Volvo and NTU to trial autonomous electric buses in Singapore

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VOLVO Buses and Nanyang Technological University (NTU) in Singapore have signed a cooperation agreement on a research and development programme for autonomous electric buses.

The programme 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 endeavour. 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.

“We are seeing fast-growing interest in both autonomous and electric vehicles in cities all over the world. Together with NTU, one of the world’s leading universities of technology, we now have the possibility of testing various solutions under realistic conditions in a major city that has high ambitions for its public transport,” says Hakan Agnevall, president Volvo Buses.
NTU president Professor Subra Suresh, said, “Industry-academic connections are key in nurturing an environment which promotes innovation, research excellence, and technological change for a better tomorrow.

“NTU takes pride in its strong industry connections, and this partnership with Volvo will pave the way for future mobility solutions by developing and testing autonomous buses right here on campus. These solutions will further strengthen Singapore’s vision of embracing autonomous vehicle technologies and enhance public transportation.”

One of the autonomous electric buses will be used on Singapore’s advanced new test facility for autonomous vehicles, Cetran (Centre of Excellence for Testing and Research of Autonomous Vehicles).

Here, NTU’s researchers will in a fenced-off area 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 programme 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.