Fenix Rail Systems Signalling Capabilities









Who we are - Railway Signalling Engineers

Professional Specialists in Rail Signalling Engineering

MISSION:

To deliver cost effective signalling design and consultancy services.

OUR SERVICES:

- System Definition
- System Requirements
- System (Scheme) Design
- Detailed Design
- Procurement
- Construction / Installation
- Testing & Commissioning
- Independent Checking Engineer

- Mentoring
- Training
- Project Engineering
- Project Management
- Signal Sighting
- Turnkey Signalling Solution
- Consultancy Services
- Signalling Specialist



Summary of Capabilities

EXPERIENCE

Expert, Multi-functional Team with a Combined Track Record in Rail Signalling Engineering with a Wealth of Experience in Signalling and Interlocking Design



MANAGEMENT + SYSTEMS

Compliance and Quality Management
Dedicated Document Control Resources

COMPETENCIES

Traditional Relay Based Signalling Systems

Computer Based Signalling Systems

Communication Based Signalling Systems (ETCS and CBTC)

Depot Signalling Systems

Signalling Principles

Interfacing of Different Systems E.G. Computer based / Relay

Based

Location Design

GRIP Process Design (1-8)

SKILLS

Design

Product Engineering & Project Management

Mentoring & Consultancy

RESOURCES

IRSE Licenced Signalling Principles

Designers & Designers

Signal Sighting Chairman

Professional Head of Signalling

Independent Checking Engineer

Signalling CAD Draughtsman

Contractors Responsible Engineer (Design)

Contractors Responsible Engineer (Construction)

Project Engineers

Project Management

Programme Manager



Our Capabilities – Option Selection

- Condition survey and correlation reports.
- Outline Project Specification (OPS).
- Signalling Scheme Plan.
- Detail of control and interlocking assumptions.
- Identification of non-compliances and ways to manage them.
- Option Selection Report.

- · Scheme Plan risk assessment.
- Signal Sighting chair, forms and reports.
- Signal spacing charts and calculations.
- Aspect Sequence Charts.
- IDC/IDR participation.
- Signalling Surveying



Our Capabilities – Single Option Development

- Final Project Specification (FPS)
- Assessment of Signalling Systems before Design
- Alterations Report
- Signalling Scheme Plan (updates from GRIP 3)
- Scheme Plan risk assessment (updates from GRIP 3)
- Signal Sighting forms, sighting and reports (updates from GRIP 3)
- Draft Signalling Design Specification
- SAT/SORA
- Testing & Commissioning Strategy
- Level Crossing Surveys including Ground Plans



Level Crossing Survey



Our Capabilities – Detailed Design

- Signalling Design Specification
- Fringe work Specifications
- Stage Plans
- HAZID (signalling system only)
- Signalling Scheme Plan
- Signal Sighting forms and reports
- Section C Notices
- Location Area Plans
- Bonding Plans
- Cable Plans (Main and Detailed)
- Control Tables / Mechanical Locking Charts

- RRI Relay Room / Location Case Circuit Design
 - -Free-wired
 - -Geographical
- CBI Application Data and associated architecture/circuit design
 - -SSI
 - -VHLC
- Signal Box / Control Panel Modifications
- Signal Box / Control Panel Modifications
- Power Calculations
- Route Lists
- Control Tables





Our Capabilities – Other Capabilities

- Signalling Contractor's Responsible Engineer (CRE)
- ERTMS-ETCS Consultancy
- Technical Mentoring
- Independent consultancy

- Omincom Review and Desktop Studies
- Temporary Speed Restriction (TSR) design
- Technical analysis/preparation of documents
- Gauging Reports







THANK YOU

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