SIP-adus Activity Report Large-Scale Field Operational Tests

Cross-Ministerial Strategic Innovation Promotion Program Innovation of Automated Driving for Universal Services

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Today's Topics

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- Purposes of the Large-Scale Field Operational Tests
- Technologies required for the Automated Driving System and Areas of Cooperation
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- Field Operational Tests Locations
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SIP-adus's Objectives

Since 2014, SIP-adus has been conducting R&D focused on the following three objectives.

Early
realization and
popularization
of an
automated
driving system

Reduction of accidents and elimination of congestion in road traffic

Realization of an advanced public bus system

that is easy to use by the elderly and disable road users

- Progress toward deployment based on simultaneous pursuit of focused R&D and international cooperation
- Building of a national foundation for achieving national goals



Development in cooperation with the Tokyo Metropolitan Government, using the Tokyo Olympic and Paralympic Games as a milestone







Purposes of the Large-Scale Field Operational Tests

Beginning in FY2017, SIP-adus will implement large-scale field operational tests for the following purposes



Activation of research/technical development

To stimulate research and technical development by providing opportunities, locations, and necessary infrastructure for testing, with an eye to accelerating real-world implementation of the automated driving system.



Evaluation/issue identification with more objectives

To give shape to the outcomes of research in areas of cooperation that have been addressed through the SIP automated driving system, and to evaluate and identify problems with an even greater variety of viewpoints in an open forum.



Focus on deployment

To ascertain possibilities and assess prospects for practical application of research outcomes.



International cooperation and coordination

To disclose outcomes to overseas manufacturers and research institutes and lead international cooperation and coordination.



Nurturing of social acceptance

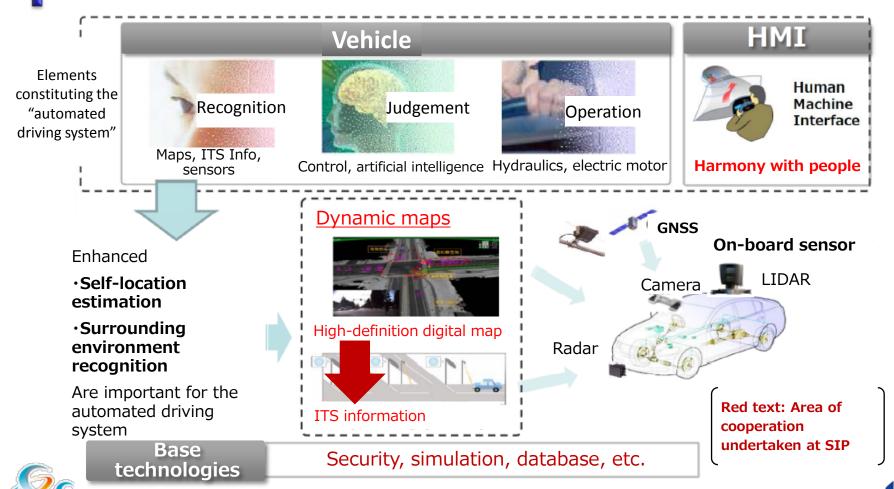
To improve social recognition of the automated driving system and cultivate social acceptance of self-driving vehicles.





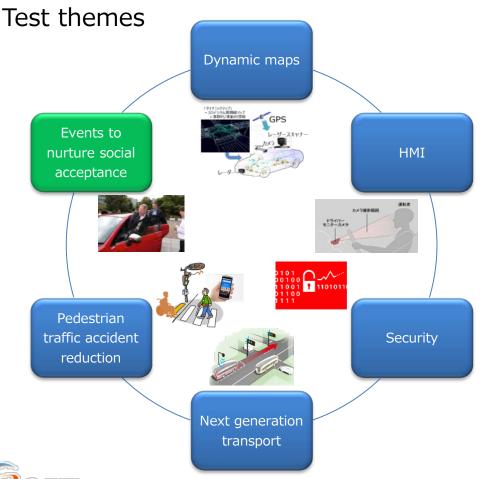
Technologies required for the Automated Driving System and Areas of Cooperation

Realizing the automated driving system will require advanced self-location estimation and surrounding environment recognition by means of high-definition digital maps, ITS facilities, GPS, and other various technologies that are in addition to in-vehicle cameras and sensors. SIP-adus is conducting research and development in these areas with focus on areas of cooperation with industry.



Large-Scale Field Operational Tests Outline

SIP-adus is integrating policies and measures based on the results of R&D and studies conducted thus far; providing opportunities for open discussion through large-scale operational tests on public roads and promotion of international standardization and R&D, with focus on the 5 key issues + social acceptance-building events; ascertaining R&D and possibilities for deployment; and promoting international standardization.



Envisioned participants

- Domestic and foreign OEMs/suppliers
- Universities/research institutes
- •Concerned ministries and agencies/journalists/members of the general public

Test locations

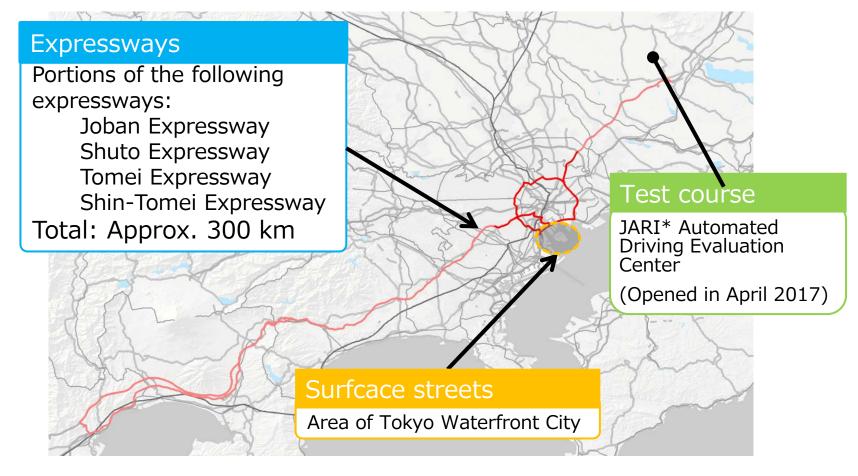






Field Operational Tests Locations

Expressways, Surface streets, Test course



*JARI: Japan Automobile Research Institute





Outline of Theme-Specific Tests

5 key issues + events to nurture social acceptance

Dynamic maps



Final confirmation and international standardization for the commercialization of Dynamic Map Center functions

HMI



Formulation of HMI guidelines and international standardization for realization of automated driving Level 3.

Security



Establishment of evaluation methods and international standardization

Pedestrian traffic accident reduction



Development of technologies for measuring pedestrian location data and pedestrian terminal systems

Next generation transport



Verification of Next-Step ART* technology

Events to nurture social acceptance

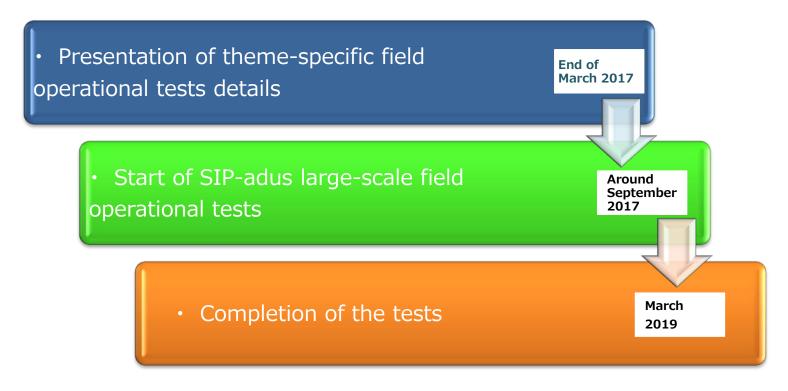


Promotion of correct understanding of automated driving technology and social initiatives

*ART: Advanced Rapid Transit

Schedule

Preparations are underway for a planned start of SIP-adus large-scale field operational tests in or around September 2017.



(Please note that the schedule may change.)

□ Updates on test details and participant recruitment information are provided through the SIP-adus website.

(http://www.sip-adus.jp/)



Mobility bringing everyone a smile!



Thank you for your kind attention.



