

Sydney Metro Northwest

Fully automated metro

Sydney Metro is Australia's largest public transport project and first fully-automated metro network. Stage 1, the AU\$8.3 billion Sydney Metro Northwest, will open in the first half of 2019 with a train every four minutes in the peak. Alstom's proven Metropolis and Urbalis solutions, adapted to the specific needs of Sydney, will ensure fast, safe and reliable services to the residents of Sydney's North West.



Country.....	Australia
Context.....	Sydney Metro Northwest is Australia's first fully-automated rail network and largest public transport project. As the first stage of Sydney Metro, the 36 km Sydney Metro Northwest includes eight new stations and five upgraded stations. Services will start in the first half of 2019 with 15 trains an hour during the peak.
Solution.....	<p>Under the Operations, Trains and Systems contract for the Sydney Metro Northwest, awarded to the Northwest Rapid Transit consortium, Alstom will be responsible for the project management, design, supply, manufacturing, testing and commissioning of the rolling stock and signalling systems.</p> <p>With more than 4,000 metro cars in service worldwide, Metropolis maximises passenger comfort and safety, reduces lifecycle and maintenance costs and simplifies traffic management. It is designed to serve sustainable mobility through increased energy efficiency with lighter trains, motor control optimisation and energy recovery.</p> <p>The Alstom Urbalis 400 CBTC system, deployed on 25 per cent of radio CBTC solutions worldwide, will allow fully automated operation (GOA4), increase network capacity and save energy. The specific design of the trains provides Transport for NSW with an individual identity for the Metro Northwest.</p>

KEY BENEFITS

Fast journey

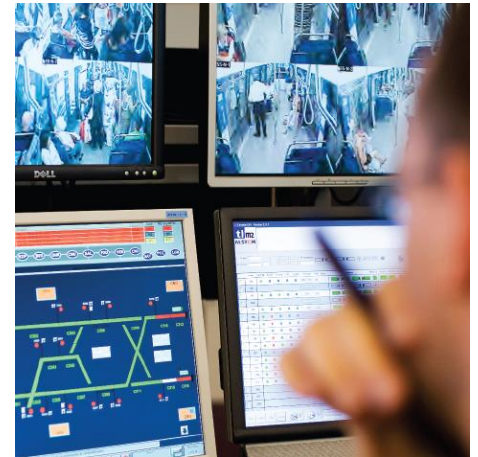
The Metropolis train was designed to be an aerodynamically efficient car body. The Urbalis signalling system minimises the time trains are stopped at stations and the time between each train.

Enhanced travel experience

Stations are equipped with platform screen doors for passenger safety. Each train is equipped with 38 surveillance cameras, emergency intercoms and provides real-time travel information as well as continuous mobile phone coverage. Accessibility is improved through three large double doors per carriage.

TECHNICAL FEATURES

Line length	36 km
Metropolis fleet size	22 six-car trains
Security	38 surveillance cameras per train: constant CCTV monitoring 230 tunnel cameras Emergency intercoms
Passenger information	2 PID (Passenger Information Display) per vestibule 6 live electronic route-maps per car Exterior front display of destination Continuous mobile phone coverage
Passenger comfort	Heating and air-conditioning Large windows, ambient LED lighting Two multi-purpose areas per train for prams, luggage and bicycles 2 wheelchairs spaces per car 3 double-doors per car per side No internal doors Low noise level
Stations	13 stations with Platform screen doors Level access between platform and train
Signalling	URBALIS 400: Communication Based Train Control (CBTC) fully automated system providing Automatic Train Protection and Automatic Train Operation (ATP/ATO) ICONIS operation control center SMARTLOCK 400 Computer-based interlocking



For more information
please contact Alstom:

Alstom
48, rue Albert Dhalenne
93842 Saint-Ouen, Cedex France

Phone: +33 1 57 06 90 00

Visit us online: www.alstom.com