



Implementation and Support

Introduction

Atkins provides added value to clients across the entire spectrum of project stages. The breadth of skills throughout the business means Atkins not only offer key planning and design expertise, but also essential project management, testing and commission's crucial to the successful completion of a project.

The testing and commissioning teams within Atkins ensure vital components of new schemes meet industry requirements in terms of safety and standards. Our teams have the necessary competencies to complete these key project phases on projects in the signalling and control systems, electrification and civil engineering environments.

Our service delivery extends beyond project specific solutions, to resolving bespoke operational issues including approvals, incident investigations, procurement & contract administration; we also have a dedicated rail vehicles team specialising in approvals and vehicle component assessment. With a team of fifty systems integration experts, Atkins provides seamless solutions to both discipline specific and multidiscipline rail schemes.

Outputs we deliver

Regardless of the nature of the project, Atkins ensures total support is provided to clients during and beyond project completion. Some of our key services in the signalling environment include:

- Point Mechanism Re-servicing Programmes
- Project Manage and undertake all aspects of Special Inspection Notice
- cable diversion
- Reliability Studies
- Solid State Interlocking Testing and Data Review
- 'Health' Checks
- Signal Sighting
- Testing and commissioning of signalling and telecommunications assets to standards laid down in the Signalling Testing Handbook and Signalling Maintenance Standards
- Major Incident Investigation
- Expert Witness Services
- Post-incident testing (including at Ladbroke Grove and Potters Bar)
- Technical claims assistance
- Writing of testing strategies and plans
- Correlation activities
- Signal testing management
- Advanced systems troubleshooting
- Independent testing of mechanical locking to Locking Tables or to Signalling Principles

Together with the major testing and installation schemes, Atkins houses a dedicated Signalling Maintenance and Renewals Team (SMART). The team provides highly qualified staff for carrying out Signal Maintenance Testing Handbook (SMTH) work supported by the supervision and management provided by experienced signal engineers from within Atkins. The team are competent to deliver a wide portfolio of signalling activities to support signalling maintenance requirements, and in particular, activities traditionally classed as minor works, or support activities carried out by the maintenance and faulting teams.

The Atkins Notified Body is able to offer assessment and certification services across the full scope of the interoperable rail system defined by the following subsystems:



- Infrastructure
- Energy
- Control-command and Signalling
- Rolling Stock

Atkins is registered with Railway Safety as both a Vehicle Acceptance (VAB) and Conformance Certification Body (CCB). The rail business is also registered with the European Commission as a Notified Body.

Our Telecommunications group has a long and successful track record in the provision of consultancy services to major light and heavy rail clients, both in the UK and worldwide. This has been augmented by a design capability for both operational and retail telecom infrastructure renewal projects. Areas of specific expertise include:

- Communication Networks
- Control Centres
- Passenger Security & Safety
- Operational Communications
- Mobile Communications
- Customer Information

Atkins' dedicated systems validations team deliver new or altered signalling, train control and communication systems into operational service, smoothly integrating them into the working railway. Our 90 dedicated testers hold IRSE licences, and many also hold similar certification from other railway infrastructures worldwide.

Atkins Project and Programme Management teams aid the delivery of rail schemes, providing a complete range of specialised and expert support through its range of services:

- Bid Management
- Programme Management
- Programme Support Services
- Client Project Management
- Commercial and Contract Management
- Relocation Management
- Asset Management
- Strategic Consultancy



Atkins also has an Investigative Services unit providing independent engineering, technical support and consultancy services through a core team of specialists supported by the unrivalled facilities of our two nationally acclaimed Technical Investigation Centres.

Our approach

Working with the HMRI, we develop safety cases for safety critical products and systems (and their application on the UK railway network) and carry out independent assessments of safety cases produced by the product and system suppliers or by a third party. Safety cases for rail applications are developed and assessed by applying standards such as IEC 61508, CENELEC EN50129, EN50126 and EN50128.

The Rail Vehicles Unit employs a large number of specialist engineers with extensive experience in the drafting and development of Railway Group Standards and also with other national and international railway industry standards through membership of the drafting committees of bodies such as UIC, CEN, CENELEC and UIC

Outcomes we deliver

Atkins is able to provide effective and appropriate support to specific projects, based on: A thorough knowledge of the issues relating to safety approval and authorisation, regardless of the regulatory regime; access to specialists in the full range of railway engineering disciplines (e.g. civils, signalling and telecoms) and system features (e.g. Railway Operations, EMC and Human Factors); and the ability to apply the experience gained under previous regulations to the new regime.

SMART differentiates us from our competitors as we are not just providing a body shopping service, but we offer to undertake works as small, economical projects. Our teams will have fully equipped vans containing tools and calibrated equipment to cover most maintenance situations.

Certificated engineers, many of national or international standing, are part of the group. Chartered Engineers review all Investigative Services reports. The disciplines of the group include Electrical and Electronic Engineering, Mechanical Engineering (including hydraulics, pneumatics and material sciences), with considerable experience in Railway Safety Critical Control and Communication Systems in all technologies from 'Solid Steel to Solid State'.

