

QUESTIONS and AMENDMENTS on Informal document GRRF-82-12-Rev 3**QUESTIONS:**

Question 1: Does the new detailed definition of CSF allow to **approve** LKA systems based on braking according to R79? If not, what must we change for that?

Question 2: On the request of the vehicle manufacturer, does the group confirm the possibility to approve a “LKA system” either as a CSF system or as a ACSF of category B1?

Question 3: In § 5.6.1.1.3. the requirement for ACSF A is “*The system shall be able to be deactivated by the driver at any time.*” and in § 5.6.2.1.2. the requirement for ACSF B1 is “*The vehicle shall be equipped with a means for the driver to activate and deactivate the system. The deactivation shall be possible at any time.*”

Concerning the requirement on the deactivation: Does it mean: without restrictive conditions? Could we consider that the mean to deactivate can be located in the n-th page of the menu, that is to say not easily accessible?

Question 4: For B1 category, § 5.6.2.2.1. says: “If the system is active an optical signal shall be provided to the driver”. Here the meaning of active is not indicated, but it is defined in § 5.6.2.2.5. : (i.e. ready to intervene or intervening). Does it mean wether only one signal is available that the same optical signal shall cover two distinct status considering that the appearance of the signal can change between the both status?

Question 5: Concerning the emergency signal required in § 5.6.2.2.5., it only may intervene after the automatic deactivation of the system. We consider it would be preferable to intervene before. Does it share by the other CPs?

Question 6: In the text we use sometimes “acoustic signal/acoustic warning” and sometimes “acoustical signal/acoustical warning”. Between acoustic and acoustical, which one is more correct? Furthermore, we have in § 5.4.1.3. requirements for “audible warning signal” but we never use audible in other place in the text!
We have too “optical signal” and sometimes “visual signal”. Same concern exists about “tactile signal” and “haptic signal”.

Question 7: Do we exclude the trailers from this amendment of this regulation?

Question 8: The current amendment being a new supplement to Regulation UNECE 79, do we need to include some specific or transitional provisions in order to avoid applying new requirements of supplement 6 to the existing systems of vehicles already type-approved according to supplement 5, especially when they are brought to be modified (extension of approval of UNECE 79)?

AMENDMENTS:

§ 3.2.1., amend to read:

3.2.1. Lane keeping functional test

3.2.1.1. The vehicle speed shall remain in the range from V_{smin} up to V_{smax} .

The test shall be carried out for each speed range specified in paragraph 5.6.2.1.3. of this Regulation separately **or within a larger speed range covering contiguous speed ranges where the $a_{y,smax}$ is identical.**

The vehicle shall be driven.....

Justification: Each couple of lateral acceleration and speed values needs a radius of the curvature. In order to avoid multiplying the number of test configurations we propose the possibility to gather some of them.

§ 3.2.2., amend to read:

3.2.2. Maximum lateral acceleration test

3.2.2.1. The vehicle speed shall remain in the range from V_{smin} up to V_{smax} .

The test shall be carried out for each speed range specified in paragraph 5.6.2.1.3. of this Regulation separately **or within a larger speed range covering contiguous speed ranges where the $a_{y,smax}$ is identical.**

The vehicle shall be driven.....

Justification: Same than above.

§ 3.2.4., amend to read:

3.2.4. Transition test; hands-on test

3.2.4.1. The vehicle shall be driven with activated ACSF with a vehicle test speed between $V_{smin} + 10$ km/h and $V_{smin} + 20$ km/h on a track with lane markings at each side of the lane.

The driver shall release the steering.....

The test shall be repeated with a vehicle test speed between $V_{smax} - 20$ km/h and $V_{smax} - 10$ km/h **or 130 km/h whatever is lower.**

Whether V_{smax} is higher than 140km/h, the manufacturer shall demonstrate through appropriate documentation that the requirements defined in § 3.2.4.2. are fulfilled with a vehicle test speed between $V_{smax} - 20$ km/h and $V_{smax} - 10$ km/h.

Justification: The maximum speed V_{smax} of existing systems can reach 210 km/h, so for performing the test a distance between 3 and 4 km is needed, and then only few Technical Services will be able to check this performance.