



Work in Rail Environments

FSR

Intent: To eliminate or minimise the risks of fatalities, injuries and events arising from work in rail environments.

Engineered Safety in Practice (examples):

- Eliminate or reduce the need for works within the rail corridor through design alternatives, such as pre-assembled structures or modular installations.
- Design rail assets, foundations, and access systems to allow for off-track construction and crantage where possible.
- Integrate Digital Engineering models (BIM + GIS) to identify and design out potential conflicts with live rail infrastructure, traction power, signalling, and communications systems.
- Select construction methodologies and materials that minimise the number and duration of rail possessions/occupations required

FSR Controls

1. Obtain authority from the Network Operator to enter or work in the rail corridor, confirming that the authority defines the limits, scope of work, and agreed controls.
2. Verify that Safeworking controls have been communicated to all workers, and in place, before commencing work.
3. Work must be performed from a *position of safety* outside the Danger Zone unless the track is protected or lookout working is applied.
4. Lookout working must only be implemented when higher-order Safeworking protections are not practicable, and only in accordance with the relevant Network Rules.
5. When lookout working, the Safeworking person must have clear line of sight and at least two effective methods of warning workers of an approaching train (e.g. whistle, air horn, physical contact).
6. Where works are adjacent to a live track, provide delineation at 3m from the outside rail to prevent workers entering the danger zone. If 3m cannot be achieved, use a rail-operator-approved barrier system (e.g. Vortok Safety Barrier).
7. Identify and protect rail infrastructure at risk of damage before commencing work, prioritising physical controls, or where not practicable, clearly identifiable markers.
8. Where plant or equipment may encroach on the Safe Approach Distance (SAD) of overhead wiring, obtain an appropriate electrical permit from the asset owner and implement the defined controls.
9. Where an electrical permit is in place, the isolation status, limits, and conditions must be confirmed and communicated to the work group before work commences.
10. Control interfaces with other railway operations, roads, and public using physical barriers, approved traffic management measures, level crossing controls, or dedicated access routes
11. Where there is a risk of work crews going beyond authority limits and into an energised zone, the limits must be clearly communicated by the Safeworking person and reinforced in the field with reliable warnings such as barriers, signage, delineation boards, or lights.

DEFINITIONS

Position of Safety: A safe location where workers are clear of being struck by moving trains or plant, either outside the danger zone or behind a protective structure, as nominated by safe work arrangements.

