

Appendix 1 For vehicles applicable to Article 5 of the Emission Standards effective on September 1, 2019, the Preliminary and Confirmation investigation tests related stipulations are as follows:

1. Application for Heavy-Duty Buses and Trucks:

1.1. Preliminary investigation test:

1.1.1. For preliminary investigation test, at least 3 vehicles shall be selected for the test. The central competent authority may increase the number to 5 vehicles depends on situations.

1.1.2. Preliminary investigation test provisions:

1.1.2.1. Real driving on-road test

- a. Test conditions and method: the test conditions shall be in accordance with Table 1, Character C of Appendix 9 to Annex I to Regulation (EU) No 582/2011 regulated requirements and the test method shall be in accordance with Annex II to Regulation (EU) No 582/2011 regulated requirements.
- b. In-service conformity factor means the ratio between the pollutant emissions result values of valid windows for the real driving on-road test and the threshold limits of the WHTC driving cycle test as specified in Article 5 of the Emission Standards.
- c. Test route: The test route shall be in accordance with provisions specified in Annex II to Regulation (EU) No 582/2011 and the subsequent amendment directives.
- d. Test fuel: The basic test fuel shall be domestic market fuel; or with consent from the central competent authority, the vehicle manufacturer or importer may choose to use emissions test fuel at its own expense.

1.1.2.2. Smoke opacity instrument test: in accordance with the “Diesel Motor Vehicle Smoke Opacity Testing Methods and Procedures” to conduct the test.

1.1.3. Test result analysis method:

1.1.3.1 Real driving on-road test: each test vehicle shall be tested in accordance with paragraph 1.1.2 of this appendix, and any one of the pollutant emissions testing results shall be analyzed in accordance with stipulations specified in point 4 of Appendix to Annex 2 to Regulation (EU) No 582/2011 and the subsequent amendment directives. Ninety percent of the in-service exhaust emission

conformity factors shall not exceed any of the values set out in Table 1 of this Appendix. If the limit is exceeded, then that vehicle shall be determined as noncompliance vehicle. However, if during the test the ambient conditions exceeded the conditions as specified in provisions of Regulation (EU) No 582/2011 and the subsequent amendment directives, the vehicle may be retested within the required ambient conditions.

Table 1 Maximum allowed conformity factors for in-service Heavy-Duty Buses and Trucks.

Pollutant	Maximum allowed conformity factor
CO	1.50
THC	1.50
NO _x	1.50

1.1.3.2 Smoke opacity instrument test: the test results shall not exceed the smoke opacity standards as specified in Article 5 of the Emission Standards effective on September 1, 2019. If the testing results exceed the standard limits, then that vehicle shall be determined as noncompliance vehicle.

1.1.4. The pass and fail decision for the preliminary investigation test shall be determined according to the number of noncompliance vehicles correspond to the pass decision number and fail decision number as specified in Table 2 of this Appendix to the preliminary investigation test sampling plan.

Table 2 Pass and fail decision numbers of the sampling plan for preliminary investigation test.

Cumulative number of vehicles tested (sample size)	Number of noncompliance vehicles	
	Pass decision number	Fail decision number
3	0	--
4	0	4
5	0	4

If the number of noncompliance vehicles is equal to the corresponding pass decision number as specified in Table 2 of this Appendix, then the preliminary investigation test shall be determined as pass.

If the number of noncompliance vehicles is greater than the corresponding pass decision number and less than the fail decision

number as specified in Table 2 of this Appendix, then the preliminary investigation test shall be determined as fail and the vehicle manufacturer or importer shall conduct the confirmation tests on that engine family or vehicle model, or in accordance with Article 11 of this Regulation to propose a voluntary recall and correction plan.

If the number of noncompliance vehicles is greater than the corresponding fail decision number as specified in Table 2 of this Appendix, then the investigation test shall be determined as fail and shall be handled in accordance with Article 13 of this Regulation.

- 1.1.5. If the engine manufacturer or importer has objection on the previous paragraph mentioned preliminary investigation test results, the engine manufacturer or importer shall submit an explanation document in written form within 20 days from the next day of receipt of notification, and the central competent authority shall hold a review meeting on the explanation document.

1.2. Confirmation investigation test:

- 1.2.1. The engine manufacturer or importer shall complete the confirmation investigation test within the deadline prescribed by the central competent authority and the central competent authority shall designate personnel to supervise the whole execution process for the confirmation investigation test. The engine manufacturer or importer shall be responsible for the related costs.

Unable to complete the confirmation investigation test within deadline, the engine manufacturer or importer shall apply for extension to the central competent authority and provide reasons for unable to meet the deadline. The central competent authority may grant the extension period according to actual situations; if the confirmation investigation was found not to be implemented in accordance with regulated process requirements, pursuant to Article 41, paragraph 1 of the Act, the competent authority shall order to prohibit the manufacture, importation and sale of that engine.

- 1.2.2. Confirmation investigation test provisions: the test shall be conducted in accordance with paragraph 1.1.2 of this Appendix.
- 1.2.3. The test results analysis method shall be in accordance with paragraph 1.1.3 of this Appendix.
- 1.2.4. The minimum sample number of vehicles for the confirmation investigation test shall be twice the number of noncompliance vehicles for the preliminary investigation test and the maximum accumulative sample number of test vehicles shall be 10.

- 1.2.5. Pass and Fail determination principle: The pass and fail decision for the confirmation investigation test shall be determined according to pass decision number and fail decision number of the confirmation investigation test sampling plan as specified in Table 3 of this Appendix.

Table 3 Pass and fail decision numbers of the sampling plan for conformation investigation test.

Cumulative number of vehicles tested (sample size)	Number of noncompliance vehicles	
	Pass decision number	Fail decision number
6	1	4
7	1	4
8	2	4
9	2	4
10	3	4
Note: the cumulative number of vehicles tested includes the vehicles being tested for the preliminary investigation test.		

Within the accumulative number of tested vehicles, if the number of noncompliance vehicles is equal to the corresponding pass decision number as specified in Table 3 of this Appendix, then the confirmation investigation test shall be determined as pass.

Within the accumulative number of tested vehicles, if the number of noncompliance vehicles is greater or equal to the corresponding fail decision number as specified in Table 3 of this Appendix, then the confirmation investigation test shall be determined as fail.

If the accumulative number of tested vehicles can not correspond to the pass decision number or fail decision number, then adding the sample test vehicles each time by two and the maximum number of accumulative test vehicles shall be 10.

2. Application for Light-Duty Passenger Cars and Trucks:

2.1. Preliminary investigation test

2.1.1 At least 3 vehicles shall be selected for the preliminary investigation test. The central competent authority may increase the number to 5 vehicles depends on situations.

2.1.2 Preliminary investigation test provisions:

2.1.2.1 Real driving on-road test

- a. Test conditions and test method: the test conditions shall be in accordance with related provisions of the Temporary Conformity

Factors as regulated in EU Regulation (EC) No 715/2007 and the subsequent amendment directives.

- b. In-service conformity factor: means ratio between the pollutant emissions result values for the real driving on-road test and the threshold limits of the WLTC driving cycle test as regulated in Article 5 of the Emission Standards.
- c. Test route: the route selection for the test shall be in accordance with Regulation (EC) 715/2007 and the subsequent amendment directives.
- d. Test fuel: The basic test fuel shall be domestic market fuel; or with consent from the central competent authority, the vehicle manufacturer or importer may choose to use emissions test fuel at its own expense.

2.1.2.2 Smoke opacity instrument test: in accordance with the “Diesel Motor Vehicle Smoke Opacity Testing Methods and Procedures” to conduct the test.

2.1.3. Test results analysis method:

2.1.3.1 Real driving on-road test: each test vehicle shall be tested in accordance with paragraph 2.1.2 of this appendix, and any one of the pollutant emission testing results shall be analyzed in accordance with the Temporary Conformity Factors related provisions as specified in Regulation (EC) No 715/2007 and the subsequent amendment directives. The in-service exhaust emission conformity factors shall not exceed any of the values set out in Table 4 of this Appendix. If the limit is exceeded, then that vehicle shall be determined as noncompliance vehicle. However, if during the test the ambient conditions exceeded the conditions as specified in provisions of Regulation (EC) No 715/2007 and the subsequent amendment directives, the vehicle may be retested within the required ambient conditions.

Table 4 Maximum allowed conformity factors for in-service Light-Duty Passenger Cars and Trucks.

Pollutant	Maximum allowed in-service conformity factor
NO _x	2.10
PN	1.50

2.1.3.2 Smoke opacity instrument test: the test results for each vehicle shall not exceed the smoke opacity standards as specified in Article 5

of the Emission Standards effective on September 1, 2019. If the testing results exceed the standard limits, then that vehicle shall be determined as noncompliance vehicle.

2.1.4. The pass and fail decision for the preliminary investigation test shall be determined according to the number of noncompliance vehicles correspond to the pass decision number and fail decision number of the preliminary investigation test sampling plan as specified in Table 5 of this Appendix.

Table 5 Pass and fail decision numbers of the preliminary investigation test sampling plan.

Cumulative number of vehicles tested (sample size)	Number of noncompliance vehicles	
	Pass decision number	Fail decision number
3	0	--
4	1	--
5	1	5

If the number of noncompliance vehicles is equal to or less than the corresponding pass decision number as specified in Table 5 of this Appendix, then the preliminary investigation test shall be determined as pass.

If the number of noncompliance vehicles is greater than the corresponding pass decision number and less than the fail decision number as specified in Table 5 of this Appendix, then the preliminary investigation test shall be determined as fail and the vehicle manufacturer or importer shall conduct the confirmation test on vehicle models of that engine family, or pursuant to Article 11 of this Regulation to propose a voluntary recall and correction plan.

If the number of noncompliance vehicles is equal to the corresponding fail decision number as specified in Table 5 of this Appendix, then the investigation test shall be determined as fail and shall be handled in accordance with Article 13 of this Regulation

2.1.5. If the vehicle manufacturer or importer has objection on the previous paragraph mentioned preliminary investigation test results, the vehicle manufacturer or importer shall submit an explanation document in written form within 20 days from the next day of receipt of notification, and the central competent authority shall hold a review meeting on the explanation document.

2.2. Confirmation investigation test:

2.2.1. The vehicle manufacturer or importer shall complete the confirmation investigation test within deadline that prescribed by the central competent authority and the central competent authority shall designate personnel to supervise the whole execution process for the confirmation investigation test. The vehicle manufacturer or importer shall be responsible for the related costs.

Unable to complete the confirmation investigation test within deadline, the vehicle manufacturer or importer shall apply for extension to the central competent authority and provide reasons for unable to meet the deadline. The central competent authority may grant extension period according to actual situations; if the confirmation investigation was found not to be implemented in accordance with the regulated process, pursuant to Article 41, paragraph 1 of the Act, the competent authority shall order to prohibit the manufacture, importation and sale of that vehicle model.

2.2.2. Confirmation investigation test provisions: the test shall be conducted in accordance with paragraph 2.1.2 of this Appendix.

2.2.3. The test results analysis method shall be in accordance with paragraph 2.1.3 of this Appendix.

2.2.4. The sample number of vehicles for the confirmation investigation test shall be determined according to the number of noncompliance vehicles for the preliminary investigation test, at least 2 vehicles shall be added for the confirmation investigation test.

2.2.5. Pass and Fail determination principle: The pass and fail decision for the confirmation investigation test shall be determined according to the pass decision number and fail decision number of the confirmation investigation test sampling plan as specified in Table 6 of this Appendix.

Table 6 Pass and fail decision numbers of the conformation investigation test sampling plan.

Cumulative number of vehicles tested (sample size)	Number of noncompliance vehicles	
	Pass decision number	Fail decision number
6	2	6
7	2	6
8	3	6
9	4	6
10	5	6
Note: the cumulative number of vehicles tested includes the number of vehicles being tested for the preliminary investigation test.		

Within the cumulative tested vehicles, if the number of noncompliance vehicles is less than or equal to the corresponding pass decision number as specified in Table 6 of this Appendix, then the confirmation investigation test shall be determined as pass.

Within the accumulative number of tested vehicles, if the number of noncompliance vehicles is greater or equal to the corresponding fail decision number as specified in Table 6 of this Appendix, then the confirmation investigation test shall be determined as fail.

If the accumulative number of tested vehicles can not correspond to the pass decision number or fail decision number, then successive increase the sample test vehicles each time and the maximum number of accumulative test vehicles shall be 10.

3. If the confirmation investigation test was determined as fail in accordance with paragraph 1.2.5 or paragraph 2.2.5 of this Appendix, the subsequent matters shall be handled in accordance with Article 13 of this Regulation.
4. Pass or fail determination for random sample testing: the central competent authority shall perform random sample testing in accordance with Article 16, paragraph 3 of this Regulation, if the test results for each vehicle have shown that no in-service conformity factor for any of the regulated pollutants has exceeded the maximum allowable limits as specified in Table 1 or Table 4 of this Appendix, then the central competent authority shall notify the engine or vehicle model manufacturer or importer on the decision that that engine family or vehicle model has completed the recall and correction plan. If the test results for any of the sample vehicle exceed the maximum allowable limits as specified in Table 1 or Table 4 of this Appendix, then the recall and correction plan shall be determined as unfinished and to start the penalty process.