CUSTOMER BENEFITS

- Unattended driverless operation
- Moving-block technology for optimum headway and service frequency
- Reduced life-cycle costs
- Proven safe and reliable in use for over 25 years
- Flexibility for peak hour service adjustments
Brazil is one of the world’s fastest growing major economies, one of a group of four emerging economies known as the BRIC countries. Urban areas in Brazil concentrate 85% of the population. Brazil is hosting the 2014 World Cup and the 2016 Olympic Games, creating an unprecedented infrastructure boom in the country.

Sao Paulo is the largest metropolitan area in Brazil, with 21 M inhabitants. A new monorail, which can be built faster than an underground metro in the city, will be beneficial in serving games attendees as well as the general populace. To be most efficient, the monorail is fully driverless. Line 17 is one of the several new lines being planned to complement the city’s existing rail network (4 M passengers per day) which includes underground metro lines and suburban rail lines.

The line is an 18 km driverless system, designed to move 250,000 passengers a day, with trains travelling at headway of 90 seconds. The line has 18 stations and 24 trains.

Line 17 connects Congonhas International Airport to the metro rail network, linking four metro lines – Lines 1, 4, 5 and 9 and three bus corridors. It begins at Jabaquara terminal station on Line 1 – Blue and ends at Morumbi station of Line 4 – Yellow, passing through the southern and southwestern part of the city.

In November 2011, Thales was awarded the signalling contract by consortium lead Andrade Gutierrez (AG) and CR Almeida. Line 17 represents Thales’s first urban rail signalling project in Brazil. Thales will apply its world-leading SelTrac Communications-Based Train Control (CBTC) solution providing fully automated driverless operation with added features of a fully automated yard and coupling/uncoupling capability.

Through our advanced Automatic Train Supervision (ATS) system, based on commercial off-the-shelf PC and LAN technology, the System Management Center supervises the automatic, cab-signalling or manual operation of the entire rail fleet. ATS is designed to provide automatic control of all train operations under normal conditions without operator intervention. It is easy to use and enables operators to handle system disruptions quickly. Standard features include sophisticated failure management capabilities, high system availability, redundancy, complex alarm handling, and data logging.

The project implementation will be completed in three phases: the first finished on time to support the Soccer FIFA World Cup, with final completion scheduled for August 2014.