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World Forum for Harmonization of Vehicle Regulations

Working Party on Brakes and Running Gear

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Item 2 of the provisional agenda
Advanced Emergency Braking Systems

Proposal for 01 Series of amendments to the Draft Regulation on advanced emergency braking systems

Submitted by the Informal group on Advanced Emergency Braking and Lane Departure Warning Systems *

The text reproduced below was prepared by the Informal group on Advanced Emergency Braking and Lane Departure Warning Systems (AEBS/LDWS) to propose a draft 01 series of amendment to the AEBS regulation, following the"1-Regulation" approach. The provisions subject to decision are indicated between [square brackets].

^{*} In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208/, para. 106 and ECE/TRANS/2010/8, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

I. Proposal

Insert a new paragraph 12., to read:

[12. Transitional provisions

- [12.2. Contracting Parties applying **[the 00 Series of Amendments to]** this Regulation shall not be prohibited from granting UNECE type approvals and extensions of UNECE type approvals to the 00 series of amendments to this Regulation.]
- [12.3. As from the official date of entry into force of the 01 series of amendments, no Contracting Party applying this Regulation shall refuse national or regional type approval of a vehicle type approved to the 01 series of amendments to this Regulation.]
- [12.4. As from the official date of entry into force of the 01 series of amendments, no Contracting Party applying this Regulation shall refuse first national or regional registration of a vehicle which complies with the requirements of the 01 series of amendments to this Regulation.]
- [12.5. Until [1 November 2016 / 1 November 2012], no Contracting Party applying this Regulation shall refuse national or regional type approval of a vehicle type approved to the 00 series of amendments to this Regulation.]
- [12.6. Until [1 November 2020 / 1 November 2018] [1 November 2020 / 1 November 2014], no Contracting Party applying this Regulation shall refuse first national or regional registration of a vehicle which complies with the requirements of the 00 series of amendments to this Regulation.]

$\hbox{``Warning and activation test requirements-- pass/fail values''}\\$

A	В	C	D	E	F	G	Н	
	Sta	tionary target		Moving target				
	Timing of warning modes		Speed	Timing of warning modes		Speed	Target speed	
	At least 1 haptic	At least 2	reduction	At least 1	At least 2	reduction	(ref.	
	or acoustic	(ref.	(ref.	haptic or	(ref.	(ref.	paragraph	
	(ref. paragraph	paragraph	paragraph	acoustic	paragraph	paragraph	6.5.1.)	
	6.4.2.1.)	6.4.2.2.)	6.4.4.)	(ref.	6.5.2.2.)	6.5.3.)		
				paragraph				
				6.5.2.1.)				
M_3 and N_3	Not later than	Not later	Not less than	Not later	Not later than	No impact	$12 \pm 2 \text{km/h}$	1
<u>1</u> /, [3/]	1.4 s. before	than 0.8 s.	20 km/h	than [1.4]s.	0.8 s. before			
	start of	before start		before start	start of			
	emergency	of		of	emergency			
	braking phase	emergency		emergency	braking phase			
		braking		braking				
		phase		phase				
$N_2>8$ t	Not later than	Not later	Not less than	Not later	Not later than	No impact	$12 \pm 2 \text{km/h}$	2
[3/]	1.4 s. before	than 0.8 s.	20 km/h	than [1.4] s.	0.8 s. before			
	start of	before start		before start	start of			
	emergency	of		of	emergency			
	braking phase	emergency		emergency	braking phase			
		braking		braking				
		phase		phase				
$N_2 \leq 8 t$	[No restriction	[No	[0 km/h ^b]	[No time	[Not later than	[0 km/h ^d]	$[12 \pm 2 \text{km/h}]$	3
and	regarding timing	restriction		restriction]	1.4 s. before			
M_2	and warning	regarding			start of			
2/, 4/	modes ^a]	timing and			emergency			
		warning			braking phase			
		modes ^a]			^c]			
	or	or	or	or	or	or	or	
	[Blank]	[Blank]	[Blank]	[Blank]	[Blank]	[Blank]	[Blank]	

1/	Vehicles of category M3 with hydraulic braking system are subject to the requirements of row 3.					
2/	Vehicles with pneumatic braking system are subject to the requirements of row 1					
[3/	applicable only to vehicles with pneumatic rear axle suspension]					
4/	Reservation from J for light M2/N2 vehicles					
a	For zero speed reduction, start of emergency braking phase is time to collision. In this case, paragraph 6.4.3. does not apply.					
b	Speed reduction optional.					
c	For zero speed reduction, start of emergency braking phase is time to collision.					
d	In this case, paragraph 6.5.3. does not apply. Speed reduction optional."					

3