NetworkRail Safe by Design Principles.



What is Safe by Design?

Safe by Design is the integration of hazard identification and risk assessment methods early in the design process to eliminate or minimise the risks of harm throughout the construction and life of the product being designed.



Life Saving Rules

For the purposes of design we will treat design acceptance as being equivalent to having the required plans and permits in place and shall also ensure that our designers have the requisite competency



Hazard Identification and Mitigation

We will use Common Safety Method for Risk Evaluation and Assessment (CSM-REA) to identify, log, and mitigate hazards throughout the design process. We will consider hazards associated with Fabrication, Transportation and Access, Construction, Maintenance, and the End User. The Hazard Register is a key deliverable and enabler with respect to Safe by Design



Continuous Improvement

We will actively seek to improve Safe by Design performance by sharing of lessons learned, education, new technology, innovation, and any other appropriate initiative.



Design Change Management

We will assess the safety implications of design changes and implement mitigation when design change imports hazards. We will update the CSM Hazard Register and System Definition when required to take account of design change.



Collaboration

We will foster open and honest dialogue and collaboration with clients, contractors, designers, and other stakeholders, in order to ensure that designs are safe. We will listen to our stakeholders.



Site Knowledge

It is vital that we understand the site, its vicinity, and assets which may be affected by our designs. We will ensure that we have sufficient knowledge of the site and its vicinity to carry out a safe design.

We will request surveys as required and use reasonable engineering judgement in order execute a safe design.

We will record design assumptions and their sensitivity in the CSM Hazard Register.



Professional Values and Leadership

We will uphold the values of our relevant professional institutions and companies. Most importantly we will do what we consider to be the right thing and demonstrate leadership in Safe by Design



Unsafe Situations

It is our right to refuse to carry out design which we believe to be unsafe and will escalate any situation which we believe to be the case. Furthermore it is our right to stop any work we consider to be unsafe irrespective of the contractual arrangements