

Head of Systems Engineering & Assurance

Employer: East West Railway Company

Location: Milton Keynes

Basis: Interim

Role Summary: As an EWR Head of Systems Engineering & Assurance, you will have extensive experience in leading systems engineering & assurance teams in a regulated safety critical environment. Be an industry recognised expert with deep technical expertise in systems engineering and assurance and have a good working knowledge of related disciplines and the integrated Railway System.

Team dimensions: East West Rail operates a matrix structure. This role will report directly to the Head of Railway Management Systems & Integration within the Engineering Directorate, whilst working closely with the Capital Delivery Directorate to support and assure the implementation of technical strategy and engineering standards.

A little bit about us:

East West Rail is a new direct connection, linking communities between Oxford and Cambridge, including Bicester, Milton Keynes and Bedford by rail.

Oxford, Cambridge and the communities in between are renowned for their vibrant economy, educational excellence and scientific innovation. They deliver growth and prosperity both locally and for the whole country; connecting these two cities and the communities in between is crucial to the social and economic future of the region.

East West Railway Company was set up to accelerate the delivery of the East West Rail infrastructure and passenger services, bringing faster journey times and easing pressure on local roads.

We were set up by the Secretary of State for Transport in 2017 to do things differently. We aim to innovate, positively disrupt, and challenge the status-quo, leading to quicker and more cost-effective project delivery, and an improved experience for passengers and the communities we serve.

As we build our team, we're looking for people with the right skills and mindset so that we can innovate, positively disrupt and set new industry standards. Whether you've been working on some of the world's most exciting rail and infrastructure projects or can inspire us with your ideas and expertise from other sectors, we want to hear from you.

Responsibilities and accountabilities

The Technical Authority accountable for leading the engineering activity for technical specialists within Systems Engineering & Assurance, setting the Systems Engineering & Assurance Technical Strategies and Standards. Driving the overall integrated performance and optimised whole life cost of systems engineering and assurance through appropriate risk-based assurance of engineering delivery across EWR. Providing expert technical advice to inform EWR and influence the industry, actively driving engineering innovation to achieve EWR objectives. Functionally leading all Systems Engineering & Assurance team members working in EWR.

- Inform the EWR strategy and output requirements with expert technical advice and industry leading practice for Systems Engineering & Assurance.
- Set the EWR Technical Strategy for Systems Engineering & Assurance, including standards and principles to optimally achieve the EWR strategy and requirements.
- Assure technical compliance through appropriate risk-based assurance (V&V and technical approvals), RAMS analysis, audit and surveillance.
- Provide support and assurance to the EWR Programme and support the sponsor in challenging requirements to ensure that EWR deliver a railway system that is fit for purpose and meets legislative requirements and industry standards.
- Lead Engineering safety management and interoperability compliance for the programme and assuring integrated system safety and performance.
- Manage the engineering regulatory interfaces: supporting consents, approvals, safety case and entry into service.
- Actively manage and mitigate EWR system engineering and technical risks, whilst assuring that technical risk is appropriately managed within delivery partners.
- Actively lead the hazard management approach across the programme including ownership of the Programme Wide Hazard Record (Log).
- Establish and maintain technical competence accreditation systems with the other Heads of Discipline, ensuring engineers working for EWR are appropriately assessed and accredited to undertake engineering activities.
- Lead and support Capital Delivery in implementing the Systems Engineering strategy, processes and tools for the Discipline.
- Lead the system assurance activities on the programme working closely with the relevant Heads of Discipline within the programme.
- Actively manage and accelerate engineering innovation for Systems Engineering and Assurance to meet EWR challenges.
- Support in planning the Systems Engineering and Assurance capability required to deliver the EWR programme.
- Set specific team objectives, managing engineering priorities across the Systems Engineering & Assurance team to ensure effective delivery and promoting a high-performance team culture.

- Act as a role model for EWR Co.'s vision and values, by supporting the EWR Co. commitment to customer service, promoting diversity in the workplace, adopting appropriate behaviour when interacting with colleagues, and encouraging and supporting others to do the same.
- Take responsibility of your own and others' health and safety by adopting and working to the EWR Co. Health and Safety principles, ensuring you follow safe working procedures at all times.

Experience and skills

You should apply if you;

- Significantly experienced in leading Systems Engineering & Assurance teams in a regulated safety critical environment.
- Deeply technical expert in Systems Engineering & Assurance and have a good working knowledge of related disciplines and the integrated Railway System.
- A compelling, convincing and articulate communicator, who uses written and oral communications convey succinct and clear messages.
- Intrinsically flexible and content in a role which grows and changes as the project develops.
- Thriving working in a collaborative team environment who can review business needs at a holistic level, to promote business continuity and transparency.

Skills:

- Delivery and assurance of safety critical engineering solutions within large scale and technically complex projects.
- Analysis of complex data, drawing effective conclusions and rapidly producing solutions and decisions.
- Excellent communication with the ability to promote and execute Technical Strategy.
- Influencing skills, including negotiating and facilitating joint decision making with colleagues and stakeholders.
- Building and leading high-performance teams.
- System Engineering, Systems Assurance, RAMS Management and Asset Management tools and techniques.
- Innovation and change management, including best practice continuous improvement methodologies.
- Engineering Safety Management and best practice RAMS analysis methodologies.

Experience:

- Broad experience of leading Engineering in a complex, safety focussed and regulated organisation with multiple complex interfaces.
- Extensive experience of the engineering lifecycle including requirements, specification, design, build and maintenance and verification and validation of same.
- Personal responsibility for successfully leading an engineering discipline, exercising Technical Authority to assure the compliance and safety of delivered engineering solutions.
- People leadership of single-disciplinary engineering teams.

- Extensive experience of change management, rapidly adapting to emerging requirements, changing circumstances and high levels of uncertainty and ambiguity in a fast-changing environment.
- Working within relevant UK rail industry legislation and standards.

Education and Qualifications:

- Chartered or Incorporated engineer, or equivalent professional experience and training in the field of engineering.
- Masters degree in a field of engineering relevant to the Discipline, or demonstrably equivalent professional experience and training.
- You will need to have the right to work in the UK.

Join the team!

Please send your resume and a covering letter explaining why you are interested in the role and meet the above experience requirements to: **recruitment@eastwestrail.co.uk**