

Alstom has been in Taiwan for more than **37 years**.

Alstom is a major supplier of signalling systems to Taiwan metro lines mainly in Taipei and Taichung. And Alstom recently introduced its world service proven Citadis tramway to Kaohsiung city.



## KEY FIGURES

Provides signalling system to **ALL** metro lines in Taipei except the Brown Line.

Has delivered **1** turnkey project in Taiwan building Taipei Orange & Blue Line extension.

Won Alstom's **1st** tramway contract in Taiwan supplying its latest Citadis tram to Kaohsiung tramway line phase two.

Won Alstom's **1st** driverless metro project in Taiwan supplying Urbalis 400 signalling system to Taichung metro line.



### SIGNALLING SOLUTIONS

- Provides Urbalis 400 CBTC signalling solution to Taichung metro line, which is a 17km automated metro line. The line is expected to start revenue service by 2019.
- Provided ACCUTRACK ICONOIS signalling solutions for all metro lines in Taipei except Brown Line, covering in total about 106km with 97 stations.



### CITADIS TRAMWAY

- Supplies its latest Citadis tramway, Citadis X05, to Kaohsiung tramway line phase two. The line is expected to start revenue service by 2019.
- The line will be equipped with 100% catenary free tramway technology, Citadis Ecopack, an on-board energy storage solution located on the roof of the trams.
- Permanent magnet motors are applied in Kaohsiung tram to reduce energy consumption.



### INFRASTRUCTURE

- Supplied electrification for the Taipei-Kaohsiung Line for Taiwan Railway Administration, the first railway project Alstom won in Taiwan (1980).

## DRIVERLESS METRO TECHNOLOGY

- Alstom has had 14 years' expertise in radio Communication Based Train Control (CBTC).
- Urbalis range is Alstom's CBTC signalling solution for metro lines. Worldwide, 25% of all radio CBTC solutions in operation are Urbalis, serving 1,250km metro lines.
- Urbalis range has been applied in many driverless metro lines in operation across the world, such as Singapore North East Line and Circle Line, Lausanne metro line in Switzerland, Shanghai metro Line 10 in China and Hong Kong South Island Line.
- Urbalis 400 could bring higher transport capacity for the metro lines with a minimal headway down to 80 seconds. It is compatible with all types of rolling stock for both driverless metro lines and metro lines with drivers.
- Currently, Besides Taichung, Alstom is also installing Urbalis 400 signalling solution to several other driverless metro lines in the world, such as Thomson – East Coast Line in Singapore, Sydney metro line in Australia and 3 metro lines in Riyadh, Saudi Arabia.



## TRAMWAY TECHNOLOGY

- Alstom has had 18 years expertise in tram production. Its Citadis range offers each city a tailored solution that reflects city's identity, culture and natural conditions.
- Alstom Citadis tram is 100% low floor, which is accessible to all passengers. 1 in 4 low-floor trams in service in the world are manufactured by Alstom, serving for more than 50 cities in 20 countries.
- Citadis X05 is Alstom's latest Citadis evolution. Besides the on-board energy storage solution, Citadis Ecopack for Kaohsiung, Citadis X05 also offers APS ground power supply via a third rail and SRS fast ground charging system.
- Citadis X05 trams could achieve 13% energy saving on tram scope due to its optimised traction and auxiliaries. It could also achieve up to 99% recoverability at end of its life cycle.
- So far, besides Taiwan, Sydney in Australia, Nice, Avignon, Caen and IIs-de-France in France have also ordered Citadis X05 trams.