

# 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)

## ■ 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)

### <Examples of common requirements>

- 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.
- 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 being operated 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.
- The remote supervisor/operator must be aware of the surrounding conditions of all the test vehicles by monitoring image and sound.



### <Examples of other requirements>

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



- This Criteria under the Permission for Road Use clarifies the standards for prefectural police handling of permit applications regarding road use in demonstration tests for remotely-controlled automated driving systems (\*1) and specially-equipped motor vehicles (\*2).
- The monitor-operator bears the obligation and responsibility of a driver.

## <Key Common Items>

### Screening Criteria

- Test purpose
  - To demonstrate the practical application of automated driving
- Test location, date and time
  - Does not include a location, date, and time that significantly interfere with the traffic of general road users
- Safety measures
  - Maximum speed
  - The speed at which the test vehicle can be stopped safely well in advance considering the traffic situation and road environment
  - Signage indicating an automated driving test on a public road is underway

### Permit Period

Maximum of 6 months as a general rule  
If the test plan subject to the permission is clear, however, the permit period may exceed 6 months

- Test vehicle structure
  - Complies with safety standard provisions for road vehicles (including receiving special approval)
  - When driving with passengers is planned, sufficient consideration is given (e.g. braking suddenly) to every degree possible
- Person acting as monitor or driver
  - Received education and training
  - Has knowledge of their legal obligations and responsibilities of a driver
  - Possesses the necessary driver's licenses

### Conditions of Permission

- Test location, date and time
  - Driving in compliance with the location, time, date and Testing Plan to which the application pertains
- Conditions for Autonomous Driving of Test Vehicles
  - The drive must be carried out **after screening on public roads** (Note 1)

(Note 1) Police officers shall screen test sections (public roads) for safe autonomous driving and safe intervention in cases of emergency
- Driving method
  - The **monitor-operator** shall monitor the direction of travel while the test vehicle is driven and be ready to conduct necessary operations immediately in case of emergency

- In Case of a Traffic Accident
  - Measures to enable traffic accident investigations
  - A drive recorder, event data recorder or similar device is mounted to a test vehicle to record conditions at the front and rear of a vehicle as well as inside a vehicle

### Guidance about Permission

Ensuring the ability to pay damages, pre-test public relations or advance notice to local residents, prior consultation with road administrators, contacting the competent police station chief about accident cases and reporting preventive measures, and complying with relevant laws and regulations

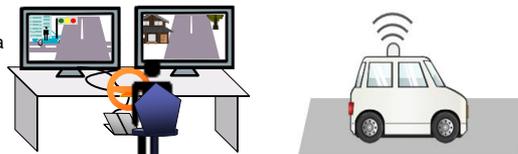
## <Key Individual Items>

### Criteria Screened for Permission

- Test location, date and time
  - A location where the necessary communication environment is ensured
- Safety measures
  - Ensure that those involved in the test get to the scene in a hurry
  - Complete implementation of safety measures given communication delays and the limited range of view for remote monitor-operators
- Test vehicle structure
  - Video and sounds make a remote monitor-operator aware of surrounding and traveling direction of test vehicles to the same degree as the driver of a regular vehicle
  - Automatically stops safely during a communication delay
- When 1 remote monitor-operator drives multiple vehicles
  - Has completed a 1:1 public road test
  - If increasing the number of test vehicles to be monitored/driven at the same time, increases them one by one as a rule

## Remote Automated Driving System (\*1)

(\*1) Automated driving systems that allow remotely-located monitor-operators to operate the vehicle with telecommunications technology



Remote monitor-operator

### Conditions of Permission

- In Case of a Traffic Accident
  - When a traffic accident has occurred, the driver must request the cooperation of the people in the test vehicle

### Guidance about Permission

Ensuring appropriate cybersecurity

## Specially-Equipped Motor Vehicles (\*2)

(\*2) Vehicles operated by special device (such as a controller) that differs from the ordinary steering wheel/brake during manual driving

Monitor-operator inside the vehicle



### Conditions of Permission

- Test location, date and time
  - The monitor-operator inside the vehicle has passed the **in-facility screening** and **on-road screening** by a police official (Note 2) (Note 3)

(Note 2) Police officers screen the safety of manual driving using a special device at the test facilities

(Note 3) Police officers screen the safety of manual driving using a special device on test sections (public roads)

## Remarks

- Using special devices such as controllers as a remote automated operation system
  - The public road screening for safe autonomous driving shall be carried out after remote monitor-operators are confirmed to be able to manually drive the test vehicle safely by passing **in-facility** and **on-road screening**. (Note 2) (Note 3)