November 9 (Day 1)

Session

Opening Session

Regional Activities

Impact Assessment

Human Factors

Japanese Government

JST

9:00-10:40

17:30-19:10

*1:00-*2:40

10:50-12:15

19:20-20:45

*2:50-*4:15

13:15-15:10

21:00-22:55

*4:30-*6:25

15:25-16:40

23:10-*0:25

*6:40-*7:55

Service and Business Implementation / FOTs

CET 1:00-2:40

2:50-4:15

5:15-7:10

7:25-8:40

15:10-16:25

22:40-23:55

13:00-14:55

20:30-22:25

11:20-12:45

18:50-20:15

9:30-11:10 17:00-18:40

#19:00-#20:40 3:30-5:10 11:00-12:40

12:50-14:15

#23:15-1:10

14:30-16:25

7:00-8:55

1:25-2:40

9:10-10:25

16:40-17:55

EST

Connected Vehicles #20:50-#22:15 5:20-6:45

SIP-adus Workshop 2021 Plenary Session Agenda

Session

Safety Assurance

Cybersecurity

Closing

* The time will be the next day / # The time will be the previous day All session are streamed 3 times

Dynamic Map

November 10 (Day 2)

CET

1:00-2:30

9:30-11:00

17:00-18:30

2:40-4:05

5:10-6:45

7:00-8:15

8:15-8:20

15:55-16:00

23:25-23:30

14:40-15:55

22:10-23:25

12:50-14:25

20:20-21:55

11:10-12:35

18:40-20:05

EST

#19:00-#20:30

11:00-12:30

#20:40-#22:05

12:40-14:05

#23:10-0:45

14:20-15:55

6:50-8:25

1:00-2:15

8:40-9:55

2:15-2:20

9:55-10:00

17:25-17:30

16:10-17:25

3:30-5:00

5:10-6:35

JST

9:00-10:30

17:30-19:00

*1:00-*2:30

10:40-12:05

19:10-20:35

*2:40-*4:05

13:10-14:45

20:50-22:25

*4:20-*5:55

15:00-16:15

22:40-23:55

*6:10-*7:25

16:15-16:20

23:55-24:00

*7:25-*7:30

SIP-adus Workshop 2021 Plenary Session Agenda November 9 (Day 1) **Opening Session** (EST) 1:00-2:40 #19:00-#20:40

Regional Activities

*1:00-*2:40 17:00-18:40 **11:00-12:40** All session are streamed 3 times * the next day / # previous day

(CET)

9:30-11:10

3:30-5:10

Seigo Kuzumaki

Fellow

Program Director for SIP-adus

Advanced R&D and Engineering Company, Toyota Motor Corporation

(JST)

9:00-10:40

17:30-19:10

Opening Session Takayuki Kobayashi Welcome Speech Minister of State for Science and Technology Policy Cabinet Office Kenneth M. Leonard Director Intelligent Transportation Systems Joint Program Office The United States Department of Transportation Rosalinde van der Vlies Director **Keynote Speech** Clean Planet Directorate, Directorate-General for Research and Innovation **European Commission**

November 9 (Day 1)

(JST)

9:00-10:40

17:30-19:10

(CET) (EST) 1:00-2:40 #19:00-#20:40 9:30-11:10 3:30-5:10

Opening Session Regional Activities

Moderator: Manabu Umeda

Collaborative Research Coordinator for SIP-adus Project researcher, Mobility innovation collaborative research organization (UTmobI) The University of Tokyo

*1:00-*2:40 17:00-18:40 **11:00-12:40** All session are streamed 3 times * the next day / # previous day

Regional Activities				
Session Abstract	In this session, speakers from each government like US, Europe, Japan, etc. will introduce latest research activities and topics regarding automated driving, including keynote speech from executives.			
Opening	Introduction for Regional Activities Session	Moderator: Manabu Umeda		
Presentation	Overview of United States Department of Transportation Automated Driving Research	Robert Heilman Director, Office of the Assistant Secretary for Research and Technology The United States Department of Transportation		
	Connected, Cooperative and Automated Mobility – the EU perspective	Ludger Rogge Policy Officer, Directorate-General for Research and Innovation European Commission		
	Research on autonomous driving in Germany	Reinhold Friedrich Deputy Head of Division, Electronics and Autonomous Driving Federal Ministry of Education and Research		
	Development of ICV and Smart Mobility in China	Keqiang Li Professor, School of Vehicle and Mobility Tsinghua University		
Closing	Closing for Regional Activities Session	Moderator : Manabu Umeda		

November 9 (Day 1) (JST) (CET) (EST)

10:50-12:15

Opening

Presentation

Closing

2:50-4:15 #20:50-#22:15

19:20-20:45 **11:20-12:45** 5:20-6:45 **Impact Assessment**

Moderator: Takashi Oguchi Director, Advanced Mobility Research Center, Institute of Industrial Science

The University of Tokyo

*2:50-*4:15 18:50-20:15 **12:50-14:15** All session are streamed 3 times * the next day / # previous day

Diffusion of automated driving vehicles (ADs) will help to reduce traffic accidents, alleviate traffic congestion, resolve the driver shortage, and resolve other social problems. On the other hand, ADs are necessary to be installed with adequate consent by people and society. In this session, experts will address views, issues and challenges related to social impact of

Session Abstract

Driving

on AVs

Impact Assessment

AD technologies.

Introduction for Impact Assessment Session

: Diffusion paths into the German car market

Assessment of Socioeconomic Impacts of Automated

A qualitative analysis of Japanese newspaper articles

Analysis of automated driving diffusion

Social Acceptance of Automated Driving

Social acceptance of Autonomous Vehicles

Closing for Impact Assessment Session

Using System Dynamics for Automated Vehicle

Empirical Insights and First Lessons

German Aerospace Center (DLR)

Head of Department, Institute of Transport Research

Moderator: Takashi Oguchi

Christian Winkler

Deputy Director

Hiroaki Miyoshi

Professor, Graduate School of Policy and Management

Doshisha University

Torsten Fleischer

Institute for Technology Assessment and Systems Analysis (ITAS)

Karlsruhe Institute of Technology (KIT) Avako Taniguchi

The United States Department of Transportation

Professor, Systems and Information Engineering

Moderator: Takashi Oguchi

University of Tsukuba

Scott Smith

Operations Research Analyst, Volpe Center

November 9 (Day 1)

(JST) (CET) (EST)

13:15-15:10 5:15-7:10 #23:15-1:10
21:00-22:55 13:00-14:55 7:00-8:55

*4:30-*6:25 20:30-22:25 **14:30-16:25**

Service and Business Implementation / FOTs Human Factors Moderator: Yurie Toyama

Researcher, Smart Region Division Mitsubishi Research Institute

Moderator: Satoshi Kitazaki

Director

Human-Centered Mobility Research Center (HCMRC) National Institute of Advanced Industrial Science and Technology (AIST)

All session are streamed 3 times * the next day / * previous day

Session Abstract | **Service and Business Implementation / FOTs**

In this session, we will discuss how we can think about the feasible business model for automated driving and how to integrate autonomous driving into local transport.

Human Factors

Public transport services using automated shuttles and busses are expected to be a key solution to the social problem of limited mobility in rural areas and have been tested in fields in various countries. High level safety is essential for social implementation and wide spread of the services. In automated mobility services, both system and service are designable. The larger degree of freedom in design is expected to bring breakthroughs for the implementation but may raise new risks due to the complexity. In this session, human factor challenges for safety of the automated mobility services in various countries will be shared.

Speakers are listed on the next page

SIP-adus Workshop 2021 Plenary Session Agenda				
November 9 (Day 1) (JST) (CET) (EST) 13:15-15:10 5:15-7:10 #23:15-1:10 21:00-22:55 13:00-14:55 7:00-8:55 *4:30-*6:25 20:30-22:25 14:30-16:25 All session are streamed 3 times * the next day / # previous day Service and Business Implementation / FOTs Human Factors Moderator: Yurie Toyama Mitsubishi Research Institute Moderator: Satoshi Kitazaki National Institute of Advanced Industrial Science and Technology (AIST)				
Opening	Introduction for the SBI/FOTs and HF session	Moderator: Yurie Toyama		
Presentation	Shuttles - from early pilots to commercial deployment	Jan Hellåker Chairman Drive Sweden		
	UNICARagil Disruptive Modular Architecture for Agile, Automated Vehicle Concepts	Lutz Eckstein Director, Institute for Automotive Engineering (ika) RWTH Aachen University		
	HEAT - Hamburg Electric Autonomous Transportation	Katrin Schwager Project Manager, Innovation and Change Hamburger Hochbahn AG		
	AIST's efforts toward social implementation of automated driving mobility services	Shin Kato Prime Senior Researcher, Human-Centered Mobility Research Center National Institute of Advanced Industrial Science and Technology (AIST)		
	Automated Driving Systems for Rural America	Daniel McGehee Professor and Director, National Advanced Driving Simulator and Dept of Industrial and Systems Engineering, University of Iowa		
	Automated Driving Systems	Timothy Haile Executive Director, All Departments Contra Costa Transportation Authority		
	East Contra Costa County(ECCC) Dynamic Personal Micro Transit (DPMT) PROJECT	Habib Shamskhou President, Engineering/Program Management/Technology Facilitation Advanced Mobility Group		
	INCLUSIVE DESIGN ACROSS THE TRAVEL CHAIN	Jordana Maisel Assistant Professor, Urban and Regional Planning University at Buffalo, State University of New York		
Closing	Closing for the SBI/FOTs and HF session	Moderator : Satoshi Kitazaki		

SIP-adus Workshop 2021 Plenary Session Agenda November 9 (Day 1) (JST) (CET) (EST) **Japanese Government** 15:25-16:40 7:25-8:40 1:25-2:40 23:10-*0:25 **15:10-16:25** 9:10-10:25 *6:40-*7:55 22:40-23:55 **16:40-17:55** All session are streamed 3 times * the next day / # previous day In this session, their various attempts related to automated driving, ITS as well as Information and Communication **Session Abstract** technologies will be introduced by the contributing Japanese government ministries and agencies. National Research Project on Automated Driving Chie Fukushima to Realize Society 5.0 Director for SIP-adus, Secretariat of Science, Technology and Innovation Policy - SIP-adus in Japan -Cabinet Office **Public-Private ITS** Takahiro Suzuki **Initiative / Roadmaps** Senior Planning Officer Past initiatives and the basic concept of the future ITS Initiative Digital Agency Police Efforts toward Realization of Automated Driving Kenichi Ito Director, Automated Driving Planning Office National Police Agency MIC's Initiatives for Automated Driving Society Shinii Ide Director of the New Generation Mobile Communications Office Radio Department, Telecommunication Bureau Presentation Ministry of Internal Affairs and Communications METI's effort to realizing autonomous driving Shiqekazu Fukunaga Director, ITS and Autonomous Driving Promotion Office Automobile Division, Manufacturing Industries Bureau Ministry of Economy, Trade and Industry **Automated Driving Services in Rural Areas** Koichi Sakai Director, ITS Policy and Program Office Ministry of Land, Infrastructure, Transport and Tourism Efforts of Road Transport Bureau, MLIT For the Realization of Automated Driving Yoshitaka Tada Director, Policy planning office for Automated Driving Technology Engineering and Environmental Policy Division Road Transport Bureau Ministry of Land, Infrastructure, Transport and Tourism

SIP-adus Workshop 2021 Plenary Session Agenda November 10 (Day 2) (JST) (CET) (EST) **Dynamic Map Moderator: Satoru Nakajo** 9:00-10:30 1:00-2:30 #19:00-#20:30 Visiting Researcher 17:30-19:00 9:30-11:00 3:30-5:00 Center for Spatial Information Science *1:00-*2:30 17:00-18:30 **11:00-12:30** The University of Tokyo All session are streamed 3 times * the next day / # previous day This session is to share the world latest examples of dynamic contents distribution/exchange with Dynamic Map and the updates, and to discuss the direction for further international collaborations and the possibility for the utilization of latest **Session Abstract** technologies. namic Map Session **Moderator: Satoru Nakajo** RIS Jean-Charles Pandazis ADASIS & SENSORIS coordinator, Innovation & Deployment European Road Transport Telematics Implementation Coordination Organisation-Intelligent Transport Systems & Services Europe (ERTICO-ITS Europe) **Andras Csepinszky** te Speaker, Steering Committee Open Auto Drive Forum

Closina

Opening	Introduction for Dynamic Map Session	
	ADASIS and SENSORIS	
	OADF – status update	
Presentation	resentation Fully automated mobility with location intelliger	

Dynamic Map Platform Co.

Implementation in FY2021

Closing for Dynamic Map Session

Current Initiatives and Future Developments

FOTs in the Tokyo Waterfront area FY2019 to 2020 Results and Overview of

Akihiro Takahashi.

VP Sales & Japan Country Manager, Sales **HERE Technologies**

Hirovuki Inahata

KAMAKURA WORKS, MITSUBISHI ELECTRIC CORPORATION

Chief Engineer, Spatial Information Systems Engineering Section/Information

Representative Director, President Dynamic Map Platform Co., Ltd.

Yoshiaki Tsuda

Technology Systems Department

Moderator: Satoru Nakajo

SIP-adus Workshop 2021 Plenary Session Agenda November 10 (Day 2) (JST) (CET) (EST) **Connected Vehicles** 10:40-12:05 2:40-4:05 #20:40-#22:05 **Moderator: Norifumi Ogawa** 19:10-20:35 **11:10-12:35** 5:10-6:35 Staff Manager, Technical Research Dept. *2:40-*4:05 18:40-20:05 **12:40-14:05** Mazda Motor Corporation All session are streamed 3 times * the next day / # previous day The use of connectivity for automated driving and Advanced Safe Driving Systems is being considered in each regions of the world, but it has not yet been put into full-scale practical use. Session Abstract We will share trends regarding cooperative driving automation in each region and consider issues. Introduction for Connected Vehicles Session **Moderator: Norifumi Ogawa Opening** Trends in US V2X and Cooperative Automation John Kenney Director, InfoTech Labs Toyota Motor North America **V2X FOR TRANSPORTATION SAFETY** Tom Schaffnit Operations Research Analyst, Volpe National Transportation Systems Center The United States Department of Transportation **C-ITS** in Europe Niels Peter Skov Andersen CEO Anemone Technology **Presentation C-ITS Martin Boehm** THE EUROPEAN INFRASTRACTURE IS PREPARED TO Technical Director **SUPPRT CONNECTED VEICLES** AustriaTech - Federal Agency for technological Measures Ltd. SIP-adus FOTs in Tokyo waterfront area Masato Minakata - Toward the realization of Grand Master, R&D and Engineering Management Div. cooperative autonomous driving-Toyota Motor Corporation Research of V2X communication for Cooperative **Norifumi Ogawa**

Staff Manager, Technical Research Dept.

Moderator: Norifumi Ogawa

Mazda Motor Corporation

Closing for Connected Vehicles Session

Driving Automation

Closing

SIP-adus Workshop 2021 Plenary Session Agenda November 10 (Day 2) (JST) (CET) (EST) Moderator : Satoshi Taniguchi **Safety Assurance** Safety Assurance Lead 13:10-14:45 5:10-6:45 #23:10-0:45 Automated Driving & Advanced Safety System 20:50-22:25 **12:50-14:25** 6:50-8:25 Development *4:20-*5:55 20:20-21:55 **14:20-15:55 Toyota Motor Corporation** All session are streamed 3 times * the next day / # previous day The virtual environment is an indispensable technology for the realization of security. So as to accelerate the expansion of virtual testing technology for safety assurance, the international cooperation on the requirements for the virtual **Session Abstract** environment and the method of validation should be enhanced. The virtual environment and evaluation methods are discussed in this session in order to figure out how to proceed with future collaboration and harmonization. **Introduction for Safety Assurance Session** Moderator: Satoshi Taniquchi **Opening** We make AUTONOMOUS MOBILITY happen. Frank Gruson Head of Advanced Engineering Radar. Radar Concept Development Continental / ADC Automotive Distance Control Systems GmbH Simulation toolchain for safety assurance with focus **Matthias Hein** on automotive radar Director, Thuringian Center of Innovation in Mobility Technische Universitat Ilmenau **Driving Intelligence Validation Platform** Hideo Inoue for Automated Driving Safety Assurance Director, Advanced Vehicle Research Institute Kanagawa Institute of Technology Presentation A scenario database linked to a virtual platform for Jacobo Antona-Makoshi automated driving safety development and Senior researcher and Group manager, Autonomous Driving Research evaluation purposes Department, Japan Automobile Research Institute VVM - Towards a comprehensive framework for AD **Roland Galbas** safety ensurance Project Lead, ADAS System Development Robert Bosch GmbH **An Overview of the Safety Case Framework** Chan Lieu Senior Manager, Safety Policy Aurora Closing for Safety Assurance Session Moderator: Satoshi Taniquchi Closing

November 10 (Day 2) (JST) (CET) (EST)

15:00-16:15 7:00-8:15 1:00-2:15

8:40-9:55 22:10-23:25 **16:10-17:25** Cybersecurity

Moderator: Shigeru Uehara

Chair of Governing Board, J-Auto-ISAC Project General Manager, E/E Architecture Development Div., Toyota Motor Corporation

All session are streamed 3 times * the next day / # previous day

22:40-23:55 **14:40-15:55**

*6:10-*7:25

Opening

It is expected that U

IN regulation will soon be adopted to detect and respond to cyber attacks, but it is not easy for each OEM to determine and implement the optimum detection performance level for their communication system. In this research, focusing on in-vehicle IDS / IDPS, we will consider the evaluation method for selecting the optimum IDS/IDPS for each OEM's communication system, technical requirements for the initial response/recovery action when cyber attacks

Session Abstract

detected and the basic thought of establishing V-SOC which can be said to be a competitive area for each OEM. Introduction for Cybersecurity Session

Moderator: Shigery Uehara Building VSOC in a connected ECO system of IDS and Nishant Khadria

threat intelligence **New Cyberattack and Proactive Survey**

Shinichi Kan

Methodologies for Automotive Industry

Associate, Technology Consulting PwC Consulting Japan

Director, Cyber Emerging Technologies

Implementation of Cybersecurity Regulation

Shiqevuki Kawana

Deloitte

Chair, Electronics Platform sub-committee

- Requirements to IDS -

Japan Automobile Manufacturers Association, Inc. Misbehavior Detection and Prevention in Connected,

Frank Kargl University Professor, Institute of Distributed Systems

Automated Driving Ulm University

Novel Capabilities Required for Intrusion Detection Tsutomu Matsumoto Systems for Automated Driving Vehicles

Professor, Faculty of Environment and Information Sciences Yokohama National University **Closing for Cybersecurity Session**

Moderator: Shigeru Uehara

Closing

Presentation

