3rd SIP-adus Workshop on Connected and Automated Driving Systems 2016

Overview

SIP-adus ①
- Innovation of Automated Driving for Universal Services -

Administrative Organization for Promoting STI

Cabinet Office

Roles:
- Support the Cabinet in formulating important policies and in overall coordination of Ministries
- Make total planning and coordination from a higher standpoint of view than other Ministries

Councils on key policy fields
1. Council on Fiscal and Economic Policy
2. **Council for Science, Technology and Innovation**
3. Advisory Council for National Strategic Special Zones
4. Central Disaster Management Council
5. Council for Gender Equality

Council for Science, Technology and Innovation (CSTI)

Chair : Prime Minister
Member : 7 cabinet members (including PM & Minister for S&T Policy) and 8 executive members
Secretariat : STI Bureau, CAO

<Main Functions>
1. Investigate and discuss basic S&T Innovation policies
2. Investigate and discuss S&T budgets and the allocation of human resources
3. Assess Japan's key R&D
4. Investigate and discuss Framework conditions for the promotion of innovation

・Basic policies on S&T (Budget Allocation, Basic Strategy etc)
・Response
・Consultation

Ministries (14 ministries)
→ In conformity with the basic policy indicated by CSTI, each ministry promotes S&T according to the division of duties

MEXT (Ministry of Education, S&T)	METI (Ministry of Economy, Trade and Industry)	MHLW (Ministry of Health, Labor and Welfare)	MAFF (Ministry of Agriculture, Forestry and Fisheries)	Other ministries
・University policy ・Basic research ・General promotion	・Industrial policy ・Energy, Nuclear power	・Clinical study	・GMO ・Agriculture and Fisheries	...

HQ for Science and Technology to Poster innovation - CSTI: Council for Science, Technology and Innovation -

CSTI needs to be the stronger headquarters for creating innovation beyond the borders of systems, regulations, ministries and sectors, closely linked with "Abenomics"

Three Arrows of Reinforcement of the HQ

1st: Improvement of the process for policy-making
"S&T Budgeting Strategy Committee" and "Action Plans for S&T Priority Measures"

2nd: **SIP** (Cross-Ministerial Strategic Innovation Promotion Program)
➢ Budget for FY2014 : ¥50bil, FY2015 : ¥50bil, FY2016 : ¥50bil

3rd: **ImPACT** (Impulsing PAradigm Change through disruptive Technologies)
➢ Budget for FY2014-2018 : ¥55bil

Cross-Ministerial Strategic Innovation Promotion Program (SIP)

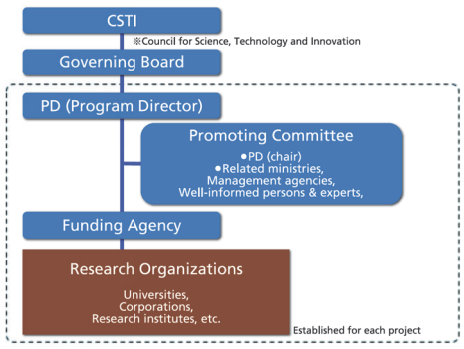
►Intensive R&D program
SIP is aiming to realize Innovation through promoting 5-years R&D by enhancing cross-ministerial cooperation. (FY2014- FY2018)

►11 Research themes
Prioritized and selected from societal issues such as Energy, Next-Generation Infrastructures and Local Resources, including R&D for AD

►Leadership and Budget
CSTI appointed Program Director (PD) for each research theme and Allocates the budget*.

* ¥50billion per year
(65% for SIP 11 themes,35% for medical R&D)

SIP
Cross-ministerial Strategic Innovation Promotion Program



11 Research Themes of SIP

Innovative Combustion Technology
(Allocation: ¥1.90 billion)
Masanori SUGIYAMA, Toyota Motor Corp.
Improving fuel efficiency of automobile engines

Structural Materials for Innovation(SM'I)
(Allocation: ¥3.758 billion)
Teruo KISHI, Univ. of Tokyo, NIMS
Developing ultra-strong and –light materials such as magnesium-, titanium-alloys and carbon fibers

Next-Generation Technology for Ocean Resources Exploration
(Allocation: ¥4.658billion)
Tetsuro URABE, Univ. of Tokyo, JMEC
Establishing technologies for efficiently exploring submarine hydrothermalpolymetallic ore

Infrastructure Maintenance, Renovation and Management
(Allocation: ¥3.156 billion)
Yozo FUJINO, Yokohama National Univ.
Developing low-cost operation & maintenance system and long life materials for infrastructures

Cyber-Security for Critical Infrastructures
(Allocation: ¥2.55 billion)
Atsuhiro GOTO, Institute of Information Security
Development of technologies that monitor, analyze, and defend control and communication system as well as confirm integrity and authenticity of system components to protect critical infrastructures against cyber threats.

Innovative Design/Manufacturing Technologies
(Allocation: ¥2.19 billion)
Naoya SASAKI, Hitachi, Ltd.
Establishing new styles of innovations arising from regions using new technologies such as Additive Manufacturing

Next-Generation Power Electronics
(Allocation: ¥2.41 billion)
Tatsuo OOMORI, Mitsubishi Electric Corp.
Integrating new semiconductor materials into highly efficient power electronics system

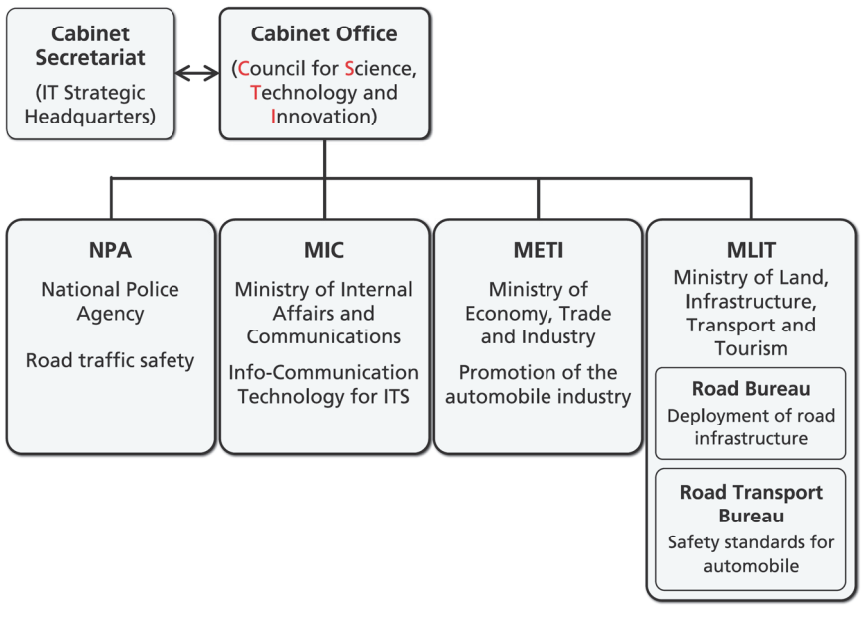
Energy Carriers
(Allocation: ¥3.49 billion)
Shigeru MURAKI, Tokyo Gas Co. ,Ltd.
Promoting R&D to contribute to the efficient and cost-effective technologies for utilizing hydrogen

Automated Driving System
(Allocation: ¥2.713 billion)
Seigo KUZUMAKI, Toyota Motor Corp.
Developing new transportation system including technologies for avoidance accidents and alleviating congestion

Enhancement of Societal Resiliency against Natural Disasters
(Allocation: ¥2.33 billion)
Masayoshi NAKASHIMA, Kyoto Univ.
Developing technologies for observation, forecast and prediction of natural disasters

Technologies for Creating Next-Generation Agriculture, Forestry and Fisheries
(Allocation: ¥2.925 billion)
Noboru NOGUCHI, Hokkaido Univ.
Realizing evolutionary high-yield and high-profit models by utilization of advanced IT etc

ITS promotion Framework of Japanese Government



Name and Message of Project

SIP-adus
(Innovation of **A**utomated **D**riving for **U**niversal **S**ervices)

Mobility Bringing Everyone a Smile

Inclusive society, where diverse people in diverse communities actively participate in generating values, will enhance both wellness of individuals and economic development. Automated driving technologies integrated with social innovations should provide everyone with mobility to fully exercise his or her capacity, enabling sustainable development of the society.

Cabinet Office
SIP