

Amended GRRF Ad-hoc Electronic Vehicle Stability Control Working Group
Document as a result of 15th April 2005 meeting.

Based upon Document EVSC 04-01 Rev 3 – changes highlighted in yellow (old paragraphs 2.28. and 2.29. combined, old paragraph 5.2.1.31.4. included in paragraph 5.2.1.31.2., annex 2 simplified, annex 19 brought in line).

WABCO remarks in blue

Proposed amendments to ECE Reg.13

•
•
•

F Towing vehicle – trailer stability compatibility

Towing vehicle		Semi-trailer			Centre axle trailer			Full (drawbar) trailer		
		Without ABS	With ABS	With RSF	Without ABS	With ABS	With RSF	Without ABS	With ABS	With RSF
Tractor	Without ABS	OK	OK	_(¹)						
	With ABS	OK	OK	OK						
	With VSF	OK	OK	OK						
Truck	Without ABS				OK	OK	_(¹)	OK	OK	_(¹)
	With ABS				OK	OK	OK	OK	OK	OK
	With VSF				? ⁽²⁾	? ⁽²⁾	? ⁽²⁾	? ⁽³⁾	? ⁽³⁾	? ⁽³⁾

OK = no problem regarding the braking interaction of the combination vehicle

Notes:

- (1) Roll stability function (RSF) not functional due to no power supply – no ISO 7638 connector on towing vehicle. Stability of combination vehicle not effected – therefore, OK.
- (2) Identification problem between centre axle trailer and full trailer. Centre axle trailers behave as semi-trailers – therefore, OK; but full trailer behaviour is a potential problem due to rotational freedom between front axle(s) and rear axle(s) (see note 3).
- (3) Due to the rotational freedom between the front axle(s) and the rear axle(s) it ~~may be~~ advisable is permitted to automatically switch-off the truck vehicle stability function (VSF) when a full trailer is coupled so that possibility of trailer swing is minimised when the vehicle stability function comes into operation. Not clear if both directional control and roll-over control would be switched off, or only directional control.
In case of towing vehicles it is permitted to switch-off (not automatically) the truck vehicle stability function (VSF) if a full trailer is coupled so that the possibility of trailer swing is prevented in case of VSF is working/controlling.