

Gold Coast



Benefits

- Integration with signalling and control
- Data communications
- Dispatcher integration in control room



Client overview



Gold Coast is a coastal and modern city in south-eastern Queensland on the east coast of Australia.

Ranked 6th in Australia's largest cities with ca 600.000 people, Gold Coast is built around magnificent beaches where people come to surf, dive or snorkel.

Gold Coast is also perfectly positioned as a destination for business, study, sport, and events and receives around 12 million visitors per year.

The 1400 km² city area includes three national parks. Also Australia's highest building is found in Gold Coast.



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Project challenge



In 2010, the GoldLinQ consortium successfully tendered for the Gold Coast light rail project. Construction began in early 2012 and had a big impact in the cities' property relocation and renewal.

The G:link light rail corridor opened for public in 2014 and now connects Gold Coast University Hospital, Griffin University, Southport, Surfers Paradise and Broadbeach. It will provide transportation for the 2018 Commonwealth Games to be hosted by Gold Coast.

The line length is 13 km with double tracks with 16 stations and the system is designed to transport 75.000 passengers per day. Characteristic are the in-carriage surfboard racks.



Solution



The TETRA radio network solution is used to monitor the location of the trains and to communicate with the train drivers. It is built around a redundant TetraNode Industrial TETRA switch. The radio access network is built with seven dual carrier base station systems that are installed on strategic point along the track.

To support various data interactions with the trains the network supports s and secondary control channels used to increase the control channel capacity for short data messages based communications.

The TetraNode network interfaces with the tram suppliers signalling and control system. Also the LDS Chameleon is integrated in the control room environment. TetraNode's voice-and data logging system is used to record all communications through TETRA.