

Press Release



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Cabinet Secretariat
Cabinet Office
National Police Agency
Ministry of Internal Affairs and Communications
Ministry of Economy, Trade and Industry
Ministry of Land, Infrastructure, Transport and Tourism

Field operational tests on automated driving in the Tokyo waterfront area has commenced. —Realizing an automated driving society originating in Tokyo—

Cabinet Office and relevant agencies/ministries has commenced field operational tests (FOTs) on automated driving in the Tokyo waterfront area today. The FOTs will be carried out under the second phase of the Cross-Ministerial Strategic Innovation Promotion Program—Automated Driving for Universal Services (SIP-adus). This program is being undertaken to realize safe and comfortable automated driving society. SIP-adus conducts the FOTs of vehicle-infrastructure cooperative automated driving systems with information from traffic infrastructure, such as traffic signal data on general roads and driving assistance information for merging at expressway junctions. A total of 28 institutions from Japan and other countries will participate in the FOTs, including automobile manufacturers, suppliers, universities, and other institutions.

1. Background

Cabinet Office and relevant agencies/ministries is carrying out the second phase of SIP-adus with the aim of contributing to solving social issues, such as reducing accidents and congestion in road traffic, securing mobility for vulnerable road users, alleviating driver shortages, and reducing the cost of logistics and mobility services. In order to put an automated driving technology into practical

use, research and development activities are being promoted in the cooperative area, where collaboration among industry, academia, and government is required.

At the Growth Strategy Council – Investing for the Future (March 2018), Prime Minister Shinzo Abe stated, "We will implement automated driving during the 2020 Olympic and Paralympic Games in Tokyo. We will step up our efforts through various projects, such as preparing the FOTs site for increasing the safety of automated driving by transmitting traffic signal data to vehicles in the Tokyo waterfront area." In response to this goal, we have been working together with Japan Automobile Manufacturers Association, Inc. (JAMA), industries, the Tokyo Metropolitan Government, and relevant agencies/ministries, etc. to move forward with the development of traffic infrastructure necessary to carry out the FOTs activities.

2. Outline of FOTs in the Tokyo Waterfront Area

The traffic environment on general roads is complicated, and the traffic is heavy on expressways, so it is difficult to enable automated driving systems based solely on information from on board sensors in these kinds of places. Therefore, it is necessary to design automated driving systems that work in coordination with traffic infrastructure and utilize various data obtained from that infrastructure, such as traffic signal data, and also information about congestion and driving assistance for merging at junctions.

(1)Traffic infrastructure to be developed by SIP-adus

During the FOTs, traffic infrastructure will be developed in the Tokyo Waterfront City and Haneda Airport areas in order to provide high-precision 3D map information and traffic signal data through Intelligent Transport Systems (ITS) roadside units.

On the Metropolitan Expressway that connects Haneda Airport to the Tokyo Waterfront City area, traffic infrastructure will be implemented to provide automated vehicles with information about other vehicles driving on the main lane of expressway and the status of Electronic Toll Collection (ETC) gates through ETC2.0 wireless roadside communication equipment. In addition, in the Haneda Airport area, magnetic markers for public transportation systems, Public Transportation Priority Systems (PTPS), temporary bus stops, and dedicated bus lanes will be developed.

(2)Participants of the FOT from Japan and other countries

A total of 28 institutions from Japan and other countries will participate in the FOTs. The participants will arrange automated vehicles and drivers for tests by

themselves and report their test results. The number of test vehicles available for automated driving is expected to total approximately 100 eventually for the FOTs.

The FOTs are internationally open to collaboration between industry, academia, and government and also include efforts to develop international standards for automated driving systems. The FOTs which will be carried out in actual traffic environments in Tokyo, one of the largest cities in the world are unrivaled worldwide.

(3) Period for the FOTs

The FOTs will be conducted in phases as soon as the traffic infrastructure and participants' preparation are ready. The FOTs are scheduled to be carried out from October 2019 to the end of March 2021.

3. Future Schedule and Activities

The development of traffic infrastructure is currently underway in the Haneda airport area and on the Metropolitan Expressway that connects Haneda airport to the Tokyo waterfront city area. FOTs in these areas are scheduled to start in the spring of 2020.

In order to foster public acceptance of automated driving, an event for riding an automated vehicle is planned in cooperation with JAMA for July 2020 prior to the holding of the 2020 Tokyo Olympic and Paralympic Games. The detail of further information of the event will be announced. In addition, a website introducing automated driving to the general public will be set up. Social networking services and other interactive communication tools will also be used to increase public acceptance.

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