# Baidu Apollo International Limited Progress of Autonomous Vehicle Trial Scheme and Plans for Autonomous Vehicle Trials in Tung Chung

#### **Purpose**

In relation to the autonomous vehicle (AV) trial project commenced by Baidu, Inc. in North Lantau towards the end of 2024, this paper briefs the Islands District Council (IsDC) on the progress of the trials conducted on the Airport Island and updates IsDC Members on the relevant trial plans.

## **Background**

Baidu, Inc., a publicly listed company in Hong Kong, has been engaged in autonomous driving technology research and development since 2013. Having accumulated over 150 million kilometers of trial mileage, it presently holds more than 5 000 patents relating to autonomous driving.

Baidu, Inc. has incorporated a local company, namely Baidu Apollo International Limited (Baidu), in Hong Kong. Upon obtaining an AV pilot licence and an AV certificate from the Transport Department (TD) in 2024, Baidu began its AV trials in the Airport Area in December the same year and has since diligently adhered to the "safety first" principle in the process, achieving a zero accident and traffic congestion record. Baidu aspires to usher autonomous driving technology and its pilot application into Hong Kong through conducting AV trials with a phased, district-based and step-by-step approach in an orderly and safe manner.

Meanwhile, Baidu continues to recruit and train up a team of local talents to facilitate collaboration among the industry, academia and research institutions to promote innovation and technology by organising multiple rounds of on-campus technology seminars and online training courses on autonomous driving. Aiming to foster wider AV knowledge and experience among the local community, Baidu works with stakeholders to cultivate an innovative ecosystem for autonomous driving and contribute to Hong Kong's development of new quality productive forces.

## **Project**

Baidu embarked on its AV trials in the Airport Area in December 2024, running one AV at a time along the first phase trial route. As at January 2025, Baidu's AVs had completed over 2,500 kilometers of safety test on open roads. At the present stage, adaption to local traffic regulations is preliminarily accomplished, with functions development and validation completed for settings such as busy roundabouts and give-way junctions.

In the light of its safety performance in the first phase trial, Baidu increased the number of AVs running simultaneously along the same test route in the Airport Area to five starting from February 2025, with additional test sessions scheduled for the morning and evening peak hours. By April 2025, its AVs recorded an accumulated test mileage exceeding 14,000 kilometers while maintaining the zero accident record and without causing traffic congestion. Stability of their autonomous driving system under conditions of high traffic flow had been further enhanced. System robustness and fleet coordination capability had also been validated in multi-vehicle simultaneous testing. By late April 2025, the maximum number of AVs allowed in its simultaneous testing was increased to ten.

At the end of April 2025, Baidu began to test AVs carrying designated passengers along the first phase trial route in the Airport Area. The trial route was extended to cover the Aircraft Maintenance Area, Aircraft Catering Area and Airport Logistics Area, with five pick-up/drop-off points set up respectively at the Hong Kong International Airport Tower, Civil Aviation Department Headquarters, AsiaWorld-Expo, Gate House No. 2 and the Hong Kong Aircraft Engineering Company Limited Aircraft Maintenance Area.

Baidu intends to commence non-passenger AV road tests in Tung Chung, which will be conducted in strict compliance with the relevant legislative provisions and the conditions stipulated in the AV Pilot Licence and AV Certificate, with the AVs meeting the requirements on safety mileage and test duration in each trial phase and demonstrating their roadworthiness and safety for use on roads.

#### Details of the Plan for Autonomous Vehicle Trials in Tung Chung

During the AV test without passengers in Tung Chung, an in-vehicle backup operator (a Hong Kong resident with over 10 years of driving experience and no less than 100 hours of full-time training by Baidu) will be sitting in the driver's seat to monitor the AV's performance and road conditions throughout the process, and take over the drive whenever necessary to ensure safety. With road works ahead, the backup operator can control the AV or take corresponding actions to avoid disruption to traffic. In the testing period, the Baidu team will exercise stringent control and evaluate the operational performance of the AVs in a timely manner to ensure safe driving on the road. The AVs will also be equipped with the required third-party risk insurance policies in accordance with the current laws and regulations to protect public interests.

## (1) Testing Hours

For more comprehensive testing and verification of the performance of AVs under miscellaneous traffic conditions on open roads, the testing hours are from 1:00 am to 5:00 am and from 9:00 am to 10:00 pm.

## (2) Trial Routes

Baidu plans to expand the trial routes for AVs to Tung Chung to include Wai Tung Road, Man Tung Road, Ying Hei Road, Yi Tung Road, Tung Chung Eastern Interchange, Yu Tung Road, Chung Yan Road, Shun Tung Road and Tung Chung Waterfront Road. Though passing through various housing estates in different districts, the new routes are mainly peripheral roads at the beginning. The aim is to minimise the impact on their neighborhood while verifying the adaptability of AVs to diverse traffic conditions in Hong Kong (Annex I).

### (3) Number of Test Vehicles

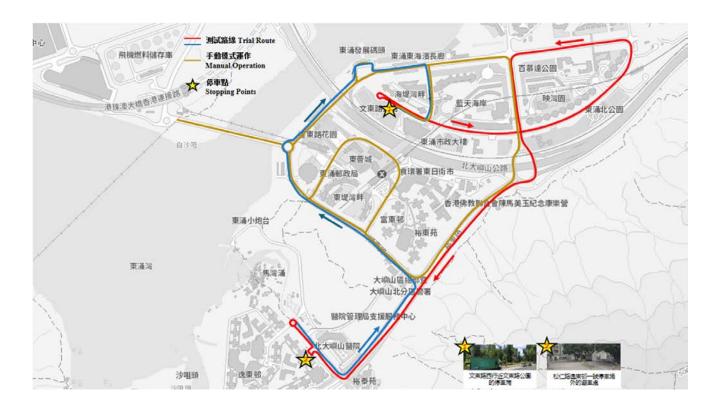
Three AVs are set to be tested simultaneously on the Tung Chung trial routes. Upon further verification from tests at the Airport Area and roads in Tung Chung, the number of test vehicles will increase progressively on those routes.

#### **Conclusion**

Baidu will ensure safety, and legal and regulatory compliance during the trial period and be subject to supervision from relevant departments.

# **Baidu Apollo International Limited**

13 May 2025



# Routes for conducting Open Road Trial (No Passenger) (autonomous or manual) (highlighted in red and blue):

 Man Tung Road, Ying Hei Road, Yi Tung Road, Tung Chung Eastern Interchange, Yu Tung Road, Chung Yan Road, Shun Tung Road, Tung Chung Waterfront Road and Wai Tung Road

#### **Remarks:**

- 1. In case of unexpected traffic situations, AVs under the pilot scheme may operate under **manual mode** at the following alternative routes (highlighted in **yellow**):
- Man Tung Road, Wai Tung Road, Tung Chung Waterfront Road, Shun Tung Road, Tat
  Tung Road, Yu Tung Road, Tung Chung Eastern Interchange, Yi Tung Road and Chek Lap
  Kok South Road
- 2. Pilot AVs under the pilot scheme may stop at the following locations (marked with asterisks):
- Lay-by on Man Tung Road westbound near Man Tung Road Park
- Lay-by outside Yat Tung Estate Carpark No.1 on Chung Yan Road