

Proposal for update for ECE R10.07

Note: The modifications to the current text of the regulation are marked in bold or strikethrough characters.

I. Proposal

4. Approval

4.1. Type approval procedures

4.1.1. Type approval of a vehicle

The following alternative procedures for vehicle type approval may be used at the discretion of the vehicle manufacturer.

4.1.1.1. Approval of a vehicle installation

A vehicle installation may be type approved directly by following the provisions laid down in paragraph 6. and, if applicable, in paragraph 7. of this Regulation. If this procedure is chosen by a vehicle manufacturer, no separate testing of electrical/electronic systems or ESAs is required.

~~4.1.1.2. Approval of vehicle type by testing of individual ESAs.~~

~~A vehicle manufacturer may obtain approval for the vehicle by demonstrating to the Type Approval Authority that all the relevant (see para. 3.1.3. of this Regulation) electrical/electronic systems or ESAs have been approved in accordance with this Regulation and have been installed in accordance with any conditions attached thereto.~~

4.1.1.3. A manufacturer may obtain approval according to this Regulation if the vehicle has no equipment of the type, which is subject to immunity or emission tests. Such approvals do not require testing.

4. Approval

4.1. Type approval procedures

4.1.1. Type approval of a vehicle

The following alternative procedures for vehicle type approval may be used at the discretion of the vehicle manufacturer.

4.1.1.1. Approval of a vehicle installation

A vehicle installation may be type approved directly by following the provisions laid down in paragraph 6. and, if

applicable, in paragraph 7. of this Regulation. If this procedure is chosen by a vehicle manufacturer, no separate testing of electrical/electronic systems or ESAs is required.

4.1.1.2. Approval of vehicle type by testing of individual ESAs.

A vehicle manufacturer may obtain approval for the vehicle by demonstrating to the Type Approval Authority that all the relevant (see para. 3.1.3. of this Regulation) electrical/electronic systems or ESAs have been approved in accordance with this Regulation and have been installed in accordance with any conditions attached thereto, **except all those components of the powertrain, on board charger, and all components that affect the immunity related functions of vehicle, where the manufacturer must apply the procedure of section 4.1.1.1. Approval of a vehicle installation.**

4.1.1.3. A manufacturer may obtain approval according to this Regulation if the vehicle has no equipment of the type, which is subject to immunity or emission tests. Such approvals do not require testing.

II. Justification

For a lot of time, we have been observing a serious problem in the application of the type-approval procedure for complete vehicles.

According to the regulation:

4.1.1.2. Approval of vehicle type by testing of individual ESAs.

A vehicle manufacturer may obtain approval for the vehicle by demonstrating to the Type Approval Authority that all the relevant (see para. 3.1.3. of this Regulation) electrical/electronic systems or ESAs have been approved in accordance with this Regulation and have been installed in accordance with any conditions attached thereto.

3.1.3. The vehicle manufacturer shall draw up a schedule describing all relevant vehicle electrical/electronic systems or ESAs, body styles, variations in body material, general wiring arrangements, engine variations, left-hand/right-hand drive versions and wheelbase versions. Relevant vehicle electrical/electronic systems or ESAs are those which may emit significant broadband or narrowband radiation and/or those which are involved in immunity related functions of the vehicle (see paragraph 2.12.) and those which provide coupling systems for charging the REESS.

These possibilities might have made sense lot years ago, because there were hardly any electronics in the vehicles. But now, especially for electric and non-electric buses and trucks too, it is very difficult for the manufacturer to meet all the necessary requirements with parts of ALL components that affect the EMC, without measuring a complete vehicle, where you really see **how it affects the installation**. Moreover, we have many experiences of components that are presented as approved, and when you measure the vehicle, they do not meet the requirements.

Some of manufacturers want to go down this route, and in my opinion, technically it is not the right one, especially according to our experience. That is the reason of this proposal.