# Participation Rules for the Tokyo Waterfront Area Field Operational Test

Revised on February 26, 2021

These participation rules (hereafter referred to as "these Rules") define rights and obligations related to a Tokyo Waterfront Area Field Operational Test (hereafter referred to as the "Field Operational Test") conducted by the Tokyo Waterfront Area Field Operational Test Operation Executive Secretariat (hereafter referred to as the "Secretariat"), the operational field test contractor (hereafter referred to as the "Contractor"), and a test participant (hereafter referred to as " participant "). Before participating in this Field Operational Test, the participant must read the full text of these Rules and agree to them.

# Article 1 Objective

By defining the matters necessary for ensuring mutual cooperation in carrying out the field operational test between the Contractor and the participant, these Rules are intended to ensure that the Field Operational Test is properly and smoothly executed.

# Article 2 Mutual cooperation

The Secretariat, the Contractor, and the participant agree to cooperate with each other in carrying out the Field Operational Test.

# Article 3 Administrative procedures

- 1. If administrative procedures accompanying the installation of devices, etc., or consultation or negotiation with the managers of other public facilities are necessary in order to carry out the Field Operational Test in accordance with these Rules, such procedures, consultation, and negotiation shall as a rule be carried out by the party that manages said devices, etc.
- 2. If a procedure requires cooperation from a party other than the party that manages said devices, etc., this matter shall be negotiated between the Secretariat and the participant in order to obtain the necessary cooperation.

# Article 4 Assignment of responsibilities and expense allocation related to the Field Operational Test

- 1. The participant agrees to develop a vehicle operation plan for the test and operate/manage its test vehicles during testing.
- 2. The participant agrees to collect data related to vehicle operation and cooperate with the Contractor in its analysis and evaluation.
- 3. The vehicles to be used in the Field Operational Test shall be provided at the participant's expense.
- 4. The allocation of expenses and arrangements for the vehicle-mounted devices used in the Field Operational Test shall be borne as indicated in Table: Responsibility assignment and expense allocation (role assignment). Any expenses not listed in said table shall be allocated upon

- mutual consultation between the Contractor and the participant.
- Additionally, the allocation of detailed expenses shall be in accordance with Table:
   Responsibility assignment and expense allocation (role assignment). Any expenses not listed in said table shall be allocated upon mutual consultation between the Contractor and the participant.
- 6. The participant shall report the amount of expenses allocated to the participant, as necessary, within the scope necessary for implementing the Field Operational Test, to the Secretariat.

Table: Responsibility assignment and expense allocation (role assignment)

Item	Equipment, Software, Work, etc.	Contractor	Participant
Provide cooperative infrastructure system	Prepare communications equipment (ITS wireless receivers, ETC 2.0 vehicle equipment, mobile communications devices), HDD costs, and communication equipment transportation charge	0	_
	Building cost of CAN output function for delivery data (quasi-static and quasidynamic data)	0	_
	Preparation costs for various related hardware (PCs, etc.)	0	_
	Build information delivery function	0	_
	Viewer software (Delivered data is superimposed on maps)	0	_
Evaluate and confirm delivered data	Cost to confirm and evaluate delivered data	_	0
	PC for confirming delivered data	_	0
Prepare test vehicle and systems	Preparation costs for vehicle and systems (Used to provide cooperative infrastructure system delivery data to vehicle control and drivers)	_	0
	Vehicle transport and storage costs	_	0
	Convert map data to company format	_	0
	Convert when using CAN message	_	0
Prepare vehicle drivers	Cost of drivers	_	0
Assess and confirm quasi-static and quasi-dynamic data	Cost to evaluate data (vehicle fuel costs, highway toll fee, etc.)	_	0
	Cost of evaluation result report	_	0
Dynamic management of test vehicles	Cost of operating dynamic management system (including GPS and acceleration sensor)	0	_
	Cost of preparing a drive recorder required to collect the test data	0	_

Cost of preparing a drive recorder required to perform the Field Operational Test safely	_	0
Cost of installing equipment (equipment for impact assessment, etc.) for dynamic management system and other requested installations	-	0

# Article 5 Test vehicle driving locations

- 1. When driving autonomous vehicles within the specified public road segments in order to validate the matters described in the preceding article, the test participant shall perform driving in accordance with the driving plan submitted in advance by the participant to the Contractor.
- 2. The Contractor may specify part of the driving route or how the vehicle should be driven.

#### Article 6 Test vehicles

- 1. Test vehicles must meet the Safety Standards of the Road Transportation Vehicles (Ministry of Transport Order No. 67 of 1951). (Includes vehicles that are approved as special exemptions by the director of the Regional Transport Bureau as specified in Section 1, Article 55 of said ordinance or by the Minister of Land, Infrastructure, Transport and Tourism as specified in Section 4, Article 56.) In accordance with the Road Transport Vehicle Act, the vehicle must have an automobile registration number certificate issued by the Minister of Land, Infrastructure and Transportation or an automobile registration number certificate issuer and shall be allowed to travel on public roads.
- 2. Test vehicles must be those to which needed operations can be done by test driver to ensure safety in case of emergencies.
- 3. The Field Operational Test is designed to evaluate and verify the technical issues and effectiveness of traffic signal information provision technologies, automated driving support technologies that use road-to-vehicle integration on highways, and infrastructure collaboration next-generation public transport systems. Therefore, the vehicle used in the Field Operation Test shall be one which uses data distributed by the infrastructure collaboration system for automated driving and safe driving assistance.
- 4. The vehicle must be equipped with a function that can install map data into a PC or on-board ECU and estimate the vehicle's own position on the map based on the information obtained from the on-board sensors.
- 5. If a vehicle equipped with automated driving functions is to be used for this test, the participant must test the vehicle in advance at a facility such as a proving ground to ensure that it can be driven safely (including cases where new functions are added to the automated driving systems).
- 6. The test vehicle must clearly indicate system switching, such as issuing an alarm when

automated driving is starting or ending.

- 7. If it is detected that the automated driving function has reached or is about to reach its functional limit, or if a system failure is detected, the system must ask the driver to take control of vehicle operation with a sufficiently advance warning. However, if driving operation is not or cannot be transferred to the driver, the vehicle must be brought safely to a stop.
- 8. The participant must submit to the Secretariat a document that describes a specific method of confirming that the test vehicle conforms to the requirements set forth in Paragraphs 1 to 7 of this article.
- 9. The Secretariat must recommend confirmation based on a third party test, etc. when it judges that it is necessary to do so based on the described content in the preceding paragraph. In this case, the Secretariat must offer support, such as early examination at a laboratory, etc.

#### Article 7 Test vehicle drivers

- 1. Test vehicles shall be driven by drivers, provided by the participant, fulfilling the legal obligations including Road Traffic Act.
- Test driver shall sit on a driver's seat of a test vehicle to always watch surrounding road traffic
  condition and vehicle's state, and in case of emergencies take needed operations to ensure
  safety and not to cause damage to others.
- 3. The test drivers described in Paragraph 1 shall follow the Guidelines for Testing Automated Driving Systems on Public Roads (hereafter referred to as the "Guidelines") and, regardless of whether the automated driving functions of the test vehicle will be used and regardless of the automated driving level that will be used, must agree to the content of the Guidelines and notes related to testing.
- 4. The test drivers shall satisfy conditions listed below:
  - Drivers must have a driver's license required by regulations for a type of test vehicle and have a considerable amount of driving experience.
  - Drivers must thoroughly understand the framework and characteristics of the automated driving system of the test vehicle and be proficient in taking emergency actions for the test vehicle. (Education and training must be provided, as needed.)
  - Drivers must be able to cooperate in questionnaire-based surveys, etc., following field operational tests.
  - Drivers must be capable of fulfilling the legal obligations of drivers, and in case a traffic accident, etc. occurs, always be aware of the responsibilities of driver.
- 5. Drivers must be capable of reliably taking the necessary actions following an accident or during an emergency, such as giving the highest priority to aiding the victims and, afterward, notifying the police, etc. of the situation.

- 6. Additionally, drivers must be capable of fulfilling their obligations as drivers, including taking the necessary actions following an accident and abiding by traffic regulations.
- 7. The participant must submit to the Secretariat a document that describes a specific method of confirming that a test driver conforms to the requirements set forth in Paragraphs 2 to 6 of this article.
- 8. The Secretariat must recommend confirmation based on a third party test, etc. when it judges that it is necessary to do so based on the described content in the preceding paragraph. In this case, the Secretariat must offer support, such as early examination at a laboratory, etc.

# Article 8 Handling of the results of a third party test

1. The participant who received the test set forth in Article 6, Paragraph 9 and Article 7, Paragraph 8 must report to the Secretariat whether the criteria below were met.

Criteria:

System performance: Capability to drive along the road alignment and to comply with laws, regulations, and rules (e.g., making a temporary stop)

Action taken by a test driver: A driver must be able to take action by appropriate intervention when the system cannot handle the situation. (A test driver who meets the criteria is hereinafter referred to as "the specified driver.")

2. The participant who received the test set forth in Article 6, Paragraph 9 and Article 7, Paragraph 8 must offer sufficient education and training to the test driver based on the test results when a person other than the specified driver is allowed to sit in the driver's seat of a test vehicle as a test driver.

# Article 9 Safety management of test vehicles

- 1. The participant must safely manage its test vehicles and strive to prevent traffic accidents, etc.
- 2. The participant must create a safety management system in the company or organization, specify the person responsible and person in charge, and report to the Contractor.
- 3. The Secretariat and Contractor shall assume no responsibility whatsoever for any traffic accidents, etc. caused by the participant during the Field Operational Test.
- 4. Test vehicles must record and save various types of data according to the Guidelines in order to enable follow-up examinations of any traffic accidents or traffic violations that may occur during testing.
- The various types of data collected by sensors related to the test vehicle and the sensors'
  operational states must be recorded and saved for use in post-accident analysis, etc., when
  necessary.
- 6. Since the static high-accuracy 3D maps, test equipment, software, etc. to be provided by the Contractor are merely prototypes, the participant must strive to safely proceed with the Field

Operational Test without relying on them.

- 7. For safety management purposes, the Secretariat shall monitor test vehicles using a cloud-based movement management system. The participant agrees to register its test vehicles in said system and allow them to be monitored.
- 8. A drive recorder, event recorder, etc., that will record the conditions surrounding the test vehicle and its status must be installed in test vehicles. (It is necessary to record not only the conditions ahead of vehicles, but also those behind and inside vehicles. For a drive recorder for recording the conditions ahead and behind a vehicle, the equipment lent for the Field Operational Test may be used.)
- 9. The driver must be seated in the driver's seat so that s/he can constantly monitor the surrounding road conditions and take necessary actions should an emergency situation occur.
- 10. Matters with which all parties involved must be familiar, such as procedures for handling emergency situations, communication structure, etc., must be documented and made known to all.
- 11. In addition to mandatory vehicle liability insurance, the participant must take out voluntary automobile insurance that satisfies the items and insured values indicated in the appendix. The cost of automobile insurance shall be borne by the participant.
- 12. If a defect in information that is received from outside and edited and output by a device provided by the Contractor causes a traffic accident, the participant shall be responsible for it.
- 13. If a traffic accident occurs, the participant must cooperate in an investigation conducted by the Cabinet Office SIP, the Secretariat, and the Contractor, such as providing the conditions surrounding the test vehicle and the vehicle status recorded in the drive recorder and event recorder, etc. set forth in Paragraph 8 of this article to the Cabinet Office SIP, the Secretariat, and the Contractor.
- 14. The information obtained by the Cabinet Office SIP, the Secretariat, and the Contractor through cooperation by the participant to investigate an accident set forth in the preceding paragraph will not be disclosed or provided to parties other than the Cabinet Office SIP, the Secretariat, an investigation committee to be set up in the Secretariat, and the Contractor without permission of the participant. However, this does not apply if a request is made based on proper procedures in accordance with laws and regulations.

# Article 10 Items to be submitted in advance

- 1. The required information must be entered in the driving plan form provided by the Contractor, and the filled-out form must then be submitted to the Contractor by the specified date.
- 2. If the content of the driving plan changes after its submission, the participant must promptly submit the details of the change to the Contractor.
- 3. If the Secretariat or the Contractor makes changes in the driving plan form, a document that

indicates such changes must be submitted to the Contractor by the specified date.

# Article 11 Test reporting

- 1. Unless there are special reasons for the contrary, the participant agrees to submit a test report and data by the date specified by the Contractor, in accordance with details to be specified separately.
- 2. Any data problems discovered during the test must be reported to the Contractor.
- The Contractor may send questionnaire-based surveys to the participant and its drivers or
  inquire about the test results. Unless there are special reasons for the contrary, the participant
  agrees to respond such requests.
- 4. The participant must submit to the Contractor all log data for test equipment lent by the Contractor.

# Article 12 Provision of test data to third parties

- In order to evaluate test results, Cabinet Office SIP, affiliated ministries, secretariat and the
  Contractor may disclose driving data from tests and other investigation results to companies
  subcontracted to perform analysis work or to related organizations. Permission will be received
  in advance from participants before disclosing individual company names in materials.
- 2. If a third party, including a different contractor, university, and company of SIP-adus applies to use the driving data of the Field Operational Test and other investigation results to conduct investigation and research, the Secretariat may disclose such driving data and other investigation results based on screening, including the purpose of use. Permission will be received in advance from participants before disclosing individual company names in materials.

#### Article 13 Public disclosure and distribution of results

- The Secretariat and the Contractor shall be permitted to statistically process the collected test
  data such that individual vehicles and individual participants cannot be identified and to
  publicly disclose or distribute the processed results as the results of the Field Operational Test.
- 2. The specifications of the data and systems used in the tests and security-related information must not be made public or distributed.
- 3. The methods for handling the information distributed via the infrastructure collaboration system during the Field Operational Test shall be stipulated by the Secretariat in participant briefings, progress report meetings, information-sharing sessions, and other meetings held by the Secretariat or Contractor as necessary. The participant shall use the stipulated methods.
- 4. The participant must obtain permission from the Contractor before publicly disclosing test data or outcomes.

# Article 14 Patent application

If the Contractor and the participant develop an invention based on the results of the Field Operational Test and wish to apply for a patent for said invention, all parties shall negotiate the details in good faith.

# Article 15 Compensation for damages and losses

- Any loss incurred by the Contractor or the participant as a result of implementing the Field
  Operational Test shall be borne by the participant, except when the Contractor is responsible
  for said loss. If loss is incurred by a third party due to a cause attributable to the participant,
  the test participant shall take necessary measures, such as compensating for the loss, at its sole
  expense.
- 2. Should a complaint be received from a third party in relation to the implementation of the Field Operational Test, the Contractor and the participant shall consult each other and, except in urgent cases, the participant shall, as a rule, take necessary measures. The expenses incurred in the course of taking measures shall be borne by the participant, except when the Contractor is responsible for the complaint.
- 3. If equipment failures, etc., makes it impossible to perform testing, the Contractor shall not provide restitution, etc., to participants.
- 4. If a defect in the information output from a device (including static high-accuracy 3D maps, test equipment, software) provided by the Contractor causes a traffic accident, the participant shall be responsible for it.

# Article 16 Asset ownership

Assets, such as testing devices, etc., that have been installed in accordance with these Rules, shall belong to the party that bore the expenses for them.

# Article 17 Field Operational Test period

The Field Operational Test is planned to run from 2019 to the end of 2021.

The period is subject to change.

# Article 18 Suspension of participation in the Field Operational Test

- If the participant wishes to suspend its participation in the Field Operational Test for its own reasons, it may do so based on consultation with the Contractor and the Secretariat.
   Once suspended, the participant cannot resume participation in the Field Operational Test.
- During implementation of the Field Operational Test, if any of the conditions listed below becomes applicable to the participant, the Contractor may ask the participant to immediately suspend the test.

- 1) All or some of the information in the application form are determined to be false.
- The test participant no longer satisfies the requirements for participating in the Field Operational Test.
- 3) The test participant is discovered to have a relationship with antisocial forces.
- 4) Instruction from Cabinet Office
- 5) The Secretariat determines for any reason that participation in the Field Operational Test by the participant is no longer appropriate.

# Article 19 Changes to the Rules

If it becomes necessary to change the details of these Rules, the Secretariat shall change them and obtain the participant's agreement to the changed rules.

# Article 20 Cooperation

- 1. As a rule, the participant must attend various meetings to be held as needed by the Secretariat or the Contractor, such as participant briefings, progress report meetings, and information-sharing sessions.
- 2. If the Contractor requests that the participant reports its test results at progress report meetings, information-sharing sessions, etc., held as necessary by the Contractor, the participant shall cooperate in reporting on its test results, etc.
- 3. The Contractor and the participant agree to cooperate in the filming of PR video for the Field Operational Tests, participating in media events, etc., and other evaluation requests (such as impact assessments) from the Secretariat or the Contractor.

# Article 21 Confidentiality

The participant must not disclose any secondary information it may obtain, other than test results, etc., to outside parties. Article 21 shall remain effective for three years after the participant stops participating in the Field Operational Test and for three years after the end of the Field Operational Test.

# Article 22 Handling of lent equipment

The participant may not reverse engineer equipment lent by the Contractor. The participant must manage this equipment appropriately in accordance with export management laws.

### Article 23 Other

Any matter not stipulated in these Rules or any dispute arising with respect to any provision of these Rules shall be set forth or resolved upon mutual consultation among the Secretariat, the Contractor, and the participant.