

Distr.: General
20 September 2012

English only

Economic Commission for Europe

Inland Transport Committee

Working Party on Road Traffic Safety

Sixty-fourth session

Geneva, 24–27 September 2012

Item 5 (a) of the provisional agenda

Consistency between the Convention on Road Traffic (1968) and Vehicle Technical Regulations

Submitted by the Russian Federation

In the context of amending the 1968 Convention on Road Traffic in the area of driver's ability to control his vehicle, this document suggests changes to version of paragraph 5 of Article 8 presented in ECE/TRANS/WP. 1/2012/8.

Article 8

« 5. Every driver shall at all times to be able to control his vehicle or to guide his animals.

Driver assistance systems with an influence on the way the vehicle is driven shall not be considered contrary to the principles mentioned in paragraph 1 and 5 of this Article and paragraph 1 of Article 13, when

- (a) system actions can be easy to override at any time under normal driving situations and when collisions are avoidable;
- (b) system can take actions intended to avoid and/or mitigate the crash severity when a collision is determined to be imminent;
- (c) Driver can be provided with clear feedback informing him when the system is actively controlling the vehicle;
- (d) Driver is informed of the conditions when system operation is malfunctioning or if when there is a failure;
- (e) Driver is informed of the conditions when system operation is not guaranteed;

(f) Driver is notified of any system initiated transfer of control between the driver and vehicle.

Justification

Driving conditions can be classified as normal and critical ones. Normal driving refers to situations that do not require immediate responses from the driver and/or vehicle to avoid a collision. Critical driving refers to situations that do require immediate responses from the driver and/or vehicle to avoid or mitigate a collision.

During normal driving, the system should be capable of being overridden by the driver using simple, deliberate action(s) at any time.

In critical driving situations where the driver has not taken proper avoidance actions because of impairment, distraction, inattention, or other unforeseen incidents, it should be possible to apply system intervention to try to avoid the collision or mitigate the crash severity.

When the system is malfunctioning or has failed, the driver should be informed of the system status. This is needed to avoid any misunderstanding by the driver that the system is still working.

When the system is not fully functioning, for example, the sensor performance is impaired under certain driving conditions such as rain or when road markings are not visible, the driver should be informed of the status to allow a smooth transfer of control to the driver.

Transfer of control between the driver and the vehicle would be the point when automation is realized. Any transfer of control should be transparent to the driver, but at the very least, the driver should be notified of any transfer initiated by the system so the driver is always aware if they have control of the vehicle.
