

# In Service Conformity guide according to Regulation (EU) 2018/1832

# In Service Conformity Guide

# CONTENT

1. Introduction	3
2. Information to be provided	3
3. Agreement on the format of information provided, and selection of vehicles to be tested	4
4. Testing carried out by the manufacturer	5
5. Annual ISC process audits	6
6. Third party testing	7
7. Annual report	7
Annex I – Contact e-mail address	8
Annex II – Scope of information needed to perform an audit	8

#### 1. Introduction

This guide defines duties and competences related to the vehicle in service conformity (ISC) for the Ministry of Transport, the approval holders as well as for the Approval Authority and Technical Services. The objective of these instructions is to describe the procedures of vehicles in service conformity checks and assure transparent procedures.

The new process of ISC has been released in the Regulation (EU) 2018/1832, which amends the Regulation (EU) 2017/1151 (further referred to as 2017/1151\*2018/1832) and applies to vehicle categories M1, N1 and N2 that had been granted approval according to the Regulation (ES) 715/2007.

This guide applies to vehicle categories M1 and N1, Class I (emission letter CG, DG, AM, AP) on the basis of vehicle types approved after January 1, 2019, and to all such vehicles, registered after September 1, 2019, as well as to vehicles of categories N1, Class II and III, and to vehicles category N2 (emission letter CH, CI, AN, AO, AQ, AR) on the basis of vehicle types approved after September 1, 2019, and to all such vehicles registered after September 1, 2020.

For vehicles categories M, N1 and N2 (emission letter EA, EB, EC) applies ISC methodology according to the Regulation (EU) 2023/443 (see: <a href="https://www.mdcr.cz/Dokumenty/Silnicni-doprava/Schvalovani-vozidel/Metodiky">https://www.mdcr.cz/Dokumenty/Silnicni-doprava/Schvalovani-vozidel/Metodiky</a>).

ISC procedures apply to vehicle types for which the period since the last issuing of Certificates of Conformity does not exceed five years.

Starting January 1, 2020, the Ministry of Transport shall perform Type 1 tests and Real Driving Emissions tests on all the vehicles mentioned within the ISC framework.

# 2. Information to be provided

#### a) Number of conformity declarations

Each year by January 31, vehicle manufacturer shall deliver to the Ministry of Transport or to the Technical Service the number of Certificates of Conformity (CoC) issued in the previous calendar year, including an assignment of CoC numbers to individual vehicle families within ISC. The family definition within ISC is given in paragraph 3, Part B, Annex II of the Regulation (EU) 2017/1151\*2018/1832 (hereinafter "ISC-family").

The e-mail address for information delivery is mentioned in Annex I.

#### b) Test plan

Each year by January 31, manufacturer shall inform the Ministry of Transport about the ISC test plan for the relevant calendar year, based on the number of CoC issued in the previous year. The plan shall include:

- List of ISC-families including their designation.
- List of vehicle types covered by individual ISC-families including their EU type approval and the commercial name of vehicle type.
- List of ES type approvals according to the Regulation (ES) 715/2007 granted to an individual ISC-family, including the extension number, if necessary, for a family identification.
- Number of CoC issued in the previous year separately for every ISC-family.
- Number of scheduled vehicles to be tested by the manufacturer within the ISC framework, separately for every family. Relevant numbers should correspond to the Part B, Annex II of the Regulation (EU) 2017/1151\*2018/1832.

- Plan shall also include testing according to the test Type 1a RDE at least for 5% of ISC-families, alternatively at least for 2 families per year in an accredited laboratory or under the supervision of the Technical Service. These tests shall be arranged by the manufacturer in compliance with the testing framework guaranteed by the Ministry of Transport. Regarding to possible doubts, the specified minimal number of tested vehicles at test Type 1a RDE is 3 vehicles for every ISC-family.
- Plan shall contain also scheduled alternative tests, which are optional to manufacturers and are on top of the above-mentioned (other Type 1 or 1a-RDE tests, Type 4 EVAP tests, type 6 -7°C tests).
- To allow for easier availability of in service vehicles, test schedule may include also vehicles manufactured in the year preceding the year from which vehicles in this step are analyzed.
- Regarding paragraph 5.10.1. Part B, Annex II of the Regulation (EU) 2017/1151\*2018/1832
  the manufacturer may already include in the schedule a request to extend the testing period
  of every ISC family from 12 to 18 months.

The e-mail address for information delivery is mentioned in Annex I.

#### c) List of warranty repairs and claims

Each year by January 31, vehicle manufacturer shall provide to the Ministry of Transport or the Technical Service the relevant information concerning warranty claims and all warranty repairs related to emissions performed or identified within maintenance during the entire warranty period. This information shall include details regarding the frequency and the nature of failures of components and systems related to emissions, separately for each ISC family.

The provided information shall be comprehensive enough to enable assessment of risk in emissions-related components.

The list of warranty repairs shall cover at least the following information, and shall be created for all vehicles under this guide regardless of the number of vehicles sold:

- List of ISC-families including their designation
- List of vehicle types covered by each ISC-family including their EU type approval and commercial name of vehicle type
- List of ES type approvals according to the Regulation (ES) 715/2007 granted to each ISC-family including the extension number, if appropriate for family identification
- Number of CoC issued for each ISC-family in the previous year
- The frequency of failures related to emissions, in absolute numbers and ppm
- A simple description of failure and components affected
- Assessment of failures as to their importance in relation to emissions (e.g., 1 low importance, 3 high importance)
- The list shall be sorted for each IP family top-down according to the total number of failures
- The list shall contain information covering the entire warranty period of ISC families in question

# 3. Agreement on the format of information provided, and selection of vehicles to be tested

The Ministry of Transport or the Technical Service carries out, based on the information supplied by the manufacturer, a preliminary assessment of the risk that the given family may not comply with requirements of in service conformity. It will then decide whether the testing schedule delivered by the manufacturer corresponds to the minimal requirements of the Regulation (EU)

2017/1151\*2018/1832 and also if there is a need to test other vehicles in the families with a heightened risk of non-conformity with the aforementioned Regulation. Furthermore, the Ministry of Transport may select other ISC families for a random testing.

The Ministry of Transport takes a decision which ISC families will be tested in an accredited laboratory or under the supervision of the Technical Service. This obligation will be ordered at the minimum for 5% of vehicles in ISC families or at least 2 ISC families annually, and this refers to both Type 1 and Type 1a – RDE tests.

The required number of vehicles to be tested, including those assigned to accredited laboratories or testing under the supervision of the Technical Service, shall be communicated to the manufacturer by the Technical Service authorized by the Ministry of Transport by March 31 of a given year. In case of low vehicle production numbers (less than 5000 vehicles per an ISC-family) and no suspicion of an increased risk of non-conformity, the manufacturer shall receive a notice that there is no need to test in the given year.

Above mentioned notice from the Technical Service will contain a reconciliated form of information to be supplied regarding items 2a, 2b and 2c of this guide, after inclusion of potential remarks of the Ministry of Transport or the Technical Service.

There is no obligation for manufacturers to carry out ISC tests if registration data across the EU (the number of CoC's issued) fall below 5000 vehicles in the previous year. The obligation to perform ISC tests by the Ministry of Transport or an authorized technical service remains unaffected (according to TAAM 17.11.2021).

If the limit of 5000 vehicles is exceeded again, the obligation for the manufacturer to perform ISC tests reappears (according to TAAM 17.11.2021).

# 4. Testing carried out by the manufacturer

Manufacturer performs exhaust emissions tests for in service conformity in the minimum extent specified in the previous paragraph.

Before the first in service conformity test, manufacturer informs the Ministry of Transport or the Technical Service about its intention to carry out the in service conformity test for a given family.

The beginning of the first test and every subsequent test of a vehicle of the ISC family shall be announced by the manufacturer at least one working day in advance.

Results of each in service conformity test shall be submitted to the Ministry of Transport or to the Technical Service within ten working days following the test in the format of a test protocol.

Every test performed shall be reported only once, and all tests (valid, invalid, satisfactory or dissatisfactory, etc.) shall be reported.

After performing all the tests within the ISC family, the manufacturer sends a notification of the completion of the tests of the entire ISC family with an assessment of whether the ISC family complies with the requirements of the regulation.

At the latest by February 28 each year, manufacturer shall provide to the Ministry of Transport a summary report on all completed ISC testing in the preceding year.

Tests required by the Ministry of Transport to be performed in accredited laboratories or under the supervision of the Technical Service represent an integral part of manufacturer's obligation to inform about the beginning and the results of tests.

All tests mentioned in this paragraph are paid by the manufacturer including all herein mentioned tests performed in accredited laboratories or under the supervision of the Technical Service.

The e-mail address for information delivery on test beginning and results, and the summary report is mentioned in Annex I.

#### Example of announcing the start of a test

*To:* The e-mail address for delivering information about the beginning of testing is mentioned in Annex I

Subject: Announcement of the beginning of vehicle testing within the ISC process Dear,

Test results will be delivered within 10 day after the test in a separate e-mail. Sincerely yours

#### Example of notification of the result of an individual test

To: The e-mail address for delivering information about the test results is mentioned in Annex I Subject: Announcement of the result of the vehicle test within the ISC process Dear,

Hereby we inform you that the (first, second, etc.) testing of the ISC family vehicle No. xxxx was performed with a satisfactory/dissatisfactory result. Please find the test protocol attached. (In case of dissatisfactory test result, include information about analyses underway, alert to further information, etc.).

Sincerely yours

#### Example of announcing the end of the test of the whole ISC family

To: The e-mail address for delivering information about the end of the test of the whole ISC family is mentioned in Annex I

Subject: Announcement of the test completion for the entire ISC family Dear,

Hereby we inform you about the completion of testing for ISC family No. xxxx.

All test protocols have been already submitted in separate e-mails. Test results of the ISC family do/don't comply with the requirements of the Regulation (EU) 2017/1151\*2018/1832.

(In case of non-compliance, include explanation)

Sincerely yours

# 5. Annual ISC process audits

Summary reports mentioned in the previous section become part of annual audits to be carried out at the manufacturer by the Ministry of Transport or by the Technical Service. The audit shall be performed preferably at the manufacturer's seat, or in its production plant; alternatively, it may be carried out remotely, e.g. by means of videoconferencing. The cost of audit and administration associated with the conformity assessment (creation and management of statistical files,

communication with the manufacturer, control of the documentation supplied by the manufacturer...) bears the manufacturer.

No later than 10 days before the audit, the manufacturer shall provide the Ministry of Transport or the Technical Service with, at the minimum, the information as per Appendix 3, Annex II of the Regulation (EU) 2017/1151\*2018/1832, also included in Annex II to this document to simplify its accessibility. This information may also be a part of the summary report described in paragraph 4 of this document.

## 6. Third party testing

According to the Regulation (EU) 2017/1151\*2018/1832, it is also possible within the ISC processes to accept tests by technical testing facilities and accredited laboratories approaching the manufacturer as independent third parties.

Prior to the first in service conformity test, the accredited laboratory or technical testing facility shall inform the Ministry of Transport or the Technical Service about the intention to perform an in service conformity test of a given vehicle family, at the same time specifying the vehicle type and the number of vehicles in the test sample. As part of this communication, the laboratory shall deliver its accreditation according the ISO/IEC 17025:2017 standard that explicitly contains the testing method to be used within the ISC process. This information shall be delivered no later than 10 working days before the testing date. Should this information be delivered later or not at all, the test shall not be recognized within the ISC process.

The Ministry of Transport reserves the right to reject the test prior to its performance on the grounds of doubts regarding laboratory's competence or impartiality.

The beginning of any further testing of an ISC family vehicle shall be communicated by the accredited laboratory or technical testing facility no later than one working day prior to testing.

The results of every in-service conformity test shall be submitted to the Ministry of Transport or to the Technical Service within 10 working days after the completion of each test in the form of a test protocol.

Each test performed shall be reported only once, and all tests (valid, invalid, satisfactory or dissatisfactory, etc.) shall be reported. After completing all tests of the relevant batch, the accredited laboratory or technical testing facility shall deliver a summary test protocol including the assessment. The results shall be included to the tested ISC family vehicles sample in the chronological order in which they were performed.

Examples of notifications of the test beginning, performance and termination is presented in section 4 of this guide, and shall be appropriately adopted for third party testing.

Tests listed in this paragraph are paid for by the third party performing them.

The e-mail address for delivering required information is mentioned in Annex I.

# 7. Annual report

By March 31 every year, the Ministry of Transport shall publish on its website https://www.mdcr.cz free of charge the summary report with the results of all completed in service conformity testing performed in the previous year. In case some testing is still open at the publishing date, a report with results shall be published as soon as the testing is finished. A report shall be prepared separately for

each vehicle manufacturer holding current ES approval in compliance with the Regulation (ES) 715/2007 issued by the Ministry of Transport and valid in the previous calendar year.

#### Annex I – Contact e-mail address

The contact person for information delivery is:

Ing. Jiří Pešek

Expert of TÜV SÜD Czech

E-mail: <u>Jiri.Pesek@tuvsud.com</u> Phone: +420 725 423 661

## Annex II – Scope of information needed to perform an audit

The following information shall be included in the detailed ISC report:

- 1. the name and address of the manufacturer;
- 2. the name, address, telephone and fax numbers and e-mail address of the responsible testing laboratory;
- 3. the model name(s) of the vehicles included in the test plan;
- 4. where appropriate, the list of vehicle types covered within the manufacturer's information, i.e. for tailpipe emissions, the in-service family group;
- 5. the numbers of the type approvals applicable to these vehicle types within the family, including, where applicable, the numbers of all extensions and field fixes/recalls (re-works);
- 6. details of extensions, field fixes/recalls to those type approvals for the vehicles covered within the manufacturer's information (if requested by the approval authority);
- 7. the period of time over which the information was collected;
- 8. the vehicle build period covered (e.g. vehicles manufactured during the 2017 calendar year);
- 9. the ISC checking procedure, including:
  - (i) vehicle sourcing method;
- (ii) vehicle selection and rejection criteria (including the answers to the table in Appendix 1 to Annex II to the Regulation 2017/1151\*2018/1832, including photos);
  - (iii) test types and procedures used for the programme;
  - (iv) the acceptance/rejection criteria for the family group;
  - (v) geographical area(s) within which the manufacturer has collected information;
  - (vi) sample size and sampling plan used;
- 10. the results of the ISC procedure, including:
- (i) identification of the vehicles included in the programme (whether tested or not). The identification shall include the Table in Appendix 1.
  - (ii) test data for tailpipe emissions:
    - test fuel specifications (e.g. test reference fuel or market fuel),
    - test conditions (temperature, humidity, dynamometer inertia weight),
    - dynamometer settings (e.g. road load, power setting),
    - test results and calculation of pass/fail;
  - (iii) test data for evaporative emissions:
    - test fuel specifications (e.g. test reference fuel or market fuel),

- test conditions (temperature, humidity, dynamometer inertia weight),
- dynamometer settings (e.g. road load, power setting),
- test results and calculation of pass/fail.