## Proposal for a supplement to the 02 series of amendments to UN Regulation No. 152 (Advanced Emergency Braking System (AEBS) for M1 and N1 vehicles)

The text reproduced below was prepared by the expert from Australia proposing a supplement to the 02 series of amendments to United Nations Regulation No. 152 (Advanced Emergency Braking System (AEBS) for  $M_1$  and  $N_1$  vehicles). The proposed amendments seek to clarify requirements in the scope requesting for reciprocal recognition with United Nations Regulation No. 131 (Advanced Emergency Braking Systems (AEBS). This proposal is based on informal document WP.29-191-23 presented at the 191st session of WP.29 in November 2023. The modifications to the current text of the Regulation are marked in bold or strikethrough characters.

## I. Proposal

Amend Section 1., to read:

## 1. Scope

This Regulation applies to the approval\* of vehicles of Category  $M_{\rm l}$  and  $N_{\rm h}{}^+$  with regard to an on board system to

- (a) Avoid or mitigate the severity of a rear end in lane collision with a passenger car,
- (b) Avoid or mitigate the severity of an impact with a pedestrian.

\* This Regulation also offers an alternative set of requirements for vehicles of Category M<sub>2</sub>, and for those of Categories M<sub>3</sub>/N<sub>2</sub> with a maximum weight below or equal to 8 tons, equipped with hydraulic braking, to those contained in UN Regulation No. 131.

For the vehicles described above, Contracting Parties that apply both UN Regulation No. 131 and this Regulation recognise approvals to either regulation as equally valid."

This Regulation applies to the following vehicles:

- Vehicles of category M<sub>1</sub> or N<sub>1</sub><sup>1</sup>
- Alternatively, vehicles of categories M<sub>2</sub> and for those of categories M<sub>3</sub> and N<sub>2</sub> with a maximum mass not exceeding 8,000 kg equipped with hydraulic brakes and at the manufacturer's discretion, approvals may be granted under this Regulation instead of the requirements of UN Regulation No 131.

Where equipped with an on-board system to:

<sup>&</sup>lt;sup>1</sup> As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.6, para. 2 https://unece.org/transport/standards/transport/vehicle-regulations-wp29/resolutions

- (a) avoid or mitigate the severity of a rear-end in-lane collision with a passenger car.
- (b) avoid or mitigate the severity of an impact with a pedestrian.

## II. Justification

1. At the 191st session of WP.29, the representative of Australia sought to clarify the type-approval process concerning the reciprocal recognition of UN Regulation No. 131 – Advanced Emergency Braking Systems (AEBS), 02 series of amendments and UN Regulation No. 152 – Advanced Emergency Braking System (AEBS) for  $M_1$  and  $N_1$  vehicles.

2. UN Regulation No. 152, Supplement 3 to the 02 series of amendments includes references to UN Regulation No. 131, requiring Contracting Parties that are signatories to both Regulations to recognise approvals to either Regulation as equally valid for vehicles of category  $M_2$ , and for those of category  $M_3/N_2$  with a maximum weight below or equal to 8t, equipped with hydraulic braking.

3. While supportive of the intent of recognising some UN Regulation No. 152 approvals for UN Regulation No. 131, the expert from Australia believes the operational details of this reciprocal recognition is unclear. This is because UN Regulation No. 131, applies to the approval of vehicles of categories  $M_2$ ,  $M_3$ ,  $N_2$  and  $M_3$ , whereas UN Regulation No. 152 is only applicable to vehicles of category  $M_1$  and  $N_1$ . This means that vehicles of categories  $M_2$ ,  $M_3$  and  $N_2$  should not be able to recognise type-approvals to UN Regulation No. 152 or vice-versa, at least without clearer constraints between the relation between the vehicle approved to UN Regulation No. 152 and the vehicle to be approved to UN Regulation No. 131.

4. Additionally, the unit of mass of 8 tons is an imperial unit of measurement which equates to 12.2 metric tonne. Australian suggest using the appropriate SI unit to clarify the intended mass of 8 tonne or 8,000 kg.

5. To provide additional clarity to the conditions of the reciprocal recognition, the expert from Australia recommends to amend the scope of UN Regulation No. 131 by incorporating the footnote into the actual text of the scope to provide clarity.

6. The alternative option proposed is to repeal the reciprocal arrangement introduced in the 02 series of amendments by deleting the paragraph under \* if these approval arrangements cannot be justified.