

SIP-adus Update

October 13, 2016

Takahiko Uchimura

SIP-adus International Cooperation WG



Contents

- **SIP, SIP-adus**
- **Development Structure**
- **Government Structure**
- **Development Focus Areas**
- **FOT from FY2017**
- **International Cooperation**
- **SIP-adus Workshop**

Cross-Ministerial Strategic Innovation Promotion Program (SIP)

■ SIP Structure

CSTI
Council for Science, Technology and Innovation

Governing Board

Program Director

11 Programs



■ SIP

- Cross-Ministerial Strategic Innovation Promotion Program



■ SIP-adus: One of eleven SIP projects

- Innovation of Automated Driving for Universal Services

“SIP- adus”

- Mobility Bringing Everyone a Smile -

Development Structure

■ Three WGs under SIP-adus



Government Structure

■ Governments structures for SIP-adus

Cabinet Secretariat
IT Strategic Headquarters

Cabinet Office
Council for Science,
Technology and Innovation

**National Police
Agency
(NPA)**

**Road Traffic
Safety**

**Ministry of
Internal Affairs
and
Communications
(MIC)**

**Communication
Technology**

**Ministry of
Economy, Trade
and Industry
(METI)**

**Economy and
Industry**

**Ministry of Land,
Infrastructure,
Transportation
and Tourism
(MLIT)**

**Road Bureau
Road and
Infrastructure**

**Road
Transport
Bureau
Standards**

Technology Developments

■ 20 to 30 projects per year



SIP-adus's Project (FY2015)	
Dynamic Map	
Activity Plan of Dynamic Map Study	co1-1.pdf
Research for the advancement of driving support by utilizing traffic regulation information	npa2.pdf
Development of Vehicle-to-pedestrian Communication Technology	miac1-2.pdf
Connected Vehicle	
Research for advanced Traffic Signal Prediction Systems	npa1.pdf
Research for the advancement of DSSS, Driving Safety Support Systems, which utilize ITS radio communication	npa3.pdf
Creation of an internationally open research and development environment	npa6.pdf
Development of V2V,V2I Communication Technology Toward the Automated Driving Systems	miac1-1.pdf
Development of Infrastructure Radar System Technology	miac1-3.pdf
Development and FOT of Traffic Signal Prediction Systems	meti6-3.pdf
Next-Generation Intelligent Transport Systems (ITS) utilizing Information and Communication Technology (ICT)	mlit_miac1.pdf
Human Factors	
Basic Research on Requirements for Safety and Reliability of Automated Driving System	mlit2.pdf
Research on Technical Requirements for Human Machine Interface (HMI) Related to Safety of Automated Driving System	mlit3.pdf
Research project for Promoting International Cooperation on Automated and Connected Driving Systems.	co1-3.pdf
Development and verification of construction technology of driving video recognition database	meti6-2.pdf
Development and Verification of Lane Marker Detection System in All-weather Condition	meti6-4.pdf
Survey on basic evaluation for effective utilization of satellite positioning technology	meti6-5.pdf

■ Budget

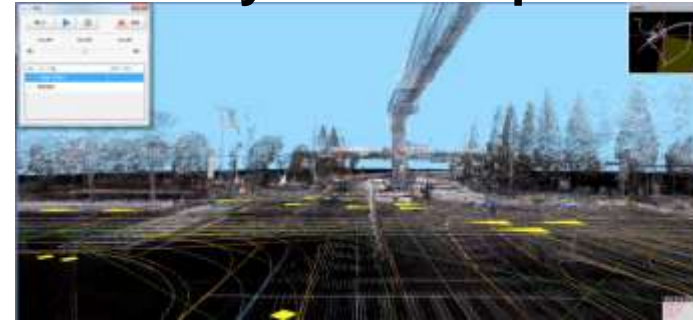
- FY 2014 : \$25 M ¥100/\$
- FY 2015 : \$23 M ¥100/\$
- FY 2016 : \$26 M ¥100/\$

Technology Developments

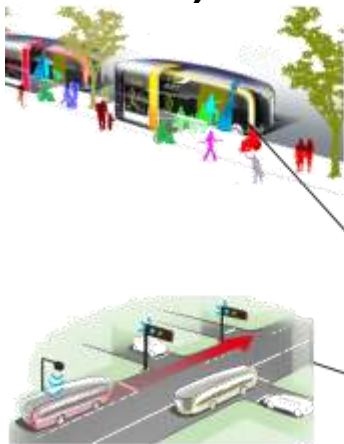
■ Five Focused area

1. Dynamic Map
2. HMI
3. Information Security
4. Pedestrian Accident Reduction
5. Next Generation Transport

Dynamic Map

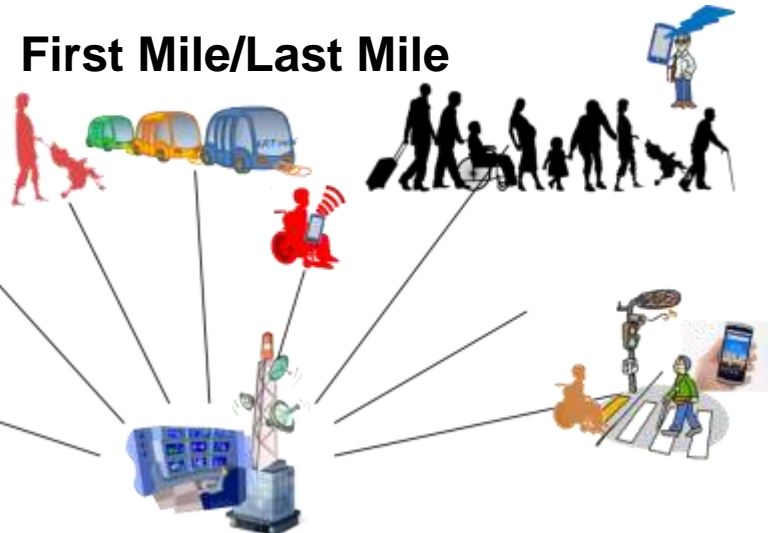


Advanced Rapid Transit
(Short/Mid distance)



Pedestrian Assist System

First Mile/Last Mile

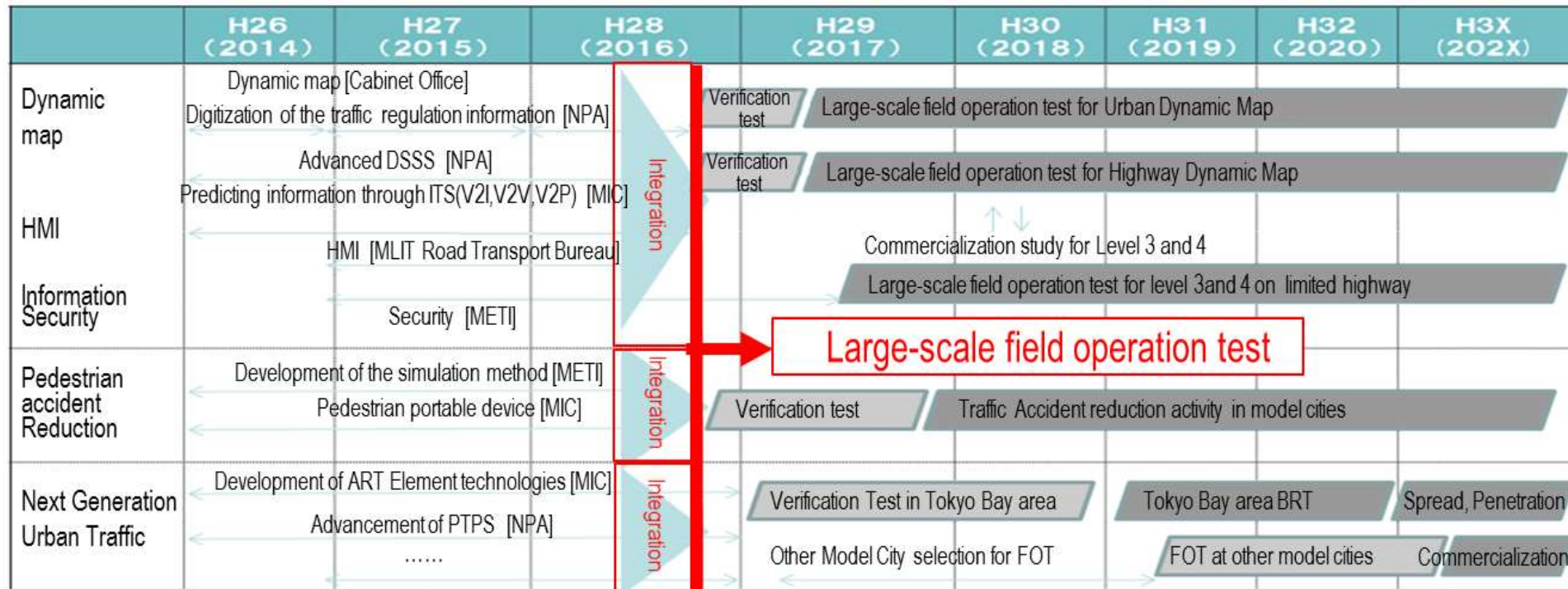


Next Generation Traffic Control Center

Next Generation Transport

Field Operational Test from FY 2017

Accelerate use of development results and enhance implementation



1. Clarify technical and institutional issues with variety of OEMs
2. Acquire new viewpoints from various participations outside SIP-adus
3. Enhance International cooperation and harmonization
4. Build Social acceptance by involving ordinary citizens

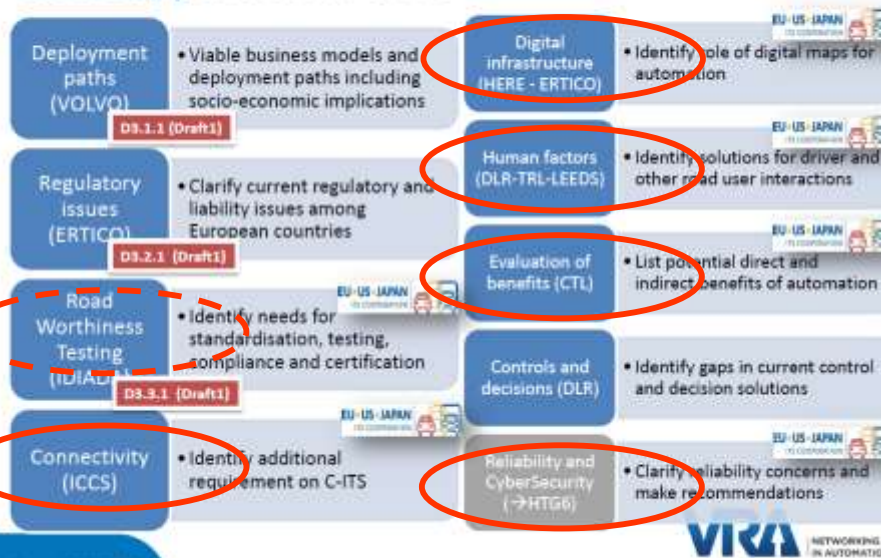
Agenda for International Cooperation

Selected based on EU and US research agenda

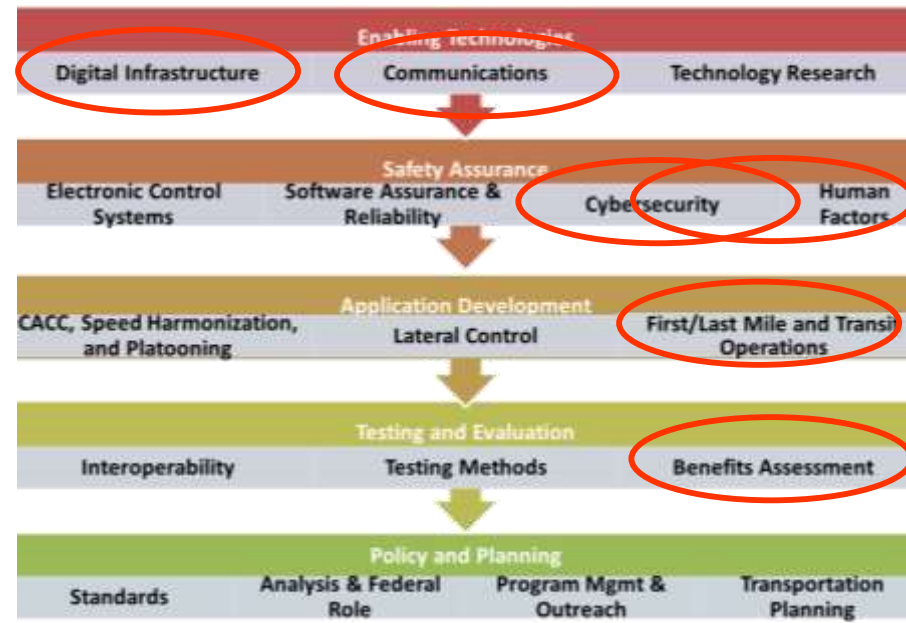
➤ Experts are assigned for each agenda

1. Dynamic Map
2. Connected Vehicle
3. Human Factors
4. Impact Assessment
5. Next Generation Transport
6. Security

Sub-WGs of the iMF Automation WG with support from VRA



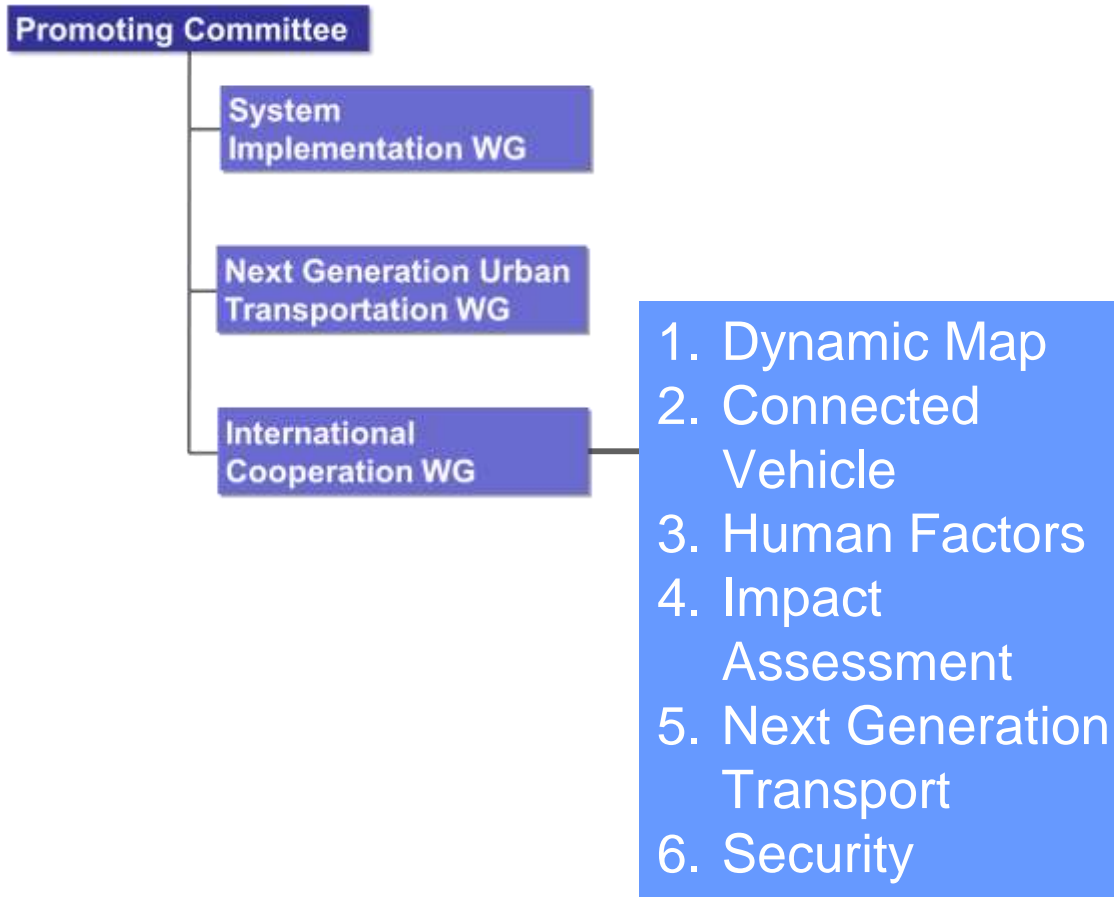
Source : VRA



Source : USDOT

International Cooperation

■ Experts Discussions in Focused areas



International Organization for Standardization



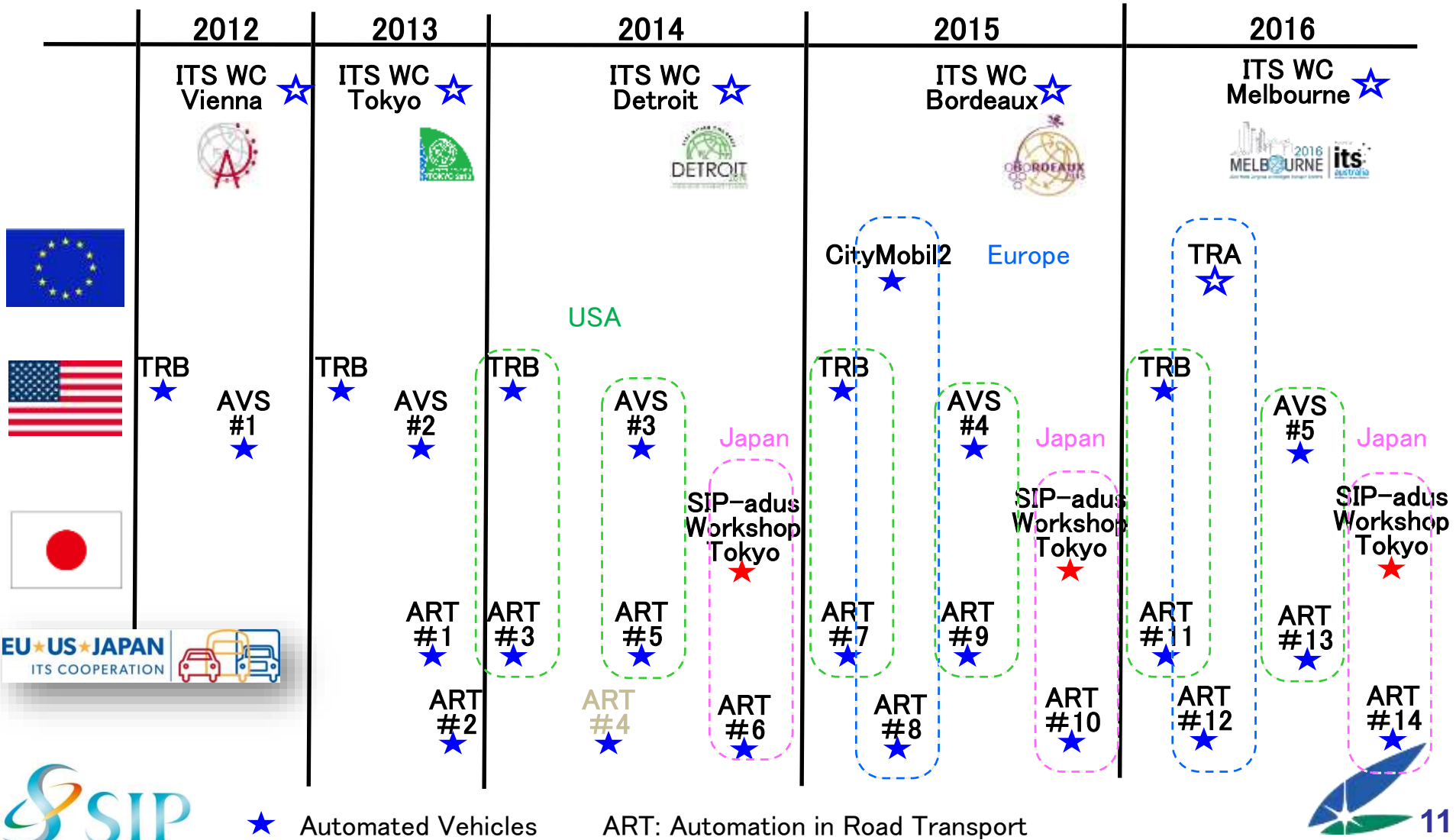
SIP-adus Workshop

International Cooperation

■ SIP-adus Team initiated technical discussions

SIP-adus Project

SIP-adus Team



2nd SIP-adus Workshop on Connected and Automated Driving Systems 2015

DATE: October 27-29, 2015

Venue: Tokyo International Exchange Center

innovation of **A**utomated **D**riving for **U**niversal **S**ervices (SIP-adus)
–mobility bringing everyone a smile–

<http://www.sip-adus.jp/>



■ Outline

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

■ Topics

1) Dynamic Map	2) Connected Vehicles
3) Security	4) Impact Assessment
5) Human Factors	6) Next Generation Transport



SIP-adus Workshop 2015



SIP-adus Workshop 2016

Organizer:

Council for Science, Technology and Innovation,
Cabinet Office, Government of Japan

Date: November 15-17, 2016

Venue: Tokyo International Exchange Center

Topics:

1. Dynamic Map
2. Connected Vehicles
3. Human Factors
4. Impact Assessment
5. Next generation transport
6. Security



Special Information Session on SIP-adus
- Field Operation Tests starting 2017
- Achievement of SIP-adus activities

SIP-adus Workshop 2016

	11/15	11/16	11/17	
AM	9:00~10:00 Opening Session	9:00~10:45 SIP-adus Report Session	9:00~12:00 Breakout Workshop (BW)	ART
	10:15~12:00 Regional Activities and FOTs	11:00:~12:30 Impact Assessment,		
Lunch	Poster Session	Poster Session	Lunch	
	Lunch	Lunch		
PM	13:00~14:30 Dynamic Map	13:30~15:00 Next Generation Transport	13:00~15:00 Breakout Workshop (BW)	
	14:45~16:15 Connected Vehicles	15:45~17:30 Human Factors	15:30~17:00 BW Presentation	
	16:30~18:00 Security		17:00~17:30 Closing Session	
	18:00~20:00 Guest Reception	18:00~20:00 Guest Reception	17:30~19:30 BW Reception	

SIP-adus Workshop 2016

Mobility Bringing Everyone a Smile

<http://en.sip-adus.jp>

END