

Proposal for new series of amendments to UN Regulations 16 and 14

Background and scope of the proposal

- After discussions in several GRSP meetings (66th -71st) Finland has prepared a proposal to add new series of amendments to UN Regulations 14 and 16 to remove the derogations for two-point safety belts.
- Earlier discussions have included introduction of seat belt reminder requirements for M₃ category vehicles. This is not included in this proposal.
- Earlier discussions have included ideas of changing of the UN Regulation 80 due to different strike point of three-point and two-point belt restrained passenger. The usage of three-point belts is possible at the moment with current wording of the UN Regulations and that is why the UN Regulation 80 changes are not taken onboard.

Changes proposed to UN Regulation 16

- *Paragraph 8.1.7. to 8.1.7.4., amend to read:*
- "8.1.7. Every seating position in Annex 16 marked with the symbol ●, three-point belts of a type specified in Annex 16 shall be provided unless ~~one of~~ the following conditions is fulfilled, in which case two-point belts of a type specified in Annex 16 may be provided.
- ~~8.1.7.1. There is a seat or other vehicle parts conforming to paragraph 3.5. of Appendix 1 to UN Regulation No. 80 directly in front; or~~
- 8.1.7.21. No part of the vehicle is in or, when the vehicle is in motion, capable of being in the reference zone; ~~or.~~
- ~~8.1.7.3. Parts of the vehicle within the said reference zone comply with the energy absorbing requirements set out in Appendix 6 of UN Regulation No. 80.~~
- 8.1.7.42. Paragraphs 8.1.7.1. ~~to 8.1.7.3.~~ shall not apply to a driver's seat."
- Similar changes are proposed to UN Regulation 14 (paragraph 5.3.5.).

Transitional provisions

- Transitional provisions are prepared according to guidelines with the following dates in square brackets: (example from the proposal for the UN Regulation 16)
- **15.6.2. As from 1 September [2025], Contracting Parties applying this Regulation shall not be obliged to accept type approvals to the preceding series of amendments, first issued after 1 September [2025].**
- **15.6.3. Until 1 September [2027], Contracting Parties applying this Regulation shall accept type approvals to the preceding series of amendments, first issued before 1 September [2025].**
- **15.6.4. As from 1 September [2027], Contracting Parties applying this Regulation shall not be obliged to accept type approvals issued to the preceding series of amendments to this Regulation.**

Justifications

- 1. As presented in documents GRSP-71-07 and GRSP-70-06 the two-point belts offer only limited level of safety compared to three-point belts especially in case of frontal collision.
- 2. Based on the GRSG-109-03 about one third of the bus collisions in Europe are frontal collisions. Frontal collisions have relatively high Accident Casualty Rates (number of casualties in one accident).
- 3. Based on the accident data from the Karkkila accident (presented in GRSP-70-06) the level of safety offered by two-point belts is not sufficient.
- 4. Based on the document GRSP-70-07 (Estimate of the cost and impact of three-point seat belts in buses in Finland) equipping the buses with three-point safety belts is a cost effective way to increase safety of the passengers.
- 5. Three-point safety belts are widely used in passenger cars and the literature supports the usage of three-point belts also in buses.