



Product Service

**Choose certainty.
Add value.**

Electromagnetic Compatibility (EMC) & Environmental (ENV) Consulting and Assurance Services for the Rail Industry

TÜV SÜD supports all rail manufacturing and operational sectors with specialist expertise in compliance and assurance solutions. The company has unmatched expertise in relevant national and international generic, rail-specific and operator-specific specifications.

The rail industry is making greater use of radio and electronics equipment to perform functions ranging from safety related to applications aimed at improving the travelling experience for passengers. Increasingly, Commercial Off The Shelf (COTS) equipment is employed to perform these functions creating additional challenges in meeting legal and contractual requirements.

TÜV SÜD provides solutions in relation to EMC, safety, environmental and RF compliance, and provides relevant technical information for inclusion within their overall Safety Case.

Our domain experts in EMC and Environmental reliability assist throughout the lifecycle and project timescales of rail procurement projects.

Rail Industry Clients

- Rolling stock manufacturers and suppliers
- Leasing companies
- Train operating companies
- Infrastructure companies and suppliers
- Consultancy organisations

Accreditations and Registrations

TÜV SÜD is one of the largest UK Notified Bodies (No.1895) designated under the EMC Directive 2004/108/EC. We review and assess client technical documentation with a view to issuing a Statement of Compliance in support of CE marking and have undertaken nearly 400 assessments since the first EMC Directive came into force. We are also an ISO 9001 registered company for consultancy and training.

Our Track Record

TÜV SÜD's technical consultants have been involved in numerous rail projects including:

- Neasden Depot Upgrade
- Network Rail Control Centres
- Channel Tunnel Rail Link (CTRL) 'Javelin' Train
- Victoria Line Tube Stock upgrades
- Asset Inspection Train

TÜV SÜD Group

TÜV®

C O N S U L T I N G



Product Service

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Requirements Management

The key to successfully addressing contract requirements is to have experts conversant with the disciplines of EMC and Environmental reliability and their technical standards.

- Managing requirements
- Interpretation of technical standards
- Technical compliance statements
- Developing EMC strategy
- Management and Control Plans
- Risk Assessment

Assurance Evidence Files

The compilation of an assurance evidence file demonstrates how the various elements of the project have achieved assurance. The integration of COTS equipment requires a compliance assessment against the contract requirements by a "Gap Analysis" and the specification of any additional testing via a test plan.

Rail Interoperability

Our compliance and assurance solutions form an important part of the EU Rail Interoperability Directive requirements.

TÜV SÜD's EMC and Environmental Solutions for the Rail Industry

Functional Safety	Functional Reliability & Availability	Mandatory Compliance with Legislation & Standards
<ul style="list-style-type: none"> • EE & CS • Hazard identification • Risk assessment • Health effects of electromagnetic fields 	<ul style="list-style-type: none"> • Shock & vibration compliance evidence • Climatic compliance evidence • Ingress Protection (IP) and contamination resistance evidence • Reliability strategy 	<ul style="list-style-type: none"> • CE Marking advice • EMC Directive guidance • EMC strategy • Technical File Compilation • Technical File assessment by EMC Notified Body
Related Rail Industry Services		Relevant Standards
<ul style="list-style-type: none"> • Management, Control & Test plans • Design consultancy • Surveys & Inspections • Qualification & reliability consultancy services • Test management services 		<ul style="list-style-type: none"> • EN 50121 Series • EN 50125 Series • EN 50155 • EN 61373 • RIA 12, 13, 18 & 20 • GE/RT8015 • GM/RC1500 • BR 967 • 2-01018-001 & M1027 • E 7202 A2

TÜV SÜD's technical consultants will assist you in providing sufficient evidence to demonstrate compliance and overall assurance for inclusion within a Safety Case.

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