Comments for amendments to ECE/TRANS/WP.29/GRSG/2011/19 - Regulation No. 58 (Rear underrun protection)

Questions on and proposed amendments to ECE/TRANS/WP.29/GRSG/2011/19

Question on paragraph 7.1.:

The reason for changing the section height is unclear.

As the reason for proposing amendments to load test requirements in Annex 5 (paragraphs 3.1.1., 3.1.2., and 3.1.3.), the result of investigation on impact speeds in accidents that occur on motorways in Germany was shown, and it was proposed to raise test force levels. Japan considers it appropriate to keep the current section height requirement of 100 mm unchanged while changing the test force levels as proposed. (See Diagram 1.)

Question on paragraph 7.4.2.:

The reason for changing the surface area of individual elements is unclear.

As the reason for proposing amendments to load test requirements in Annex 5 (paragraphs 3.1.1., 3.1.2., and 3.1.3.), the result of investigation on impact speeds in accidents that occur on motorways in Germany was shown, and it was proposed to raise test force levels. Japan considers it appropriate to keep the current requirement of 350cm² unchanged while changing the test force levels as proposed. (See Diagram 1.)

Paragraph 16.2., amend to read:

"16.2. Paragraph 16.1 does not apply to vehicles where the height requirements specified in paragraph 16.1 are incompatible with the use of the vehicles. This vehicles may haveneed an departure angle according to ISO 612:1978 of 8°10° or above, but the maximum ground clearance with respect to the underside of the protective device, even when the vehicle is unladen, must not exceed 550 mm."

Background to the proposal:

In some types of vehicles used in Japan, if the departure angle is 8°, the RUPD will come in contact with the road surface, making the vehicle unable to run. See Diagram 2.

(ISO 612:1978 specifies the method for measuring the departure angle. Our proposed amendment takes into account those types of vehicles that require an angle of 10° or above.)

Cases where the height requirements specified in this paragraph 16.2. are incompatible with

the use of the vehicles (see Diagram 3.)

Paragraph 16.4., amend to read:

"16.3. 16.4. For vehicles fitted with a platform lift fitted with a work mechanism at the rear the distance may not exceed 300-350 mm."

Background to the proposal:

In some types of vehicles used in Japan that are fitted with a platform lift or other work mechanism at the rear, there exist technical problems with Germany's proposal. For example,

- * The vehicle will be unable to comply with the visibility requirement for the registration plate at the rear.
- * The RUPD will enter the deposits of dirt dumped by the vehicle and become unusable. See Diagrams 4, 5, 6, and 7.

Paragraph 25.1,. amend to read:

"25.1. The ground clearance with respect to the underside of the RUP, even when the vehicle is unladen, must not exceed 550 450 mm over its entire width for vehicles and trailers with hydropneumatic, hydraulic or pneumatic suspension or a device for automatic levelling according to load and 500 mm over its entire width for vehicles and trailers with suspension systems other than hydropneumatic, hydraulic or pneumatic suspension or a device for automatic levelling according to load."

Background to the proposal:

The requirement that relaxes the ground clearance for suspension systems other than hydropneumatic, hydraulic or pneumatic suspension, which is granted under PART II, is missing in Part III. For this reason, we propose that paragraph 25.1. be amended as above.

Paragraph 25.2., renumbers to Paragraph 25.3.

Insert a new paragraph 25.2. to read:

"25.2. Paragraph 25.1. does not apply to vehicles where the height requirements specified in paragraph 25.1. are incompatible with the use of the vehicles. These vehicles may need an departure angle according to ISO 612:1978 of 10° or above, but the maximum ground clearance with respect to the underside of the RUPD must not exceed 550 mm."

Background to the proposal:

The requirement that states that "the maximum ground clearance for vehicles where the height requirements are incompatible with the use of the vehicles must not exceed 550 mm," which is granted under PART II (in paragraph 16.2.), is missing in Part III. For this reason, we propose that a new paragraph 25.2. be added as above.

Paragraphs 25.4. to 25.8.2., renumber as paragraphs 25.5. to 25.9.2.

Paragraph 25.3.(new), amend to read:

"25.3. The RUP must be situated as close to the rear of the vehicle as possible. The maximum horizontal distance between the rear of the device and the rear extremity of the vehicle must not exceed 200 mm. For vehicles fitted with a platform lift fitted with a work mechanism at the rear the distance may not exceed 300-350 mm."

Background to the proposal:

In some types of vehicles used in Japan that are fitted with a platform lift or other work mechanism at the rear, there exist technical problems with Germany's proposal. For example,

- * The vehicle will be unable to comply with the visibility requirement for the registration plate at the rear.
- * The RUPD will enter the deposits of dirt dumped by the vehicle and become unusable.

See Diagrams 4, 5, 6, and 7.

Question on paragraph 25.4. 25.5.:

The reason for changing the section height is unclear.

As the reason for proposing amendments to load test requirements in Annex 5 (paragraphs 3.1.1., 3.1.2., and 3.1.3.), the result of investigation on impact speeds in accidents that occur on motorways in Germany was shown, and it was proposed to raise test force levels. Japan considers it appropriate to keep the current section height requirement of 100 mm unchanged while changing the test force levels as proposed. (See Diagram 1.)

Question on paragraph 25.8.2. 25.9.2. :

The reason for changing the surface area of individual elements is unclear.

As the reason for proposing amendments to load test requirements in Annex 5 (paragraphs 3.1.1., 3.1.2., and 3.1.3.), the result of investigation on impact speeds in accidents that occur on motorways in Germany was shown, and it was proposed to raise test force levels. Japan considers it appropriate to keep the current requirement of 350cm^2 unchanged while changing the test force levels as proposed. (See Diagram 1.)

Paragraphs 31.2. and 31.3., amend to read:

- "31.2. Until $\frac{18}{24}$ 48 months after the date of entry into force of this Regulation as amended by the $\frac{02}{03}$ series of amendments, Contracting Parties applying this Regulation shall:
- 31.3. Starting 18 24 48 months after the date of entry into force of this Regulation as amended by the 02 03 series of amendments, Contracting Parties applying this Regulation shall: "

Background to the proposal:

The necessity of the proposed changes needs to be discussed sufficiently. If these proposed changes are approved, we will request the longest possible lead time to be allowed.

Japan's Stance on the Overall Proposal

We understand the direction of Germany's proposal. However, we are unable to judge the necessity of the proposal due to the lack of data on similar accidents in Japan. As regards the RUPD weight increase caused by the proposal to raise the load test forces in Annex 5, we are concerned about its effect on the environment. Therefore, the proposed amendment needs to be discussed sufficiently.

On the scope of the proposed amendment:

There are vehicles for which problems exist in the use under the current UN Regulation No. 58 as amended by 02 series of amendment. It is necessary to exclude those vehicles without technical solutions.
