

## Administrative Specification on Road Test of ICV (Provisional)

### Chapter I General Provisions

**Article 1** For the purpose of fulfilling the spirit of the 19<sup>th</sup> CPC National Congress, speeding up building a manufacturing power, S&T power, network power and traffic power, promoting technical development and industrial application of intelligentization and connectivity of vehicles, promoting transfer, upgrade, innovation and development of transport, regulating ICV road test management, this Specification is formulated in accordance with *Law of the People's Republic of China on Road Traffic Safety, Highway Law of the People's Republic of China*, etc.

**Article 2** This Specification applies to road test of ICV in territory of the People's Republic of China.

**Article 3** MIIT, Ministry of Public Security, Ministry of Transport co-publish relevant information on ICV road test regularly.

**Article 4** Provincial and municipal governmental authorities should formulate detailed rules for the implementation of this Specification according to local situation and organize to develop ICV road test specifically.

Provincial and municipal governmental authorities that are referred in this Specification include industry and information technology departments, traffic management departments and traffic administrative departments of the public security organ in each province, autonomous region, municipality directly under the central government, city specifically designated in the state plan, Xinjiang Production and Construction Corps.

### Chapter II Test Subject, Test Driver and Test Vehicle

**Article 5** Test subject refers to the organizations that propose ICV road test application, organize test and take relevant responsibilities, and should be in compliance with the following conditions:

- (I) Should be independent legal entity registered in the territory of the People's Republic of China;
- (II) Should possess ICV-related business capabilities such as manufacturing, technical research and development or test inspection of motor vehicle and components, etc;

- (III) Should have sufficient civil compensation liability in regard to possible personal damage and fortune loss that may be caused during the ICV test;
- (IV) Should possess test evaluation rules for autonomous driving function of ICV;
- (V) Should possess capability for performing real-time remote monitoring of test vehicle;
- (VI) Should possess capability for performing record, analysis and reproduction of the event of test vehicle;
- (VII) Other conditions stipulated by laws, regulations and rules.

**Article 6** Test driver refers to driver who has been authorized by test subject to take responsibilities for test and implement emergency measures for test vehicle in case of occurrence of emergent situations, and should meet the following conditions:

- (I) Should sign labor contract or employment contract with the test subject;
- (II) Should obtain the driving license for the relevant vehicle types and possess over 3 years of driving experience;
- (III) Should be free from full score record in the last 3 scoring cycles in succession;
- (IV) Should be free from record of serious offences against traffic law such as overspeed 50%, violation of traffic light and so on in the last 1 year;
- (V) Should be free from record of driving after drinking alcohol or driving while intoxicated; should be free from record of taking psychotropic drugs or narcotic drugs that are under national control;
- (VI) Should be free from record of liabilities for traffic accident causing death or serious injury;
- (VII) After autonomous driving training by test subject, should get familiar with the test rules of autonomous driving, have good command of autonomous driving test operation method, and possess emergency response capability under emergency;

(VIII) Other conditions stipulated by laws, regulations and rules.

**Article 7** Test vehicle refers to ICV applied to be used in road test, including passenger car and commercial vehicle, excluding low-speed motor vehicle and motorcycle, and should meet the following conditions:

- (I) Should be free from power-driven vehicle registration;
- (II) Should meet the requirements of compulsory inspection items of corresponding vehicle type other than durability; for exceptional items which cannot meet the compulsory inspection requirements due to realization of autonomous driving function, test subject should prove that vehicle safety performance is not lowered;
- (III) Should feature two modes of manual operation and autonomous driving, and should be able to realize mode conversion and feature relevant prompt as per safe, quick and simple mode, and should ensure instantaneous shift of vehicle to manual operation mode under any circumstance;
- (IV) Should feature record, save and monitor vehicle status online, and transfer the following 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> information in real-time. Record and save data of the following information at least 90s before vehicle accident or default automatically, and save it for not less than 3 years;
  - 1. Vehicle control mode;
  - 2. Vehicle location;
  - 3. Vehicle speed, acceleration and other motion status;
  - 4. Environmental perception and response status;
  - 5. Vehicle lighting and signal real-time status;
  - 6. 360° video monitor situations outside vehicle;
  - 7. Vehicle interior video and speech/sound monitoring situations of test driver and human-machine interaction;
  - 8. Remote control command received by vehicle (if any);
  - 9. Vehicle malfunction situations (if any).
- (V) Real vehicle test of test vehicle should be conducted thoroughly in the

specific area such as a closed road or site, and the test should conform to relevant national and industrial standards, testing requirements issued by the provincial and municipal governments as well as test evaluation rules of the test subject; besides, the test site should be equipped with road test conditions.

- (VI) Autonomous driving function of the test vehicle should be detected and verified by a third party testing institution which is recognized by the country or provincial authority. And the testing and verification project should include but not limited to the projects listed in Appendix 1.

### Chapter III Test Application and Review

**Article 8** Provincial and municipal governmental authorities should choose several typical road sections in the jurisdictions for ICV road test and announce it to the public.

**Article 9** The test subject should put forward road test application to the local provincial and municipal governmental authorities where the test road section locates. The application should at least include:

- (I) Basic situation of test subject, test driver and test vehicle;
- (II) For homemade power-driven vehicle, delivery qualification certificate of complete vehicle should be provided. For the vehicle type that is not listed in the announcement, delivery qualification certificate and compulsory inspection report of the vehicle type that is issued by a third party testing lab authorized by state should be provided; for imported power-driven vehicle, 3C report of imported power-driven vehicle, accessory inspection list and import certificate of product should be provided;
- (III) Autonomous driving function introduction and certificate of failing to reduce vehicle safety performance;
- (IV) Qualification certificate of power-driven vehicle safety technology testing;
- (V) Certificates for the test subject conducting real vehicle test in the specific area such as a closed road or site;
- (VI) Entrustment inspection report of autonomous driving function that is issued by a third party testing institution which engages in vehicle

business and authorized by the country or province;

- (VII) The test plan includes test road section, time, project, rule, risk analysis and countermeasure;
- (VIII) Compulsory insurance for traffic accident of motor vehicle, compulsory insurance for traffic accident of motor vehicle with premium not less than RMB5 million for each vehicle, or letter of guarantee for autonomous driving road test accident with premium not less than RMB5 million.

**Article 10** Provincial and municipal governmental authorities should be in charge of organizing acceptance and review of the test application, issue notice of ICV road test for the qualified vehicles one by one (see Appendix 2), file in record to MIIT, Ministry of Public Security and Ministry of Transport, and publish it to the public.

**Article 11** The notice of the test should note test subject, VIN, name and ID number of test driver, test time, road section, etc. In principle, test time should not exceed 18 months.

**Article 12** If basic information of the notice needs to be altered, the test subject should submit alteration introduction and corresponding evidentiary material. The altered notice of ICV road test will be issued after the aforesaid alteration application has been reviewed and approved by the provincial and municipal governmental authorities.

**Article 13** The test subject could apply for temporary license plate for test vehicle at the traffic administrative department of the public security organ which is noted in the notice of the test by submitting the notice and certificate that is required in the *Regulations on the Registration of Power-driven Vehicles*.

**Article 14** Driving area that is restricted by the temporary license plate should be arranged reasonably according to test road section noted on the notice. Validity of the temporary license plate should not exceed the test time noted on the notice of the test.

**Article 15** Regarding test vehicle that has been issued with the temporary license plate, the test subject should apply for test notice at local provincial or municipal respectively as well as local temporary license plate if road test needs to be conducted in other province or city, except that the local provincial or municipal government allows to conduct road test on the appointed area of this

administrative region by showing test notice and temporary license plate that is issued by other province or city.

## Chapter IV Test Management

**Article 16** Test vehicle should follow regulations on management of temporary license plate. Without the temporary license plate, the test vehicle cannot drive on road.

Both test subject and test driver should follow laws and regulations on road traffic safety in China, conduct test in accordance with test time, road section and project which is noted on the notice of the test strictly, and bring in the notice and test plan for review.

**Article 17** “Autonomous driving test” should be marked on the test vehicle body in obvious color so as to remind the surrounding vehicles.

**Article 18** The test driver should be always sitting on the driver seat of test vehicle, monitoring vehicle driving status and surrounding environment, preparing to take over the vehicle at any time.

When the test driver finds that the test vehicle is no longer appropriate to staying in autonomous driving status or system prompts demand of manual operation, the test driver should take over the vehicle in time.

**Article 19** During the test, no person or cargo that is not related to test should be carried on test vehicle.

**Article 20** During the test, do not drive in autonomous driving mode on road that is not the test road section as noted in the notice; test vehicle should be driven manually from driving parking place to the test road section.

**Article 21** The test subject should submit phase test report to the provincial and municipal governmental authorities that issue the notice of the test every 6 months, and submit report of test summary in one month after the test is over.

**Article 22** Provincial and municipal governmental authorities should report ICV road test taken in the jurisdictions to MIIT, Ministry of Public Security and Ministry of Transport in June and December each year.

**Article 23** Provincial and municipal governmental authorities should revoke the notice of the test in the event that any of the following situations happens during the test:

- (I) Provincial and municipal governmental authorities think that the testing activities have huge safety risk;

- (II) Where test vehicle is involved in serious offences against traffic law such as running in violation of the traffic lights, going in a direction not allowed by traffic regulations or penalties such as suspension or revoking of driving license of power-driven vehicle or custody in accordance with laws and regulations on road traffic safety;
- (III) Where the test vehicle party should take main responsibilities for serious circumstances such as serious injury, death or damage of vehicle caused in traffic accident.

When the provincial and municipal governmental authorities revoke the notice of the test, they should take back the temporary license plate as well, and transfer it to the traffic administrative department of the public security organ which issues this temporary license plate; if not, they should notify the traffic administrative department of the public security organ that the temporary license plate is cancelled in writing.

## **Chapter V Traffic Violations and Accident Handling**

**Article 24** Where offence against traffic law occurs during the test process, the traffic administration department of public security organ should impose penalty upon test driver as per the prevailing laws and regulations on road traffic safety.

**Article 25** Where traffic accidents occur during test, liability of the party should be ascertained in accordance with laws and regulations on road traffic safety, and decide compensation liability for damage in accordance with relevant laws and regulations and judicial interpretation. Whosever behavior is ascertained as criminal, criminal liability will be investigated according to laws.

**Article 26** In case of accident of test vehicle during road test, the party should protect the accident site and immediately call the police.

If personal injury, death and vehicle destroyed are caused, the test subject should report the accident to the provincial and municipal governmental authorities in 24h; provincial and municipal governmental authorities should report the accident to MIIT, Ministry of Public Security and Ministry of Transport in 3 working days.

**Article 27** Within 5 working days after confirmation of responsibility of accident, test subject should submit relevant documents such as results of confirmation of accident root-cause and responsibilities as well as complete accident analysis

report in written to provincial and municipal governmental authorities; provincial and municipal governmental authorities should report the accident to MIIT, Ministry of Public Security and Ministry of Transport in 5 working days.

## Chapter VI Supplementary Provisions

**Article 28** ICV referred in this Specification is a brand new generation of vehicle that is carried with advanced on-board sensor, controller, actuator, etc., merged with modern communication and network technology, could realize intelligent information switch and share of vehicle and X (people, vehicle, road, cloud and etc.), equipped with perception of complicated environment, smart decision, synergic control, etc., able to realize safe, efficient, conform, energy saving driving, and will finally realize operation in displacement of people. ICV is usually called as intelligent vehicle and autonomous driving vehicle, etc.

Autonomous driving of ICV includes conditional autonomous driving, highly autonomous driving and fully autonomous driving. Conditional autonomous driving refers to that system completes all driving operations and with appropriate intervention of the driver as demanded by the system; highly autonomous driving refers that system completes all driving operations and it will require the driver to respond in appointed environment; but the driver could refuse to respond to the system demand. Fully autonomous driving refers that the system is able to complete all driving operations on road instead of the driver and without intervention of the driver.

**Article 29** This Specification will be executed since 01 May 2018.

Appendixes:

1. Testing Projects of Autonomous Driving Function of ICV
2. Notice of Road Test of ICV



Appendix 1:

**Testing Projects of Autonomous Driving Function of ICV**

| No. | Testing projects   |
|-----|--|
| 1   | Identification and response of traffic signs and marking lines   |
| 2   | Identification and response of traffic signal lamps *  |
| 3   | Identification and response of driving status of the front vehicle (including the one driving on the opposite direction) |
| 4   | Identification and response of obstacles   |
| 5   | Identification and response of pedestrians and non-power-driven vehicles *   |
| 6   | Vehicle-following driving (including stop and start)   |
| 7   | Road-side parking  |
| 8   | Overtaking   |
| 9   | Mixed lane driving   |
| 10  | Passing through intersection *   |
| 11  | Passing through roundabout *   |
| 12  | Automatic emergency braking  |
| 13  | Manual operation takeover  |
| 14  | Networking communication *   |

\* Note:

1. \* is an optional testing project.
2. Enterprises declare that vehicle has autonomous driving function marked with \* or test road section involves corresponding scene, relevant testing projects should be done.



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Appendix 2:

No. XXX of 201X

## Notice of Road Test of ICV

(Name of the test subject):

According to joint review, your entity is approved to conduct road test of ICV.

Please test according to *Basic Information of Road Test of ICV* (on the back) and follow this *Administrative Specification on Road Test of ICV (Provisional)* and relevant requirements in laws and regulations on road traffic safety strictly during the test.

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(Issued by)

DD-MM-YY

Note: The your entity could apply for temporary license plate for road test of ICV at the local traffic administrative department of the public security organ by submitting the notice and certificate that is required in the *Regulations on the Registration of Power-driven Vehicles*.



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### Basic Information of Road Test of ICV

|                          |  |
|--------------------------|--|
| <b>Test subject</b>      |  |
| <b>Test vehicle</b>      | (List VIN or unique serial number of vehicle one by one)   |
| <b>Test driver</b>       | (List name and ID number of test driver one by one)  |
| <b>Test time</b>         | DD-MM-YY to DD-MM-YY   |
| <b>Test road section</b> | (List names of test road sections one by one, which should be consistent with the one issued by the provincial and municipal governmental authorities) |
| <b>Test project</b>      | (List names of test projects one by one)   |