Driverless buses to be tested in 3 new towns from 2022

They will run in Punggol, Tengah and the Jurong Innovation District during off-peak hours

RESIDENTS and workers in three new towns will be the first in Singapore to ride driverless buses for their daily commute from 2022.

The government has identified Punggol, Tengah and the Jurong Innovation District (JID) as areas where residents and workers can turn to driverless buses and shuttles for their first- and last-mile commute.

Announcing this at the opening of the first test centre for driverless vehicles, Transport Minister Khaw Boon Wan said the driverless buses will run during off-peak hours.

"We expect that the autonomous vehicles will greatly enhance the accessibility and connectivity of our public transport system, particularly for the elderly, families with young children, and the less mobile. More importantly, we can gain further insights into how we can develop new towns or refurbish existing ones for the safe mass deployment of autonomous vehicles."

To gather insights from industry players and research institutions for the pilot autonomous vehicle services in the three new towns, the Ministry of Transport and the Land Transport Authority (LTA) launched a Request for Information (RFI) on Wednesday. The RFI will be open until May 31 next year.

Mr Khaw said: "The biggest challenge for autonomous vehicles is not the development of the technology, but how we can safely incorporate it into our living environment, through appropriate regulations and town planning."

He said autonomous vehicle (AV) technology will transform urban mobility and how people move in the city. It is especially promising for Singapore because it can help alleviate the tight land and manpower limits.

The new 2-hectare AV test centre, located just outside the Nanyang Technological University (NTU), will put self-driving vehicles through their paces, with a test circuit replicating Singapore's road and traffic conditions.

The circuit also has a rain simulator and flood zone to test the navigation abilities of autonomous vehicles under different weather conditions.

The test centre was jointly developed by NTU, LTA and JTC, as part of the Centre of Excellence for Testing & Research of AVs – NTU (Cetran), which was launched in August 2016.

Mr Khaw said it would provide a "safe, controlled and configurable" testing environment for AV developers to test their technologies using a range of simulated on-road scenarios.

"These scenarios could include aggressive driving and interactions with other road users, including cyclists and users of personal mobility devices."

The test centre will have a network of seven 360-degree closed circuit television (CCTV) cameras at strategic locations which will stream real-time footage to a monitoring and evaluation system.

The Cetran Autonomous Vehicle Test Centre will facilitate the testing of autonomous vehicles in a simulated real-world environment, to prepare for their integration into public roads in the future. BT PHOTO: GAVIN FOO