

# Worldwide EMC Compliance Services

# Whole Project EMC Compliance Management From an Established Market Leader



London Underground, Transport for London, UK

Power Upgrades 630 to 750 V DC Traction

Full EMC Compliance including EMC Management for substations, cable management, procurement specifications, compliance reviews and on-site EMC measurements



Rio Tinto Ore Line, Pilbara, Western Australia

Rolling Stock Signalling Systems Upgrade

Full EMC compliance and testing of new wireless controlled braking systems designed to reduce headway using existing rolling stock



Gautrain Rapid Rail, Johannesburg, South Africa

New Railway EMC Management and On-Site Testing

Whole project EMC management and testing of new railway to Network Rail requirements including power, traction, signalling, tunnels and rolling stock



Huawei, Shenzhen, China

Rail EMC Management Training

Comprehensive training on whole project EMC including; Management, documentation, supplier control, certification, reviews, measurements and installation guidance



Heathrow, London, UK

**Great Western 25 KV Overhead Electrification** 

Full EMC management, risk assessment, compliance activities and testing of Crossrail western access to Heathrow. Full EMC for depots to house new rolling stock



MTR, Hong Kong

EMC Problem Solving and Compliance Audits

Independent reviews of EMC testing performed on monitoring systems used on the MTR. Consultancy and measurement of longitudinal and transverse voltages (V<sub>1</sub>/V<sub>7</sub>)



Eurofins York (formerly York EMC Services) is a company with over 25 years' experience of providing Electromagnetic Compatibility (EMC) assurance services to the railway industry. Our consultancy, testing and training services have become an established part of major rail projects worldwide.



#### What is EMC and why is it important?

Electromagnetic Compatibility (EMC) ensures that items of electronic equipment operate as intended without causing interference to each other, and that radio communications are also protected.

#### EMC is achieved by ensuring that:

- Electromagnetic emissions are controlled to within allowable limits
- Immunity levels are adequate to protect against the electromagnetic sources present in the operating environment

The correct operation of equipment is essential to achieving and maintaining a safe and reliable railway.

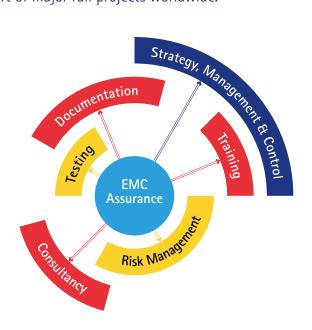
#### Managing EMC in Rail

To deliver rail projects on time and on budget, EMC must be managed from the very beginning.

Complex rail construction projects can involve a large number of contractors and subcontractors, each responsible for delivering their part of the finished railway. An effective EMC Strategy details how electromagnetic compatibility is to be managed for the whole project, specifies EMC roles and responsibilities and ensures that all parts of the EMC assurance process are covered.

### Successful EMC management is a major part of providing a railway that is:

- 1. Compatible with itself; for example that signalling systems can operate as intended in the presence of rail vehicles and
- 2. Compatible with its neighbours; for instance with communications systems outside the railway boundary.



## **How we can help**Rail EMC Consultancy, Testing and Training

Eurofins York provides a wide range of rail EMC services that suit individual customers and projects. From whole EMC project management to the delivery of specific parts of the EMC assurance process, Eurofins York has become the partner of choice for many rail infrastructure companies.

Our portfolio includes:

- EMC Management and Control Plans
- EMC Specifications
- EMC Hazard Identification (HAZID ID) and Risk Assessments
- Infrastructure design and cable layout reviews
- Test plans and on-site testing
- Compliance documentation
- A wide-range of training courses from York Training Academy, including EMC for Railways.







