



CASE STUDY

ACTEMIUM UPGRADES CONNECTIVITY AT NETWORK RAIL'S DONCASTER TRAINING CENTRE

Actemium UK has delivered a major structured cabling upgrade and wireless network installation at Network Rail's Doncaster Training Centre, supporting the next generation of railway training and skills development across Britain's railway network. Delivered by Actemium's Data Network Solutions team, the project modernised legacy data and network infrastructure across the site, connectivity, resilience and digital learning environments ahead of the facility's launch in October 2025.

Sector: Rail

Location: Doncaster, United Kingdom

Expertise: Advise | Audit | Design | Install
Test | Commission

Scope: Structured cabling | Wireless network
installation Communications rooms | CCTV
Access control | WLAN deployment Data
infrastructure modernisation

01

OUR CLIENT AND THEIR REQUIREMENTS

Network Rail's Doncaster Training Centre - recently renamed The Gresley Institute - was developed to support the future of Britain's railway workforce through learning, apprenticeships and skills development. The facility includes 21 classrooms as well as specialist signalling simulation equipment and is expected to support up to 1,000 rail industry professionals each year.

Ahead of the facility becoming operational in late 2025, Network Rail required a comprehensive audit, remediation and upgrade of the site's digital infrastructure to support modern training environments, operational systems and wireless connectivity across the college.

Actemium UK, through Axians Data Network Solutions, was appointed to undertake work across the site's structured cabling systems, communications rooms, wireless network infrastructure, CCTV systems and access control platform at the multi-floor facility.

Building on a trusted relationship and previous successful project delivery, Network Rail appointed Actemium UK to ensure rapid mobilisation, technical quality and programme certainty.

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THE CHALLENGES

The project presented several operational and technical complexities typical of live upgrade projects.

A detailed audit identified multiple structured cabling issues requiring remediation - including 181 data sockets that didn't pass testing and required repair, re-termination or replacement.

In addition, the communications rooms across the facility needed significant rationalisation and reconfiguration, including:

- Removal of redundant network hardware
- Rack relocations and consolidation
- Cable reorganisation
- Earthing and bonding improvements
- Raised floor and infrastructure remediation works

The wireless network installation also required extensive new Category 6A cabling and relocation of existing infrastructure to support the deployment of 60 wireless access points across the facility.

Working within a programme with fixed occupation deadlines, careful planning and coordination were critical to maintaining delivery schedules while minimising disruption across the site.

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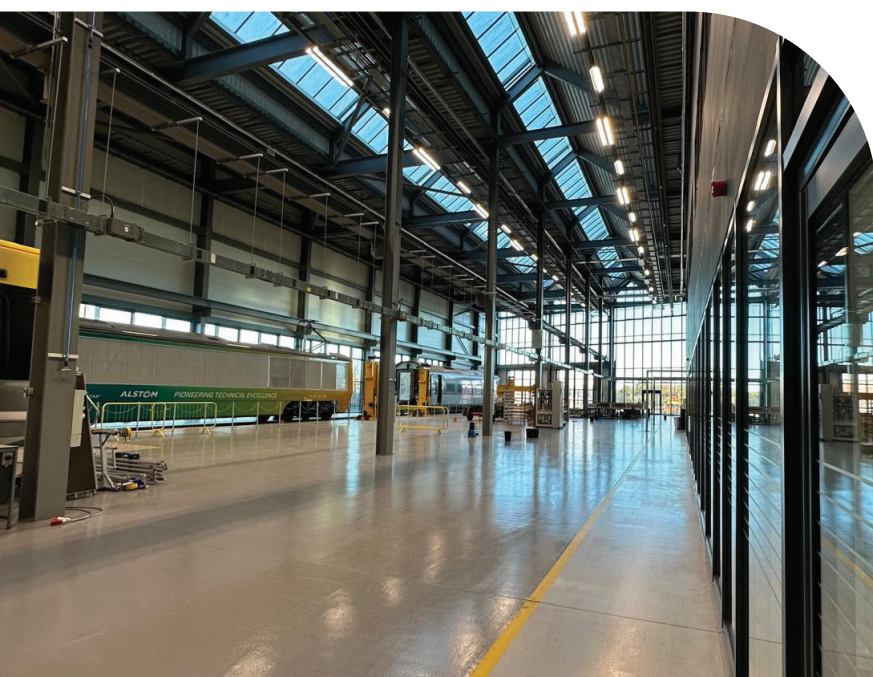
THE SOLUTION

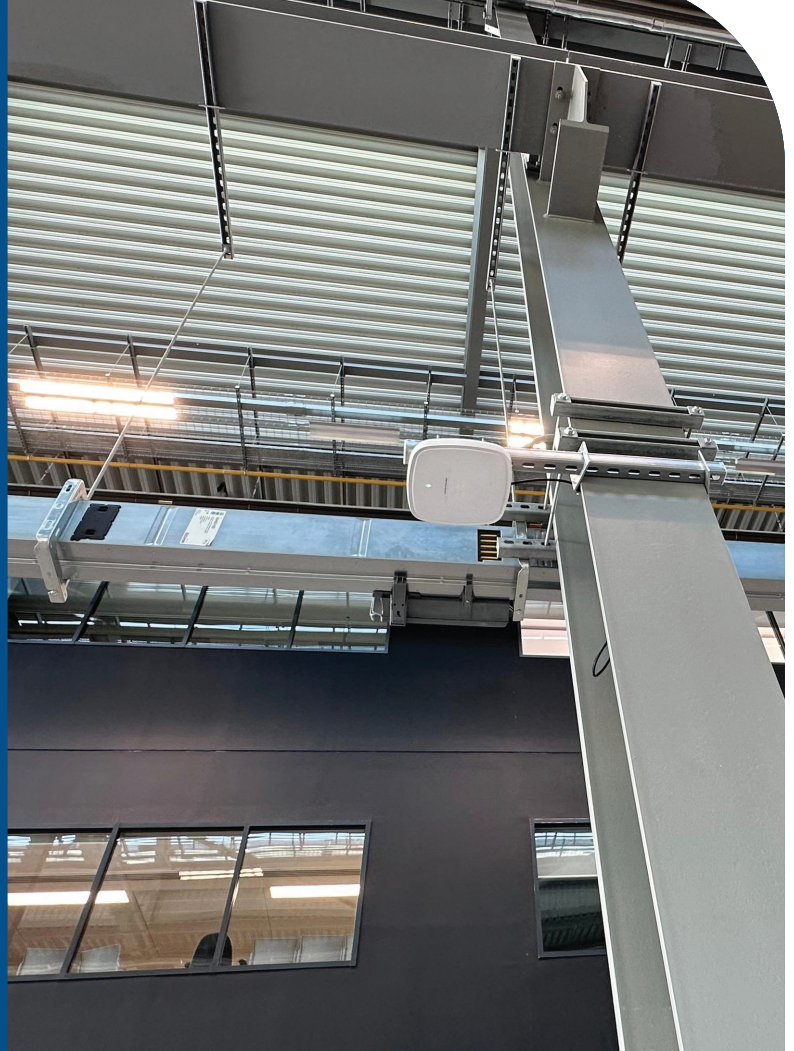
Actemium UK delivered a full audit, remediation and infrastructure modernisation programme tailored to the operational and technical requirements of the training facility.

The scope of works included:

- Comprehensive audit of the structured cabling, communications rooms, CCTV and access control systems
- Full industry-standard Category 6A testing across identified cabling infrastructure
- Production of updated infrastructure drawings and system documentation
- Repair and remediation of failed data outlets
- Communications room rationalisation and rack consolidation
- Installation and deployment preparation for 60 wireless access points
- New structured cabling installations across classrooms, training rooms and shared learning environments
- Data infrastructure upgrades for display screens and digital learning systems
- Certified recycling and secure destruction of redundant network hardware and hard drives
- Final testing, commissioning and handover documentation

The project also included delivery of a dedicated training room environment featuring new structured cabling infrastructure, anti-static flooring and multiple rack installations to support hands-on railway training activities.





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RESULTS AND CLIENT BENEFITS

Actemium UK successfully completed all works on schedule ahead of the planned occupation and training launch in October 2025.

The upgraded infrastructure now provides:

- High-performance wireless connectivity across the training facility
- Improved network resilience and structured cabling performance
- Enhanced digital learning capability for students and trainers
- Rationalised and future-ready communications infrastructure
- Improved operational reliability and maintainability

The project demonstrates Actemium UK's ability to deliver complex digital infrastructure modernisation projects within live operational environments while maintaining programme certainty, technical quality and minimal disruption.

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