Proposal for amendments to the new UN Regulation on advanced emergency braking systems

Submitted by the experts from the International Organization of Motor Vehicle Manufacturers

The text reproduced below was prepared by the experts from the International Organization of Motor Vehicle Manufacturers (OICA) to introduce AEBS on vehicles equipped with rigid rear axle suspension, as requested by the informal group on AEBS/LDWS (see item 3 in document AEBS/LDWS-15-08). Modifications to ECE/TRANS/WP.29/2011/92 and ECE/TRANS/WP.29/2011/93 are marked in bold for new characters.

I. Proposal

Amendment to TRANS/WP 29/2011/92 (00 Series)

Paragraph 1, amend to read:

"1. Scope and purpose

This Regulation applies to the approval of vehicles of category\textsuperscript{1} \textsuperscript{1}. M\textsubscript{2}.

(a) N\textsubscript{2} above 8 tons,
(b) M\textsubscript{3} and
(c) N\textsubscript{3}

equipped with a pneumatic or Air over Hydraulic braking system with regard to an on-board system to avoid or mitigate the severity of a rear-end in lane collision"

Paragraph 5.1.1., amend to read:

"5.1.1. Any vehicle \textbf{equipped with a pneumatic rear-axle suspension and} with an AEBS complying with the definition of paragraph 2.1. shall meet the performance requirements contained in paragraphs 5.1. to 5.6.2. of this Regulation and shall be equipped with an anti-lock braking function in accordance with the performance requirements of Annex 13 of Regulation No.13.

Vehicles equipped with another type of rear suspension may also be type approved provided that the requirements contained in paragraphs 5.1. to 5.6.2. are fulfilled."

\textsuperscript{1} As defined in section 2 of the Consolidated Resolution on the Construction of Vehicles (R.E.3) (document ECE/TRANS/WP.29/78/Rev.2).
Annex 3, the table, row 3 shall be deleted.

Annex 3, footnote 2 and references to footnote 2 shall be deleted.

Annex 3, footnote 4 and references to footnote 4 shall be deleted.

Annex 3, footnotes a to d and references to footnotes a to d shall be deleted.

Rerumber the remaining footnotes accordingly.

Amendment to TRANS/WP 29/2011/93 (01 Series)

This proposal from OICA is provisional that the 01 Series of amendments is required for new types not before 1 November 2016. It also assumes that the proposals submitted by the informal group as a result of its 16th meeting are endorsed by GRRF-71.

Paragraph 1, amend to read (footnote 2 remains unchanged):

“1. Scope and purpose

This Regulation applies to the approval of vehicles of category M\text{2}, N\text{2}, M\text{3} and N\text{3} with regard to an on-board system to avoid or mitigate the severity of a rear-end in lane collision.”

Paragraph 5.1.1., amend to read:

“5.1.1. Any vehicle equipped with a pneumatic rear axle suspension and with an AEBS complying with the definition of paragraph 2.1.1. shall meet the performance requirements contained in paragraphs 5.1 to 5.6.2. of this Regulation and shall be equipped with an anti-lock braking function in accordance with the performance requirements of Annex 13 of Regulation No.13.

Vehicles equipped with another type of rear suspension may also be type approved provided that the requirements contained in paragraphs 5.1 to 5.6.2 are fulfilled.”

Annex III, row 2 of the table (vehicles of categories N\text{2} < 8 tons and M\text{3}), amend to read:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationary target</td>
<td>Timing of warning modes</td>
<td>Speed reduction</td>
<td>Moving target</td>
<td>Timing of warning modes</td>
<td>Speed reduction</td>
<td>Target speed (ref. paragraph 6.5.1.)</td>
<td></td>
</tr>
<tr>
<td>At least 1 haptic or acoustic (ref. paragraph 6.4.2.1.)</td>
<td>At least 2 (ref. paragraph 6.4.2.2.)</td>
<td>(ref. paragraph 6.4.4.)</td>
<td>At least 1 haptic or acoustic (ref. paragraph 6.5.2.1.)</td>
<td>At least 2 (ref. paragraph 6.5.2.2.)</td>
<td>(ref. paragraph 6.5.3.)</td>
<td>(ref. paragraph 6.5.1.)</td>
<td></td>
</tr>
<tr>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td></td>
</tr>
<tr>
<td>(N\text{2} \leq 8) t and (N\text{3} \leq 2)</td>
<td>[4]/</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
[4/] Until 1 November 2016, values will be specified by the vehicle manufacturer. During this period, no test requirement with regard to timing, warning modes or speed reduction will apply, provided that the specifications of paragraph 5 of this regulation are met.

The warning and activation test requirements in Columns B to H applicable to the vehicles of Column A will be defined by GRRF at least 36 months before 1 November 2016.

Annex 3, footnote 3 and references to footnote 3 shall be deleted.

Annex 3, footnotes a to d and references to footnotes a to d shall be deleted.

Renumber the remaining footnotes accordingly.

II. Justification

1. The proposal was constructed following a request from the 16th meeting of the informal group on AEBS/LDWS, in accordance with a proposal from the Chair to delay the introduction of requirements for vehicles of categories N2≤8 t and M2 at the 2nd step of the AEBS introduction (01 Series of amendments to the AEBS regulation).

2. It assumes that the rows 1 and 2 have been merged and that the footnote N°4 (current) is deleted.

3. It simultaneously introduces a commitment from GRRF to start the work for requirements for these vehicles in the 01 series of amendments, and clarifies the status of these vehicles during the meantime.