

Extending the life of complex rail network assets

Our multi-disciplinary service offering provides skilled personnel for total rail system and infrastructure maintenance

In a world where rail systems and products have never been more complex or diverse:

- Our business strategy provides our clients with security and peace of mind through functional system operation

- Our staff are available to provide full after sales support and assistance
- We meet your need for a diverse range of rail products and services

For over 30 years, UGL has been providing maintenance for BHP Billiton Iron Ore's signalling and communication systems - over 750 kilometres of track, signalling and communications for iron ore rail lines into Port Hedland, Western Australia.

Local expertise and the support of international technology partners provides innovative rail infrastructure solutions

Build & Asset Management

Construction

Our tunnelling and depot rail infrastructure is designed to achieve optimal operational effectiveness

UGL's expertise in construction complements our supply of rail system products:

- Combining our construction capability with our portfolio of rail system products enables UGL to provide a tailored end-to-end solution for our clients
- We deliver tunnelling and depot rail infrastructure solutions designed to achieve optimal operational effectiveness



The Epping to Chatswood Rail Link

The Epping to Chatswood Rail Link project for Transport for NSW has set a new standard in the design and construction of major rail infrastructure.

UGL's scope of works consisted of the design, construction and commissioning of the rail systems between Chatswood and Epping.

Our services included:

- Communication systems, including train control system (ATRICS) data links, radio for government, police and train radio networks, telephony (fixed and mobile)
- DC traction power system and overhead wiring systems, ventilation and smoke management systems
- Earthing, EMR and electrolysis protection
- High and low voltage electrical systems
- Noise attenuation systems
- Rail signalling and integration with the existing operating rail network
- Tunnel and station management control systems and networking to existing systems
- Tunnel fire detection and suppression systems

Our tunnel and depot rail infrastructure solutions are designed to achieve optimal operational effectiveness

Digital Train Radio System (DTRS)



Sydney Trains engaged UGL for the design, development, construction, integration, commissioning, testing and through-life support for a Global System Mobile Rail (GSM-R) communications network.

Our services included:

- Equipment supply for the network
- Network testing and commissioning
- On-site installation and construction
- Overall system design
- RF and site design
- RF technology specification/selection
- Through-life support for the GSM-R network

Regional Rail Link

Victorian Department of Transport

Regional Rail Link (RRL) network Train Control and Systems

RRL is a landmark infrastructure project, designed to remove major bottlenecks in Victoria's rail network.

Our services included:

- Creation of a new train control system and new generation computer based signalling system for the RRL network
- Design and installation of passenger information or 'ICT' systems at new and substantially modified stations including; Footscray, West Footscray, Sunshine, Tarneit and Wyndham Vale
- Design, installation and commissioning of all regional V/Line signalling equipment
- Enhancement of three existing train radio systems to ensure coverage along the entire RRL corridor
- Installation of approximately 70km of fibre optic cable, both backbone and tails, to support all new communication systems, and spanning the entire RRL corridor
- Modification of existing Metro and V/Line train control systems (spanning the entire RRL corridor)



Passenger Information or 'ICT' Systems

UGL's rail systems project team is responsible for the design, installation and commissioning of all passenger information systems at all new and upgraded stations.

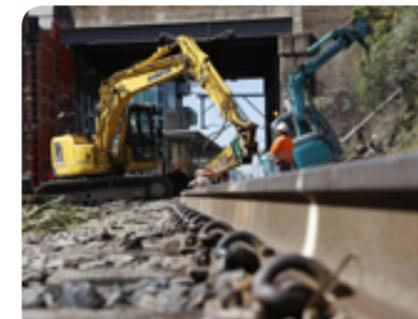
Train Control and Signalling Systems

UGL's rail systems project team is responsible for the overall design and commissioning of all new regional train control and signaling systems.

Illawarra to Cronulla Rail Line

Transport Infrastructure Development Corporation (TIDC)

The project was part of the NSW Government's Rail Clearways Programme.



Our services included:

- Cronulla Section Hut - full installation of electro-mechanical works
- Gymea Substation - full installation of electro-mechanical works
- High Voltage alterations of several Sutherland substation feeders
- Provision of safe working personnel
- Relocation of existing signalling infrastructure for civil works to proceed (design, construct, install)
- Re-signalling of the entire line, including design, construction, installation and test

Innovations, solution and outcome

With UGL acting as an alliance partner, the electrical fit out of both Gymea substation and Cronulla section hut were undertaken to a high quality standard within a time precious environment. Throughout the project opportunities for design improvement were canvassed with and taken up by the design team.