Informal document No. **GRSP-42-09** (42nd GRSP, 11-14 Dec 2007, agenda item 4(a))

Proposal for Draft amendment to global technical regulation No. 1

Note:

- -This document is the proposal document which Japanese expert added "PROPOSAL 12 to 15" to the Informal document No. GRSP-41-24.
- Bold and underlined and italic letters are our proposal.
- Bold and strike-through and italic letters "PROPOSAL 1 to 11" are the original text in ECE/TRANS/WP.29/2007/40 and gtr1.

1. PROPOSAL

Some editorial corrections are proposed in ECE/TRANS/WP.29/2007/40.

A1. PROPOSAL

Paragraph 4.2.2. b)., amend to read:

4.2.2. "b) a door latch system with a fully latch position and a door closure warning system.

The door <u>latch</u> closure warning system shall be located where it can be clearly seen by the driver.

B1. JUSTIFICATION

- -Delete the word" latch".
- -There is no word in definition and section 5.1.5.4(b).

<Confirm>

Regarding "The door latch closure warning system shall be located where it can be clearly seen by the driver." there is no sentence in FMVSS206 in this section.

If this text is added in this section, NHTSA will correct the text like this in 4.2.1(b) of FMVSS206. <Reason>

There is no text in 4.2.1(b) of FMVSS206.

A2. PROPOSAL

Annex 1 Paragraph 2.1.2.1.1., amend to read:

"2.1.2.1.1. "Adapt Attach the test fixture to the mounting provisions of the latch and striker.

Align <u>in</u> the direction of engagement parallel to the linkage of the fixture. Mount the fixture with the latch and striker in the fully latched position to the test fixture in the test machine so as to apply a load perpendicular to the face of the latch."

B2. JUSTIFICATION

- -Delete the word" in".
- -There is no word "in" in gtr1, Annex 3 2.1.2.2.1 of ECE11-03 and 5.1.1.1(b)(1) of FMVSS206.

A3. PROPOSAL

Annex 1 Paragraph 2.1.2.2.1., amend to read:

2.1.2.2.1. "Adapt Attach the test fixture to the mounting provisions of the latch and striker. Align <u>in</u> the direction of engagement parallel to the linkage of the fixture. Mount the fixture with the latch and striker in the secondary latched position to the test fixture in the test machine so as to apply a load perpendicular to the face of the latch."

B3. JUSTIFICATION

- -Delete the word" in".
- -There is no word "in" in gtr1, Annex 3 2.1.2.2.1 of ECE11-03 and 5.1.1.1(b)(1) of FMVSS206.

A4. PROPOSAL

Annex 1 Paragraph 2.2.2.1.1., amend to read:

2.2.2.1.1. "Adapt Attach the test fixture to the mounting provisions of the latch and striker. Mount the <u>fixture with</u> latch and striker in the fully latched position to the test fixture in the test machine so <u>as</u> to apply a load in the direction of the latch opening."

B4. JUSTIFICATION

- 1) The word" adapt" should replace" Attach".
- -Harmonize with other sections 2.1.2.1.1, 2.1.2.2.1, and 2.2.2.2.1 in Annex 1.
- 2) The words "fixture with" should be added before the word" latch".
- -There are the words "fixture with" in 5.2.1.2(a)(1) of FMVSS206.

<Request to NHTSA>

Correct 5.1.1.2(a)(1) of FMVSS206.

<Reason>

Using the word "<u>Adapt</u>" and missing the word "<u>as</u>" in 5.1.1.2(a)(1) of FMVSS206.

A5. PROPOSAL

Annex 1 Paragraph 2.2.2.2.1, amend to read:

"2.2.2.2.1. "Adapt Attach the test fixture to the mounting provision of the latch and striker. <u>Align</u>

the direction of the engagement parallel to the linkage of the fixture. Mount the
fixture with the latch and striker in the secondary latched position to the test fixture in
the test machine so <u>as</u> to apply a load perpendicular to the face of the latch."

B5. JUSTIFICATION

- 1) Delete the sentence" Align the direction of the engagement parallel to the linkage of the fixture".
- -There is no sentence in Annex 1 2.2.2.2.1 of gtr1, Annex 3 2.2.2.2.1 of ECE11-03, 5.1.1.2(b)(1) of FMVSS206. It may be an error.
- 2) Add the word" as" after the word" so".
- It may be an error.

A6. PROPOSAL

Annex 1 Paragraph 2.3.2.1., amend to read:

"2.3.2.1. "<u>Adapt Attach</u> the test fixture to the mounting provisions of the latch and striker. Mount the <u>fixture with</u> latch and striker in the fully latched position to the test fixture in the test machine so as to apply a load in the direction of the latch opening."

B6. JUSTIFICATION

- 1) The word" Adapt" should replace" Attach".
- -Harmonize with other sections 2.1.2.1.1, 2.1.2.2.1, and 2.2.2.2.1 in Annex 1.
- 2) The word" fixture with" should be added before the word" latch".
- -There are the words "fixture with" in 5.2.1.2(a)(1) of FMVSS206.

<Request to NHTSA>

Correct 5.1.1.3(a) of FMVSS206.

<Reason>

Using the word "Adapt" in 5.1.1.3(a) of FMVSS206.

A7. PROPOSAL

Annex 4 Paragraph 3.6.1., add the word:

"3.6.1. "The force application plate is 150 mm in length, and 50 mm in width, and at <u>least</u> 15 mm in thickness. The plate edges are rounded to a radius of 6 mm ± 1 mm."

B7. JUSTIFICATION

- -Add the word" least".
- -There is the word "least" in Annex 4 3.6.1 of gtr1, Annex 6 3.6.1 of ECE11-03 and 5.2.2.3(f)(1)(i) of FMVSS206.

A8. PROPOSAL

Annex 4 Paragraph 3.6.3., amend to read:

"3.6.3. "The force application plate is positioned <u>such that the long edge of the plate is as close to</u>
<u>the edge of the interior as close to the</u> edge of the door as possible, It is not necessary for the force application plate to be vertical. but not such that the forward edge of the plate

is more than 12.5 mm from the interior edge..."

B8. JUSTIFICATION

- -Delete the" as close to the" and add the sentence" such that the long edge of the plate is as close to the edge of the interior".
- -Harmonize with 5.2.2.3(f)(3) of FMVSS206.

A9. PROPOSAL

Annex 4 Paragraph 3.7.1., amend to read:

"3.7.1. "The force application plate is 300 mm in length, and 50 mm in width, and at <u>least</u> 15 mm in thickness. The plate edges are rounded to a radius of 6 mm ± 1 mm."

B9. JUSTIFICATION

- -Add the word" least" before 15 mm.
- -There is the word "least" in Annex 4 3.7.1 of gtr1, Annex 6 3.7.1 of ECE11-03 and 5.2.2.3(g)(1)(i) of FMVSS206.

A10. PROPOSAL

Annex 4 Paragraph 3.7.3., amend to read:

"3.7.3. "The force application plate is positioned <u>such that the long edge of the plate is as close to the edge of the interior as close to the</u> edge of the door as possible, It is not necessary for the force application plate to be vertical.but not such that the forward edge of the plate is more than 12.5 mm from the interior edge..."

B10. JUSTIFICATION

- -Delete the" as close to the" and add the sentence" such that the long edge of the plate is as close to the edge of the interior".
- -Harmonize with 5.2.2.3(g)(3) of FMVSS206.

A11. PROPOSAL

Annex 4 Paragraph 4.1., amend to read:.

"4.1. "Move each force application device at <u>a any</u> rate of 20 — 90 mm per minute up to 2000 N per minute, ..."

B11. JUSTIFICATION

- -Delete the word" a" and add the word" any" before" rate".
- -Harmonize with 5.2.2.4(a) of FMVSS206.

2. PROPOSAL

Some editorial corrections are proposed in gtr1.

Refer to "A 15 Proposal" below for those justifications of "A15 from Proposal A12".

A12. PROPOSAL

Section 5.1.3. on gtr1., amend to read:

5.1.3. Load Test Three

(Applicable only to back doors that open in a vertical direction.)

5.1.3.1. Each primary door latch system on back doors shall not disengage from the fully latched position when a load of 9,000 N is applied in a direction orthogonal to the directions specified in paragraphs 5.1.1.1. and 5.1.2.1., when tested in accordance with paragraph 7.1.1.1.

A13. PROPOSAL

Section 5.1.5.1(d) on gtr1., amend to read:

- 5.1.5.1. Each door hinge system shall:
 - (d) On back doors only (*Applicable only to back doors that open in a vertical direction.*), not separate when a vertical load of 9,000 N is applied.

A14. PROPOSAL

Annex 2 Section 2.3.3.5. on gtr1., amend to read:

2.3.3.5. Vertical Setup 1. (*Applicable only to back doors that open in a vertical direction*. Only for back doors).

A15. PROPOSAL

Annex 2 Section 2.3.3.6. on gtr1., amend to read:

2.3.3.6. Vertical Setup 2. (*Applicable only to back doors that open in a vertical direction*. Only for back doors).

B12 to B15 JUSTIFICATION

- -Harmonization to FMVSS206. There is the difference between FMVSS206 and gtr1(=ECE11-03) at this time.
- -Intend to add this section on gtr1 is applying to FMVSS206 requirement at that time.
- -Refer to Annex 1 in Section 2.3.4 on "2. LATCHES (cont'd)" and Annex 2 in section 3.2.3 on "3. HINGES" on "TRANS/WP.29/GRSP/2001/1 dated on 8 Feb. 2001"
- -This material shows that Back door requirement on gtr1 takes former FMVSS206 requirements.
- -Revised FMVSS206 is took this requirements.

Annex 1

DOOR LOCKS AND RETENTION COMPONENTS FMVSS 206 AND ECE R.11.02

		FMVSS 206	ECE R11.02	TECHNICAL DIFFERENCES IN REGULATIONS	DRAFT GLOBAL REGULATION
	HES (cont'd)				
2.3	HINGED BACK DOORS				
	2.3.1	Each back door must have at least one primary latch and striker assembly with: - a fully latched position; and - a secondary latched position	No requirement	EU/ECE do not apply to back doors.	Take US: Each back door must have at least one primary latch and striker assembly with: - a fully latched position; and - a secondary latched position
	2.3.2	Load test one: - fully latched: 11,000 N - secondary latch: 4,450 N Application of load: perpendicular to the face of the latch such that the latch and striker anchorage are not compressed against each other	No requirement	EU/ECE do not apply to back doors.	Take US: Load test one: - fully latched: 11000 N - secondary latch: 4450 N Application of load: perpendicular to the face of the latch such that the latch and striker anchorage are not compressed against each other
	2.3.3	Load test two: - fully latched: 8,900 N - secondary latch: 4,450 N Application of load: in the direction of the fork-bolt opening and parallel to the face of the latch	No requirement	EU/ECE do not apply to back doors.	Take US: Load test two: - fully latched: 8900 N - secondary latch: 4,450 N Application of load: in the direction of the fork-bolt opening and parallel to the face of the latch
	2.3.4	Load test three: Back door, opening upwards: Fully latched position shall not disengage under load of 8,900 N Application of load: orthogonal to directions of load tests one and two	No requirement	EU/ECE do not apply to back doors.	Take US: Load test three: Back door, opening upwards: Fully latched position shall not disengage under load of 8,900 N Application of load: orthogonal to directions of load tests one and two
	2.3.5	Inertia load: Fully latched position shall not disengage under inertia load of 30 g. Application of inertia load: in the directions of load tests one, two and three	No requirement	EU/ECE do not apply to back doors.	Take US: Inertia load: Fully latched position shall not disengage under inertia load of 30 g. Application of inertia load: in the directions of load tests one, two and three
	2.3.6	Auxiliary back door latches if present, must comply with load tests one and two and inertia load described above.	No requirement	EU/ECE do not apply to back doors.	Take US: Auxiliary back door latches if present, must comply with load tests one and two and inertia load described above.

Annex 2

DOOR LOCKS AND RETENTION COMPONENTS FMVSS 206 AND ECE R.11.02

		FMVSS 206	ECE R11.02	TECHNICAL DIFFERENCES IN REGULATIONS	DRAFT GLOBAL REGULATION
3. HINGES					
3.1	SIDE DOOR				
	3.1.1	No requirement	The retention components of hinged mounted side doors, other than folding doors, shall be mounted at the forward edge in the direction of travel. In the case of double doors, this requirement shall apply to the door wing which opens first, the other wing shall be capable of being bolted	Rear hinging of side doors prohibited in ECE, except for double doors.	Hinged side doors shall not have their hinges mounted on the rear of the door. In the case of double doors this prohibition shall only apply to the door wing which opens first; the other wing shall be capable of being bolted.
	3.1.2	Longitudinal and transverse loads: Each side door hinge system must: - support the door withstand a longitudinal load of 11,000 N withstand a transverse load of 8,900 N.	Longitudinal and transverse loads: The retention components must: - support the door withstand a longitudinal load of 11,110 N withstand a transverse load of 8,890 N.	None, except for rounding of figures	Take US: Longitudinal and transverse loads: Each side door hinge system must: - support the door ithstand a longitudinal load of 11,000 N - withstand a transverse load of 8,900 N.
3.2	BACK DOORS				
	3.2.1	Load test one: each back door hinge system shall - support the door - shall not separate under load of 11,000 N Application of load: perpendicular to the hinge face plate such that the hinge plates are not compressed against each other	No requirement	ECE does not apply to back doors	Take US: Load test one: each back door hinge system shall - support the door - shall not separate under load of 11,000 N Application of load: perpendicular to the hinge face plate such that the hinge plates are not compressed against each other
	3.2.2	Load test two: No separation under load of 8,900N Application of load: perpendicular to the axis of the hinge pin and parallel to the hinge face plate such that the hinge plates are not compressed against each other	No requirement	ECE does not apply to back doors	Take US: Load test two: No separation under load of 8,900N Application of load: perpendicular to the axis of the hinge pin and parallel to the hinge face plate such that the hinge plates are not compressed against each other
	3.2.3	Load test three: Back doors opening upward: no separation under load of 8,900N Application of load: in the direction of the axis of the hinge pin	No requirement	ECE does not apply to back doors	Take US: Load test three: Back doors opening upward: no separation under load of 8,900N Application of load: in the direction of the axis of the hinge pin