

# COMFORTDELGRO EMBARKS ON AUTONOMOUS VEHICLE TRIAL IN REAL TRAFFIC CONDITIONS – FIRST OF ITS KIND IN SINGAPORE

12 November 2018 – ComfortDelGro is embarking on a trial of an autonomous shuttle bus service in real traffic conditions in the National University of Singapore's (NUS) Kent Ridge campus – with a view towards a commercial roll-out if successful.

The year-long autonomous bus shuttle operational trial, which will involve ComfortDelGro, Inchcape Singapore, NUS and Toulouse-based EasyMile Pte Ltd, will commence in March 2019.

It will be carried out using the EasyMile EZ10 autonomous shuttle which will be funded by Inchcape Singapore and operated by ComfortDelGro's wholly-owned subsidiary, ComfortDelGro Bus Pte Ltd. The shuttle, which has a total carrying capacity of 15 passengers, will run along a 1.6 km route in NUS between Heng Mui Keng Terrace and Business Link.

The trial of the autonomous shuttle bus service – the first of its kind in Singapore by a transport operator – is significant because it will be operating in real mixed traffic conditions, alongside regular buses, cars and motorcycles. Another significant note is that it will rely on its own internal array of software and hardware technologies for its navigation on the roads, without any assistance of external infrastructure. A Safety Engineer will also be on board the autonomous shuttle during the trial to ensure safe operation of the vehicle, as well as to provide engineering expertise.

In the initial stage of the trial, the autonomous shuttle trial will be focussed on collecting data for its mapping and navigation systems, and would not be open for passenger service. Once the trial management team is satisfied that the shuttle is ready for commuter trials, passengers will be able to start boarding the vehicle.

The EasyMile EZ10 autonomous shuttle runs entirely on electricity and benefits from the latest in Autonomous Vehicle (AV) technology combining robotics and artificial intelligence, to operate and navigate on existing roadways with no additional infrastructure required. It has also an in-built access ramp for mobility challenged passengers.



A similar trial is currently running in Forus, Norway, where the EZ10 autonomous shuttle is running on a 1.2 km route on regular intervals in an area consisting of 3,500 companies and 40,000 employees. EZ10 AVs were one of the first ones to be deployed successfully in mixed traffic in France, Germany, Norway, Australia, Japan and California.

The latest trial marks ComfortDelGro's third foray into the AV sphere in Singapore. Through its subsidiary, SBS Transit Ltd, it is currently participating in two ongoing trials – in Sentosa and Jurong Island – where it is assisting in data collection, operations modelling and development.

ComfortDelGro Managing Director and Group CEO, Mr Yang Ban Seng, said: "We are excited to team up with three strong partners to undertake this latest AV trial which will be conducted in mixed traffic alongside regular vehicles on the road. We believe the experiences gained from these trials will help us gain greater insight into how to become an AV fleet operator in the years to come."

Mr Gilbert Gagnaire, Founder and CEO of EasyMile, said: "I am delighted to work with key partners locally and together contribute to make Singapore one of the leading Smart Cities in the world." He added: "The very first EZ10 commercial application was launched in Singapore in 2016. This new mobility service will be Singapore's most advanced autonomous shuttle project yet."

Inchcape Singapore's MD, Ms Jasmmine Wong, said: "This could be a pivotal project for us. As a leading automotive distributor, we cannot afford to rest on our laurels, it is in our DNA to keep learning and innovating. We are completely behind the government especially on meaningful initiatives like these that are so significant that it could totally transform the face of transportation in Singapore. From a wider strategic perspective for Inchcape Asia, we hope to use Singapore as a shining beacon and pilot similar projects across Asia. We are truly honoured to be a part of this trial project."

Professor Chen Tsuhan, NUS Deputy President (Research and Technology), said: "In this era of digitalisation and smart technologies, the use of autonomous vehicles as a mode of transport is not a question of 'if' but 'when'. NUS is excited to serve as a living lab for this trial, where our researchers, and later on, the NUS community, can play a major role in evaluating the use of autonomous shuttles. This is also in line with the University's goal of becoming a smart, safe and sustainable campus. We look forward to contributing our strong expertise in areas such as artificial intelligence, data science, analytics and engineering to advance autonomous technologies for improvement of the public transportation system of Singapore and around the world."

## Background



## **ComfortDelGro Corporation**

ComfortDelGro is one of the world's largest land transport companies with a total fleet size of over 43,000 buses, taxis and rental vehicles. Headquartered in Singapore, the Group also has operations in China, the United Kingdom, Ireland, Australia, Vietnam and Malaysia.



## **EasyMile**

EasyMile is a pioneer in driverless technology and smart mobility solutions.

The fast-growing start-up develops software to automate transportation, revolutionising passenger and goods transportation. It has already deployed over 210 driverless projects with more than 320,000 people transported over 250,000 km. Clients include the world's largest transport operators, city authorities, airports, corporations, business parks, and universities.

EasyMile has a global presence with headquarters in Toulouse (France) and regional offices in Denver (USA), Berlin (Germany), Melbourne (Australia) and Singapore. The Company employs over 150 highly-skilled and passionate employees.



## **National University of Singapore**

The National University of Singapore (NUS) is Singapore's flagship university, which offers a global approach to education, research and entrepreneurship, with a focus on Asian perspectives and expertise. We have 17 faculties across three campuses in Singapore, as well as 11 NUS Overseas Colleges across the world. Close to 40,000 students from 100 countries enrich our vibrant and diverse campus community.

Our multidisciplinary and real-world approach to education, research and entrepreneurship enables us to work closely with industry, governments and academia to address crucial and complex issues relevant to Asia and the world. Researchers in our faculties, 29 university-level research institutes, research centres of excellence and corporate labs focus on themes that include energy, environmental and urban sustainability; treatment and prevention of diseases common among Asians; active ageing; advanced materials; as well as risk management and resilience of financial systems. Our latest research focus is on the use of data science, operations research and cybersecurity to support Singapore's Smart Nation initiative.

For more information on NUS, please visit <a href="www.nus.edu.sg">www.nus.edu.sg</a>.



## **Inchcape Singapore**

Inchcape Singapore is the global distribution and retail leader in the premium and luxury automotive sectors.