

Nippon Koei Co., Ltd.

September 30, 2022

Nippon Koei will Start Test Running for Practical Use of Autonomous Vehicles in Binh Duong New City in Vietnam

Nippon Koei Co., Ltd. (Representative Director and President: Hiroaki Shinya), TOKYU CORPORATION (President: Kazuo Takahashi), BECAMEX TOKYU CO.,LTD. , a real estate developer in Binh Duong New City, and PHENIKAA-X JOINT STOCK COMPANY , R&D Institute of AI & next-generation mobility, will start test running of autonomous vehicle (AV) operation from 1st October in Binh Duong New City in Binh Duong Province, Vietnam.

The test running is to be conducted on a 750-meter circular route passing through Binh Duong Administration Center and Hikari commercial facility using an autonomous vehicle developed by Phenikaa X. The test running aims to verify safety, social acceptability and the feasibility of introducing autonomous mobility. This will be the first demonstration test of automated driving on public roads in Vietnam. In addition, as part of the Mobility as a Service (MaaS) demonstration, service information and real-time location of autonomous vehicles will be available on a local bus application "BusMap" to suggest transfers from local buses to automated driving vehicles.

Currently, one of the challenges in transportation in Binh Duong New City is the lack of last mile transportation as many people still use motorcycles, despite the availability of "KAZE SHUTTLE," a bus system operated by Becamex Tokyu Bus Co., Ltd. , which uses the Japanese bus system, cabs, and ride-hailing services. We believe that improvement of last mile transportation by installment of autonomous vehicles and promoting multiple transportation use by MaaS will reduce high dependency on private motor bikes.

To address this issue, the team would like to combine knowledge and experience Nippon Koei gained from autonomous vehicle projects in Japan and overseas, Nippon Koei's wide range of technical solutions of city planning and transportation planning, and Phenikaa X's autonomous driving vehicles and self-driving technologies in urban development project of Tokyu and Becamex-Tokyu, aiming to realize optimization of regional transportation using data and improve accessibility to Ho Chi Minh City.

In conjunction with future urban development projects, Mobility as a Service aims to launch self-driving mobility service and MaaS applications that enable smooth use of public transportation inside and outside Binh Duong New City and promote data utilization to solve urban and transportation problems.

After the test running, The four companies will provide solutions for the further development of Binh Duong New City into a smart city, and to promote further cooperation with a vision to expand the concept to other regions.

Nippon Koei continues to promote high quality township and transportation development by applying new technologies such as autonomous vehicle and MaaS and contribute to safe and secure life of people.



Autonomous Vehicle
(Phenikaa)

■ Binh Duong New City

Located about 30 km north from Ho Chi Minh City, the economic center of Vietnam, Binh Duong New City is a large-scale urban development project with a total development area of approximately 1,000 ha and industrial parks, government buildings, universities, residential and commercial facilities.

This project aims to solve the problems that Ho Chi Minh City faces as a metropolis, such as traffic congestion, air pollution, and overcrowding.

Binh Duong New City has a population of 92,716 as of 2022. The city will have 120,000 resident population and 400,000 working population in the future. MRT and BRT connecting Ho Chi Minh City and Binh Duong New City are planned to be constructed with support by Japanese government. The entire city is being comprehensively developed according to the model of Transportation Oriented Development (TOD), making it one of the pioneering TOD project in Vietnam.



Overlook of Binh Duong New City

■ Overview of test running

Overview : Conduct test running of an autonomous vehicle in 750 m circular route passing through Binh Duong Administration Building and Hikari, shopping center developed by Becamex Tokyu. Test rides by residents and a questionnaire survey will be conducted. On the public road, the safety of autonomous vehicle in a mixed environment with buses will be verified. In "Hikari", safety and acceptability of autonomous vehicles in a mixed environment with pedestrians will be verified. Based on the obtained driving data, answers from questionnaire survey, and existing traffic data, the team will analyze the data and study measures to promote TOD-type urban development using smart solutions. This test running will be conducted as part of "Study for the Realization of TOD-type Urban Development Using Smart Technology in Southeast Asia" by the Ministry of Land, Infrastructure, Transport and Tourism.

Date :	October 1, 2022 to October 9, 2022 (9 days)
Test running route :	October 3 : 750 m circular route (Hikari~Binh Duong Administration Center) October 1 to October 2 and October 4 to October 9 : 180 m one way (Inside Hikari)
Autonomous Vehicle Specifications:	Cruising Distance : 100 km Maximum Speed : 40 km/h Load capacity : 600 kg (4 passengers)

Role of each company :

Nippon Koei : Consulting on self-driving technology, transportation planning and data analysis for smart cities.

Tokyu ・ Becamex Tokyu: Coordination with relevant departments and providing infrastructure and facilities necessary for demonstration.

Phenikaa X : Operation and demonstration of autonomous vehicle and self-driving system.

Collaborators :

Ministry of Land, Infrastructure Transportation and Tourism, Japan : Implementation Support for test running.

Binh Duong people's committee : Providing infrastructure necessary for this test running and permission of this test running.

Phenikaa MaaS Technology Joint-stock company: Collaboration with BusMap application (real-time location and service information)

Becamex Tokyu Bus: Collaboration between operation of "KAZE SHUTTLE" and autonomous vehicle.

-Contact for inquiries regarding this matter-

Nippon Koei Co., Ltd. Corporate Communication Office

Email: c-com@n-koei.co.jp Homepage: www.n-koei.co.jp