

Summary of the transposition of gtr no. 14 (Pole Side Impact) into a draft new UN Regulation

Submitted by the expert from Australia

Background

1. At the fifty-third session of the Working Party on Passive Safety (GRSP) in May 2013, GRSP recommended that a proposal (ECE/TRANS/WP.29/GRSP/2013/7, as amended by Annex II of ECE/TRANS/WP.29/GRSP/53) for the establishment of a new global technical regulation on pole side impact, be submitted to the Executive Committee of the 1998 Agreement (AC.3) for consideration and voting at its November 2013 session. At this session of GRSP, Australia also volunteered to transpose the gtr into a proposal for a new UN Regulation.
2. At the 161st session of the World Forum for the Harmonization of Vehicle Regulations in November 2013, AC.3 established the global technical regulation on pole side impact (the gtr) in the UN Global Registry (ECE/TRANS/WP.29/1106).
3. At the fifty-fourth session of GRSP in December 2013, Australia submitted a draft proposal (GRSP-54-14) for a new UN Regulation on Pole Side Impact, including a 01 series of amendments to the new Regulation, for comment by delegates. GRSP agreed that the gtr (ECE/TRANS/180/Add.14) should be transposed into a new UN Regulation. Australia invited interested delegates to participate in an online drafting meeting (to be held in early February) to finalise the working document(s) to be submitted for consideration at the May 2014 session of GRSP.
4. An online drafting meeting was held on 13 February 2014 and an amended draft was circulated for comment. Following this, Australia submitted proposals for a new UN Regulation (ECE/TRANS/WP.29/GRSP/2014/9) and a 01 series of amendments to the new Regulation (ECE/TRANS/WP.29/GRSP/2014/12).

Key elements of the draft transposition

5. The draft transposition is fully consistent with the gtr, being either derived from Part II. (Text of Regulation) or based on the discussion in Part I (Statement of technical rationale and justification), where issues of transposition were specifically considered. It also incorporates standard provisions for type approval.
6. The scope of the draft UN Regulation defines the vehicles, in terms of the UN vehicle categories defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.) document (ECE/TRANS/WP.29/78/Rev.3), for which approvals can be issued (i.e. those for which it applies or for which approvals may be issued if requested by the manufacturer) and for which approvals must be accepted by Contracting Parties applying the Regulation. In accordance with the General guidelines on the scope of UN Regulations recommended by WP.29 in document ECE/TRANS/WP.29/1044/Rev.1, the scope does not dictate the vehicle categories for which the technical requirements of a UN Regulation on Pole Side Impact should be mandated. This should be dealt with nationally/regionally by Contracting Parties. See particularly paragraph 48 of the gtr.

7. Category N1 vehicles include a wide variety of construction types, including passenger car derived light commercial vehicles, pick-ups and one-box vans. The classification of Category N1 vehicles specified at paragraph 1.1 b) (scope) of the draft UN Regulation establishes a sub-group of Category N1 vehicles for which the benefits of a pole side impact regulation would generally be expected to be significantly higher than the Category N1 vehicles that fall outside this sub-group. For further detail/explanation refer to paragraphs 49-52 of the gtr.

8. Paragraph 7.2 of Annex 1 of the gtr regulatory text provides an option for Contracting Parties to reduce the test speed to 26 km/h for vehicles with a width of 1.50 m or less. The background/rationale for including this Contracting Party option in the gtr is provided at paragraphs 63-69 of the gtr.

9. The draft new UN Regulation in its original form (ECE/TRANS/WP.29/GRSP/2014/9) allows narrow vehicles (those with a width of 1.5 m or less) to be tested at 26 -0/+7 km/h, instead of the 32 ± 1 km/h required for other vehicles. It is envisaged that ongoing issue of these approvals would be allowed, but in accordance with article 12 of the 1958 Agreement, Contracting Parties would not be obliged to accept them (i.e. approvals would be of limited recognition).

10. A 01 series of amendments (ECE/TRANS/WP.29/GRSP/2014/12) to the draft new Regulation has been proposed in which the approval test would be required to be conducted at a test speed of 32 ± 1 km/h, regardless of the vehicle width. Approvals issued in accordance with the proposed 01 series of amendments would need to be accepted by all Contracting Parties applying the Regulation (i.e. approvals would be mutually recognised).

11. It is envisaged that the draft new Regulation and 01 series of amendments would be voted on by the Executive Committee of the 1958 Agreement (AC.1) and enter into force at the same time (note: a similar approach has previously been taken for UN R131 – Advanced Emergency Braking Systems).

12. Administrative provisions for UN type approval (e.g. application for approval, approval, conformity of production, communication and arrangement of approval mark) and definitions to support these provisions (e.g. approval of a vehicle type, manufacturer, type of protective system, vehicle type), have been included.

13. The gtr does not specify a side of the vehicle for the pole test to be conducted on. This allows for this to be specified as appropriate for manufacturer self-certification and type approval based regulatory systems. The provisions of paragraph 5.1. of the draft UN Regulation have (similar to UN R95) been drafted such that the approval test will be conducted on the driver's side, unless the side opposite the driver's side is considered by the Approval Authority to be the least favourable (worst case) side.

14. Post-crash hydrogen/helium leakage limits and gas concentration (hydrogen/helium) by volume in air limits for compressed hydrogen fuelled vehicles have been transcribed from the gtr on hydrogen and fuel cell vehicles (ECE/TRANS/180/Add.13) into the draft new UN Regulation on Pole Side Impact. Compressed hydrogen fuelled vehicle preparation and leak test measurement methods from the gtr on hydrogen and fuel cell vehicles have been transposed into a consolidated test preparation and measurement procedure (Annex 6) in the proposed new UN Regulation on Pole Side Impact. These transposed requirements reflect the compressed hydrogen fuel system integrity provisions included in the gtr on Pole Side Impact by reference to the gtr on hydrogen and fuel cell vehicles.

Changes since the fifty-fourth (December 2013) session of GRSP

15. Contracting Parties involved in the online meeting of 13 February 2014 supported the removal of square brackets from the scope initially proposed in informal document GRSP-54-14.

16. Square brackets have been removed from the commencement date for the transitional provisions for the 01 series of amendments.

17. The Annex 11 (relating to simplified testing where there are modifications to the vehicle type) originally provided for in informal document GRSP-54-14 has been deleted (on the basis of industry and Contracting Party comments) in favour of allowing Approval Authorities, by consequential amendment of paragraph 6, discretion to determine whether modifications made to an approved vehicle type should necessitate further tests or not.
