

The 2nd Phase of SIP-adus (2018-2022)



Vision

Overview

Reduce traffic accidents and traffic congestion, provide depopulated areas with transportation, contribute to solve social challenges such as driver shortages in the logistics industry, and finally ensure safe and secure mobility for everyone in society, by expanding automated driving from expressways to surface roads and implementing automated driving-based logistical and mobility services.

Targets

Privately owned vehicles: High driving automation on expressways by 2025 (SAE Level 4) and partial driving automation on regular roads (SAE Level 2 or higher)

Mobility services: Unmanned high driving automation in limited regions (Operational Design Domain) by 2020 (SAE Level 4)

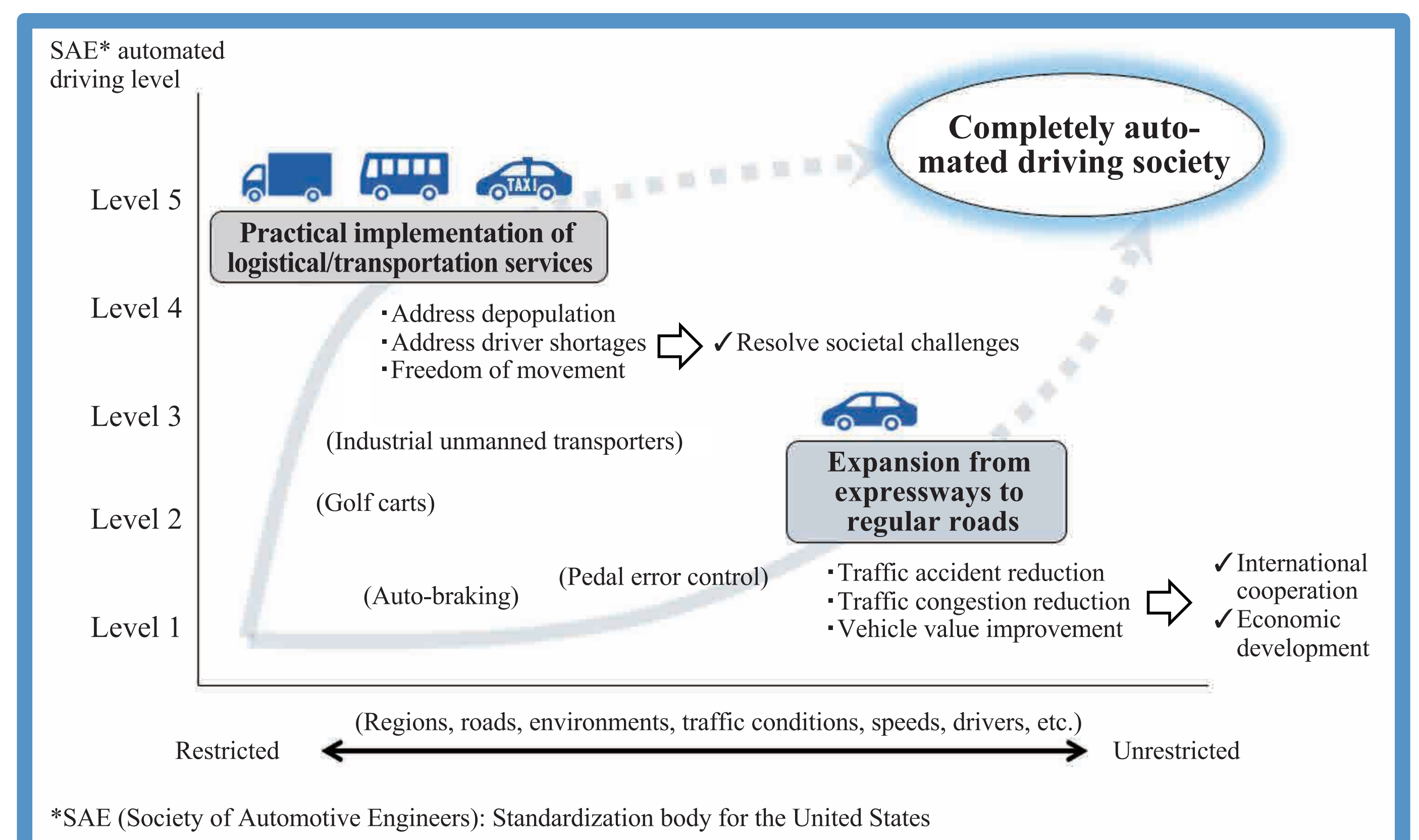
Logistical services: High driving automation trucks on expressways around 2025 or later (SAE Level 4)

Establish the cooperative domain technologies essential to achieving the above items by 2023, validate the effectiveness by FOTs (Field Operational Tests) with various private business operators and regional public entities, and complete the preparation for their commercialization by accomplishing multiple practical implementation examples, .

Achievement Strategy

Seek smooth commercialization exit by commercial-phase-stakeholder participation in research and development. Specifically, promote investment and business planning from private business operators by :

- (1) Utilizing the 2020 Tokyo Olympics/Paralympics
- (2) Incorporating the project planning of relevant public and private entities into FOTs.



Socio-Economic Impact

A greater degree of mobility suited to regional community needs and uses, as well as (1) traffic accidents and traffic congestion reduction, (2) local transportation ensuring, (3) labor shortages alleviation, (4) industrial competitiveness strengthening and (5) new industry generation, are expected with vehicles, logistical services and transportation services which utilize automated driving technology, when implemented in conjunction with other transportations.

Implementation

Research and Development Topics

[I] Develop/verify automated driving systems (FOTs)

- (1) Develop technology for delivering signaling data
- (2) Develop technology to support road-vehicle coordination, vehicle merging, etc.
- (3) Develop technology for gathering and utilizing vehicle probe data
- (4) Develop next-generation public transportation systems
- (5) Develop road environment suited to the practical implementation of mobility services...etc.

[II] Develop core technologies for implementing automated driving

- (1) Create a safety assessment environment in virtual space
- (2) Develop technology for efficient data gathering, analysis and distribution...etc.

[III] Foster social acceptance of automated driving

- (1) Plan and hold events promoting social acceptance
- (2) Clarify the impacts of automated driving
- (3) Research the support for persons with reduced mobility ...etc.

[IV] Promote international cooperation

- (1) Use international conferences as communication opportunities
- (2) Conduct joint research with overseas research institutions...etc.



Relevant government bodies
(partial list)

Cabinet Secretariat; National Police Agency; Ministry of Internal Affairs and Communications;
Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism

Managing entity NEDO