8 December 2021

Agreement

Concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations*

(Revision 3, including the amendments which entered into force on 14 September 2017)

Addendum 78 – UN Regulation No. 79

Revision 4 - Amendment 4

Supplement 4 to the 03 series of amendments – Date of entry into force: 30 September 2021

Uniform provisions concerning the approval of vehicles with regard to steering equipment

This document is meant purely as documentation tool. The authentic and legal binding text is: ECE/TRANS/WP.29/2021/14.



UNITED NATIONS

^{*} Former titles of the Agreement:

Agreement concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958 (original version); Agreement concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, done at Geneva on 5 October 1995 (Revision 2).

Annex 8

Paragraph 3.5.1.1., amend to read:

"3.5.1.1. The test vehicle shall be driven in a lane of a straight test track, which has at least two lanes in the same direction of travel, with road markings on each side of the lanes. The vehicle speed shall be: V_{smin} + 10 km/h.

The ACSF of Category C shall be activated (standby mode) and, unless the system is already enabled according to paragraph 5.6.4.8.3., another vehicle shall approach from the rear in order to enable the system as specified in paragraph 5.6.4.8.3. above.

The approaching vehicle shall then pass the vehicle under test entirely.

A lane change into the adjacent lane shall then be initiated by the driver.

The lateral acceleration and the lateral jerk shall be recorded during the test."

Paragraph 3.5.2.1., amend to read:

"3.5.2.1. Minimum activation speed test V_{smin} based on $V_{app} = 130$ km/h.

The test vehicle shall be driven within a lane of a straight track which has at least two lanes in the same direction of travel and road markings on each side of the lane.

The vehicle speed shall be: $V_{smin} - 10 \text{ km/h}$.

The ACSF of Category C shall be activated (standby mode) and, unless the system is already enabled according to paragraph 5.6.4.8.3., another vehicle shall approach from the rear in order to enable the system as specified in paragraph 5.6.4.8.3. above.

The approaching vehicle shall then pass the vehicle under test entirely.

A lane change procedure shall then be initiated by the driver.

The requirements of the test are fulfilled if the lane change manoeuvre is not performed."

Paragraph 3.5.2.2.1., amend to read:

"3.5.2.2.1. The test vehicle shall be driven within a lane of a straight track which has at least two lanes in the same direction of travel and road markings on each side of the lane.

The vehicle speed shall be: $V_{smin} - 10 \text{ km/h}$.

The ACSF of Category C shall be activated (standby mode) and, unless the system is already enabled according to paragraph 5.6.4.8.3., another vehicle shall approach from the rear in order to enable the system as specified in paragraph 5.6.4.8.3. above.

The approaching vehicle shall then pass the vehicle under test entirely.

A lane change procedure shall then be initiated by the driver.

The requirements of the test are fulfilled if the lane change manoeuvre is not performed."

Paragraph 3.5.2.2.2., amend to read:

"3.5.2.2.2. The test vehicle shall be driven within a lane of a straight track which has at least two lanes in the same direction of travel and road markings on each side of the lane.

The vehicle speed shall be: $V_{smin} + 10 \text{ km/h}$.

The ACSF of Category C shall be activated (standby mode) and, unless the system is already enabled according to paragraph 5.6.4.8.3., another vehicle

shall approach from the rear in order to enable the system as specified in paragraph 5.6.4.8.3. above.

The approaching vehicle shall then pass the vehicle under test entirely.

A lane change procedure shall then be initiated by the driver.

The requirements of the test are fulfilled if the lane change manoeuvre is performed."

Paragraph 3.5.3.1., amend to read:

"3.5.3.1. The test vehicle shall be driven in a lane of a straight test track, which has at least two lanes in the same direction of travel, with road markings on each side of the lanes.

The vehicle speed shall be: $V_{smin} + 10 \text{ km/h}$.

The ACSF of Category C shall be activated (standby mode) and, unless the system is already enabled according to paragraph 5.6.4.8.3., another vehicle shall approach from the rear in order to enable the system as specified in paragraph 5.6.4.8.3. above.

The approaching vehicle shall then pass the vehicle under test entirely.

A lane change into the adjacent lane shall then be initiated by the driver.

The steering control shall be firmly controlled by the driver to maintain the vehicle in the straight direction.

The force applied by the driver on the steering control during the overriding manoeuver shall be recorded."

Paragraph 3.5.4.1., amend to read:

"3.5.4.1. The test vehicle shall be driven in a lane of a straight test track, which has at least two lanes in the same direction of travel, with road markings on each side of the lanes.

The vehicle speed shall be: $V_{smin} + 10 \text{ km/h}$.

The ACSF of Category C shall be activated (standby mode) and, unless the system is already enabled according to paragraph 5.6.4.8.3., another vehicle shall approach from the rear in order to enable the system as specified in paragraph 5.6.4.8.3. above.

The approaching vehicle shall then pass the vehicle under test entirely.

A Lane Change Procedure shall then be initiated by the driver.

The test shall be repeated for each of the following conditions, which shall occur before the lane change manoeuvre has started:

- (a) The system is overridden by the driver;
- (b) The system is switched off by the driver;
- (c) The vehicle speed is reduced to: $V_{smin} 10 \text{ km/h}$;
- (d) The driver has removed his hands from the steering control and the hands-off warning has been initiated;
- (e) The direction indicator lamps are manually deactivated by the driver;
- (f) The lane change manoeuvre has not commenced within 5.0 seconds following the initiation of the lane change procedure. (e.g. another vehicle is driving in the adjacent lane in a critical situation as described in paragraph 5.6.4.7.)."

Paragraph 3.5.6.1., amend to read:

"3.5.6.1. The test vehicle shall be driven in a lane of a straight test track, which has at least two lanes in the same direction of travel, with road markings on each side of the lanes.

The vehicle speed shall be: $V_{smin} + 10 \text{ km/h}$.

The ACSF of Category C shall be activated (standby mode) and, unless the system is already enabled according to paragraph 5.6.4.8.3., another vehicle shall approach from the rear in order to enable the system as specified in paragraph 5.6.4.8.3. above.

The approaching vehicle shall then pass the vehicle under test entirely.

The rear sensor(s) shall be made blind, with means agreed between the vehicle manufacturer and the Technical Service, which shall be recorded in the test report. This operation may be carried out at standstill, provided no new engine start /run cycle is performed.

The vehicle shall be driven to a speed of V_{smin} + 10 km/h, and a lane change procedure shall be initiated by the driver."

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