

Rail Systems Engineering

DT Infrastructure's Rail Systems Engineering (RSE) team offers fully integrated end-to-end solutions for rail infrastructure asset owners across Australia.

At DT Infrastructure (DTI), we are proud of our proven success across the rail sector, delivering safe, efficient, and value-driven solutions that maximise asset performance and longevity. Through our extensive experience designing, building, integrating and maintaining complex rail infrastructure, we bring significant rail systems engineering knowledge and capabilities in heavy, light and metro rail applications.



Asset management

DTI's RSE team delivers end-to-end services, providing clients with comprehensive whole-of-life asset management solutions.



Safety assurance

Enhancing overall operational handover certainty, our capable team of assurance engineers provide an in-house, end-to-end project delivery offering.



Digital engineering

We are dedicated to enhancing efficiencies, agility and scalability through digital transformation on rail systems operations and maintenance.



System engineering

DTI provides a focused systems engineering approach in project delivery to minimise risk and generate real benefits for our customers including value-for-money outcomes.



Communications

As one of the largest digital radio and network communications engineering providers, DTI is your network solutions integrator of choice.



System integration

Our proven system integration expertise ensures newly implemented rail sub-systems are fully integrated and work seamlessly with any existing systems.



Control centre

DTI's experience in designing and commissioning operational control centres provides assurance that we are a fully integrated turnkey delivery partner.



Signalling

Our experienced local signalling workforce can design, install, integrate, test and commission complex signalling systems for transport including mainline, metros and light rail.



Overhead wiring

DTI provides overhead line wiring for mainline, metro and light rail applications in both alternating current (AC) and direct current (DC) environments.



Testing and commissioning

We have in-house capabilities for all rail systems testing and commissioning activities, including communications networks, rail signalling, train control systems and network supervisory systems.



Installation

Our dedicated construction teams assemble, install and construct major systems for all rail applications, including signalling and train control.



RSE combines our extensive rail sector experience, in-house capabilities and cross-sector understanding to provide an integrated, customised and specialist service for rail projects.

Warrnambool Line Upgrade project

The Warrnambool Line Upgrade (WLU) is a key part of the Victorian Regional Rail Revival project delivered by Rail Projects Victoria (RPV).

As part of the WLU project, the team delivered 180km of new rail systems componentry on the Geelong and Warrnambool Lines.

Our scope involved interface management, signalling and train control design, integration, testing and overall commissioning of the rail system.

Key features:

- Commissioned six new computer based interlockings (CBI) on the corridor.
- Deployed a new DT Infrastructure Train Control System (TCS) known as TrackDNA InControl.
- Introduced a new DT Infrastructure Maintenance Support System (MSS) known as TrackDNA InSupport.
- Provided turnkey system assurance, engineering, and overall system integration to the project.

