



SIP-adus: 2014-2018

SIP-adus — Mobility Bringing Everyone a Smile — Cross-ministerial Strategic Innovation Promotion Program

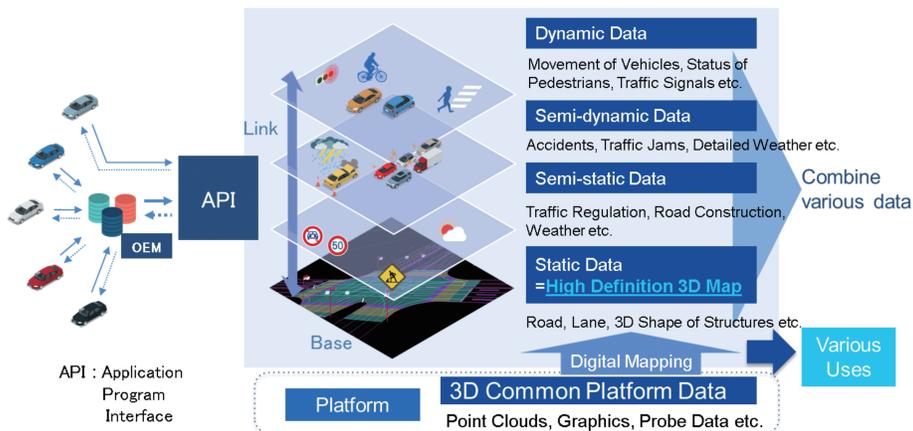
Overview

SIP-adus(Automated Driving for Universal Service) started in June 2014 as a national research and development project for innovation. It has a social significance, providing a fundamental solution to such issues as the reduction of traffic fatalities, the reduction of the environmental burden by easing traffic congestions, travel support for elderly people and other vulnerable road users, and the revitalization of rural areas.

The improvement of the competitiveness of the automobile industry and the expansion of related markets are significant from an industrial point of view.

Research and Development of Automated Driving Systems

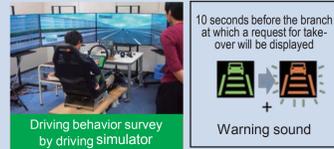
Dynamic Map



Initiatives to formulate specifications of dynamic maps, standardize dynamic maps, introduce them to multiple applications, and achieve commercialization with SIP-adus at the core in collaboration with relevant ministries, industrial bodies, international standard organizations, etc.

HMI(Human Machine Interface)

Issue A
Method of displaying information required for correct take-over of driving from an automated driving vehicle



Issue B
Method of measuring the state of preparation for take-over of driving from automated driving mode, and definition of the index of the state of preparation



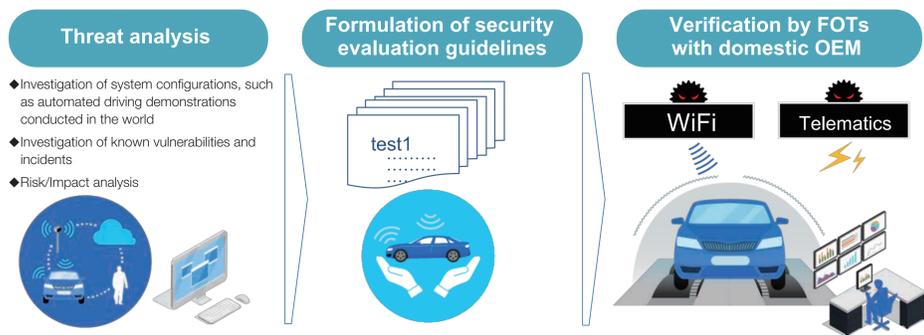
Issue C
Method of communication between vehicles in automatic driving mode and nearby traffic participants

Evaluation of communication by pedestrians of various attributes



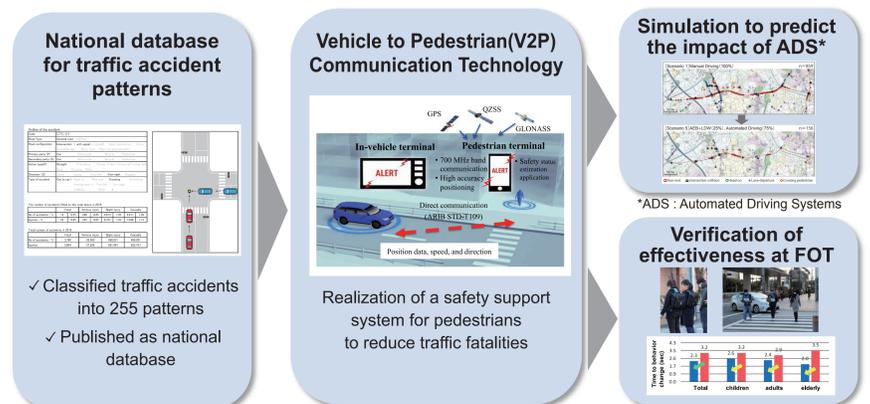
- These initiatives are included in the industry guidelines “Considerations for Automated Driving HMIs” (Japan Automobile Manufacturers Association).
- Japan made proposals to international standards. (ISO/TC22/SC39/WG8*)

Cyber Security



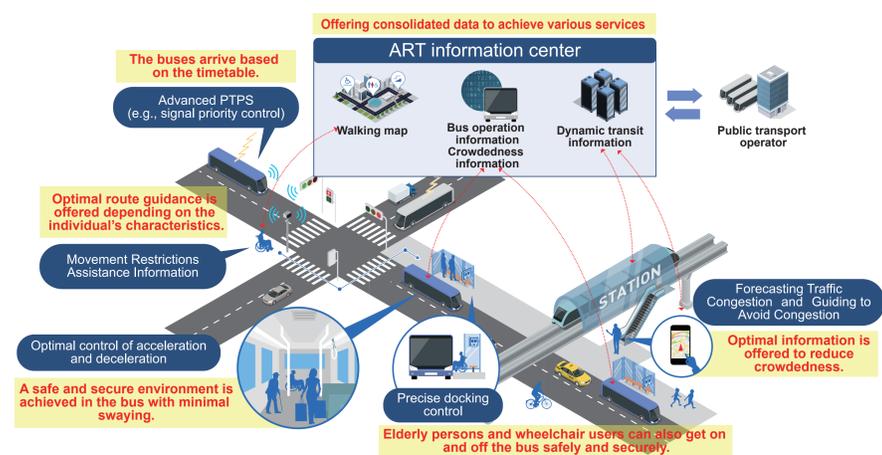
Establishment and international standardization of evaluation methods and protocols on vehicle and component levels.

Pedestrian Traffic Accident Reduction



Analysis for the reduction of pedestrian accidents, which account for half of all fatal traffic accidents – Development of technologies – Verification.

Next Generation Transport



Proposal and implementation of the next-step ART (Advanced Rapid Transit) envisaging the Olympic and Paralympic Games Tokyo 2020 and the future.

Program Director

Seigo Kuzumaki

Fellow Advanced R&D and Engineering
Company Toyota Motor Corporation

Profile

Mr. Kuzumaki received a master's degree in aeronautical engineering from Kyoto University in 1985. The same year, he joined Toyota Motor Corporation in the Body Design Department. In 2003, he began working in technology planning and technical development as the vehicle safety function supervisor in the Vehicle Technology Development Department at Toyota.

He has served in his present post since 2019. Following his appointment as Sub-PD for the SIP Automated Driving System program for two years from 2014, he was appointed PD in 2016.

