

Proposal for supplement 3 to the 04 series of amendments to UN Regulation No. 11 (Door latches and hinges)

The text reproduced below was prepared by the expert from Germany on behalf of the TF GRSP AVRS, to enable the application of the regulation to vehicles equipped with an ADS ADS[F-2]. The modifications to the existing text of the UN Regulation are marked in bold for new or strikethrough for deleted characters.

I. Proposal

Insert a new paragraph 0., to read:

“0. Introduction

For supplement 3 to the 04 series of amendments:

The Regulation is amended to account for vehicles of category X. The scope is updated to reflect that this Regulation does not apply to vehicles of category Y, since no occupants are inside the vehicle under any circumstances.

0.1.2. The Regulation was originally drafted for vehicles with driver and manual driving controls and it is the intention of this new amendment to keep the spirit of the regulation and to extend its application to vehicles without driver and manual driving controls. In the absence of driver/manual driving controls, provisions related to them shall not be taken into account if not already covered by this amendment.

0.1.3. In case of vehicles with an ADS where those vehicles are also equipped with a manual driving mode operating at a speed of more than 6 km/h it is expected that in the manual driving mode the technical requirements can be applied as they would for a conventional vehicle. In a mode where an ADS feature is active the relevant ADS requirements have to be fulfilled.”

Paragraph 1., amend to read:

“1. Scope: This Regulation applies to vehicles of categories M₁ and N₁ with respect to latches and door retention components such as hinges and other supporting means on doors, which can be used for the entry or exit of the occupants and/or can present the risk of occupants being thrown from a vehicle as a result of impact.

This regulation does not apply to vehicles of category Y.”

Paragraph 1., footnote 1, amend to read:

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

Paragraph 2.9., amend to read:

“2.9. "Door closure warning system" is a system that will activate a visual signal located where it can be clearly seen by the driver, or will transmit a logical signal to the ADS[F-2] (if applicable), when a door latch system is not in its fully latched position and while the vehicle ignition is activated.”

Paragraph 2.24., amend to read:

“2.24. "Side front door" is a door that, in a side view, has 50 per cent or more of its opening area forward of the rearmost point on the driver's seat back, when the seat back is adjusted to its most vertical and rearward position, providing direct

access for passengers to enter or depart the vehicle; **in case of vehicles with an ADS[F-2], the front-most seat back is considered instead of the driver's seat back.**"

Paragraph 2.25., amend to read:

- "2.25. "Side rear door" is a door that, in a side view, has 50 per cent or more of its opening area to the rear of the rearmost point on the driver's seat back, when the driver's seat is adjusted to its most vertical and rearward position, providing direct access for passengers to enter or depart the vehicle; **in case of vehicles with an ADS[F-2], the front-most seat back is considered instead of the driver's seat back.**"

[Insert new paragraphs 2.28. to 2.29., to read

- "2.28. "ADS feature of type 1 (ADSF-1)" means an ADS¹ feature which includes an ADS fallback response requiring a fallback user
- 2.29. "ADS feature of type 2 (ADSF-2)" means an ADS feature which does not include an ADS fallback response requiring a fallback user."]

Insert new paragraph 5.3., to read

- "5.3 For vehicles whilst an ADS[F-2] [feature] is active while carrying occupants, a door closure warning system shall transmit a logical signal to the ADS[F-2], provided the ADS complies with the technical requirements of UN Regulation No [XXX]."

Paragraph 6.3.2., amend to read:

- "6.3.2. ~~Rear~~-Side Doors

Each ~~rear~~ side **rear** door shall be equipped with at least one locking device which, when engaged, prevents operation of the interior door handle or other interior latch release control and requires separate actions to unlock the door and operate the interior door handle or other interior latch release control.

For vehicles whilst an ADS[F-2] [feature] is active while carrying occupants, all doors adjacent to a seating position suitable for the transport of children shall be equipped with such locking device."

Paragraph 6.3.2.1., amend to read:

- "6.3.2.1. "The locking device may be a:
- (a) A ~~C~~child safety lock system; or
 - (b) A lock release/engagement device located within the interior of the vehicle and readily accessible to the driver of the vehicle ~~or an occupant seated adjacent to the door~~; or
 - (c) A lock release/engagement device readily accessible to the occupant adjacent to the door, or
 - (d) A lock release/engagement device controlled by the ADS for vehicles whilst an ADS[F-2] [feature] is active and while carrying occupants, provided the ADS complies with the technical requirements of UN Regulation No [XXX]. Means shall be installed to facilitate the egress of all occupants in an emergency case."

Paragraph 6.3.2.2., amend to read:

- "6.3.2.2. Either system described in paragraph 6.3.2.1. (a) (b) and (c) shall be permitted as an additional locking feature. **For vehicles whilst an ADS[F-2] [feature] is active and while carrying occupants, either system described in paragraph 6.3.2.1. (a), (c) and (d) shall be permitted as an additional locking feature.**"

Annex 1, insert new paragraphs 9.1., to read:

“9.1. Vehicle is equipped with ADSF-2? Yes/No/Optional”

Annex 4, paragraph 2.2.3.3., amend to read:

“2.2.3.3. Transverse setup 1. Orient the vehicle or body in white so that its transverse axis is aligned with the axis of the acceleration device, simulating a ~~driver left~~ **hand-side** impact.”

Annex 4, paragraph 2.3.3.3., amend to read:

“2.3.3.3. Transverse setup 1. Orient the door subsystem(s) on the acceleration device in the direction of a ~~driver left~~ **hand-side** impact.”

II. Justification

See paragraph 0. in the proposal.
