SIP-adus Workshop 2022

Police Efforts toward Realization of Automated Driving

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Expected benefit of automated driving





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Government's target for realization of automated driving



*1 When driverless automateddriving transport services are to come true depends on various conditions in the actual cruising environment, such as weather and traffic volume. With regard to the creation of an environment for the realization of those services, each government agency will consider the appropriate timing and the way it should be and take measures, taking into account future technological developments, etc. Our efforts towards the realization of automated driving





transition demand and to be prepared to take control of the vehicle securely.

The driver must drive on their own without relying on ADS. (Automated driving assuming the presence of a driver)

Def. of Specified automated operation (SAO):

Operating on a road a motor vehicle equipped with an <u>AOD (only one which</u> <u>may immediately stop that motor vehicle automatically in a safe manner</u> <u>when that motor vehicle has become an improperly maintained vehicle or</u> <u>when the use of that AOD has become unable to satisfy the ODD dedicated</u> <u>to that AOD</u>, which is used under the ODD dedicated to that AOD

(Article 2-17-2, RTA)



2022 Amendment to the Road Traffic Act for SAE Lv4 automated driving

(1) Permission for a SAO

(2022 amendment of the Road Traffic Law)

- A person seeking to conduct a SAO must obtain permission from a Prefectural Public Safety Commission (PPSC).
- A person seeking to obtain the permission must submit a written application containing a plan concerning the SAO
- SAOs must comply with the permitted SAO plan.

(2) Rules to be Observed While a SAO is Running

The SAO implementer must take either:
(a) measures to equip a place to manage the SAO with a remote-monitoring equipment and place a supervisor of SAO there; or
(b) measures to place a supervisor of SAO in that vehicle for SAO

(3) Measures to be taken in the Event of a Traffic Accident during a SAO

• The SAO supervisor placed must immediately take measures to notify a fire department nearest to the scene and must send a person responsible for on-site measures to the scene.

(4) Administrative disposition to the SAO Implementer

- In a case where the SAO implementer or SAO staff violate laws and regulations in relation to SAOs, a PPSC may instruct the SAO implementer to take necessary measures concerning the SAO.
- A PPSC may revoke the permission or suspend its validity for a period, if a SAO implementer or SAO staff violate RTA, an order under RTA, or measures under RTA in relation to SAO, etc.

Guidelines for public road testing of automated driving systems

May 2016

Guidelines for public road testing of automated driving systems

On the conditions that a driver sits in the driver's seat and is ready to take necessary measures in an emergency, you can conduct an experiment of automated vehicles on public roads without any permission or report.

Tests have been conducted in various parts of Japan.

Tests on public rods

<Points of Attention>

- A vehicle has to comply with the requirements of the Safety Regulations for Road Vehicles.
- O A driver has to sit in the driver's seat and be ready to take over the control of the vehicle in an emergency.
- O Those who conduct the tests have to obey the laws.



Criteria for the permission for public road testing of automated driving

Requirements for the public road testing of automated driving which do not comply with the guideline have become apparent, so we have developed and clarified the criteria for the permission for this.

Automated driving system with remote control technology(*1)

- (*1) A system that enables a remote supervisor/operator to operate the vehicle remotely by utilizing telecommunication technology
- Formulation and Release in June 2017 (Partially amended in September 2019 and September 2020)

<Examples of common requirements>

Vehicles with special control devices (*2)

- (*2) A vehicle operated by a special control device different from a conventional steering wheel and brake pedal during manual driving
- Formulation and Release in September 2019 (Partially amended in September 2020)
- The vehicle's maximum speed limit should be a speed at which the vehicle can come to a halt safely with a sufficient allowance of time in light of traffic conditions and road environments.
- > The autonomous driving for the practical application of automated driving should be conducted with a certification of a police officer who has actually ridden the vehicle.

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The vehicle should be equipped with data recording devices, such as a car driving recorder and an event data recorder, in order to record the conditions in front of, behind, and inside it..

<Examples of other requirements>

- The test vehicle should come to a halt safely without any operations when there is a communication delay exceeding a decided-upon period of time.
- In principle, the number of test vehicles simultaneously supervised/operated by one person should be increased one at a time.
- Remote supervisor/operator has to be aware of the surrounding conditions of all the test vehicles by image and sound.



Image & Sound



Operate if needed

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<Examples of other requirements>

A supervisor/operator has to be on the test vehicle who has passed an examination conducted by police to verify the supervisor/operator is able to operate it manually in a facility and on a public road.

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