

Proposal for a draft Amendment to the Framework document on automated/autonomous vehicles ECE/TRANS/WP.29/2019/34rev1

Submitted by the experts from the International Organization of Motor Vehicle Manufacturers and European Association of Automotive Suppliers

The text reproduced below was prepared by the experts from the European Association of Automotive Suppliers (CLEPA). It contains a proposal for amendments to the Framework document on automated/autonomous vehicles ECE/TRANS/WP.29/2019/34rev1 and is submitted to WP.29 for consideration at the November 2019 session. This text proposes a supplement to the agreed priorities and principles to strengthen aspects of System Safety and its validation by adding necessary work items in the field of Passive Safety.

1. Background

It is recognised that for automated vehicles to fulfil their potential to improve road transport, the safety of passengers and other road users is a key aspect and central enabler for its success. It is proposed to add the field of passive safety of occupants in vehicles driven in automated or autonomous modes to the Framework document on automated/autonomous vehicles ECE/TRANS/WP.29/2019/34rev1. Interior concepts of such vehicles could offer additional degrees of freedom in seating and orientation for driver and passenger(s), whereas as long as the driver is not concerned, current/conventional vehicles could be affected too.

2. Proposal

To add a new sub-paragraph 9(n) as follows :

"n. *Extended Occupant Safety Systems: To demonstrate a reasonable safety level for occupants in seating positions derived from variations of nominal seating positions and orientations (including Child Restraint Systems) to cover new mobility aspects e.g. automated/autonomous vehicles.*

3. Justification

Interior and restraint systems in vehicles today are tested in defined nominal seating positions, described by the intended use of vehicle. As the intended use of vehicles will change due to new mobility concepts of automated and autonomous vehicles, care needs to be taken that also new definitions of the intended seating position and posture of occupants are described and allowed when a reasonable level of safety is provided.

It is therefore proposed to include an extension on interior and passive safety, their adapted definition and technical provisions into the Framework document of WP.29 on automated and autonomous vehicles.

Initially this can be mentioned at the end of paragraph 9 (i.e. Additional issues not listed in the currently agreed WP29 priorities), in order to initiate a discussion among the experts who can in due time move this important safety aspect to the priority list at the beginning of paragraph 9 (i.e. Key issues and principles to be considered by WP29 subsidiary bodies as a priority).