

Project Profile

Forrestfield-Airport Link - Perth, Australia

The Forrestfield–Airport Link is a railway line currently under construction on the Transperth network in Perth, Western Australia. The line is intended to service Perth Airport and the Perth foothills with a terminus in Forrestfield.



Image Courtesy of Metro.net

The Forrestfield-Airport Link is a 5km dual TBM bored passenger rail tunnel project, linking Perth's eastern suburbs to rail for the first time.

The project faces major challenges going forward, with tunnelling under highly sensitive, critical infrastructure such as operational airport runways, and existing rail lines.

In addition, the local karstic geological environment poses several tunnelling issues particularly given the terrain.

All monitoring data is hosted on the **MissionOS** system through Maxwell GeoSystems' partnership with GLS monitoring.

The **MissionOS** system, along with GLS, the joint venture partner, have both been externally audited and passed by the Perth Transit Authority Airport.

There are 32 instrument types incorporated in the **MissionOS** system scope. These include ground, rail, and structure monitoring points through tilt-meters, inclinometers, extensometers, to vibration monitors, water observation wells, and weather stations. Even battery health for system telemetry is monitored.

The configurability of **MissionOS** data models allows data collection and processing of endless instrumentation types.

The **MissionOS** Generic Data Loader (GDL) has been set-up to automatically extract data from 400 individual data files from one-off uploads to real-time uploads multiple times a minute.



Image Courtesy of Metro.net

Sector	Tunnels	Location	Perth Australia
Client	Salini Impregilo - NRW JV	Budget	USD\$ 1.1 Billion
Technical Summary	Instruments	10,000	32 Types
	TBM Drives	2	
	Stations	3	
	Instrument Records	23 Million	
	Users	135	
	Status	On-going	