

PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 13

Note: The text reproduced below was prepared by the expert from the United Kingdom in order to propose an amendment to Regulation No. 13 regarding the draft provisions for electronically controlled vehicle stability enhancement systems (ECE/TRANS/WP.29/GRRF/2006/34).

A PROPOSAL

Paragraph 2.32.2.1., amend to read:

"2.32.2.1. "Directional control" means a function within a vehicle stability function that assists the driver, **in the event of under steer and over steer conditions**, within the physical limits of the vehicle in maintaining the direction intended by the driver in the case of a power-driven vehicle, and assists in maintaining the direction of the trailer with that of the towing vehicle in the case of a trailer."

Proposed Annex 21

**SPECIAL REQUIREMENTS FOR CERTAIN VEHICLES
EQUIPPED WITH A VEHICLE STABILITY FUNCTION**

Paragraph 2.1.3., amend to read:

"**2.1.3.** - - - This may be carried-out other than at the time of type approval.

As a means of demonstrating the vehicle stability function any of the following dynamic manoeuvres shall be used *:

Directional Control	Roll-Over Control
Reducing radius test	Steady state circular test
Step steer input test	J-turn
Sine with dwell	
J-turn	
μ-split single lane change	
Double lane change	
Reversed steering test or "fish hook" test	
Asymmetrical one period sine steer or pulse steer input test	

To demonstrate repeatability the vehicle will be subject to a second demonstration using the selected manoeuvre(s).

* **Should the use of any of the above defined manoeuvres not result in loss of directional control or roll-over as appropriate an alternative manoeuvre may be used in agreement with the technical service."**

Paragraph 2.2.3., amend to read:

"2.2.3. - - - This may be carried-out other than at the time of type approval.

As a means of demonstrating the vehicle stability function any of the following dynamic manoeuvres shall be used *:

Directional Control	Roll-Over Control
Reducing radius test	Steady state circular test
Step steer input test	J-turn
Sine with dwell	
J-turn	
μ-split single lane change	
Double lane change	
Reversed steering test or "fish hook" test	
Asymmetrical one period sine steer or pulse steer input test	

To demonstrate repeatability the vehicle will be subject to a second demonstration using the selected manoeuvre(s).

* Should the use of any of the above defined manoeuvres not result in loss of directional control or roll-over as appropriate an alternative manoeuvre may be used in agreement with the technical service."

B. JUSTIFICATION

This amendment to the draft EVSC proposals to ECE Regulation No. 13 is to remove any mis-interpretations. The aim is to clarify that at least one dynamic manoeuvre is required to demonstrate both the under steer and over steer conditions in relation to directional control and at least one to demonstrate roll-over control.

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