

# New East Anglia Trains (NEAT)



## CASE STUDY

### Overview of Deliverables

Abellio's subsidiary company, Abellio Greater Anglia (AGA), was awarded a nine-year contract by the Department for Transport (DfT) in August 2016 for the provision of passenger rail services to and from London across Essex, Suffolk, Norfolk, Cambridgeshire and Hertfordshire (Greater Anglia Route). As part of the contract Abellio undertook to carry out a £1.5 billion fleet and infrastructure upgrade. Abellio have awarded contracts to Stadler and Bombardier to replace all the existing rolling stock within the Abellio East Anglia franchise. This will create an estimated increase of 10 per cent in the fleet size, the fleet will be equipped with air conditioning, free high speed WiFi and power sockets for customer.

The infrastructure upgrades and introducing new rolling stock into a live rail operating environment were key challenges for the programme which also included multiple stakeholders that includes numerous Network Rail functions, the train fleet suppliers, multiple contractors providing the infrastructure improvements and AGA itself, as well as other third parties such as ORR, rail users groups and local authorities.

Our work was to develop management processes following a detailed audit/review to set a framework which assures the technical, operational and safe delivery of the NEAT Programme.

### Deliverables included:

- Assessment and audit of the engineering and safety assurance process, this required audit of the existing controls against the SMS to determine the gaps then;
- Development of Engineering Management and Safety Management process – the output was described by detailed control procedures, plans, briefs, assurance activities and 1:1 support and mentoring. The procedures supported delivery of the overall programme and individual project requirements, audit recommendations and have been embed into the delivery organisation
- Alteration following the audit/review to the Safety Management System (SMS) and briefing

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- of Health & Safety responsibility
- Provision of peer review services that assess the readiness for change of assets and introduction of the new rolling stock
- Ensuring that the NEAT programme was being discharged across several contractual and commercial interfaces and therefore the application of engineering roles, accountabilities and responsibilities were in accordance to the contract structure being applied.
- Development of a clear Responsibilities Accountable Consulted Informed (RACI) for the project
- Audit and assessment of Infrastructure Works and Integration
- Common Safety Method (CSM) support for all infrastructure and interface with rolling stock and interface with Anglia Safety Review Panel (SRP)
- Specific engineering support for the following areas
  - Selective Door Opening (SDO) delivery for both CSM, Engineering controls and advise the compatibility team
  - Signalling, Traction, Civil and station changes
- Engineering oversight, support for all submissions to Anglia Route Asset Manager's (RAM)
- Integrated programme support, provision of engineering oversight monitoring and audit of deliverables from suppliers
- Chairing Chief Project Engineer (CPE) meetings, supporting NEAT programme meetings
- Support to Asset Protection (ASPRO) and Landlord Consent works

### Technical competencies applied in the delivery of the contract

- Application of CSM principles
- Organisation and Chairing of cross-disciplinary Hazard Identification workshops
- Production of CSM compliant Hazard Logs
- Gathering of evidence and liaison with Network Rail and AsBo
- Application of Engineering Management Techniques

### Value added initiatives

To ensure delivery of above, we took a collaborative approach to safety leadership and worked closely with all key stakeholders, providing guidance, direction and workshop facilitation to identify, define and agree solutions that reflect the needs of all decision makers and maintain the efficiency and pace that AGA needs to deliver the programme successfully.

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The outcome is an approach robust enough to be flexible to meet operational needs whilst avoiding excessive bureaucracy and being deployable across multiple stakeholders. Our safety leadership has created a structured, knowledgeable and focused approach to driving innovative improvements in health, safety and well-being governance and in performance in frontline delivery; with clear integrated procedures implemented across all partners and supply chain.

### Programme start and completion dates

Project duration from 2018 – present.

### Resources utilised

Vertex utilised its team of Railway Systems Engineers and Project Managers for this project. Qualification held includes membership of the Institution of Railway Signalling Engineers, membership to the Association of Project Managers (MAMP), Project Management Professionals (PMP) and professional Chartership (C.Eng.).

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