Alstom will develop a driving simulator for Barcelona Metro

3 June 2019 – Alstom has been awarded a contract by TMB (Transports Metropolitans de Barcelona), Barcelona Metro operator, for the development of a S9000 train driving simulator dedicated to lines 9 and 10, currently the only driverless lines in operation in Spain.

The solution will consist of a training system that incorporates the latest simulation technologies for routes, conditions and obstacles. The simulator will create realistic scenarios employing virtual reality technology commonly used by video games developers.

This simulator, which includes a full-scale cabin reproduction of the Alstom's Metropolis S9000 train, will train technicians in the rapid and efficient resolution of incidents on automatic lines, where the reaction time is key to preventing an impact to service. Simulated conditions and situations can include train faults, signalling conditions, environmental incidents, and even passenger density.

Technicians will be able to practice the skills required to solve incidents and maintain railway safety, without needing to stop traffic or perform power cuts on the metro lines. The tool will faithfully reproduce specific sections of the railway network with exact replicas of stations, junctions, signals, cables, points of interest, etc.

Metro de Barcelona Lines 9 and 10 connect the city centre with other locations in the metropolitan area and the airport. The trains running on these lines belong to the Alstom's Metropolis platform and use an automatic driving system based on CBTC technology.

The project for TMB will be carried out jointly by Alstom's Services platform and the local Alstom Services team in Barcelona.

