Volvo Buses and Nanyang Technological University (NTU) in Singapore collaborate on a research and development program for autonomous electric buses. The program is part of the Land Transport Authority of Singapore’s drive to create new solutions for tomorrow’s sustainable public transport. For Volvo, this will be its first autonomous application in public transportation and it has chosen NTU as its partner in this endeavor. Volvo has already demonstrated the autonomous technology in mining, quarry and refuse collection operations.

The 12-metre Volvo 7900 electric bus is already operating around the world, but the buses to be deployed in Singapore will be equipped with autonomous driving technologies. This include GPS and LIDAR laser technology systems for charting, positioning and detecting obstacles around the vehicle.

One of the buses will be used on Singapore’s advanced new test facility for autonomous vehicles, CETRAN*. In a fenced-off area, NTU’s researchers will be able to test new functionality and study how the bus interacts with other road-users in various conditions. The second bus will be used for tests in the bus depot in partnership with the operator SMRT. The aim is that tomorrow’s autonomous buses should be able to charge their batteries, drive through the depots to the vehicle wash and park - entirely autonomously.

The cooperative program between Volvo Buses and NTU is underway and will initially last for two years. The jointly developed autonomous electric buses will arrive into Singapore in the beginning of 2019. Fast-charging stations based on the common OppCharge interface will be supplied by ABB.