

Information system

Type approval procedure

Disclosure of emission strategies and defeat devices within the framework of type approvals in accordance with emission-related regulations and for complete vehicle type approvals

Relevant legal acts:

Regulation (EC) No. 715/2007

Regulation (EC) No. 692/2008, last amended by regulation (EU) 2016/646

Directive 2007/46/EC

UN Regulation No. 83

UN Regulation No. 101

Question or problem:

With the promulgation by the Federal Ministry of Transport and digital infrastructure (*BMVI*) dated 26.04.2016, the Federal Motor Transport Authority (KBA) was requested with immediate effect to demand a statement from applicants declaring whether they use motor protection systems as defined by Article 5 of Regulation (EC) No. 715/2007, prior to the issuance of type approvals.

If yes, the manufacturers shall furthermore be requested for each case to disclose the specific function and software and to explain the functionality and the reasoning based on which they deem the motor protection systems necessary. The KBA shall examine the relevant information. Additional measurements shall be performed in case of doubt, such as with portable emission measuring systems (PEMS) on the road.

With regard to contents the requirements of Regulation (EU) No. 2016/646 amending Regulation (EC) 692/2008 are hereby implemented..

In the past Technical Services did not explicitly report certain test results since these were generally deemed compliant with the issuance of a final statement of compliance. The KBA will in future demand the explicit reporting of all measured results.

Result:

A)

Vehicle manufacturers shall with immediate effect and prior to issuance or extension of a type approval certificate pursuant to the above legal acts, issue a declaration (Annex 1) stating the absence of prohibited defeat devices. The statement may be issued per type approval or aggregated for several type approvals. Aggregated statements must include a list of relevant individual type approvals.

The efficiency of the emission control system shall not be reduced during normal, reasonably to be expected vehicle operation (Article 3 No. 10 Regulation (EC) No. 715/2007 or No. 2.16 UN Regulation No. 83). Failing this, the existence of a prohibited defeat device may reasonably be suspected.

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The type 1 test conditions pursuant to UN Regulation No. 83 represent only a very limited range of normal reasonably to be expected vehicle operation. This applies especially in respect of environmental conditions.

Type approvals will be issued conditional upon this statement and compliance with all other underlying statutory regulations.

B)

Every type approval issued pursuant to A) will have a collateral clause attached. This will state that the type approval shall expire if the following information is not submitted within 90 days:

- 1) Description of emission reduction measures in the engine and the after-treatment of exhaust gases,
- 2) Description of the base emission strategy that is active throughout the speed and load operating range of the vehicle unless an auxiliary emission strategy is activated; ,
- 3) Description of all auxiliary emission strategies that becomes active and replaces or modifies a base emission strategy for a specific purpose and in response to a specific set of ambient or operating conditions and only remains operational as long as those conditions exist.

The KBA will disclose details on the extent of documentation. Annex 2 illustrates a first draft, preliminary and not conclusive.

Provided the above information is identical for a range of type approvals and a list of all relevant type approvals is included, documentation covering all shall suffice.

Early submission of the information required under B) is expressly recommended.

The KBA will examine the submitted documentation for prohibited defeat devices. Should prohibited defeat devices be found, the relevant type approvals may be repealed or withdrawn.

Defeat devices qualifying under Article 5 (2) of Regulation (EC) No. 715/2007 or No. 5.1.2.1 of UN Regulation No. 83 are allowed.

It is pointed out that, subject to individual checks,

- mitigation of emission reduction for reasons of the durability of emission reducing components will not constitute permissible exceptions under Article 5 (2), letter a) of Ordinance (EC) No. 715/2007,
- mitigation of emission reduction during normal and reasonably to be expected vehicle operation is generally not permissible.

The requirements under A) and B) are applicable to vehicle classes M1 and N1.

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As from 1.10.2016, the information under B) must be submitted before type approval will be issued. The above mentioned collateral clause shall be omitted after submission to the KBA.

C)

Pursuant to Regulation (EC) No. 715/2007 for vehicles with diesel engines and irrespective of the requirements under A) and B), the test results and assessments of the Technical Service as per Article 3 No. 9 of Regulation (EC) No. 692/2008 shall expressly be included in the test report for every new or extended type approval and the underlying documentation by the manufacturer shall be attached. The hitherto accepted simple confirmation based on a positive final statement of compliance shall no longer be acceptable.

D)

The procedures described under A) and B) shall generally be applied to all vehicles in which the use of defeat devices is prohibited under European law. Further detail of the procedure will be defined in another IST in the near future.

Flensburg, 24.05.2016
400-331/070
Volker Suwe

Annexes: 2

Annex 1 of IST 01-16 Disclosure of emission strategies

Statement by the manufacturer on the absence of prohibited defeat devices

**Hersteller -
Manufacturer:**

.....

**Fabrikmarke (Handelsname des Herstellers) -
Make (manufacturer's trade name):**

.....

**Fahrzeugtyp -
Vehicle type:**

.....

**EG-Typgenehmigungsnummer/n -
EC type approval number(s):**

.....

Zutreffendes ankreuzen - Mark if applicable:

Hiermit erklären wir das Nichtvorhandensein unzulässiger Abschalteneinrichtungen gemäß Artikel 3 (10) der VO (EG) Nr. 715/2007 in Verbindung mit Artikel 5 Absatz 2 der VO (EG) Nr. 715/2007. - *We hereby declare the absence of prohibited defeat devices in accordance with Article 3 (10) of Regulation (EC) no. 715/2007 in conjunction with Article 5, paragraph 2 of Regulation (EC) no. 715/2007.*

Hiermit erklären wir das Nichtvorhandensein unzulässiger Abschalteneinrichtungen gemäß Nr. 2.16 der UN/ECE-Regelung Nr. 83 in Verbindung mit Nr. 5.1.2.1 der UN/ECE-Regelung Nr. 83. - *We hereby declare the absence of prohibited defeat devices under no. 2.16 of the UN / ECE Regulation No. 83 in accordance with no. 5.1.2.1 of UN / ECE Regulation No. 83.*

.....
**Datum -
Date**

.....
**Name und Funktion -
Name and capacity**

.....
**Unterschrift -
Signature**

Annex 2 of IST 01-16 Disclosure of emission strategies

Requirements for adequate manufacturer's documentation

- Schematic presentation of all emission mitigating / control systems
- Functional description of all emission mitigating / control systems and the individual components
- Explanation of the emission strategy in normal operation
- Explanation of deviating or additional emission strategies, e.g.
 - o Warming up strategy
 - o Full-load enrichment / full load operation
 - o Prevention of regeneration under critical operating conditions
 - o EGR rate reduction
 - o UREA dosing reduction

The manufacturer shall name all defeat devices he considers permissible.

They shall be described in terms of

- input parameters set to trigger emission reduction modifications,
- vehicle functions affected by the defeat device,
- the type and extent of impacts on the emission behaviour and possibly other circumstances relevant to type approval.

The manufacturer shall confirm that no defeat devices other than those named by him and which he deems permissible are installed in the vehicles.