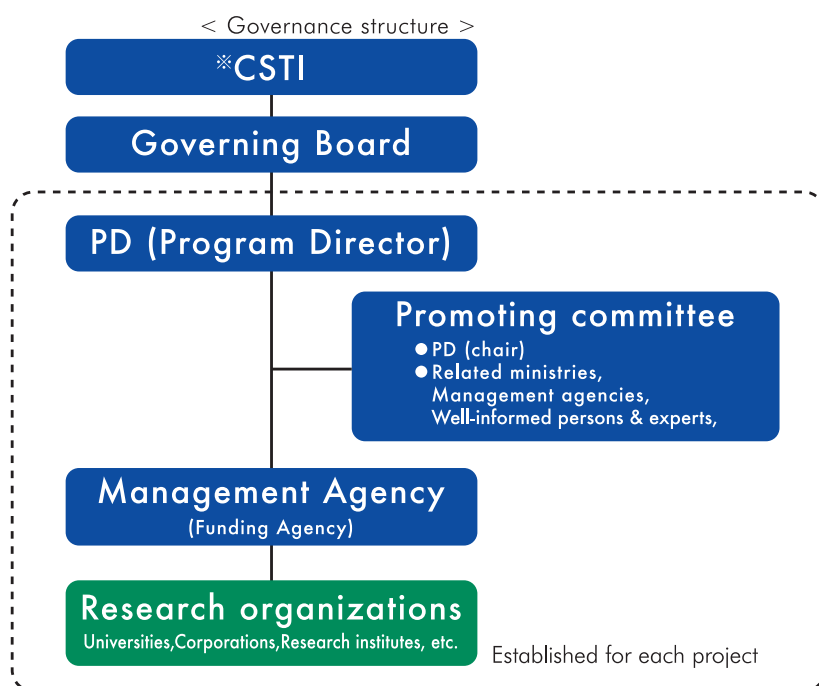


# The National Program for Innovation

## Cross-ministerial Strategic Innovation promotion Program (SIP)

- Aiming to realize Science, Technology and Innovation through promoting R&D overlooking from basic research to application and commercialization by cross-ministerial cooperation.
- \*CSTI defined the themes to solve societal issues and achieve economic growth.
- \*CSTI appoints Program Directors (PDs) for each project and allocates the budget.



\*Council for Science, Technology and Innovation (CSTI)

## Automated Driving System in SIP

- One of ten SIP projects

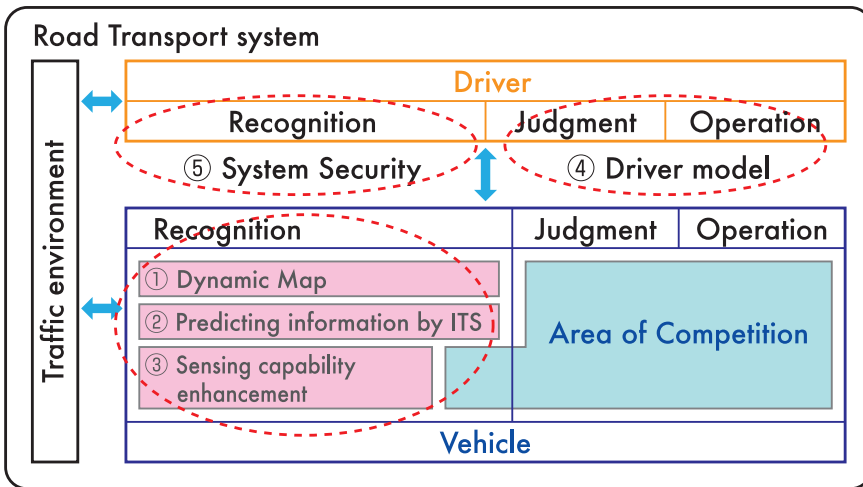
Priority policy issues	Prospective subject	Description
Energy	Innovative combustion technology	Improving fuel efficiency of automobile engines
	Next-generation power electronicsa	Integrating new semiconductor materials into highly efficient power electronics system
	Innovative structural materials	Developing ultra-strong and -light materials such as magnesium-, titanium-alloys and carbon fibers
	Energy carrier	Promoting R&D to contribute to the efficient and cost-effective technologies for utilizing hydrogen
	Next-generation ocean resources development technologies	Establishing technologies for efficiently exploring submarine hydrothermal polymetallic ore
Next-generation infrastructures	Automated Driving System	Developing new transportation system including technologies for avoidance accidents and alleviating congestion
	Technologies for maintenance/upgrading/management of infrastructures	Developing low-cost operation & maintenance system and long life materials for infrastructures
	Reinforcement of resilient function for preventing and mitigating disasters	Developing technologies for observation, forecast and prediction of natural disasters
Local resources	Technologies for creating next-generation agriculture, forestry and fisheries	Realizing evolutionary high-yield and high-profit models by utilization of advanced IT etc.
	Innovative design/manufacturing technologies	Establishing new styles of innovations arising from regions using new technologies such as Additive Manufacturing

# Automated Driving System

<b>Description</b>	Developing new transportation systems including technologies for avoiding accidents and alleviating congestion.
<b>Budget</b>	¥2.45 Billion (for FY 2014)
<b>Program Director</b>	Dr. Hiroyuki WATANABE (TOYOTA MOTOR CORPORATION)

## Automated Driving System Major Development Themes

[I] Development and verification of automated driving system



[III] International cooperation

- ① Shared research facility
- ② Social acceptance
- ③ Package export organization

- ① Local traffic management enhancement
- ② Next generation transport system

[IV] Deployment for next generation urban transport

- ① Traffic fatality reduction effect estimation method & national shared data base
- ② Micro and Macro data analysis and simulation technology
- ③ Local traffic CO<sub>2</sub> emission visualization technology

Area of Cooperation = Area of SIP

[II] Basic technologies to reduce traffic fatalities and congestion

## Automated Driving System Development Structure

### Steering Committee for SIP Automated Driving Research Project

#### System Implementation WG

- Dynamic map
- Micro and macro data analysis and simulation technology
- Predicting information by ITS
- Sensing capability enhancement
- Human Factors
- System security

#### International cooperation WG

- Shared research facility
- Social acceptance

#### Next Generation Urban Transportation WG

- Local traffic management enhancement
- Next-generation public road transport system

# To learn more about SIP Automated Driving System Development Project in Japan

## ITS World Congress Detroit 2014

Thursday, September 11, 8:30 a.m. – 10:00 a.m. Cobo 140 E

SIS72 – Automated Driving Technology Research in Japan —Strategic Innovation Promotion Program



### Organizer & Moderator

- Hajime Amano, President and CEO ITS Japan, Japan

### Speakers

- Hiroyuki Watanabe, Program Director, Council for Science and Technology, Cabinet Office, Japan
- Tomoyuki Tanuma, Counsellor for SIP, Council for Science, Technology and Innovation, Cabinet Office, Japan
- Seigo Kuzumaki, Assistant Program Director, Council for Science Technology and Information, Cabinet Office, Japan
- Masayuki Kawamoto, Project General Manager, R&D Management Div. Toyota Motor Corporation, Japan
- Kunio Segawa, Staff Manager, Technical Research Dept., R&D Technical Administration Div, Mazda Motor Corporation, Japan
- Mamoru Sekiguchi, Senior Manager, Electronic Product Design Department, SUBARU Engineering Div., Fuji Heavy Industries Ltd., Japan
- Masao Fukushima, Technical Consultant, R&D Engineering Management Division, Nissan Motor Co., Ltd., Japan
- Toshio Yokoyama, Senior Chief Engineer, Technology Development Division 12, Honda R&D Co., Ltd., Japan

## Workshop on Connected and Automated Driving Systems

### Organizer:

- Cross-Ministerial Strategic Innovation Promotion Program,
- Council for Science, Technology and Innovation,
- Cabinet Office, Government of Japan

**Date:** November 17-18, 2014

**Venue:** United Nations University  
5-53-70 Jingumae Shibuya-ku, Tokyo  
Japan 150-8925, Japan



### Outline:

Experts from Europe, Americas, and Asia-Pacific will share progress of related projects and discuss technical and non-technical challenges for deployment.

Japanese government initiated a research project on automated driving systems under Cross-Ministerial Strategic Innovation Promotion Program (SIP). Details of research plan will be unveiled during the workshop. Preliminary results of the project will also be demonstrated.

### Topics:

1. Dynamic and integrated database of road network and surroundings
2. Perception of driving environment through communication
3. Sharing roles between driver and vehicle system
4. Integrated approach to reduce traffic fatality and injury
5. Next generation transportation systems with automated driving technologies

Detailed program and speakers will be announced shortly

[http://www.its-jp.org/english/workshop\\_in\\_japan\\_november2014/](http://www.its-jp.org/english/workshop_in_japan_november2014/)