Proposal for revision of ECE/TRANS/WP.29/GRSP/2012/9
Proposal for Supplement [2] to the 03 series of amendments to Regulation 95

I. Proposal

Insert a new paragraph 2.35., to read:

"2.35. "Automatically activated door locking system" means a system that locks the doors automatically at a pre-set speed or under any other condition as defined by the manufacturer."

Paragraph 5.3.1., amend to read:

"5.3.1. No door shall open during the test.

5.3.1.1 In the case of automatically activated door locking systems which are installed optionally and/or which can be de-activated by the driver, this requirement shall be verified by using one of the following 2 test procedures, at the choice of the manufacturer:

5.3.1.1.1. If testing in accordance with Annex 4, paragraph 5.2.2.1., the manufacturer shall in addition demonstrate to the satisfaction of the Technical Service (e.g. manufacturer’s in-house data) that, in the absence of the system or when the system is de-activated, no door will open in case of the impact

5.3.1.1.2. If testing in accordance with Annex 4, paragraph 5.2.2.2., the manufacturer shall in addition demonstrate that the inertial load requirements of Paragraph 6.1.4. of the 03 series of amendments to Regulation 11 are met for the unlocked side doors on the non-struck side."

Insert a new paragraph 5.3.2., to read:

"5.3.2. After the impact, the side doors on the non-struck side shall be unlocked.

5.3.2.1. In the case of vehicles equipped with an automatically activated door locking system, the doors must [be locked before the moment of impact and] be unlocked after the impact at least at the non-struck side.

5.3.2.2. In the case of automatically activated door locking systems which are installed optionally and/or which can be de-activated by the driver, this requirement shall be verified by using one of the following 2 test procedures, at the choice of the manufacturer:

5.3.2.2.1. If testing in accordance with Annex 4, paragraph 5.2.2.1., the manufacturer shall in addition demonstrate to the satisfaction of the Technical Service (e.g. manufacturer’s in-house data) that, in the absence of the system or when the system is de-activated, the side doors on the non-struck side are unlocked after the impact

5.3.2.2.2. If testing in accordance with paragraph Annex 4, paragraph 5.2.2.2., the manufacturer shall in addition demonstrate that when applying the inertial load of Paragraph 6.1.4. of the 03 series of amendments to
Regulation 11, the unlocked side doors on the non-struck side remain unlocked.

Paragraphs 5.3.2. to 5.3.6.3., renumber as paragraphs 5.3.3. to 5.3.7.3.

Insert a new Paragraph 10.12 to read

"10.12 Until 18 months after the date of entry into force of the Supplement [02] to the 03 series of amendments to this Regulation, Contracting Parties applying this Regulation can continue to grant UN type approvals to the 03 series of amendments to this Regulation without taking into account the provisions of Supplement [02]"

Annex 4, paragraph 5.2., amend to read:

"5.2. The doors shall be closed but not locked.

5.2.1 However, in the case of vehicles equipped with an automatically activated door locking system, it shall be ensured that all the side doors are locked before the test.

5.2.2 In the case of vehicles equipped with an automatically activated door locking system, which is installed optionally and/or which can be de-activated by the driver, one of the following two procedures shall be used at the choice of the manufacturer:

5.2.2.1 All the side doors shall be locked manually before the start of the test

5.2.2.2 It shall be ensured that the side doors on the struck side are unlocked and the side doors on the non-struck side locked before the impact; the automatically activated door-locking system may be overridden for this test."

II. Justification

1. It has become common practise to equip vehicles with automatic door locking systems (also called 'rolling door locks', 'speed locks', 'auto locks', etc.). Regulation No. 95 however does not allow the doors to be locked during the test. This contradicts with the fact that in real life, for vehicles equipped with automatic door locking systems, the doors are locked at the moment of impact.

2. Including these requirements for automatic door locking systems gives the possibility for these systems to automatically unlock the doors upon an impact in order to evacuate the occupants. Simultaneously, the correct functioning of these systems can be checked.

3. This OICA proposal is largely based on the proposal by the Netherlands (doc. ECE/TRANS/WP.29/GRSP/2012/9), but adds a further possibility of testing the vehicle in a "mixed configuration" of locked and unlocked doors, thereby ensuring that all the requirements for all systems can readily be verified by a single test, as explained below.

4. Paragraph 2.35 is taken over from doc. GRSP/2012/9 without any change.

5. Paragraph 5.3.1: The general requirement is that no door opens during the test, and this must be met by all systems. However, in the case of vehicles with automatic locking systems that are automatic or that can be de-activated, 2 testing possibilities are proposed.
The first possibility is the one proposed in GRSP/2012/9. The second is to test such vehicles, with the automatic locking system installed, whereby the doors on the impacted side are unlocked and the doors on the non-impacted side are locked at the moment of impact. In addition, the doors on the non-impacted side are required to meet the inertial load requirements of Regulation 11. This allows verification, in a single test, that all doors remain closed, whether they are locked or whether they are unlocked.

6. Paragraph 5.3.2: A new requirement is added that "After the impact, the side doors on the non-struck side shall be unlocked".

7. Paragraph 5.3.2.1 could in practice be deleted because it is redundant. The general requirement is that the side doors shall be unlocked after impact and this should be met by all systems, whether automatic or not.

8. Paragraph 5.3.2.2: in the case of vehicles with automatic locking systems that are automatic or that can be de-activated, 2 testing possibilities are proposed. The first possibility is the one proposed in GRSP/2012/9. The second is to test such vehicles, with the automatic locking system installed, whereby the doors on the impacted side are unlocked and the doors on the non-impacted side are locked at the moment of impact. In this case however, it shall also be ensured that during the inertial load test of Regulation 11, the doors on the non-impacted side do not lock. This allows verification, in a single test, that all doors are unlocked after the test, whether they were locked or whether they were unlocked before the impact.

9. Transitional Provisions: after further careful consideration, OICA suggests adding a transitional period of 18 months, taking into account the need to fine-tune the testing arrangements and the necessary verifications on planned future models. The GRSP secretariat is kindly requested to verify the number of this proposed supplement.