

Annex 7**Text requirements for automatically commanded steering functions****1. General Provisions**

Vehicles fitted with systems of ACSF category B1 shall fulfill the tests requirements of this annex.

2. Test conditions

2.1. The test shall be performed on a flat, dry asphalt or concrete surface delivering good adhesion. The ambient temperature shall be between 0° C and 45° C.

2.2. Lane markings

The lane markings and the width of the lane used in the tests shall be those of one of the Contracting Parties, with the markings being in good condition and of a material conforming to the standard for visible lane markings of that Contracting Party. The lane marking layout used for the testing shall be recorded.

The test shall be performed under visibility conditions that allow safe driving at the required test speed.

2.3. Tolerances

All vehicle speeds specified in the tests shall be met with a tolerance of ± 2 km/h.

3. Tests**3.1. Functionality Test 0 (FU0, Test for lane keeping)**

3.1.1. The vehicle speed shall remain in the range from v_{min} up to v_{max} .

if v_{max} is > 60 km/h:

Drive the vehicle with activated ACSF with a vehicle test speed greater than 60 km/h holding the steering control on a track with curves with road markings at each side of the lane at least with 2 different lateral accelerations selected by the technical service below 90% of $a_{y_{\text{max}}}$.

and

If v_{min} is ≤ 60 km/h:

Drive the vehicle with activated ACSF with at least two different vehicle test speeds equal or less than 60 km/h holding the steering control on a track with curves with road markings at each side.

3.1.2. The requirements of the test are fulfilled if the vehicle does not cross any lane marking.

3.1.3. Data for the whole lateral acceleration and speed range: The Technical Service shall require the manufacturer to deliver data about fulfilling the

test for lane keeping capabilities for the whole lateral acceleration and speed range.

- 3.2. Test for holding the steering control: Drive the vehicle with activated ACSF with $v_{smin} + 10$ km/h on a curved track with road markings at each side of the lane. Release the steering control and continue to drive until the ACSF is deactivated by the system. The track shall be selected such that it contains at least one curve to the left and one to the right and that the lateral accelerations remains below 0.5 m/s^2 or $a_{y_{smax}}$ whatever is lower and that it allows driving with activated ACSF for at least [60 s] without any driver intervention.