



Sydney Metro North West – Independent Safety Assessor and Safety Advisory Services



Project

Sydney Metro North West
– Independent Safety Assessor and
Safety Advisory Services

Client

Transport for New South Wales

Location

Sydney, Australia

Start Date

2013

End Date

2019

Duration

6 years

Services Provided

Formal safety assessment &
systems integration, auditing &
due diligence, constructability
review

Background

Transport for New South Wales commissioned Network Rail Consulting to provide specialist safety support during the construction and delivery of the NSW Government's high priority rail project - the A\$ 8.3 billion North West Rail Link in Sydney.

The 36 kilometre (km) rail link is one of Australia's largest transport infrastructure projects. The North West Rail Link will be a fully automated rapid transit system – an Australian first incorporating driverless trains and state of the art customer safety and security measures. The new rail link comprises:

- ▶ 23km of new double track railway – including 15km in tunnel and a 4km “Skytrain” viaduct;
- ▶ upgrading of the existing 13km Epping to Chatswood section of railway;
- ▶ operation via a Public Private Partnership of new single-deck rapid transit trains; and
- ▶ 8 new railway stations and the development of the precincts around them.

When complete, the North West Rail Link will enhance travel along the north west corridor from Chatswood to Epping and beyond to Cudgegong Road and Rouse Hill. The rail corridor will serve one of Sydney's fastest growing residential areas and one that will be of increasing importance to the city's future economic development and prosperity.



Scope of Works

Network Rail Consulting is providing independent safety assessor (ISA) and advisory services to the client in full accordance with the latest international railway standards, in particular ISO 9001 and EN 50126.

Our role as independent safety assessor extends for the duration of the two major construction contracts - the Tunnel & Station Civil Works Contract and the Surface & Viaduct Civil Works Contract. The two construction contracts were awarded in 2013 and are anticipated to be completed by early 2017.

During construction, our Independent safety assessor role will focus on the following specific aspects and sub-systems of the project:

- ▶ tunnels and excavations
- ▶ viaduct, structures and stations

- ▶ a cable stay bridge
- ▶ geotechnical and drainage
- ▶ security, fire and life safety systems
- ▶ constructability in design
- ▶ management systems and assurance processes.

We are also engaged to provide rail safety advisory services in relation to the Operations, Trains and Systems Contract. Our advisory role encompasses assistance with the evaluation of proposals during the pre-contract award period and ongoing advice during the delivery phase up to the end of 2019. This will focus on the fit out of the rail systems, provision of rolling stock and development and implementation of the operational procedures and practices.

Key Project Outputs

The outputs of the project will provide the client with evidence-based safety assurance that the project safety requirements are being met in the execution of the three main contracts. The key deliverables of the project include principally:

- ▶ preliminary safety assessment of the project safety management plan, the safety assurance plan and the reference design safety assurance report;
- ▶ ongoing independent safety assessment of the main construction contracts throughout their duration, culminating in the preparation of independent safety assessment reports for each contract; and
- ▶ ongoing safety advisory services in relation to the operations and systems contract.