

Cross-ministerial Strategic Innovation promotion Program (SIP)
Phase 3, Development of Smart Mobility Platform

**Promoting international research collaboration and
dissemination activities toward the Development of Smart
Mobility Platform**

FY2025 Summary Report

March 2025

Mobility Innovation Collaborative Research Organization,
The University of Tokyo (UTmobl)
Mobility Innovation Alliance Japan



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1. Project overview

Outline of project activities

In this project, in order to promote international collaboration in SIP Phase 3, Development of Smart Mobility Platform, we will form an International Advisory Board (IAB) to establish international benchmarks for this research and development. In addition to the existing collaboration with Europe and the US, established under the second phase of SIP (automated driving for universal services), we will address collaboration activities with international organizations (such as the International Transport Forum (ITF) and the Fédération Internationale de l'Automobile (FIA)), and will address collaboration activities with Asia-Pacific regions centered on ASEAN, like academic societies, relevant government ministries, JICA, JETRO and industries (such as WILLER).

Furthermore, through these activities, we will monitor trends both internally (the R&D activities in the SIP Development of the Smart Mobility Platform) and externally (in relevant international research developments), develop connections with relevant overseas research institutes and organizations, and contribute to the realization of our vision.

Vision

Through this project, we aim to establish and maintain an equal standing between Japan and leading countries at the forefront of innovation, and to deepen trust in Japan from the Asia-Pacific region, particularly ASEAN countries. In this way, we seek to further strengthen collaboration even after the completion of the SIP Development of the Smart Mobility Platform, and aim to position Japan to lead technological development and social implementation in the field of mobility.

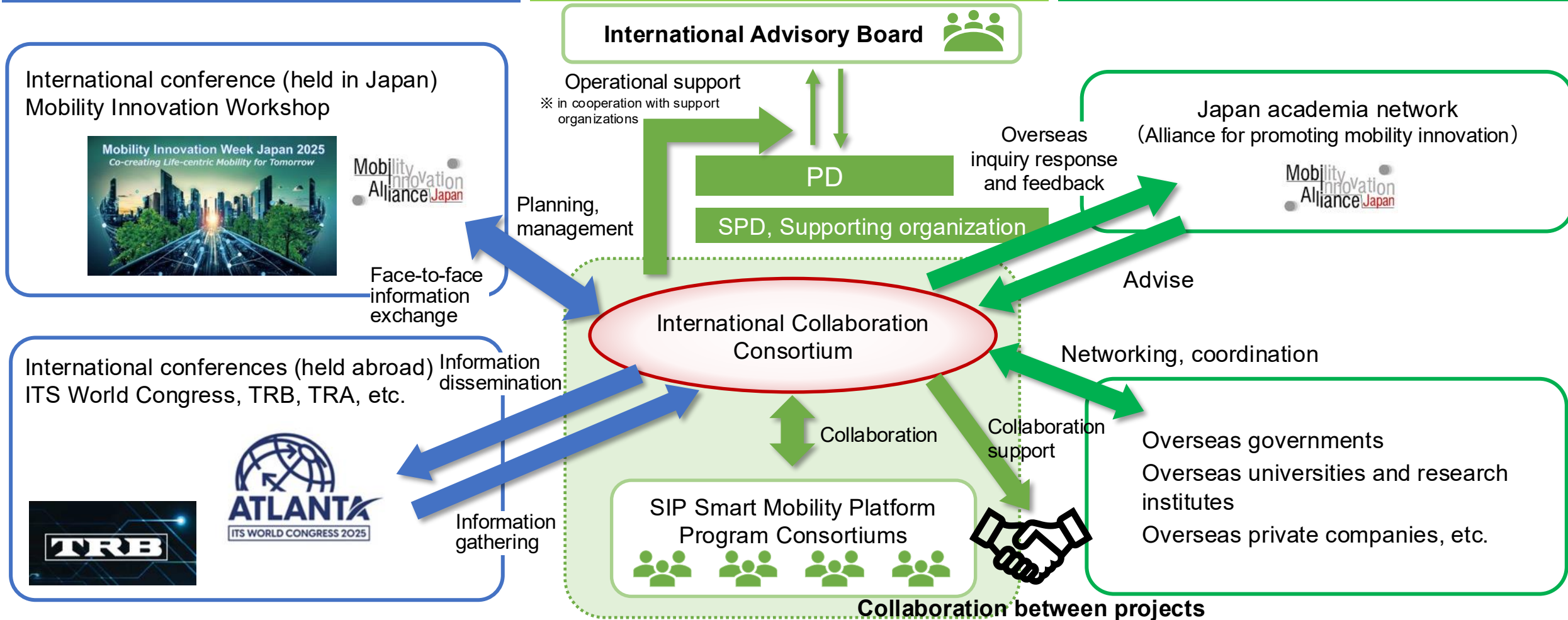
1. Project overview

Collaborate with related stakeholders both inside and outside Japan to promote international collaboration activities based on three pillars (A~C).

A: Information gathering and dissemination activities through international conferences

B: Smart Mobility Platform international collaboration promotion and IAB operation support

C: Collaborative activities utilizing the network



FY2025 activity report

2-1. Information gathering and dissemination activities through international conferences

2-1. Information gathering and dissemination activities through int'l conferences

2-1-1. Dissemination activities through international conferences

In order to raise awareness of research activities related to the SIP Smart Mobility Platform among overseas stakeholders, and facilitate future international collaboration, dissemination activities about the SIP Smart Mobility Platform were conducted. In addition, by leveraging the international network of the UTokyo International Collaboration Consortium, we created opportunities to disseminate research activities related to the SIP Smart Mobility Platform.

■ Planning sessions and creating resentation opportunities at ITS World Congress (US), August 2025

In the session which the University of Tokyo planned and organized at the ITS World Congress in Atlanta, initiatives in Nagoya University consortium were presented, and presentation opportunities were created for Hiyama SPD and Tohoku University Consortium to present their initiatives.



■ Presentation at Automated Transportation Symposium 2025 (US), November 2025

With the UTokyo International Collaboration Consortium serving as the contact point and coordinating the session, Hiyama SPD presented the activities of the SIP Development of Smart Mobility Platform at the “Automated Transportation Symposium”, an international conference on autonomous driving held in the United States.

■ Presentation at POLIS annual conference (NL), November 2025

Ishida PD presented the initiatives of the SIP Development of Smart Mobility Platform at the POLIS annual conference, an international conference where cities and experts share knowledge on sustainable and smart urban mobility, held in Utrecht, the Netherlands.

2-1. Information gathering and dissemination activities through int'l conferences

2-1-1. Dissemination activities through international conferences

■ Presentation at Mobility Innovation Workshop (JP), Nov. 2025

- By leveraging the international network of the UTokyo International Collaboration Consortium, overseas experts related to the SIP Smart Mobility Platform were invited to Japan, and an international workshop (Mobility Innovation Workshop 2025) was held.
- In the plenary session, a session related to the SIP Smart Mobility Platform was organized, where Ishida PD delivered a presentation of an overview of SIP's initiatives and raised awareness among international experts. In the same session, experts from international organizations (ITF^{*1} and FIA^{*2}) also gave presentations introducing their respective activities and discussed future international cooperation opportunities through a panel discussion.



*1 ITF : International Transport Forum

*2 FIA : Federation Internationale de l'Automobile

2-1. Information gathering and dissemination activities through int'l conferences

2-1-2. Investigation of overseas initiatives through international conferences

By utilizing opportunities to participate in international conferences, investigations of latest overseas trend were conducted. Overseas trends related to the SIP Smart Mobility Platform, including advanced case studies, were surveyed with a focus on developments in automated driving, and networks with relevant stakeholders were established.

■ An Overview of automated driving in Europe (@EUCAD 2025)

- Major trends in the European Union (EU) : Strengthening responses to the competitive disadvantage to the US and China
 - January 29, 2025 : Published the “Competitiveness Compass”
 - ✓ Outlined policy directions for the next five years within a strategic framework aimed at revitalizing economic competitiveness and achieving sustainable growth
 - January 30, 2025 : Launched Strategic Dialogue on the Future of the European Automotive Industry
 - March 5, 2025 : Announced the Automotive Strategic Dialogue and Action Plan, as a result
- Key trends in EUCAD
 - Status report on Horizon Europe programme
 - ✓ Preparations for shuttles and minibuses are complete, and full-scale demonstration tests started. (Vehicle preparation and the acquisition of necessary approvals took longer than expected.)
 - Reports indicated that the current position is disadvantageous to the United States and China and that coordinated efforts, including by the European Commission (EC), are required.
 - The EC has recognized this reality and is strengthening efforts to establish new strategies and promote developments.
 - There is a high interest in the use of AI for autonomous driving, which has been reflected in the EC's new initiatives.
 - ☞ Digital policies include AI initiatives (the “AI Gigafactories” and “Apply AI” initiatives) and the drafting of legislation.
 - The establishment of the European Connected and Automated Driving Alliance for joint AD development also warrants close attention.
 - New Horizon Europe calls show an expansion of AI-related projects, and the EC indicated strengthening collaboration with non-EU countries.
- ULTIMO project update
 - Vehicle preparation is progressing in 3 regions (with a significant reduction in the number of vehicles compared to the initial plan), and demonstration tests will begin in the second half of 2025.

2-1. Information gathering and dissemination activities through int'l conferences

2-1-2. Investigation of overseas initiatives through international conferences

■ An Overview of automated driving in the US (@ITS World Congress 2025)

- Priority issues by Intelligent Transportation Systems, Joint Program Office
The following research topics have been defined, but are still under preparation and implementation, and results are not yet available.
 - Artificial Intelligence (AI), • Automation Program, • Complete Streets Artificial Intelligence, • Digital Infrastructure,
 - Interoperable Connectivity/Spectrum, • Intersection Safety Challenge, • ITS4US, • Vehicle-to-Everything (V2X) Deployment
- Initiatives to promote the wider adoption of V2X technologies : National V2X Deployment Plan
 - Implementation is planned to begin in 2026, with expansion scheduled for 2034.
 - Deployment to automated vehicles is also envisioned.
- Initiatives to promote the wider adoption of V2X technologies : Intersection Safety Challenge
 - Achieving safer intersections for vehicles and vulnerable road users by utilizing an innovative cooperative intersection safety system.
- Status of Robotaxi development
 - Major participating organizations ; Waymo, May Mobility, Zoox, Motional, Tesla
 - Key characteristics : United States
 - ✓ Due to the low profitability of public transportation (buses), automation efforts are primarily focused on taxis.
 - ✓ Development aimed at business deployment is progressing, leveraging the resources of various companies, including the entry of Tesla.
 - ✓ Zoox is developing a new vehicle featuring a comfortable cabin space; however, its activities remain limited to pilot testing with employees.
 - ✓ Cruise had aimed for mass production of the Origin vehicle, but announced its withdrawal from the robotaxi business in December 2024.
 - Key characteristics : Europe
 - ✓ To address environmental challenges, the European Commission is promoting expanded use of public transportation.
 - ✓ Robotaxi development trends are not particularly prominent.

2-1. Information gathering and dissemination activities through int'l conferences

2-1-2. Investigation of overseas initiatives through international conferences

■ An Overview of automated driving in the US (@ITS World Congress 2025)

- Status of Robotaxi development
 - Key challenges
 - ✓ Safety and business viability
 - ✓ Securing affordable automated vehicles: development of legal frameworks and certification systems for vehicle mass production
 - ✓ Acceptance not only by passengers, but also by society and other road users
 - ✓ Support for passengers requiring boarding assistance, including persons with disabilities
- Development Status of Automated public transport buses / shuttles
 - Major participating organizations
 - ✓ Demonstration projects aimed at practical deployment are mainly led by local governments and public transport operators.
 - ✓ Demo. projects using shuttle developed by early entrants such as NAVYA expanded; however, results did not fully meet expectations.
 - ✓ The number of newly entering vehicles is increasing, particularly in countries with relatively relaxed regulations, such as Finland.
 - Key characteristics: United States
 - ✓ Due to the low profitability of public transportation, automation development by vehicle manufacturers, bus OEMs, etc. remains limited.
 - ✓ Some demonstration projects using existing low-speed vehicles are progressing, mainly in restricted areas such as national parks and transport between airports and urban districts.
 - ✓ Given the large national territory and road conditions, there is greater expectation for high-capacity, higher-speed vehicles rather than low-speed vehicles.
 - Key characteristics: Europe
 - ✓ To address environmental goals (expansion of public transport use), the European Commission provides support for practical deployment through programs such as Horizon Europe projects.
 - ✓ While there is demand for vehicles following NAVYA and EZ10, the number of new entrants under the current “Exemption” framework (provisional standards) remains limited.
 - Key challenges
 - ✓ Business viability for transport operators requires government support at regional and national levels.
 - ✓ Development of legal frameworks and operational structures for introducing cabin attendants and remote operators to replace pro drivers.

2-1. Information gathering and dissemination activities through int'l conferences

2-1-2. Investigation of overseas initiatives through international conferences

■ Acceptance of automated driving services in the US (@ITS World Congress 2025)

- Acceptance of automated ride-sharing services
 - Research has been conducted on how financial incentives for automated ride services can improve connectivity to public transportation and encourage users to shift their travel behavior from private cars to public transport.
 - In San Francisco, when Waymo introduced incentives to encourage transfers to public transportation, behavioral changes were observed, with users increasingly combining Waymo services with public transport. On the other hand, individuals who consistently rely on either private cars or public transportation tend to show strong preferences for their established travel modes.
 - Regarding the use of Waymo services, it was found that price advantages are an attractive factor for many users.
 - Public transport operators and stakeholders should not underestimate the appeal and perceived “coolness” of automated driving technology. In fact, San Francisco has attracted tourists who wish to experience riding in Waymo vehicles.
 - Public expectations are evolving, with increasing demand for autonomy, flexibility, and immediacy. These trends should be considered in the design of future transportation and mobility systems.
- Lessons learned from automated driving services in Contra Costa County
 - Rossmoor: Deployment of automated shuttles in a senior community. Users were found not to be particularly concerned about the technical details, but to feel a sense of safety simply from the fact that the vehicle was automated, while also showing strong interest in and expectations for the vehicle's mobility functions. Their main concerns were not about the vehicle's driving capability, but rather how the vehicle functions in terms of boarding and alighting.
 - Martinez: Point-to-point service. No significant resistance to automated vehicles was observed; however, users expressed requests for longer travel distances and extended service hours. When using a point-to-point model, many lessons were learned regarding the importance of clearly communicating the locations of stops. For operations, partnerships were established with local transit operators to secure drivers/operators. Through 10 months of operation, operators reported that safety improved over time. The most effective method for attracting passengers was traditional mail-based outreach.
 - CCTA (Contra Costa Transportation Authority) is actively testing shared automated vehicles. CCTA considers automated driving technology to be the future of public transportation and believes it will address first- and last-mile challenges in Contra Costa County.

2-1. Information gathering and dissemination activities through int'l conferences

2-1-2. Investigation of overseas initiatives through international conferences

■ Initiatives for the societal deployment of automated driving services (@Mobility Innovation Workshop 2025)

- Initiatives in Jacksonville, the United States (U2C (Ultimate Urban Circulator) program)
 - A comprehensive program to modernize and expand the Skyway in Jacksonville and to introduce AV into the JTA transportation system.
 - Plans include the modernization of the existing Skyway system, expansion of access to the downtown area through the Bay Street Innovation Corridor, and extensions to adjacent districts.
 - As Phase 1 of the Bay Street Innovation Corridor (BSIC), operations of NAVI (Neighborhood Autonomous Vehicle Innovation) have been launched.
 - Currently, operations are conducted using modified Ford e-Transit vehicles; however, the future introduction of purpose-built automated vehicles, such as those developed by Holon, is under consideration.
- ADASTEC's automated bus deployment initiatives
 - ADASTEC has developed a Level 4 automated driving system for public transport buses. Operations began in Michigan, United States, in 2022, and the company is also advancing automated bus initiatives in Europe under mixed-traffic conditions on public roads.
 - Through experience gained from demonstration projects conducted in various regions, ADASTEC has achieved a high level of system quality capable of operating under diverse global conditions, including a wide range of weather and geographical environments.
 - At present, safety drivers are deployed in most locations; however, there are plans to remove safety drivers in a demonstration project in Norway by the end of 2025, followed by similar removal in Germany and the Netherlands in the second quarter of 2026.
- Wayve's initiatives (UK)
 - Wayve is a company originating from the University of Cambridge in the United Kingdom and develops software for end-to-end automated driving systems.
 - Its technology is based on the concept of generalization, enabling knowledge learned and trained in one location to be applied to new environments and scenarios.
 - In its current AV2.0 approach, all conventional components are replaced with a single end-to-end neural network.
 - To build trust, language data are utilized, enabling drivers and the system to communicate with each other using natural language.

2-1. Information gathering and dissemination activities through int'l conferences

2-1-2. Investigation of overseas initiatives through international conferences

■ Research for future mobility (@Mobility Innovation Workshop 2025)

- Impact assessment of automated vehicle deployment (European “Hi-Drive” project)
 - The impacts of automated vehicle deployment on safety, traffic efficiency, and the environment were examined through simulation.
 - Impact on safety: The results showed a reduction in the number of accidents due to the deployment of automated vehicles and ADAS. In urban areas, further reductions were observed through enablers such as connectivity and high-precision positioning.
 - Impact on travel time: Travel time slightly increased with the deployment of automated vehicles and ADAS. This may be attributed to factors such as maintaining larger following distances than human drivers.
 - Impact on travel behavior: Although travel time slightly increased due to automated driving, perceived travel time may decrease as a result of improved travel comfort. This could lead to increased travel frequency and potentially longer total travel distances.
- How will new mobility transform society? (AustriaTech)
 - There are significant differences in traffic environments between urban and rural areas, and it is necessary to first determine which regions to prioritize for implementation. Considering the purposes behind travel can create new opportunities, in Austria, automated mobility services have the potential to account for 15–20% of the transportation share in the future.
 - From a policy perspective, it is important to ensure data collection, continuous monitoring, and the establishment of clear goals and KPIs.
 - Rather than relying solely on government-led planning, an “alliance-based” framework is required in which industry, research institutions, and regional stakeholders collaborate from a shared perspective to co-create roadmaps and frameworks.
- Safe, serene, smart mobility (International Transport Forum)
 - In mobility, the most important factor is ensuring safety when traveling. The core of ITF’s activities related to safety is the concept of the “Safe System Approach.” Safety is not the result of a single actor or a single technology within the system, but rather the outcome of all these elements combined. Locations where diverse road users interact involve large amounts of kinetic energy, making it necessary either to separate them or to reduce speeds. Speed management is a key infrastructure measure for promoting safety.
 - The 5 pillars of the Safe System Approach are: road safety management, safe speeds, safe roads, safe vehicles, and safe behavior.
 - An important aspect of safety is the feeling of being safe. If people perceive conditions as unsafe, they may refrain from traveling or from using certain modes of transport.
 - I believe that improvements in safety, reductions in travel-related stress, and the enhancement of well-being related to mobility can be achieved through the use of technology.

FY2025 activity report

2-2. SIP Smart Mobility Platform international collaboration promotion and International Advisory Board (IAB) operation support

2-2. SIP Smart Mobility Platform int'l collaboration promotion and IAB operation support

2-2-1. Holding 2nd International Advisory Board (November, 2025)

- In order to obtain advice and proposals from overseas experts based on international perspectives regarding the research activities and results of the SIP Smart Mobility Platform, we supported the International Advisory Board (IAB), composed of high-level overseas experts, with the aim of producing global competitive results.
- The 2nd IAB was held as an in-person meeting, taking the opportunity of the Mobility Innovation Week Japan to enable deeper discussions and stronger relationship with the IAB members. The sessions were composed based on 2 major social implementation pathways envisioned by the SIP Smart Mobility Platform, and participants exchanged views on the future direction of research outcomes, including inputs from the IAB members.
- Following the discussions, an Advisory Memorandum from the IAB members outlining recommendations for future research and development activities was received.



SIP Smart Mobility Platform International Advisory Board (IAB) member

- Bart van Arem (Full Professor of Transport Modeling, TU Delft)
- Philippe Crist (Senior Advisor, ITF, OECD)
- Asuka Ito (Sustainable Mobility Senior Manager, FIA)
- Rodrigo Jose Firmino (Professor, Pontifical Catholic University of Paraná)
- Andrew Glass Hastings (Executive Director, Open Monbility Foundation)
- C. Y. David Yang (President & Executive Director, AAA Foundation)
- Gregory D. Winfree (Agency Director, Texas A&M Transportation Institute)
- Jaehak Oh (Former President of KOTI, Former President of EASTS)
- Arthur Chua (CEO, Goldbell Group, Singapore)

2-2. SIP Smart Mobility Platform int'l collaboration promotion and IAB operation support

2-2-2. Research on potential international partners

■ Activities to promote collaboration in the Asia-Pacific region

Activities were conducted to build relationships with research institutions in the Asia-Pacific region, particularly ASEAN, in order to further strengthen international collaboration activities beyond the SIP Smart Mobility Platform and enable Japan to lead mobility-related technology development and social implementation. These activities will lead to continued collaboration with the Asia-Pacific region in the coming years.

- Organizing session in ITS AP-Forum

- At the ITS AP-Forum held in Korea in May 2025, a session was organized to discuss future mobility innovation utilizing mobility data. In addition to introducing initiatives by Oriental Consultants consortium, professors from University of Seoul and The University of Queensland were invited as speakers, contributing to the establishment of a new international network.

- Study on potential collaboration in Malaysia

- Multiple meetings have been held with relevant stakeholders since October 2025 regarding the possibility of implementing the research outcomes of the SIP Smart Mobility Platform in the Kuala Lumpur region of Malaysia. In FY2026, the scope and content will be defined, and an implementation plan will be developed to lead to concrete activities.

- Cooperation with Policy Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

- To strengthen international collaboration activities with the ASEAN region, a meeting was held with Policy Bureau, MLIT in October 2025. As a platform for future information sharing and exchange with public and private stakeholders related to ASEAN, participation in Japan Association for Smart Cities in ASEAN (JASCA) was introduced, and the Mobility Innovation Alliance Japan is currently in the process of participation.

2-2. SIP Smart Mobility Platform int'l collaboration promotion and IAB operation support

2-2-2. Research on potential international partners

■ International cooperation activities in the Philippines (April, 2025)

As part of collaboration activities in the Asia-Pacific region, cooperation activities were conducted in the Philippines. As site visits, we visited New Clark City, where the smart city project is developed, and the automated bus service is implemented as part of the project. We also visited a newly opened transportation hub in Manila. Through site visits and discussions with local stakeholders, the latest developments in regional mobility initiatives in the region were recognized, and new networks were established for future collaboration opportunities with the Philippines.

● New Clark City site visit

- Regarding the new urban development project underway in New Clark City near Manila, we visited BCDA, the government organization responsible for the city, and exchanged views and observed the local development status.
- In addition, discussions were held with Zenmov, a Japanese startup conducting automated bus pilot projects in the area, and a test ride of the automated shuttle was carried out.

● Bus terminal in Manila (PITX) site visit

- As a site visit in the Philippines, we visited PITX, a newly opened multimodal transportation hub in Manila.
- The visit provided insights into how the transportation hub functions as a multi-modal connection hub through operational coordination among local city buses, long-distance buses, jeepneys, and the LRT system.

2-2. SIP Smart Mobility Platform int'l collaboration promotion and IAB operation support

2-2-2. Research on potential international partners

■ International cooperation activities with RWTH Aachen University, Germany

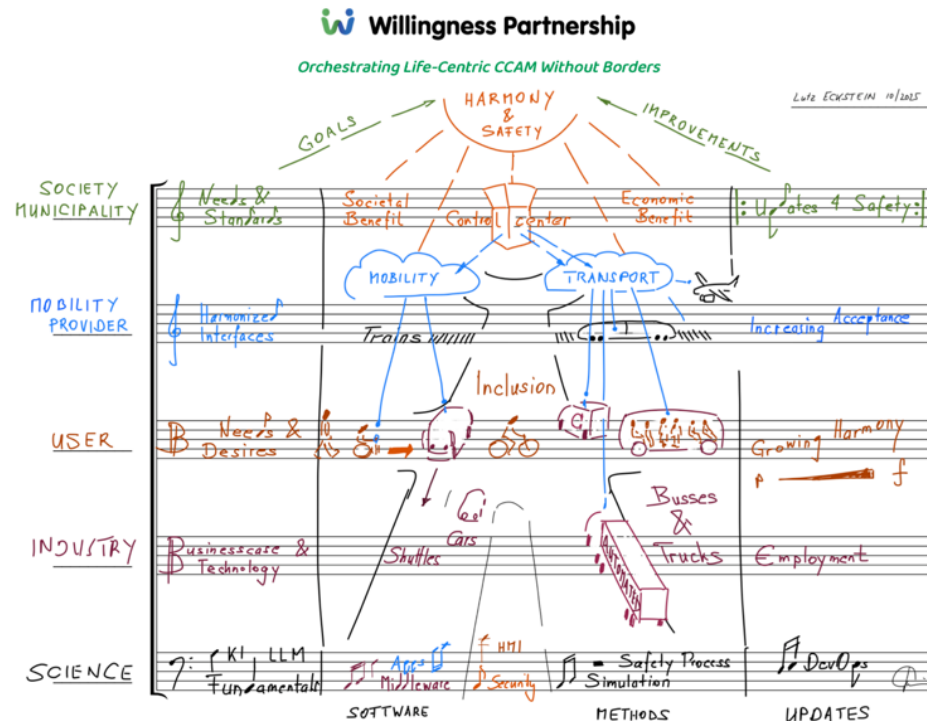
As a potential opportunity for future international collaboration, we visited RWTH Aachen University, Germany, and discussed possibilities for future cooperation. As a result, the parties reached a mutual understanding on activities toward future international collaboration, and Future Mobility Partnership, a non-profit organization initiated by RWTH Aachen University, and the Mobility Innovation Alliance Japan signed an MOU as a "Willingness Partnership" aimed at future international collaboration in November 2025.

● Future Mobility Partnership, Germany

- Non-profit organization founded by RWTH Aachen University that promotes collaboration toward "future mobility"
- Board members include professors of automotive engineering and computer science

● Willingness Partnership

- Grounded in shared values such as openness, inclusion, trust, human–technology harmony, and freedom of movement, the Willingness Partnership reflects our belief that innovation must be driven not only by necessity, but also by willingness — the proactive desire to co-create a better mobility future.



2-2. SIP Smart Mobility Platform int'l collaboration promotion and IAB operation support

2-2-2. Research on potential international partners

■ Initiatives in Hamburg, Germany

As a potential candidate for future international collaboration, an investigation of initiatives in the city of Hamburg, Germany, was conducted. Building on the local visit by the SIP Smart Mobility Platform members, networks with relevant stakeholders in Hamburg were established. The findings will serve as a reference for future SIP Smart Mobility Platform activities, while possibilities for further collaboration will continue to be explored.

- Basic Policy
 - Positioning C-ITS and automated driving as permanent infrastructure supporting urban transport policy, not as demonstrations of advanced technologies, based on a rational city-driven approach
- Commendable Strategic Decisions
 - Rather than waiting for widespread vehicle deployment, roadside units have been standardized and installed on pre-equipped traffic signals, enabling transition to operation under real traffic conditions
 - Clear positioning of C-ITS as a complementary technology for automated driving
- Expected Benefits
 - Improved punctuality and reliability of public transportation (Demand-responsive public transportation traffic signal priority by ITS-CUBE)
 - Enhanced traffic safety at intersections (VRU detection and V2X information sharing)
 - Gradual deployment toward automated shuttles and logistics applications
 - Contribution to urban challenges such as CO2 reduction and labor shortages
- Advantages Compared with Other Cities
 - Seamless linkage from upper-level strategy to demonstration and actual operation, reaching the implementation phase
 - C-ITS implementation in a large city area under real traffic conditions
 - High interoperability compliant with European standards (ETSI / C-Roads)

2-2. SIP Smart Mobility Platform int'l collaboration promotion and IAB operation support

2-2-2. Research on potential international partners

■ Initiatives of bicycle transportation in the Netherlands

As a potential candidate for future international collaboration, an investigation of initiatives of bicycle transportation in the Netherlands, was conducted. Building on the local visit by the SIP Smart Mobility Platform members, networks with relevant stakeholders in the Netherlands were established. Regarding the common challenges, possibilities for further collaboration will continue to be explored.

- Utilization of Bicycles in the Netherlands
 - Most short-distance trips in daily life can be made by bicycle.
 - Even for longer-distance travel, bicycles remain a primary mode of transport through integration with public transport and bike-sharing systems.
- Three Key Government Policies for Cycling in the Netherlands
 - Hardware: Development of cycling infrastructure, including dedicated bicycle lanes and bicycle parking facilities.
 - Software: Cycling promotion campaigns and support programs encouraging bicycle use for elderly people.
 - Orgware: Stakeholder collaboration and cooperation through public-private platforms (e.g., Tour de Force) to strategically expand and enhance bicycle use.
- Challenges Facing Cycling in the Netherlands
 - Single crashes by elderly cyclists: The e-bikes has led to an increase in bicycle use among elderly people, leading to a rise in bicycle accidents.
 - Integration with transport hubs: How to effectively connect bicycle travel with busy railway stations, metro and bus networks.
 - Conflicts between pedestrians and cyclists: Conflicts arise in areas where pedestrians and cyclists share the same space.
 - Managing diverse mobility modes: Accommodating emerging mobility options such as e-bikes and e-scooters.
 - Curbside space management: Managing curbside space efficiently in urban areas, including interactions between delivery vehicles and cyclists.
- Examples of Potential Applications in Japan
 - Introduction of diverse personal mobility options: Enabling easier and more convenient travel
 - Establishment of facilities for personal mobility management and maintenance: Providing community hubs
 - Development of orchestration technologies for seamless mobility integration: Ensuring high convenience

2-2. SIP Smart Mobility Platform int'l collaboration promotion and IAB operation support

2-2-3. Promoting international collaborations in the SIP Smart Mobility Platform

Supporting activities were conducted to promote collaboration activities with overseas initiatives, projects, or organizations that are candidates for international collaboration with the SIP Smart Mobility Platform.

■ Collaboration with XCARCITY projects, the Netherlands

<About XCARCITY project>

- A Dutch national project led by TU Delft. The project explores the urban deployment of smart mobility through the use of digital twins and related technologies. As part of its research on multi-interaction within immersive VR-based digital twins, the project investigates dynamic safety indicators, software and hardware requirements, through experiments involving pedestrians crossing in front of automated shuttles. The project also studies how digital twins can be utilized to support urban planning and strategic decision-making.

<Joint Workshop with XCARCITY project>

- Taking the opportunity of the visit of related members to Japan, a joint workshop was held at the Institute of Industrial Science, the University of Tokyo on November 7, 2025.
- Research activities from both projects were presented, followed by an exchange of information and ideas. Young researchers from both Japan and the Netherlands participated, fostering international networking among the next generation of researchers..

2-2. SIP Smart Mobility Platform int'l collaboration promotion and IAB operation support

2-2-4. Joint workshops with overseas research institutes

■ Joint workshop with University of the Philippines (April, 2025)

- Leveraging the international network of the UTokyo International Collaboration Consortium, a joint workshop with University of the Philippines was held in Diliman campus.
- On the Philippine side, participants included researchers from the University of the Philippines, representatives of local government agencies, and private-sector stakeholders such as bus terminal operators, bringing perspectives from academia, government, and industry and contributing a wide range of topics for discussion.
- On the Japanese side, the UTokyo International Collaboration Consortium and Oriental Consultants Consortium shared information on the initiatives of the SIP Smart Mobility Platform across consortium boundaries.
- The workshop provided a new platform for international exchange among local young researchers and stimulated active discussions and exchanges of ideas among participants.

■ Joint workshop with The University of Western Australia (February, 2026)

- Collaborating with Nagoya University, a joint workshop with the University of Western Australia (UWA) was held.
- Participants visited the Public Transport Authority of WA and the Ellenbrook Line, etc. to learn about Perth's transport infrastructure and transit-oriented development (TOD). They also observed an automated shuttle bus demonstration and discussed end-to-end deep learning for automated vehicles, regulatory frameworks, and public acceptance of automated driving technologies.
- The workshop focused on infrastructure policy, governance, and sustainable mobility. Discussions covered mobility care and accessibility, automated driving, and innovations in road safety, and concluded with the presentation of a framework for future collaboration and joint activities.

2-2. SIP Smart Mobility Platform int'l collaboration promotion and IAB operation support

2-2-5. International networking among working-level & young researchers

■ Second international workshop for working-level and young researchers (November, 2025)

Building on the previous year's initiative, the second workshop was organized to provide an opportunity for international exchange and capacity building for working-level and young researchers.

<Purpose of the workshop>

- Sharing and discussing more specific issues and future expectations among working-level and young researchers regarding future smart mobility.
- The workshop provides an opportunity for international exchange among researchers responsible for next-generation smart mobility.
- The workshop contributes to generating an innovative mind for researchers beyond their research area and regions, through discussions regarding topics related to the Smart Mobility Platform.

<Outline of the workshop>

- Date & Time : November 14, 2025
 - ✓ The workshop was held as one of the workshops in Breakout Workshop, Mobility Innovation Workshop.
- Members : Global working-level and young researchers (including PhD students), total of 26 members.
- Discussions were held on the following themes to enhance traffic safety and realize sustainable mobility:
 - Beyond "Traffic Safety", Toward Walkable and Livable Mobility
 - Local Knowledge and Contextual Technologies
 - The Shadows of Mobility Innovation: Labor, Inequality, and Social Impacts
 - Global Cooperation and Inclusion: Learning from Diverse Regional Contexts

FY2025 activity report

2-3. Collaborative activities utilizing the network

2-3. Collaborative activities utilizing the network

2-3-1. Expert meeting utilizing Japanese academic network

- Leveraging Mobility Innovation Alliance Japan's academic network, an expert meeting (Alliance for Promoting Mobility Innovation) was convened again, following previous years.
- The meeting provided an opportunity to share information on international trends relevant to the SIP Smart Mobility Platform and to discuss potential new research topics for international collaboration, as well as opportunities for cooperation, particularly with European partners. Experts from a wide range of disciplines participated in the discussions. The meeting explores possibilities for continuous international collaboration beyond the completion of the SIP Smart Mobility Platform.

■ FY2025, 1st Alliance for Promoting Mobility Innovation (September, 2025)

- 1st Alliance for Promoting Mobility Innovation in FY2025 was held as a hybrid-style meeting. 19 experts from academic members in Mobility Innovation Alliance Japan were participated.
- Following updates on the international collaboration activities and global trends, participants discussed opportunities for future cooperation with Europe, particularly Germany, including collaboration with an organization originating from RWTH Aachen University.
- Key discussion topics included industry engagement, public acceptance of automated driving, deployment of automated driving in rural public transport, and remote support/teleoperation technologies.

■ FY2025, 2nd Alliance for Promoting Mobility Innovation (February, 2026)

- 2nd Alliance for Promoting Mobility Innovation in FY2025 was held as an online meeting. 20 experts from academic members in Mobility Innovation Alliance Japan were participated.
- Following updates on the international collaboration activities and global trends, information on Horizon Europe, to which Japan has recently decided becoming an associated country, and information on Willingness Partnership with an organization originating from RWTH Aachen University were provided. Discussions focused on future international collaboration opportunities, including participation in Horizon Europe program through the Willingness Partnership framework. Additional topics included the implications of the European AI Act, automated driving applications in logistics, and impacts on insurance and liability systems.

2-3. Collaborative activities utilizing the network

2-3-2. Collaboration activities with the European Commission (DG-RTD)

- Utilizing the network established with the European Commission (DG-RTD) through the 2nd phase of SIP (SIP-adus), we attended the Bilateral Meeting between the EU and Japan on Automation in Road Transport to gather the latest information and explore possibilities for future collaboration with the SIP Smart Mobility Platform.
- Currently, collaborative activities with the ULTIMO project under Horizon Europe are ongoing, and further collaboration opportunities are being explored based on an agreement of Japan's associated country in Horizon Europe announced in December 2025.

■ Bilateral Meeting between the EU and Japan on Automation in Road Transport (May 2025, Jan. 2026)

- It is a bilateral meeting on automated driving between the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) Road Bureau and the European Commission (DG-RTD). Discussions were held focused on the exchange of the latest information and possibilities for future collaborative activities.
- In addition to the latest research activities related to CCAM from the European Commission (DG-RTD), new projects from Horizon Europe, including future large-scale demonstration project were introduced,

■ Collaborative activities with ULTIMO project

<About ULTIMO project>

- A large-scale demonstration project aimed at identifying economically viable and practically feasible solutions for the deployment of user-centered and sustainable public transport services. The project is coordinated by Deutsche Bahn (DB).
- The project seeks to implement automated mobility services in three pilot regions: Herford, Oslo, and Geneva.

<Activities in FY2025>

- We visited the ULTIMO pilot test site, Oslo in Norway, and discussed with local stakeholders (June, 2025).
- 4 project members participated in the Mobility Innovation Week Japan 2025 and discussions were held (Nov. 2025).
- We visited the ULTIMO pilot test site, Herford in Germany, and discussed with local stakeholders (Nov., 2025).

2-3. Collaborative activities utilizing the network

2-3-3. International young researchers' development

- As part of collaboration activities with the Asia-Pacific region, particularly with ASEAN countries, two young engineers from MWM Terminals, the operator of the multimodal mobility hub Parañaque Integrated Terminal Exchange (PITX) in Manila, Philippines, were invited to Japan as speakers for the Mobility Innovation Workshop.
- During their visit, in addition to participating in the workshop and networking activities, they visited bus terminal facilities in Tokyo and exchanged views on mobility hub initiatives and best practices in Japan.

■ Invitation to the Mobility Innovation Workshop

- As part of the Mobility Innovation Workshop 2025 held in November 2025, young engineers from MWM Terminals were invited to Japan to deliver a presentation. While previous international workshops had primarily featured speakers and participants from Europe and North America, this initiative marked an important step toward expanding participation and knowledge sharing from ASEAN countries.
- During Breakout Workshop 3, discussions were held based on the presentation of the PITX. Participants explored the importance of understanding local needs and selecting technologies and approaches that are both technically and economically sustainable for long-term implementation and operation.

■ Visiting mobility hub in Japan

- Taking opportunities of their visit to Japan, the young engineers from MWM Terminals visited Bus Terminal Tokyo Yaesu and Busta Shinjuku as representative examples of bus terminals in Japan. During the visits, they received briefings on the initiatives and operations of each terminal and conducted on-site inspections. They also introduced mobility hub initiatives in Manila, enabling a mutual exchange of knowledge and experiences between Japan and the Philippines. Discussions further explored shared challenges and technical issues faced by both countries, as well as potential opportunities for future collaboration.

2-3. Collaborative activities utilizing the network

2-3-4. Information gathering through expert meetings utilizing global network

Utilizing the global network of the UTokyo International Collaboration Consortium, we participated in informal meetings with overseas experts and gathered information on the latest global trends, focusing on automated driving. The existing network was maintained and further expanded.

■ International Cooperation Workshop (May 2025)

- Participated in the International Cooperation Workshop held in conjunction with EUCAD.
- Obtained information from the United States on the new automated vehicle framework announced by the USDOT in April 2025, as well as updates on the V2X Accelerator initiative and trends in the U.S. automated driving industry presented by University of San Francisco.
- Received updates from South Korea on its C-ITS demonstration projects and Connected and Automated Driving (CAD) R&D initiatives, including the KADIF Project.

■ ITFVHA* (August 2025)

* ITFVHA : International TaskForce on Vehicle-Highway Automation meeting

- Participated in an informal expert meeting in automated driving gathering from around the world, held annually alongside the ITS World Congress, where participants share information and engage in discussions on the latest developments in the field. The meeting provided updates on the deployment of automated driving technologies in Europe and North America, as well as progress in V2X implementation, offering valuable insights into the latest global trends in automated mobility.
- Panel discussions addressed topics such as the relationship between automated driving and citizens, the automation of road transport systems, and the application of AI in automated driving.
- This is a valuable opportunity to gather experts from around the world, discuss various topics, and engage in direct dialogue. We will continue to take advantage of this opportunity to gather information and build international networks.

END

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