



“Business investigation into the strengthening of information transmission capabilities in preparation for the realization of automated driving systems”

in “the second phase of the Cross-Ministerial Strategic Innovation Promotion Program — Innovation of Automated Driving for Universal Services”

Annual Report

Executive Summary

April 18, 2022



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1. Objectives of the project

Objective (1) International cooperation in SIP-adus

The Cabinet Office has been working to solve social issues, such as reducing traffic accidents and congestion and offering means of mobility to individuals who have limited access to road transportation including elderly persons who live in local areas, through the Strategic Innovation Promotion Program — Automated Driving system since FY2014. the second phase of SIP, which commenced in FY2018, aims to expand the implementation of automated driving from expressways to 舟橋0 roads.

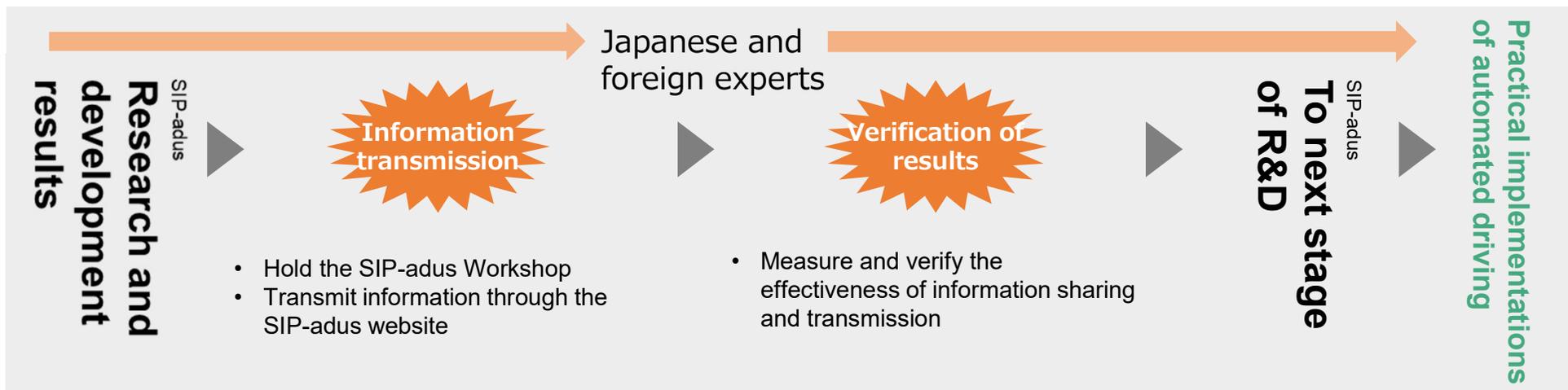
The pillars of this R&D project are: I) development and verification of auto 舟橋1 driving systems (demonstration tests), II) development of basic technology for practical application of automated driving, III) fostering social acceptance (public acceptance) of automated driving, and IV) strengthening international cooperation.

The International Cooperation Working Group of the Cabinet Office has been promoting bilateral and multilateral joint research. Meanwhile, this project provides Japanese and foreign experts with opportunities to share information and conduct joint research by regularly holding the SIP-adus Workshop in order to enhance international cooperation and promote international standardization.

Objective (1) Enhancement of information transmission and verification of results

To implement automated driving in society, it is important to strengthen information transmission capabilities and utilize opinions and responses in promoting R&D in the future.

In this project, questionnaire surveys of participants are conducted after the SIP-adus Workshop is held. The opinions of participants are compiled, and the results of verification are provided as a reference for organizing the program the next fiscal year. Meanwhile, the SIP-adus website is used to actively disseminate information. The content of the SIP-adus Workshop is updated in stages, reports on R&D promoted by SIP-adus are posted, events held in connection with SIP-adus are reported, and information on large-scale FOTs in the Tokyo waterfront area is updated promptly. The web access logs are analyzed throughout the year to measure how effectively the website transmits information.



スライド 3

舟橋0 第1期はAutomated driving system
舟橋 恵, 2022-06-01T04:35:50.109

舟橋1 第2期 : the second phase
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2. Hosting of SIP-adus Workshop 2021

2-1 . Overview of event

a. Summary Results of SIP-adus Workshop 2021

This year's SIP-adus Workshop was held via an online conference from November 9th (Tuesday) to November 10th (Wednesday), 2021.

The Plenary Program consisted of a grand total of eight sessions and included speeches on automated driving policies by government representatives from Japan, the U.S., and Europe. Sessions on the five key themes related to international standardization (FOTs, Human Factors, Dynamic Map, Connected Vehicles, Safety Assurance, and Cybersecurity) were held. (Note: FOTs and Human Factors were conducted jointly as the Service & Business Implementation session.) In addition, sessions took place on Regional Activities to discuss initiatives in Europe, the U.S. and other regions, Impact Assessment to discuss the socio-economic impact of automated driving, and the Japanese Government to share information on the initiatives of relevant ministries and agencies of the Japanese government.

With respect to the Plenary Program session schedule, Breakout Workshops were held separately for each session theme and in accordance with the theme leaders' discretion.

With its continuous achievements, the SIP-adus Workshop has established itself as an international conference on automated driving and has contributed to enhancing Japan's presence in the field. In addition, the SIP-adus Workshop has become an opportunity to gather information on automated driving projects overseas and develop professional networks.

Overview

Overviews of SIP-adus Workshop2021	
Organizer	Cross-Ministerial Strategic Innovation Program, Secretariat of Science, Technology and Innovation Policy, Cabinet Office, Government of Japan New Energy and Industrial Technology Development Organization (NEDO)
Period	Plenary Session : November 9-10 2021 (Tuesday-Wednesday) Breakout Workshop *held by each theme held before/after Plenary Session 各テーマごとにPlenary Sessionの前後で開催 ※On-demand streaming : December 10 2021-January 5 2022
Venue	Online
Participants including speakers	1,075 individuals from 23 countries and regions including 134 from overseas (FY 2020: 1,152 individuals from 29 countries including 137 from overseas/ FY2019: 511 individuals from 23 countries including 89 from overseas) Speakers out of participants: 57 speakers including 29 from overseas (FY 2020: 76 speakers including 28 from overseas)
Themes	Regional Activities Impact Assessment Service & Business Implementation / FOTs Human Factors Dynamic Map Connected Vehicles Safety Assurance Cybersecurity Japanese Government
Official website	https://www.sip-adus.go.jp/evt/workshop2021/

Program

November 9 (Day 1)				November 10 (Day 2)			
Session	Japan (JST)	Europe (CET)	Americas (EST)	Session	Japan (JST)	Europe (CET)	Americas (EST)
Opening Session / Regional Activities				Dynamic Map			
	9:00 - 10:40 17:30 - 19:10 *1:00 - *2:40	1:00 - 2:40 9:30 - 11:10 17:00 - 18:40	*19:00 - *20:40 3:30 - 5:10 11:00 - 12:40		9:00 - 10:30 17:30 - 19:00 *1:00 - *2:30	1:00 - 2:30 9:30 - 11:00 17:00 - 18:30	*19:00 - *20:30 3:30 - 5:00 11:00 - 12:30
Impact Assessment				Connected Vehicles			
	10:50 - 12:15 19:20 - 20:45 *2:50 - *4:15	2:50 - 4:15 11:20 - 12:45 18:50 - 20:15	*20:50 - *22:15 5:20 - 6:45 12:50 - 14:15		10:40 - 12:05 19:10 - 20:35 *2:40 - *4:05	2:40 - 4:05 11:10 - 12:35 18:40 - 20:05	*20:40 - *22:05 5:10 - 6:35 12:40 - 14:05
Service and Business Implementation / FOTs				Safety Assurance			
Human Factors	13:15 - 15:10 21:00 - 22:55 *4:30 - *6:25	5:15 - 7:10 13:00 - 14:55 20:30 - 22:25	*23:15 - 1:10 7:00 - 8:55 14:30 - 16:25		13:10 - 14:45 20:50 - 22:55 *4:20 - *5:55	5:10 - 6:45 12:50 - 14:25 20:20 - 21:55	*23:10 - 0:45 6:50 - 8:25 14:20 - 15:55
Japanese Government				Cybersecurity			
	15:25 - 16:40 23:10 - *0:25 *6:40 - *7:55	7:25 - 8:40 15:10 - 16:25 22:40 - 23:55	1:25 - 2:40 9:10 - 10:25 16:40 - 17:55		15:00 - 16:15 22:40 - 23:55 *6:10 - *7:25	7:00 - 8:15 14:40 - 15:55 22:10 - 23:25	1:00 - 2:15 8:40 - 9:55 16:10 - 17:10
				Closing			
	16:15 - 16:20 23:55 - 0:00 *7:25 - *7:30	8:15 - 8:20 15:55 - 16:00 23:25 - 23:30	2:15 - 2:20 9:55 - 10:00 17:25 - 17:30				

* The time will be the next day / * The time will be the previous day

All Sessions are streamed 3 times

2. Hosting of SIP-adus Workshop 2021

2-1 . Overview of event

b. Plenary Program

On November 9th and November 10th, the online Plenary Program included presentations from Japanese and overseas experts on eight important themes on automated driving, along with speeches from government representatives from Japan, the U.S., and Europe on automated driving. All sessions were recorded in advance, and taking into consideration the different time zones, streamed three times per session. In addition to Japan time (JST), content was also streamed in accordance with easily accessible times in Europe (CET) and the U.S. (EST). In response to requests from participants, after the conclusion of the conference, the entire Plenary Program was made available on-demand from December 10th, 2021 to January 5th, 2022. All presentation materials were made available on the SIP-adus website.

■ Online Streaming

Online Streaming

Choose language



Important Points about Online Viewing (Zoom webinar)

- All sessions in the workshop will be delivered using Zoom webinar (web conferencing system).
- As each session will be delivered through a unique Zoom webinar, it is not possible to continue viewing the next session in sequence on the same screen.
- To view the next session, please click "Leave this meeting" once and then click the "View" button of the next session.

Plenary Session				
Nov. 9 [Tue.]	Opening Session / Regional Activities	Impact Assessment	Service and Business Implementation / FOTs + Human Factors	Japanese Government
Nov. 10 [Wed.]	Dynamic Map	Connected Vehicles	Safety Assurance	Cybersecurity
				Closing

November 9

Opening Session / Regional Activities

Click on "View" to view the sessions

	Japan (JST)	For Europe (CET)	For Americas (EST)	
1st Online Streaming	9:00 a.m.-10:40 a.m.	1:00 p.m.-2:40 p.m.	7:00 p.m.-8:40 p.m. (Nov. 5)	View
2nd Online Streaming	5:30 p.m.-7:10 p.m.	9:30 a.m.-11:10 a.m.	3:30 a.m.-5:10 a.m.	View
3rd Online Streaming	1:00 a.m.-2:40 a.m. (Nov.10)	5:00 p.m.-6:40 p.m.	11:00 a.m.-0:40 p.m.	View

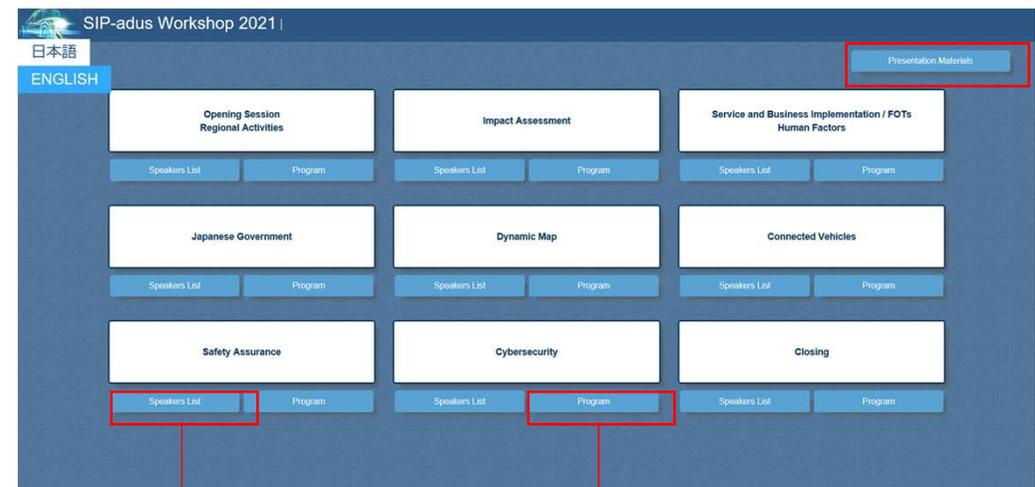


Click on "Speaker Information" to view program details

Click on "Presentation Materials" to view the presentation materials

■ On-demand Streaming

Click on "Presentation Materials" to view the sessions



Click on "Speakers List" and "Program" to view the program

2. Hosting of SIP-adus Workshop 2021

2-1 . Overview of event

c. Breakout Workshop

Individual Breakout Workshops were also held online before and after the Plenary Program sessions. The Human Factors and Connected Vehicles sessions, including Q&As, were open to the general public and generated active discussions.

- Open to the Public:

Human Factors 23:00-25:00(JST), October 29th, 2021

Connected Vehicles 23:00-25:00(JST), November 8th, 2021

- Open only to Experts:

Impact Assessment

Service and Business Implementation / FOTs

Dynamic Map

Safety Assurance [Virtual Testing] [EU HEADSTART - JP White Paper consolidation]

Cybersecurity

Human Factors: 87 participants

Participating Country	Participant
Japan	55
Germany	9
United States of America	7
Canada	2
China	2
France	2
Korea	2
Netherlands	2
Sweden	2
United Kingdom	2
Italy	1
Belgium	1

Connected Vehicles: 135 participants

Participating Country	Participant
Japan	102
Germany	12
United States of America	5
France	4
Italy	2
Hungary	2
Austria	1
Canada	1
Singapore	1
Belgium	1
United Kingdom	1
Taiwan	1
Korea	1
China	1

2. Hosting of SIP-adus Workshop 2021

2-1 . Overview of event

d. Initiatives by Ministries

The Cabinet Office, and the relevant ministries and agencies of the Japanese Government each prepared slides addressing their initiatives and streamed them between sessions, which in past years were usually exhibited as posters presentations.

SIP-adus Workshop 2021 **Cabinet Office** Cabinet Office

National Research Project on Automated Driving to realize Society 5.0

Overview

SIP Strategic Innovation Promotion Program
SIP-adus aims to help solve social issues, including reducing traffic accidents and congestion, ensuring mobility for vulnerable road users, and mitigating the driver shortage and reducing the costs of logistics and mobility services by practically applying, deploying, and expanding automated driving, thereby raising quality of life throughout society.

Structure of ADS

In-vehicle sensor information
Lidar, Camera, Radar, Base

Dynamic map
Link, Base

Building the Traffic environment info.
Traffic light, Traffic Sign, Lane link, Road marking, Roadside edge

Localization
Pass planning, Advanced driver-assistance systems

SIP-adus Workshop 2021 **Digital Agency** Digital Agency

Basic Concept and priority measures of the Future ITS Initiative, and 2030 vision

Approach so-called "Future pull," which is breaking away from the method of extending the current trend, and identifying the necessary actions based on the ideal future and the challenges of transport of people and goods.

2030 vision of mobility society
Inventively rethinking the future of mobility and how based on the challenges of future transport.

Transformation of mobility
- Emergence of autonomous driving
- From driverless to fully autonomous driving
- From driverless to fully autonomous driving

Changes in the social environment
- Realization of Society 5.0
- Appreciation of social issues
- Changes in transport mode
- Green growth associated with low-carbon society

Priority initiatives
- Creation of a digital platform for realizing a new mobility society
- Further advancement of automated driving, etc.
- Dissemination and use of diverse mobility

Digital mobility platform
- Digital mobility platform

Goals for 2030
Realize a safe and convenient digital transport society that supports enriched quality of life of citizens, ahead of the rest of the world

Priority measures

1. Technological development	2. Infrastructure development	3. Regulatory framework	4. Social environment
1.1 Development of autonomous driving technology	2.1 Development of digital infrastructure	3.1 Development of regulatory framework	4.1 Development of social environment
1.2 Development of autonomous driving technology	2.2 Development of digital infrastructure	3.2 Development of regulatory framework	4.2 Development of social environment
1.3 Development of autonomous driving technology	2.3 Development of digital infrastructure	3.3 Development of regulatory framework	4.3 Development of social environment
1.4 Development of autonomous driving technology	2.4 Development of digital infrastructure	3.4 Development of regulatory framework	4.4 Development of social environment

Goals for 2030
- Safety and a sense of security
- Convenience
- Environment
- Freedom of transport
- Digital transformation of transport of people and goods

SIP-adus Workshop 2021 **National Police Agency of Japan** National Police Agency

Research and Development①

Provision of Signal Phase and Timing (SPaT) information using cloud and other technologies

Purpose
With the aim of contributing to the realization of the provision of SPaT information using cloud and other technologies, this R&D project will verify the provision of upcoming SPaT information for automated driving by building a model system.

Things to be examined
- Examine a method of the provision of SPaT information (transmission path, integration with map data and so on)
- Improve the accuracy of SPaT information
- Reduce the delay of SPaT information etc

Flowchart:
Central controlled traffic lights (Traffic lights connected to Traffic Control Center) → Upcoming SPaT information → Traffic Control Center (Prefectural Police Headquarters) → Upcoming SPaT information → NPA SPaT Information Aggregation System (NPA) → Upcoming SPaT information → SPaT Information Center (prefectural name) → Upcoming SPaT information → Delivery Center (Provider servers, etc.) → Upcoming SPaT information → Mobile communication network → Car

Independent traffic lights (Traffic lights not connected to Traffic Control Center)

SIP-adus Workshop 2021 **Ministry of Internal Affairs and Communications** MIC

MIC's Initiatives for Automated Driving Society

International Standardization
Contributing to ITU-R activities

Regulation
Frequency allocation

Overseas Cooperation
Promoting global use of ITS

R&D and FOT
Technical studies and SIP

Trials in foreign countries

Requirements for CAV

ETC, **Radar**

Technical studies for introduction V2X

2. Hosting of SIP-adus Workshop 2021

2-1 . Overview of event

SIP-adus Workshop 2021 Ministry of Economy, Trade and Industry

"RoAD to the L4" R&D/Social Implementation Project Overview

Projects for Realization of Promotion of Driverless AD Services

- Theme 1**
Demonstration of an AD Service with Remote Monitoring (L4)
 • In limited locations and vehicles with remote monitoring (L4) by FY2022
 2021 2022
 Area/vehicle expansion
- Theme 2**
Other initiatives to expand target areas and vehicle, as well as improve business viability
 • L4 driverless AD services to diverse areas and with various type of vehicles in over 40 locations by FY2025
 ~2022 ~2025
 Mixed environments
- Theme 3**
Deployment of High-Performance Trucks including Platooning on Expressway
 • L4 AD trucks and its platooning technology on expressway after 2025
 ~2022 ~2025
 Mixed traffic environments
- Theme 4**
Harmonization and interoperability of V2V and V2P for deployment of L4 in mixed traffic environment
 • L4 AD services in mixed traffic in diverse areas using cooperative system by 2025
 ~2022 ~2025

SIP-adus Workshop 2021 Rood Bureau, MLIT

Automated Driving Services in Rural Areas

- Challenges facing rural areas
- Automated Driving Services based at Michi-no-Eki and other facilities
- Field operational tests in 18 locations. Full-fledged service in 4 locations.

Comparison of aged population (2015)
 National average: 28% Rural areas: 33%

Total length of discontinued regular bus routes (2015)
 Total length: 2507.18 km

Rapid increase in senior citizens who cannot drive
 Number of those aged 75 and over who have voluntarily surrendered their licenses

Lack of home deliveries due to truck driver shortage
 Lack of home deliveries (Last year)

Continuation crisis of villages in rural areas

SIP-adus Workshop 2021 Road Transport Bureau, MLIT

Efforts of Road Transport Bureau, MLIT For the Realization of Automated Driving

Development of System

Overview of International Regulations Consideration System
 Japan is leading discussions on each item under consideration as Co-Chair or Vice-Chair.

World Forum for Harmonization of Vehicle Regulations (WP29)
 (Japan, US, EU, China, etc. joined)

- Automated vehicle (AD)
 - General safety (GSSA)
 - Passive safety (PSSA)
 - Lighting (LSP)
 - Noise and Vibration (NV)
 - Function and Safety (F&S)
- Advanced Emergency Braking System (AEBS)
- Validation Methods for Automated Driving (VMA)
- Cyber security (CS)
- EDW (DSAD)
- Functional Requirements for Automated Vehicles (FR-AD)

Partial amendment of the Road Transport Vehicle Act
 Amendment from "system that assumes driving by driver" to "system that assumes driving by system".

[Amendment contents]

- Automated driving systems were added to devices covered by the safety standards (enforced in April 2020).
- A system for licensing the wireless update of relevant software was established (enforced in November 2020).

Automated Driving Vehicle (level3) Approval

Private Vehicles
 In November 2020, the world's first model designation was implemented as a Level 3 Automated Driving Vehicle.

[Major Operating Design Domain]

- National expressways, urban expressways
- The speed must be less than 30 km/h before the automatic driving device starts to operate and about 50 km/h or less after it starts to operate.

Mobility Services
 In March 2021, remote monitoring and operation type automated driving vehicle (level 3) was put into practical use.

communication

[Major Operating Design Domain]

- Travel routes equipped with electromagnetic.
- The running speed of a vehicle equipped with the automatic operation device must be 12 km/h or less.

2. Hosting of SIP-adus Workshop 2021

2-2 . Verification of results

Verification of results based on questionnaire surveys and viewing status

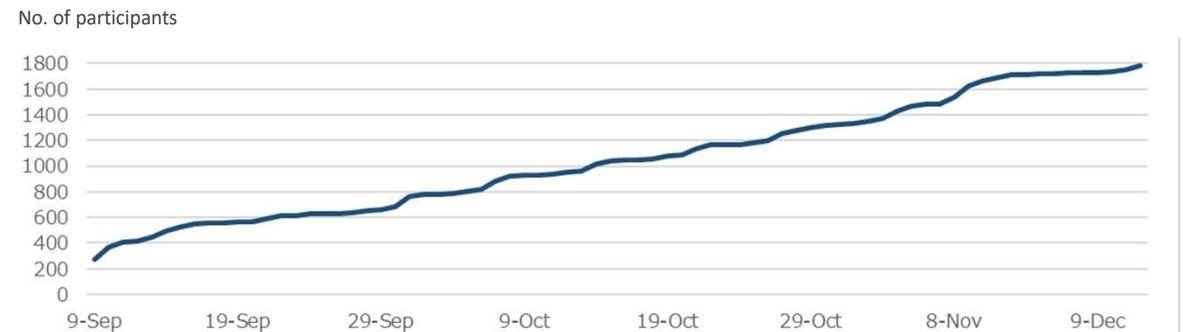
A questionnaire survey was conducted on participants and speakers.

Almost all participants and speakers of the SIP-adus Workshop 2021 replied that they are keen to participate in the SIP-adus Workshop next year, showing that the conference was highly worthwhile.

Regarding the overall evaluation of the SIP-adus Workshop, about 41% of participants and 36% of speakers gave the highest rating on a five-point evaluation scale. The overall evaluation was high in terms of the information gathered on the latest developments, however, there were some requests to provide networking opportunities among participants. In the next fiscal year and beyond, we intend to offer opportunities for discussions as is the case of on-site workshops.

Participant registration breakdown

Including the on-demand streaming period, 1,785 people registered for the conference. Up to and including the day before the conference, November 8th, 1,542 people registered for the conference, and 144 people registered during the conference period, November 9th - 10th.



Distribution of session stream views

On the English language channel, a total of 144 people viewed the second and third streams, indicating the number of participants increased due to streams made available during easily viewable times in Europe and the U.S. On the Japanese language channel, a total of 300 people viewed the second and third streams, inferring there was also a need for evening and night streaming for Japanese viewers.

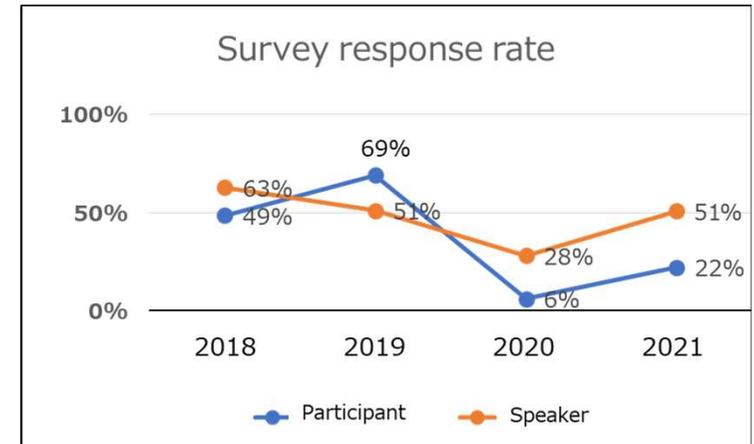
Number of Times /Language		No. of viewers									
		Entire program	Opening+ Regional Activities	Impact Assessment	SBI/FOTs+ Human Factors	Japanese Government	Dynamic Map	Connected Vehicles	Safety Assurance	Cyber-security	Closing
1st time	Japanese	778	504	306	307	271	376	330	254	209	24
	English	119	47	27	21	42	36	35	27	30	5
	Subtotal	897	551	333	328	313	412	365	281	239	29
2nd time	Japanese	244	115	53	44	32	71	52	47	28	3
	English	99	47	23	31	14	28	23	19	12	3
	Subtotal	343	162	76	75	46	99	75	66	40	6
3rd time	Japanese	56	10	5	7	17	16	6	8	17	2
	English	45	20	6	9	5	15	12	14	7	0
	Subtotal	101	30	11	16	22	31	18	22	24	2
Total	Japanese	1,078	629	364	358	320	463	388	309	254	29
	English	263	114	56	61	61	79	70	60	49	8
Number of viewers		1,075	659	390	404	344	488	428	339	276	37

2. Hosting of SIP-adus Workshop 2021

2-2 . Verification of results

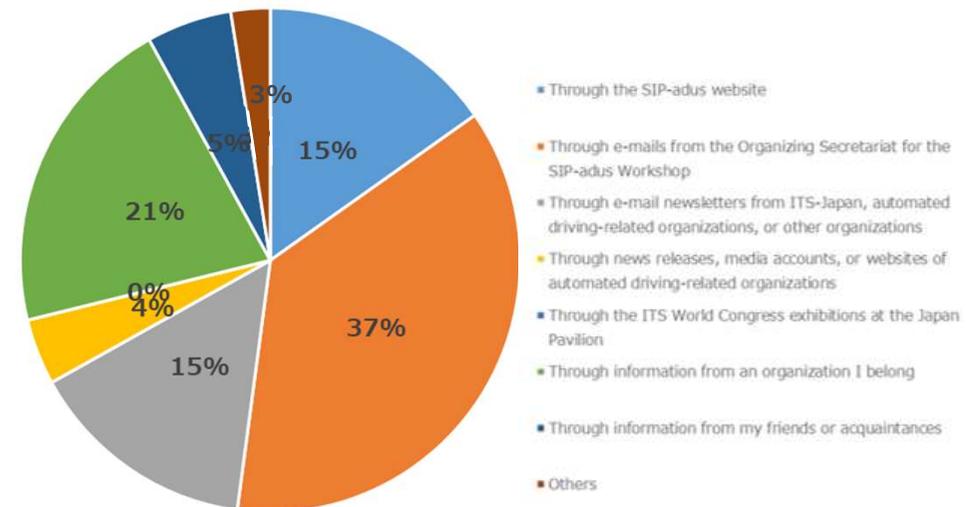
■ Survey response rate

Participants were asked to access and complete the online questionnaire survey via a link displayed on the streaming screen. Additionally, after the conference several requests were sent to participants once again asking them to complete the survey. The overall survey response rates were 22% for the participant survey and 51% for the speaker survey. These rates were an increase compared to last year when the surveys were also conducted online. However, we are still considering ways to increase the response rate by implementing measures, such as providing incentives to those who respond to the survey.



■ How participants learned of the event

The main source from which participants learned of SIP-adus Workshop 2021 was from emails from the SIP-adus Workshop Organizing Secretariat. This indicates that the multiple promotional emails sent by the Organizing Secretariat to last year's Workshop participants was an effective means of publicizing the conference. In addition, this year the issuance of email magazines from various organizations were also effective due to the active outreach to the Nikkan Jidosha Shimbun, the cooperation of the Florida Economic Development Bureau in the U.S., and the collaboration with automated driving related organizations. It is also notable that sufficient publicity activities were not carried out at the ITS World Congress exhibition due to the entry restrictions in Germany and the inability to dispatch staff from the Cabinet Office to the congress this year due to COVID-19. As a result, no participants indicated that they learned of the Workshop through the ITS World Congress.



スライド 10

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図を拡大しました。

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2. Hosting of SIP-adus Workshop 2021

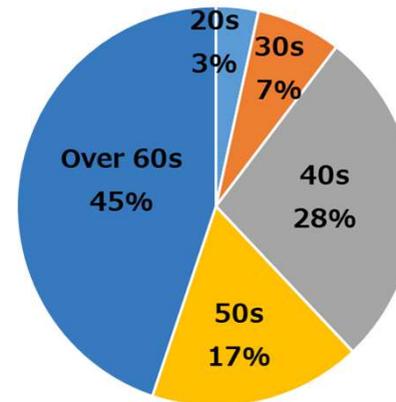
2-2 . Verification of results

■ Breakdown by age and occupation

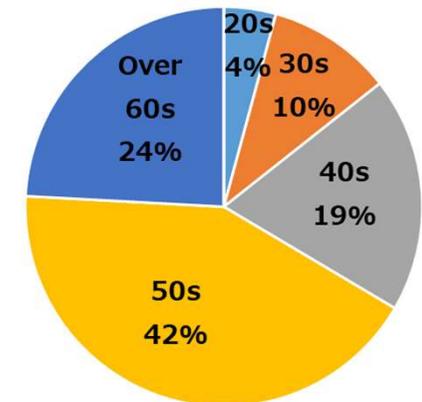
Age Group

By age group, most of the participants and speakers were in their 40s to 60s, with participants in their 50s and speakers in their 60s accounting for the largest number. Meanwhile, it is noteworthy that the percentage of speakers in their 40s was higher than that of those in their 50s, but the percentage of speakers in their 30s decreased compared to that of last year.

Speakers by age group
(n=29)



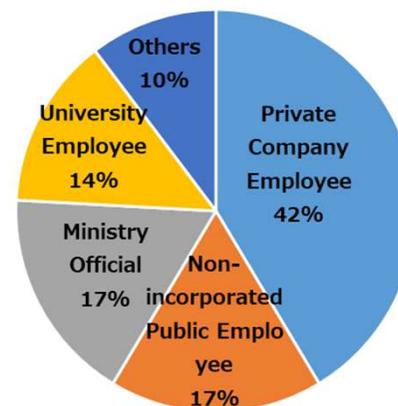
Participants by age group
(n=236)



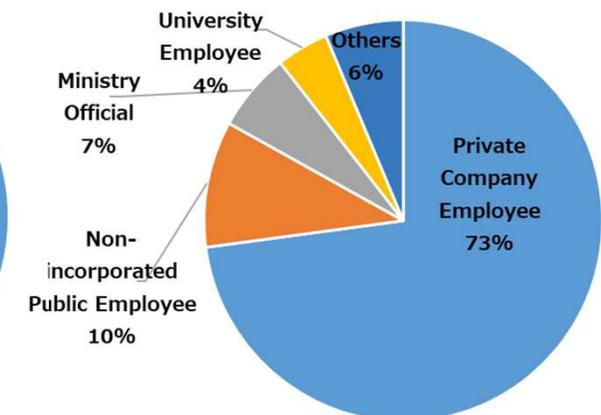
Occupation

By occupation, company employees accounted for the largest group of participants (73%) attending the conference.

Speakers by occupation
(n=29)



Participants by occupation
(n=236)



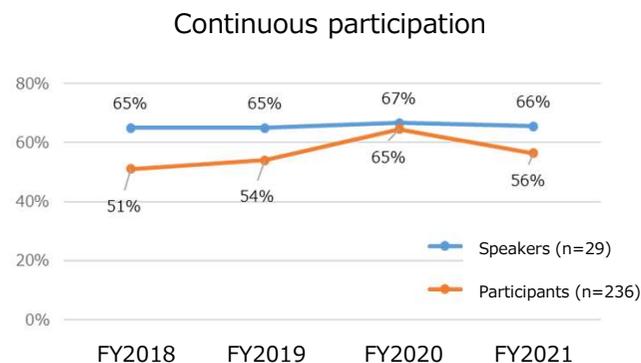
2. Hosting of SIP-adus Workshop 2021

2-2 . Verification of results

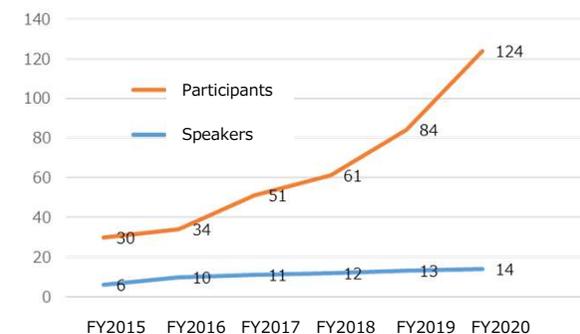
■ Participation status

Status of continuous participation

While the continuous participation rate of speakers has remained flat in past years, 46% of participants were new to the conference this year, suggesting it has become easier for participants to attend compared to the face-to-face format.

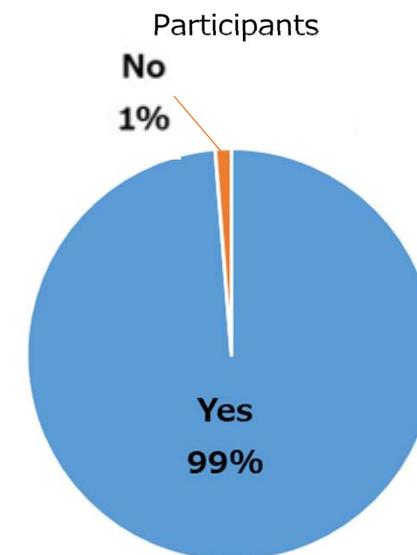
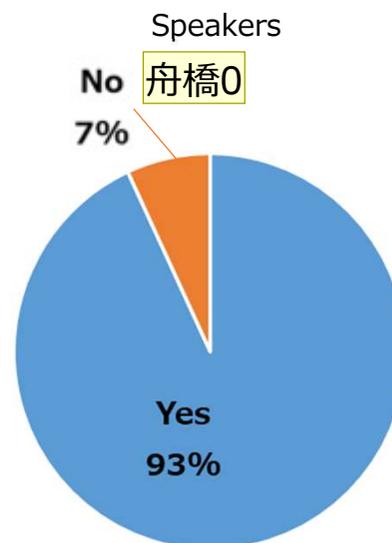


No. of continuous participation in the past
No. of participants



Intention to participate next year

More than 90% of both participants and speakers expressed their intention to participate again next year, indicating the conference was highly beneficial despite it being held in an online format due to COVID-19. Even those who indicated they do not want to participate in next year's event as speakers, expressed that they would like to attend as participants if the conference is not recorded or held online.



スライド 12

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2. Hosting of SIP-adus Workshop 2021

2-2 . Verification of results

■ Evaluation of participant preferences and online viewing

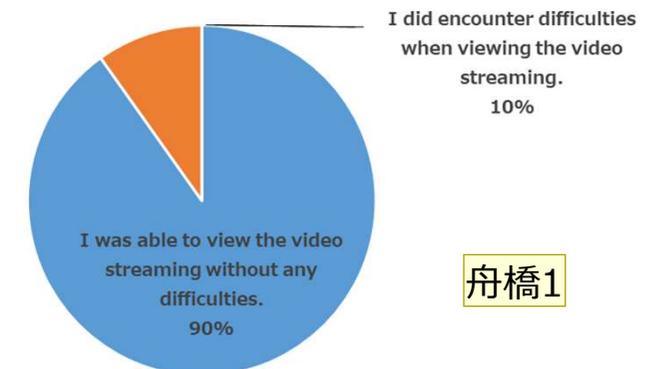
More than 75% of all speakers preferred to participate on-site in a face-to-face format, while 63% of the general participants preferred to participate online. A difference in attitudes toward the format of the conference between the speakers and the general participants is evident.

With regard to online viewing, 90% of the participants answered that they had no particular problems, suggesting that there are reasons other than the online viewing system as to why participants preferred to participate in an online format.

Your preference for joining the next year's SIP-adus Workshop



How was the Zoom system as the online streaming platform?



■ Comments on online streaming (excerpts)

Positive points

- Viewing online content was smooth, very satisfied (20 responses).
- From next year on, holding the conference online again would be good (13 responses).
- For ease of participation, having the sessions online was good (9 responses).
- So that missed sessions can be viewed, having on-demand streaming available after the event was good (8 responses).

Points to consider

- It would have been better if the videos were delivered in an on-demand format so that they could be viewed at any time (8 responses).
- The online format was not interactive, and I felt it was insufficient because I could not ask questions directly (4 responses).
- The length of the program made it difficult to concentrate and maintain energy (2 responses).

スライド 13

舟橋0 グラフを拡大しました
舟橋 恵, 2022-06-01T04:47:39.767

舟橋1 頭出し揃え
舟橋 恵, 2022-06-01T04:49:04.040

2. Hosting of SIP-adus Workshop 2021

2-2 . Verification of results

■ Overall evaluation

The percentage of respondents who gave a high evaluation of the Workshop as a whole (number of responses with the highest rating of 5 on a scale of 1 to 5 / number of valid responses) was 41% for participants and 36% for speakers, with participants overall giving higher ratings.

As for the speakers, the percentage of those who gave a high evaluation decreased by 20% from the previous year, suggesting that what speakers are looking for in a workshop has changed since the second year of the online format.

Percentage of respondents who gave the rating the highest for the overall Workshop
(Responses with a rating of 5 / Valid responses)

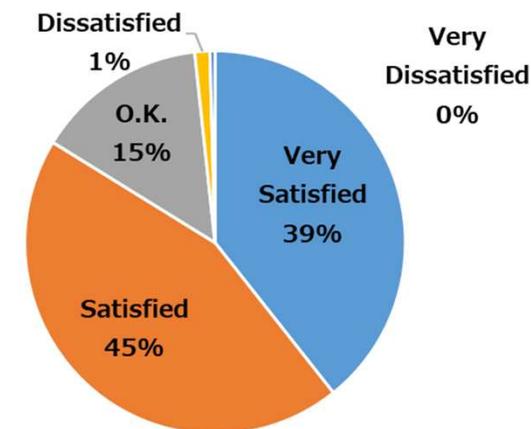
	FY2021	FY2020	FY2019	Shift
Speakers	36%	56%	40%	-20pp
Participants	41%	39%	17%	2pp

■ Overall evaluation of the program structure

As for the evaluation of the program structure, 84% of all participants answered "Very Satisfied" or "Satisfied", indicating that the program was highly rated.

As was the case last year, some participants expressed that they wished the program had featured initiatives from China as well as from Europe and the U.S.

Level of Satisfaction for the overall program structure
(Participants) (n=236)



2. Hosting of SIP-adus Workshop 2021

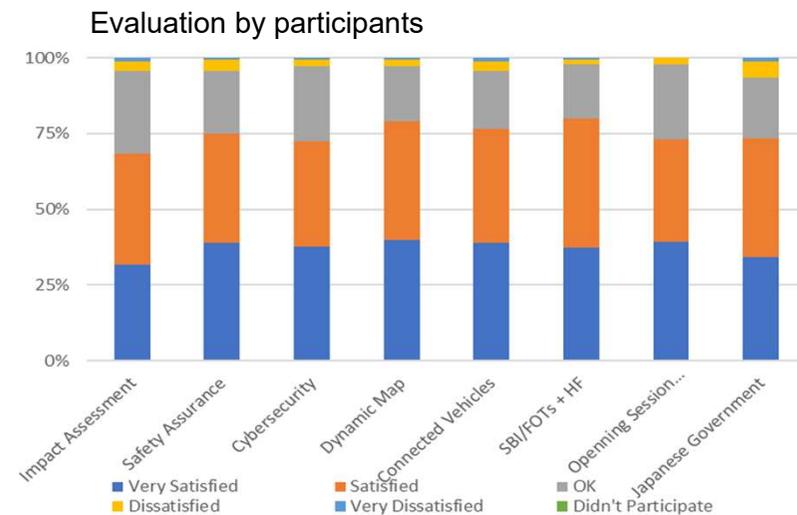
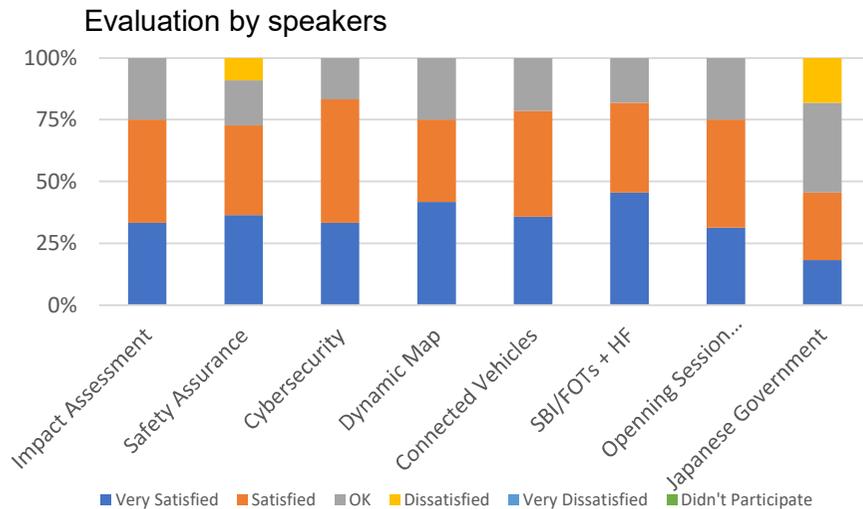
2-2 . Verification of results

■ Evaluation of the overall program

As for participants, more than 40% gave the highest rating to every session.

There was a significant difference in the evaluation of the Japanese Government session between the speakers and participants, with a high percentage of participants responding "Very Satisfied" to "OK (Fairly Satisfied)", while many speakers responding they were "Dissatisfied".

In addition, the session on Service and Business Implementation / FOTs and Human Factors, which were held this time as a joint session, received high ratings for satisfaction from participants, indicating that holding them as a joint session was effective.



■ Program comments (excerpts)

Positive points

- The quality of the lectures were good, and very well organized (participant/speaker, 8 responses).
- The current status of SIPs and its social implementation, etc. were very understandable (participant, 5 responses).
- It is very useful to understand the latest research trends in Japan and overseas (participant/speaker, 5 responses).

Points to consider

- There were a lot of superficial content; I would have liked to hear more specifics (participant, 5 responses).
- I had the impression that there were not enough lectures from China (participant, 2 responses).
- I would have like to know the participants' reactions and evaluations, and would have liked more interactivity (participant, 2 responses).

2. Hosting of SIP-adus Workshop 2021

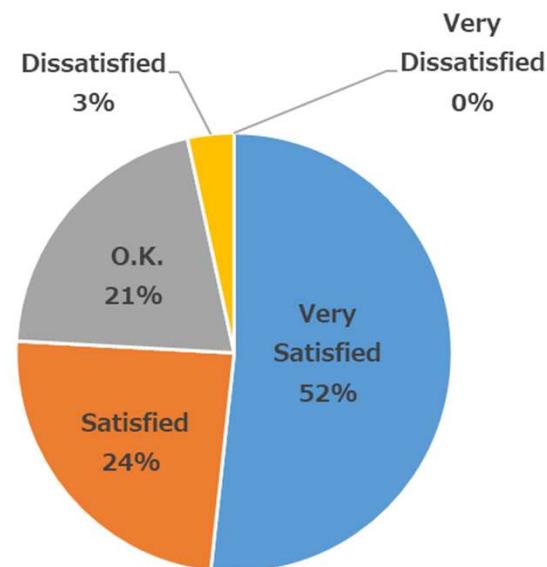
2-2 . Verification of results

■ Evaluation of the pre-recording instructions and video recording quality

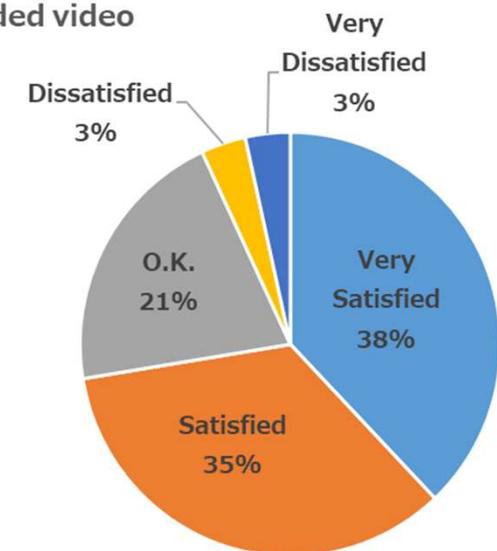
A video recording for each speaker occurred prior to the meeting. More than 75% of all speakers answered that they were “Very Satisfied” or “Satisfied” with the video pre-recording explanation and guidance provided by the Organizing Secretariat.

More than 70% of all respondents were also “Very Satisfied” or “Satisfied” with the quality of the completed video.

Instruction for pre-recording
(n=29)



Quality of the recorded video

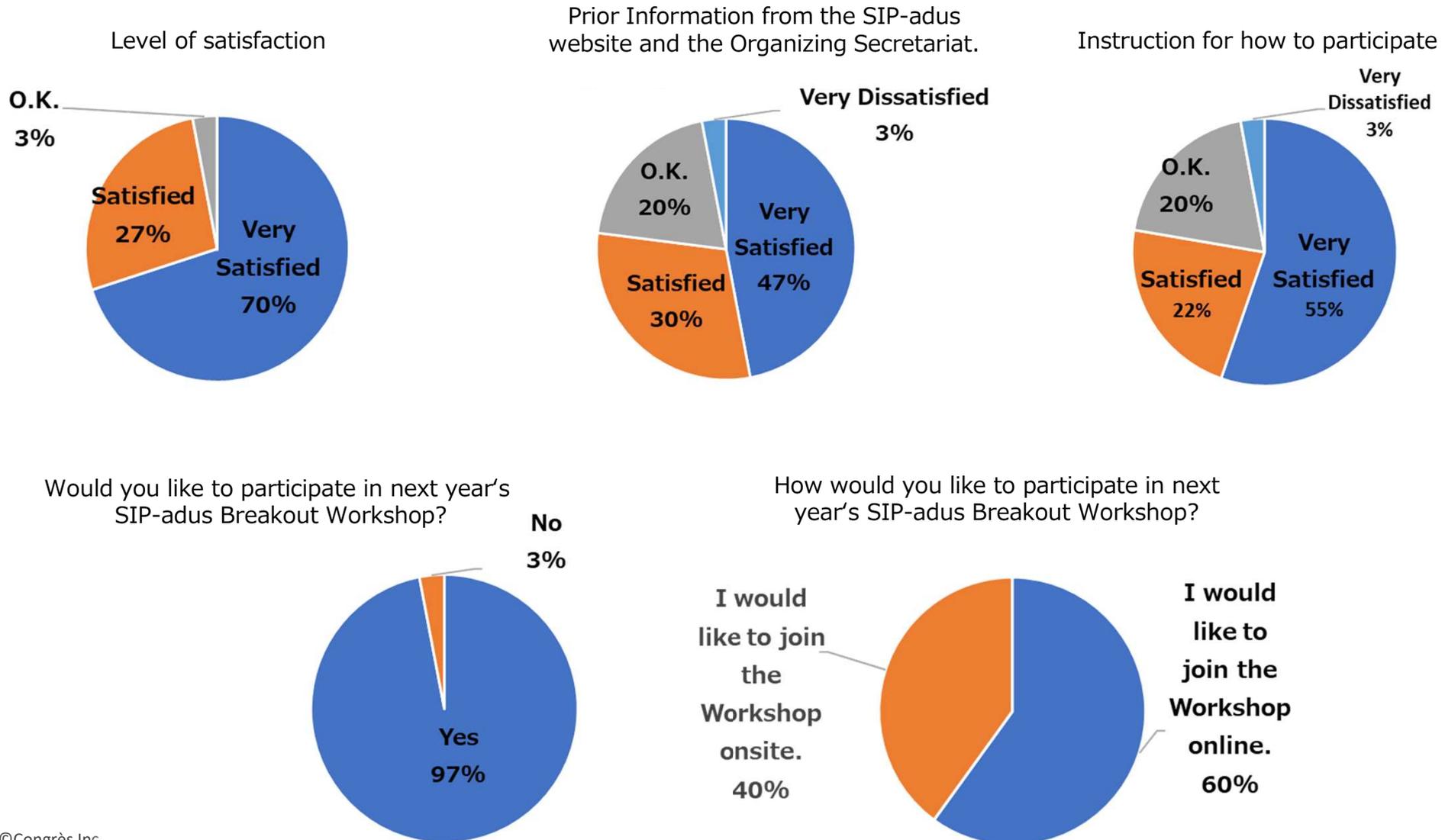


2. Hosting of SIP-adus Workshop 2021

2-2 . Verification of results

■ Evaluation of the Breakout Workshop / Panelists survey results

The overall satisfaction with the Breakout Workshop was high, with 97% of the panelists giving a high rating (“Very Satisfied” or “Satisfied”) and the remaining 3% saying they were “O.K.” (Fairly Satisfied).



2. Hosting of SIP-adus Workshop 2021

2-2 . Verification of results

■ Panelist comments on the Breakout Workshop (excerpts)

Positive points

- Good discussion (6 responses).
- Very well organized (4 responses).
- Simultaneous interpretation was provided, which deepened mutual understanding (4 responses).

Points to consider

- There was some difficulty in bringing the panelists, who are experts within their own fields, together in one direction (1 response).
- Time was very limited and there wasn't enough time to exchange opinions (1 response).

Reasons for wanting to participate again next year and the preferred form of participation

- Prefer to hold the meeting on-site because it allows for more in-depth discussions (5 responses).
- Believe that continuous conference attendance is necessary to check on the progress of each country (1 response).
- Believe it is a very valuable opportunity to exchange views on important topics with key stakeholders (1 response).

3. Transmitting information using the website

3-1 . Overview of information transmission

■ Overview

Under this project, information is disseminated actively through the SIP-adus website to strengthen information transmission. In addition to updating the pages in “Home,” “About SIP,” “Research & Development,” “Cooperative Activities & Conferences,” and “Field Operational Tests,” we focused on the two points below in FY2021.

■ Periodic update of the “Field Operational Tests” page

Since the FOTs in the Tokyo waterfront area started in October 2019, the FOT implementation plan, driving plan, etc. on the “Field Operational Tests” page (in Japanese) have been updated monthly.

■ Reciprocal website and information sharing

In order to enhance information dissemination to the general public, a link to the SIP-adus website and information on Workshops were posted on the SIP café website, and information on events, etc. listed on the SIP café website were posted on the SIP-adus website.

3. Transmitting information using the website

3-2 . Verification of effectiveness

■ Disseminating information on the main themes

Information on the five key themes of international collaboration were released on the conference page (English website).

The number of accesses to the Safety Assurance page was the highest, probably due to the higher volume of information posted on the conference page compared to the other themes.

Number of accesses by theme
Period: From May 2021 to March 2022

Theme	Publication date	Number of accesses
Safety Assurance	2021/7/30	865
Human Factors	2021/5/25	382
Dynamic Map	2021/3/25	353
Connected Vehicles	2021/7/13	313
Impact Assessment	2021/11/11	171

■ No. of users

Full year

Period: May 2021 to March 2022

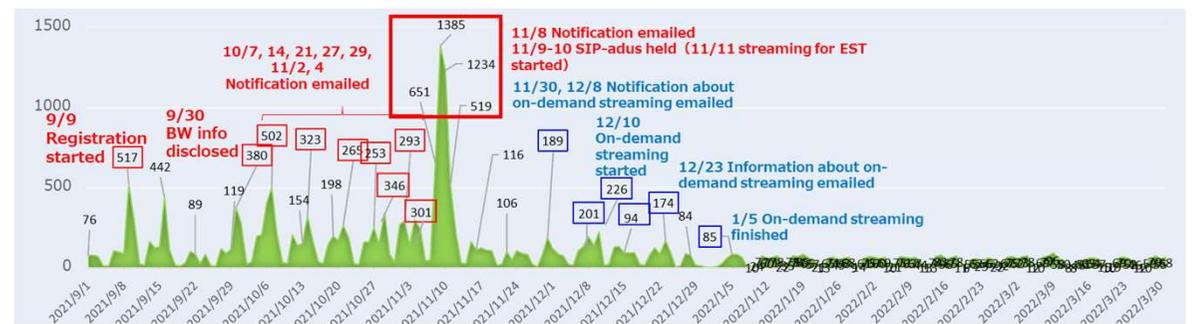
In 2021, apart from the Workshop invitation e-mails, a newsletter was sent out to inform people about what is new on the SIP-adus website, so it is notable that the website was accessed even during periods when the number of visits had previously been low.



Before/After Workshop(Japanese website)

Period: September 2021 to March 2022

Compared to last year, the website had more visits during the registration start period. Additionally, due to the delivery of notification e-mails a certain number of visits also occurred during the before/after period of the Workshop.



3. Transmitting information using the website

3-2 . Verification of effectiveness

■ Top 10 countries by number of users (May 2021 to March 2022)

Both the Japanese and English websites had the same countries in the top three of their website access rankings: Japan, the U.S., and China. On the English website, following these three countries was Germany. However, since the largest number of Workshop participants (excluding Japan) were from Germany, we believe that access to the website was not directly correlated to participation in the Workshop. In the future, posting a link on the website to the Workshop page and other related information needs to be considered.

Japanese website

Country	%
Japan	79.3%
U.S.A	9.9%
China	3.4%
Korea	0.8%
Germany	0.6%
Singapore	0.5%
Finland	0.5%
Netherland	0.5%
Taiwan	0.5%
India	0.4%
Others	3.6%

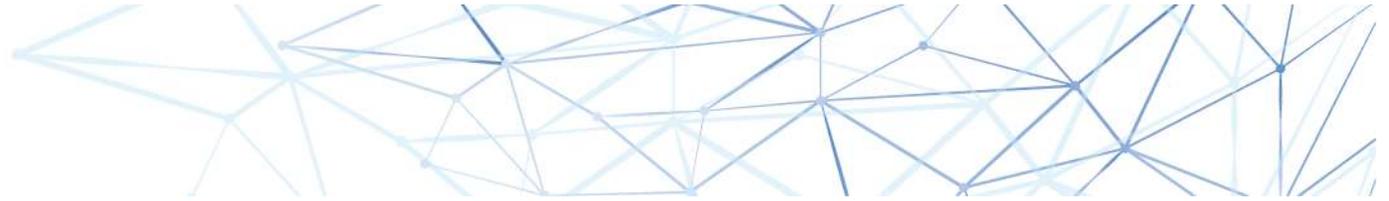
English website

Country	%
Japan	49.8%
U.S.A	15.9%
China	8.2%
Germany	5.6%
Korea	2.2%
Netherland	2.1%
U.K.	1.7%
Taiwan	1.7%
France	1.5%
Finland	1.4%
Others	9.8%

Reference: Breakdown of Workshop registrants by country (top 5 countries in terms of registrations)

Country	%
Japan	86.1%
Germany	4.7%
U.S.A	1.9%
China	1.8%
Korea	0.8%

4. Final thoughts



■ To produce results of SIP-adus Phase 2

The second phase of SIP-adus will be completed in 2022. The SIP-adus Workshop has established itself as an annual international conference on automated driving in the past 10 years, and has developed as a forum for international cooperation. The SIP-adus website has evolved as a tool for information transmission: the content has been made more substantial, and the pages have been made more visitor-friendly. The following results and issues should be considered to make its last year most beneficial.

■ SIP-adus Workshop

1. Improving internationalization

The percentage of participants and speakers who gave high ratings on the Workshop as a whole (number of responses with the highest rating of 5 on a scale of 1 to 5 / number of valid responses) was 41% and 36%, respectively. The 36% of speakers who gave high ratings was a decrease of 20% from the previous year.

Many expressed their expectations to have more opportunities for discussions at next year's Workshop. This was the second year that the event was held in an online format, and with the Breakout Workshop also being online and the elimination of social gatherings there was no opportunity to have discussions among experts.

In the future, no matter what format is used to hold the Workshop, it must provide more opportunities for discussion in order to increase the satisfaction of attending experts.

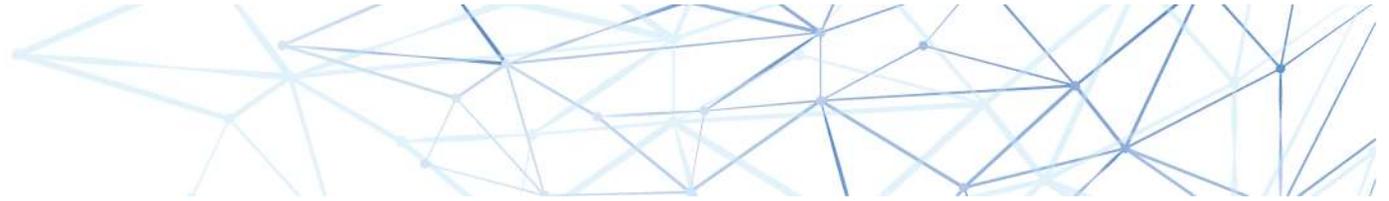
2. Creating discussion opportunities

The percentage of participants and speakers who gave high ratings on the Workshop as a whole (number of responses with the highest rating of 5 on a scale of 1 to 5 / number of valid responses) was 41% and 36%, respectively. The 36% of speakers who gave high ratings was a decrease of 20% from the previous year.

Many expressed their expectations to have more opportunities for discussions at next year's Workshop. This was the second year that the event was held in an online format, and with the Breakout Workshop also being online and the elimination of social gatherings there was no opportunity to have discussions among experts.

In the future, no matter what format is used to hold the Workshop, it must provide more opportunities for discussion in order to increase the satisfaction of attending experts.

4. Final thoughts



■ SIP-adus website

1. Website access improvement

In past years, access to the SIP-adus website has been concentrated during periods around the Workshop. However, this year as a result of emailing newsletters and information regarding the Workshop, the SIP-adus website has been accessed even during periods when access is usually low. Thus, with the effectiveness of these actions verified, we will continue to distribute newsletters and other information on a regular basis while considering how to make the content relevant to the needs of our email recipients with the overall aim of further increasing the number of visits to our website.

2. Disseminate information using social media / collaborate with events to promote public acceptance

During the period leading up to the SIP-adus Workshop 2021, we actively lobbied the Daily Automotive News, collaborated with the Florida Department of Economic Development, and issued e-mail newsletters from various organizations in cooperation with automatic driving related organizations. As a result, 15% of all Workshop participants responded that they learned about the Workshop from "newsletters of automated driving-related organizations" and 4% from "news releases and automated driving-related websites," suggesting that the information dissemination from various sources had a certain effect.

Additionally, to enable the SIP-adus website to play a key role as a tool for disseminating information about automated driving, it is necessary to disseminate information through social media, such as Facebook and Twitter, so that the general public can receive information more easily, and to disseminate information in collaboration with events for promoting public acceptance.

This report documents the results of Cross-ministerial Strategic Innovation Promotion Program (SIP) 2nd Phase, Automated Driving for Universal Services (SIP-adus, NEDO management number: JPNP18012) that was implemented by the Cabinet Office and was served by the New Energy and Industrial Technology Development Organization (NEDO) as a secretariat.