
Responses from the Russian Federation to OICA comments on the updated proposal for an amendment to UN Regulation No. 66 (GRSG-121-31) submitted by the Russian Federation

Submitted by the expert from the Russian Federation

The text reproduced below reflects the comments from OICA (regular font) to the updated proposal of the Russian Federation for an amendment to UN Regulation No. 66 (GRSG-121-31) and subsequent responses to those comments by the Russian Federation (*italic*).

1. Since the proposed amendments have a significant impact on the technical definition of vehicles, we suggest that such an amendment should be proposed as a new series of amendments with transitional provisions.
2. Para. 5.3.5. The proposed new paragraph 5.3.5. still seems contradictory to the 58 Agreement and its principle of mutual recognition because of adding provisions based on domestic regulations. If your idea is to strengthen the requirements of UN R 66, we propose to identify if there is a need for such a measure and to discuss in UNECE GRSG how a modification should look like to ensure a harmonized approach also in future. Further amendments should take into account the various methods provided by UN R 66.

The proposal would be optional, but if the applicant had received approval without the assessment provided for in Annex 5, Appendix 1, the Contracting Parties would have the right to request such an assessment. This proposal is similar to paragraph 1.4. of section 1 "Scope" of UN Regulation No. 144.

The Russian Federation believes that it is necessary to tighten certain provisions of UN Regulation No. 66, based on the results of researches conducted in the Russian Federation and on the provisions of the national standard. The Russian Federation proposes to introduce new requirements optional, depending on the preferences of the Contracting Party, which will receive the right to require additional assessment through full-scale tests, taking into account that other test methods cannot be alternative when checking compliance with new requirements.

3. Para. 2.1. and 2.2.5 and Annex 5, appendix 1, para. 1.3: It seems that you want to avoid elements of the interior to get detached during the roll-over of the vehicle. From our point of view, we should clarify which parts or elements are in the focus of such a requirement. We should discuss, how to require the fixation of those elements in question. It should be taken into account, that e.g. number and size of fire extinguishers are not required in UN R 66 and UN R 107.

The focus of these requirements are elements that, when moved, can cause injury to passengers or the driver when the bus rollovers. In these amendments, as in UN Regulation No. 107, we do not describe the requirements for the number, size and method of attachment of fire extinguishers, but leave them to manufacturers. It is proposed to check that it will not spontaneously move and injure passengers when the bus rollovers. Also in case of fire the fire extinguisher shall be accessible from its standard position.

4. Annex 5, para: 2.2.4. is already covered by UN Regulation 107, Annex 3, para. 7.6.9. Assessing whether this device is still accessible after the roll-over test is not required by para. 5.1. of the main text of UN R 66. If needed, the text should be modified.

Item 2.2.4. is already subject to the requirements of UN Regulation No. 107, we agree with this, but the purpose of the requirements is different. This requirement has appeared here (in UN Regulation No. 66) due to the fact that provided test buses will be equipped with breaking devices, as well as with hatches, in their standard position, like in buses in service.

Paragraph 5.1., may be amended to read "No parts of the internal equipment shall be moved from their places after the full-scale test of the bus according to paragraph ... of UN Regulation No. 66."

5. Annex 5, appendix 1: In para. 1.1 a prescription is added on the opening of the escape hatches after the full scale test.

- We understand that you have an issue with getting inside the vehicle from outside. Clarification is needed if this is an aspect that you want to look at because of the experience of rescue services after roll-over-accidents or based on the outcome of full-scale-tests according to UN R 66. We believe that technical requirements on emergency exits should be provided for in UN R 107, Annex 3, para. 7.6.9.

We believe that it is inappropriate to rollover the bus as part of the assessment of compliance with the requirements of UN Regulation No. 107, therefore we introduce the requirements into UN Regulation No. 66.

During the State inspection, 8 different complete buses were tested according to UN Regulation No. 66. We have revealed cases of failure to open the emergency hatch, including due to deformation of the roof. In UN Regulation No. 107, the tests are carried out on the fully finished, complete, undamaged bus, in paragraph 1.1. of Appendix 1, Annex 5 we propose to check the deformed bus, after roll over , when there is a need to leave the bus lying on its side.

- We understand that you want to ensure the structural integrity of the roof or floor opening for the escape hatch and that the size of the opening is kept after the rollover. From our point of view, we should discuss how to define a separate test to show compliance independent from the approval method (para. 5.3.-5.4.) applied. Clarification is needed why escape hatches of readily breakable glass should not be broken after the full-scale-test, if the required opening is kept.

In the case of a hatch made of easily breakable glass, the glass itself has already been certified and checked, the deformation of the roof will not affect the characteristics of the glass, but can affect the operation of hatches with mechanical locks. Therefore, we believe that these tests should be carried out during full-scale tests.

In the case of a breakable hatch, if the size of the emergency exit is retained after testing, the possibility of opening the hatch lock may not be checked.

In paragraph 1.2 it is proposed to not allow any destruction of the seat mounting. We think that a complete detachment of the seat anchorage from the structure should not be allowed, but, as already required in UN R 80, permanent deformation, including breakage, of an anchorage or of the surrounding area shall be permissible. Such a requirement, if relevant, should be added to the main text of the UN R 66. It might be needed to define a separate component test for the strength of seat anchorages during roll-over.

We believe that there is no need to conduct additional component assessments, it is enough to make sure that during the tests there is no separation of seats from the floor.

We agree with the OICA position that seats separation from the floor (whole, or at least one anchorage point) is inappropriate, and residual deformation, including breakage of the anchorage or the surrounding area, is permissible. This requirement may be added to the main text of UN Regulation No. 66. In this case, we believe that it is easier to assess the seats anchorages during a full-scale test than to come up with separate additional tests.

To summarize we want to better understand whether this proposal tries to address real accidents. Does Russia have more information on accident statistics and the relevance of the proposed measures?

In connection with resonant accidents in the Russian Federation with victims and injuries of passengers due to seats separation and unfixed fire extinguishers, a State inspection of vehicles was organized. During the State inspection, 8 different complete buses were tested according to UN Regulation No. 66, cases were identified when the emergency hatch could not be opened, including due to roof deformation. A standard is now being issued at the national level, which contains the requirements proposed for inclusion in Annex 5 of UN Regulation No. 66. This standard will be voluntary, but we expect that with all public bus purchases state customers will require the implementation of this standard.

Further on, it remains open, which of the proposed requirements should be added to UN R 66 and which should belong to UN R 107.

In our opinion, there is no point in transferring anything to UN Regulation No. 107, otherwise a new destructive test of the bus will have to be added to the tests under UN Regulation No. 107."