 90 signal box and relay room installations in South East Territory with production of appropriate survey reports.

Full survey of the Railtrack East Anglia Zone's signalling assets in 2000 using the Primary Signalling Infrastructure Condition Assessment (SICA) software model. This comprised a survey of over 230 signalling installations with production of appropriate survey reports.

Work undertaken during this period: (3) Documentation and Standards:

Signalling Maintenance Documentation: Cromer-Norwich Line: Led the production of a suite of new and revised Signalling Maintenance Documentation for the Harmon VHLC Interlocking and HXP3 Level Crossing Predictor, a novel signalling system implemented by RT East Anglia Zone. These were later revised and reissued when the VHLC and HXP3 equipment was installed for controlling the Bedford-Bletchey Line.

Supply Chain Audit Protocols: Led the production of a suite of signal engineering audit protocols for Network Rail Headquarters Signal Engineers Group. The Audit Protocols cover all areas of signal engineering and will be used as part of the Link Up Supply Chain PROOF process to validate suppliers to Network Rail.

European TSIs for Interoperability: Planning, implementation and management of a trial analysis of European TSIs against RGSs covering the fields of Rolling Stock, Infrastructure and Operations. Work included cost and resource management as well as production of full trial report to Railway Safety.

Work undertaken during this period: (4) Other Projects:

Manchester South Capacity Improvement Project: Provided support helping Ansaldo Signalling to adapt their ACC signalling system for controlling the southern approaches to Manchester, including specifying the required signalling controls, reviewing the interfaces to the conventional signalling equipment, reviewing the safety logic to ensure that it conforms to Railway Group and Network Rail Company Standards.

Belfast-Bangor Track Relaying Project: Acted as Professional Head of Signalling for Mowlem Railways. The role involved the technical monitoring of the nominated signalling sub-contractor during the implementation phase of the works. Working in conjunction with the client's multi-disciplinary project team to oversee the successful implementation of the signalling system as part of the wider track and civil engineering works aspects of the project.

Axle Counter Concept Safety Case: Management of the Hazard Log for the Axle Counter Concept Safety Case and review of the Hazard Traceability.

Jubilee Line Extension Project: Working on Contract 202 of the, Design and Installation of Moving Block Signalling System throughout existing and extended Jubilee Line, utilising WESTRACE processor based interlockings. Principally involved with Design Reviews, Systems Engineering EMC Compliance reviews, Material Compliance reviews, reviews of Design Compliance with LUL Standards & HMRI Guidelines associated with implementation of Fixed Block Contingency Signalling System.

