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World Forum for Harmonization of Vehicle Regulations

Working Party on Passive Safety

# REPORT OF THE WORKING PARTY ON PASSIVE SAFETY ON ITS FORTIETH SESSION (Geneva, 12 – 15 December 2006)

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# I. ATTENDANCE

1. The Working Party on Passive Safety (GRSP) held its fortieth session from 12 (afternoon) to 15 (morning only) December 2006 under the chairmanship of Mr. G. Mouchahoir (United States of America). Experts from the following countries participated in the work following Rule 1(a) of the Rules of Procedure of the World Forum for Harmonization of Vehicle Regulations (WP.29) (TRANS/WP.29/690): Australia; Canada; Czech Republic; France; Germany; Greece; Hungary; Italy; Japan; Netherlands; Norway; Republic of Korea; Republic of South Africa; Russian Federation; Spain; Sweden; Switzerland; United Kingdom; United States of America. An expert from the European Commission (EC) participated. Experts from the following non-governmental organizations participated: International Organization for Standardization (ISO), International Organization of Motor Vehicle Manufacturers (OICA); European Association of Automotive Suppliers (CLEPA); Consumers International (CI) and European Enhanced Vehicle-safety Committee (EEVC).

# II. 1998 AGREEMENT (Agenda item A)

A. Draft global technical regulation (gtr) on pedestrian safety (Agenda item A.1)

<u>Documentation</u>: ECE/TRANS/WP.29/GRSP/2006/2; ECE/TRANS/WP.29/GRSP/2006/7; informal document No. GRSP-40-14 of Annex 1 to this report

- 2. GRSP agreed with the suggestion by the expert from Japan to amend paragraph 3. of the report ECE/TRANS/WP.29/GRSP/39 of the previous GRSP session as follows:
- ".... GRSP supported that suggestion and invited IHRA to proceed to a detailed research on the upper leg (high bumper vehicles) versus the bonnet leading edge test methods and on the leg versus high bumper test methods."
- 3. GRSP noted still pending issues regarding the development of the draft gtr on pedestrian safety in three major areas: the scope (feasibility studies aimed at expanding application of the gtr to vehicles greater than 2.5 tonnes), studies conducted by the EC and Japan on test performances (legform impacts, active safety provisions) and injury criteria (child's head dimensions and related impact speed, provisions regarding the synthetic skin, and the use of a "wrap around distance" (WAD) of 1700 mm). The expert from Japan stated that no studies were in progress in his countries on pedestrian protection other than the flexible leg test method. He introduced GRSP-40-14 regarding the status report on flexible legform impactor. He announced that more information on these studies would be available at the next GRSP session.
- 4. The expert from the United States of America informed GRSP that they have conducted many tests per the gtr requirements with the aim of justifying an enlarged scope. She reported that these tests evaluate the size of vehicles as well as the shape and that head impacts tests have been performed on to miscellaneous vehicle types. She stated that they would be conducting leg impact test per the gtr requirements and thanked Japan for loaning them a TRL legform. She informed GRSP that the final results of the studies in her country would be available for the next session.

- 5. The expert from Italy reminded GRSP of the recent progress report by the EC on pedestrian protection. He added that the report did not indicate any clear technical rational to extend the scope of the gtr.
- (http://ec.europa.eu/enterprise/automotive/pagesbackground/pedestrianprotection/).
- 6. The EC expert reported on the current situation of consideration of Phase II of the corresponding European Union (EU) Directive on pedestrian protection. He added that the results of internal procedures, mainly devoted to substantiate the enlargement of the scope to vehicles with a maximum laden mass greater than 2.5 t, would merge into a proposal submitted in 2007 to the codecision procedure. He recalled that no other meetings of the ad-hoc group were needed until the finalization of the studies in progress in Europe, the United States of America and Japan.
- 7. Concluding the discussion on this subject, GRSP agreed to have a final review of the draft gtr (ECE/TRANS/WP.29/GRSP/2006/2 and ECE/TRANS/WP.29/GRSP/2006/7) at its next session in May 2007, awaiting the study results and the political decision by the EC.
- **B.** Draft global technical regulation (gtr) on head restraints (Agenda item A.2)

<u>Documentation</u>: ECE/TRANS/WP.29/GRSP/2006/14; ECE/TRANS/WP.29/2006/140 and Amend.1; informal documents Nos. GRSP-40-18 and GRSP-40-19 of Annex 1 to this report

- GRSP noted the third progress report on head restraints (ECE/TRANS/WP.29/2006/140) as 8. well as the editorial corrections adopted by AC.3 (see ECE/TRANS/WP.29/2006/140/Amend.1). The Chairperson of the informal group on head restraints informed GRSP about the progress made during the sessions held in Montreal and Paris (GRSP-40-18 and GRSP-40-19). She introduced the first draft of the gtr on head restraints (ECE/TRANS/WP.29/GRSP/2006/14). She noted that some issues were still under consideration (e.g.: back-set limits and their measurement). She explained that there were many concerns with using the Head Restraint Measuring Device (HRMD) mounted on 3D H-point measuring device; the primary concern was of the variability of the measurements between seats of the same make and model. To address this concern a backset measurement of the space procedure was developed using the R-point as the reference point. This procedure was being validated and results were expected before the May GRSP session. She noted the difficulties the group was having in addressing non-static head restraints and the group's strong support, as a second step, for further development of a dynamic whiplash evaluation test and whiplash dummy. She concluded that the finalization of the draft gtr would be difficult to achieve by the next GRSP session in May 2007.
- 9. GRSP agreed to resume consideration of this subject at its next session on the basis of a revised document by the informal group.
- 10. Concluding the discussion on this subject, the Chairman invited the expert from the United States of America to provide to WP.29 and AC.3 a synopsis and a schedule of the pending issues.
- C. Global technical regulation No. 1 (Door locks and door retention components)

(Agenda item A.3)

Documentation: TRANS/WP.29/GRSP/2005/11

11. The GRSP Chairman recalled the purpose of TRANS/WP.29/GRSP/2005/11 proposing amendments to resolve the pending definition of an auxiliary latch system. The expert from the United States of America informed GRSP about the rulemaking procedure to adopt gtr No. 1. She stated that the outcomes of comments, especially from manufacturers, would give the basis for a further amendment of the gtr. GRSP agreed to resume its consideration at the next session on the basis of a revised document. The Chairman recalled the need that the amendment should be submitted to AC.3 together with a written report for justification (see Article 6.4. of the 1998 Agreement).

# **D.** Exchange of views on side impact (Agenda item A.4)

12. The expert from the United Sates of America informed GRSP about the upgrading of their national legislation. The Chairman suggested resuming consideration of this subject at the next GRSP session, awaiting the conclusion on the ES-2re dummy.

# **E.** Exchange of views on vehicle crash compatibility (Agenda item A.5)

- 13. The Chairman informed GRSP about the advice by WP.29 and AC.3 to delete this item from the agenda, due to the lack of information. Some delegates preferred to keep the item on the agenda in order to have an access to EEVC WG 15 outcomes.
- 14. The expert from Germany informed GRSP about the ongoing work of the EEVC Working Group 15, on "compatibility between cars". GRSP noted that the documentation on the research work could be consulted on the EEVC website at the following address: <a href="http://www.eevc.org/wgpages/wg15/wg15index.htm">http://www.eevc.org/wgpages/wg15/wg15index.htm</a>. He stated that, although research projects had reached the final phase no clear positions could be addressed at this stage. He underlined that cost benefit analyses were cumbersome and that the two candidate test barriers (progressive deformable barrier and full-width barrier) were both eligible as test tools. He added that the EEVC Steering Committee would meet again in March 2007 to decide on the follow-up on this issue.
- 15. GRSP agreed to remove this issue from the agenda for the time being.

# F. Hydrogen and fuel cell vehicles – Subgroup on Safety (HFCV-SGS) (Agenda item A.6)

- 16. GRSP noted the intention by the gtr sponsors (Germany, Japan and United States of America) to develop a roadmap concerning the safety of hydrogen and fuel-cell vehicles that would be presented to AC.3 at its March 2007 session (see report ECE/TRANS/WP.29/1056, para. 110).
- 17. GRSP agreed to resume consideration on this subject after the finalization of that roadmap.

# G. Exchange of views on cabs of commercial vehicles

(Agenda item A.7)

<u>Documentation</u>: Informal document No. GRSP-40-07 of Annex 1 to this report

- 18. The expert from Sweden introduced GRSP-40-07 regarding the decision of WP.29 and AC.3 at their last sessions (see report ECE/TRANS/WP.29/1056, para. 122) to first revise Regulation No. 29 and, as a second step, to consider the development of a gtr on this subject.
- 19. GRSP agreed to remove the item from its agenda under the 1998 Agreement.

# III. 1958 AGREEMENT (Agenda item B)

**Amendments to Regulations** (Agenda item B.1)

1. Regulation No. 11 (Door latches and hinges)

(Agenda item B.1.1)

- 20. Regarding the proposal of alignment of Regulation No. 11 to gtr No. 1, GRSP noted the decision of WP.29 and AC.1 to limit the scope to  $M_1$  and  $N_1$  vehicles (see report ECE/TRANS/WP.29/1056, paras. 49 and 85)
- **2. Regulation No. 14 (Safety-belt anchorages)** (Agenda item B.1.2)

<u>Documentation</u>: ECE/TRANS/WP.29/GRSP/2006/19; informal document No. GRSP-40-08 of Annex 1 to the report

- 21. The expert from Germany introduced ECE/TRANS/WP.29/GRSP/2006/19 concerning identification markings of upper tether anchorages. He stated that further identification provisions were needed to avoid the misuse of luggage anchorages as top tether anchorages when the latter were placed in the luggage compartment. He added that ISOFIX top tether anchorages at a seating position without ISOFIX lower anchorages should not be marked to avoid misuse. The expert from OICA opposed the marking of all top tether anchorages regardless whether or not they were located in the luggage compartment. He proposed to identify only those where a risk of misuse occurs. The expert from France endorsed the identification rather than a marking.
- 22. GRSP agreed with the Chairman's suggestion to resume the discussion at the next session on the basis of a revised proposal. The Chairman invited all experts to provide a full examination of the effects and factors as well as a cost-benefit analysis.
- 23. GRSP welcomed GRSP-40-08 (tabled by Italy and France) proposing the mandatory fitting of safety-belt anchorages for Class II buses and the alignment of the provisions of Regulation No. 14 with those of the corresponding Directive 2005/40/EC. The expert from Japan opposed the mandatory fitting of safety belts for folding seats. He suggested inserting as a minimum a derogation for folding seats in those Contracting Parties that have not yet these provisions. The expert from Germany preferred to exempt low floor buses. Other experts suggested caution to reclassify Class II vehicles and preferred to insert appropriate exemptions.

24. Following the discussion, GRSP agreed to resume consideration of this subject at its next session, on the basis of a revised document jointly prepared by Italy and France.

# **3. Regulation No. 16 (Safety-belts)** (Agenda item B.1.3)

<u>Documentation</u>: TRANS/WP.29/GRSP/2004/26/Rev.1; ECE/TRANS/WP.29/GRSP/2006/4; ECE/TRANS/WP.29/GRSP/2006/15; informal documents Nos. GRSP-40-03 and Rev.1, GRSP-40-09 and GRSP-40-16 of Annex 1 to this report.

- 25. Concerning the installation of safety-belt reminders (SBR), the expert from France introduced GRSP-40-03 superseding TRANS/WP.29/GRSP/2004/26/Rev.1, taking into account the amendments proposed in ECE/TRANS/WP.29/GRSP/2006/4 and GRSP-39-17. The expert from France suggested setting up, in a first step, the technical provisions for drivers of category M<sub>1</sub> vehicles and, in second step, considering the technical provisions for passengers other than drivers and for vehicle categories other than M<sub>1</sub>. GRSP agreed on the need to change the scope, the signal warning/vocal information provisions and the extension of approval of components.
- 26. The expert from Japan introduced a survey on the effectiveness of seat belt reminders (GRSP-40-16). He underlined the high benefits introduced by the device, but regretted the reduction of effectiveness in case of a short time deactivation.
- 27. Following the discussion, the expert from France tabled a revised proposal (GRSP-40-3-Rev.1). GRSP adopted the proposal as reproduced in Annex 2 to this report. The secretariat was requested to transmit the adopted proposal to WP.29 and AC.1, for consideration at their June 2007 sessions, as draft 05 series of amendments to Regulation No. 16.
- 28. The expert from CLEPA withdrew ECE/TRANS/WP.29/GRSP/2006/15 and proposed to resume the discussion on a revised proposal at the next GRSP session.
- 29. For the same purpose as mentioned in paragraph 23 (Class II buses), the expert from Italy presented GRSP-40-09 proposing a new series of amendments to Regulation No. 16. GRSP agreed to follow the same approach as for Regulation No. 14. GRSP experts were requested to send their written comments in due time to the expert from Italy for preparing a consolidated proposal to be distributed with an official document at the next session.

# 4. Regulation No. 29 (Cabs of commercial vehicles) (Agenda item B.1.4)

<u>Documentation</u>: ECE/TRANS/WP.29/GRSP/2006/5; informal documents Nos. GRSP-40-06 and GRSP-40-11 of Annex 1 to this report.

- 30. The expert from the Russian Federation apologized for the cancellation of the informal meeting on Regulation No. 29. Referring to ECE/TRANS/WP.29/GRSP/2006/5, he informed GRSP about the ongoing work in his country. He underlined the need for additional research. He clarified that these efforts were devoted to identify specific requirements for the different types of cabs.
- 31. The expert from OICA introduced GRSP-40-06 and gave a summary of the proposal that addressed a frontal impact with an increased energy level, a 90° rollover with subsequent impact

(new test) and a 180° rollover test (with addition of a dynamic pre-load). For category N vehicles less or equal to 7.5 t of gross vehicle mass, the expert from OICA suggested a frontal impact test with the current energy level or an alternative approval according to Regulation No. 33 or 94.

- 32. The expert from Sweden reminded the overall priority to improve the safety of the driver's working place. He endorsed the approach by OICA to develop an alternative test for vehicles having a gross vehicle mass of less than 7.5 t and to update the provisions for heavier vehicles.
- 33. The expert from the Czech Republic gave an overview of the main proposals for amendments considered by GRSP experts (GRSP-40-11). He stated that the basic document TRANS/WP.29/GRSP/2002/18 (tabled by the United Kingdom) was taking into account the recommendations from his country and he preferred a further development of this proposal.
- 34. The GRSP Chairman requested OICA to go ahead and to convene as soon as possible a meeting of the expert group. He invited the informal group to prepare a roadmap, including a time-schedule. GRSP agreed to resume consideration of this subject at its next session and requested the secretariat to distribute GRSP-40-06 with an official symbol.

# **5. Regulation No. 44 (Child restraint systems)** (Agenda item B.1.5)

<u>Documentation</u>: ECE/TRANS/WP.29/GRSP/2006/9; ECE/TRANS/WP.29/GRSP/2006/17; informal documents Nos. GRSP-40-05, GRSP-40-15 and Rev.1 of Annex 1 to this report

- 35. GRSP resumed the discussion on ECE/TRANS/WP.29/GRSP/2006/9 (tabled by CLEPA) regarding the results of an investigation concerning the increase of the horizontal plane requirement from 800 mm to 900 mm. The expert from Germany introduced GRSP-40-05 giving an overview of interior dimensions of almost one hundred registered vehicles. The expert from OICA noted the same conclusion on the basis of its survey. He stated that the proposal from CLEPA was based only on universal child restraints placed on outboard positions. He added that the solution could not ease the manufacturer's task to provide enough space to check fixtures whose maximum dimensions were 720 mm. The expert from the Netherlands encouraged an extensive survey on all seating positions and semi-universal class. The expert from CLEPA clarified that his proposal was initially addressed to booster cushion seat users of class II and III. He added that a wider space would allow proper design solutions to cope with submarining. GRSP agreed to resume consideration of this subject at the next session possibly on the basis of a new document to be prepared by CLEPA.
- 36. The expert from Germany introduced ECE/TRANS/WP.29/GRSP/2006/17 in order to clarify the reference to lock off devices, the colour code for the laterally facing child restraint webbing route and the provisions of Annex 16 to the Regulation, with regard to the conformity of production procedure. The expert from Japan gave a presentation on the use in his country of webbing route colours. GRSP also agreed to resume the discussion on this item at its next session.

- 37. GRSP welcomed a proposal by the EC (GRSP-40-15) to reduce the potential lack of safety for children restrained on non-integral child seats for mass groups 0, 0+ and I using adult safety belts. The EC expert stated that the proposal was aimed at providing all small children with integral seats in order to guarantee an optimum protection. The expert from CLEPA requested a proper time framework to solve stock issues.
- 38. Following the discussion, the EC expert tabled GRSP-40-15-Rev.1. GRSP adopted ECE/TRANS/WP.29/GRSP/2006/17, as reproduced in Annex 3 to this report. The secretariat was requested to transmit it, on an exceptional basis, to WP.29 and AC.1, for consideration at their March 2007 sessions, as draft Supplement 4 to the 04 series of amendments to Regulation No. 44.
- **6.** Acceleration test devices (Agenda item B.1.6)

Documentation: ECE/TRANS/WP.29/GRSP/2005/5/Rev.1; ECE/TRANS/WP.29/GRSP/2006/18

- 39. Regarding the provisions for the inclusion of acceleration test devices into Regulation No. 16, the expert from Japan introduced ECE/TRANS/WP.29/GRSP/2006/18 superseding ECE/TRANS/WP.29/GRSP/2005/5/Rev.1.
- 40. GRSP adopted ECE/TRANS/WP.29/GRSP/2006/18 with the amendment reproduced below. The secretariat was requested to transmit it to WP.29 and AC.1 for consideration at their June 2007 sessions as draft Supplement 19 to the 04 series of amendments to Regulation No. 16.

Add a new paragraph 7.7.7., to read:

- "7.7.7. However, if the tests were performed at a higher speed and/or the acceleration curve have exceeded the upper level of the hatched area and the safety belt meets the requirements, the test shall be considered satisfactory."
- 7. New draft Regulation on accessory or replacement seat covers (Agenda item B.1.7)

Documentation: ECE/TRANS/WP.29/GRSP/2006/16

- 41. The expert from Germany presented ECE/TRANS/WP.29/GRSP/2006/16, proposing a new Regulation on accessory or replacement seat covers. He also gave a presentation to show the consequences of existing aftermarket covers on seats fitted with air-bags. GRSP acknowledged the potential risks of seats covers existing in the aftermarket and noted that the EC was considering the whole issue of aftermarket equipment in general.
- 42. GRSP agreed to defer the matter to the next session and invited the German delegation to substantiate the proposal with a cost-benefit analysis.

# **8.** Consideration of scopes and common definitions (Agenda item B.1.8)

<u>Documentation</u>: Informal document No. GRSP-40-17 of Annex 1 to this report

43. GRSP welcomed a proposal by France (GRSP-40-17) showing a possible way to extend the use of child restraint systems on categories of vehicles other than  $M_1$  and  $N_1$ , affecting UNECE Regulations Nos. 14, 16 and 44. The expert from Sweden supported the proposal, but recommended a cautious approach in changing the technical requirements. Following the discussion, GRSP agreed to resume consideration on this subject at its next session. The secretariat was requested to distribute GRSP-40-17 with an official symbol.

# **9. Regulation No. 17 (Strength of seats)** (Agenda item B.1.9)

Documentation: Informal documents Nos. GRSP-40-01 and GRSP-40-10 of Annex 1 to this report

- 44. The expert from Australia withdrew GRSP-40-01.
- 45. GRSP considered GRSP-40-10 (tabled by Italy and France) proposing to align the provisions of the Regulation with those of the corresponding EU Directive 2005/39/EC. The EC expert raised timeline conflicts with the EU Directive for vehicles having an integrated saloon up to 10 seats (M<sub>3</sub> of class III and b) with side-facing seats grouped in the rear. He explained that for these vehicles, the exemption of five years should be aligned with that in the EU Directive. The expert from the Russian Federation requested that a clearer accident analysis should be provided to justify the ban of side-facing seats. The expert from Japan raised also concerns.
- 46. GRSP agreed to resume consideration on this subject on the basis of a revised proposal.
- **10. Regulation No. 80 (Strength of seats)** (Agenda item B.1.10)
- 47. The expert from Italy stated that, at the present time, there was no urgency to amend it.
- **11. Regulation No. 94 (Frontal collision)** (Agenda item B.1.11)

Documentation: Informal documents Nos. GRSP-40-02 and GRSP-40-13 of Annex 1 to this report.

- 48. GRSP considered a proposal by Australia aimed at clarifying the 3 ms head acceleration during the test (GRSP-40-02). The GRSP agreed to resume consideration on this issue at the next session on the basis of a revised proposal from Australia.
- 49. Announcing the possible application of Regulation No. 94 by its country, the expert from Japan gave a presentation (GRSP-40-13) to insert into the Regulation some corrections. GRSP agreed to resume its consideration at the next session, on the basis of a revised proposal.

# **12. Regulation No. 95 (Lateral collision)** (Agenda item B.1.12)

Documentation: Informal document No. GRSP-40-12 of Annex 1 to this report

50. GRSP considered a proposal by Japan (GRSP-40-12) regarding the technical description of the dummy. GRSP invited the Japanese expert to provide data on the consequences of the proposed changes of filters. The expert from Japan volunteered to prepare a new proposal for the next session.

# IV. BUSES AND COACHES (Agenda item C)

- **A.** Frontal collision of buses and coaches (Agenda item C.1)
- 51. GRSP noted that in the April session of GRSG, the delegate from Spain had been invited to inform GRSP on this issue (ECE/TRANS/WP.29/GRSG/70, para. 21). The expert from Spain apologized for not being in the position to give such a presentation and volunteered to contact his GRSG homologue. GRSP agreed on the importance to have a mutual exchange of information on this subject.
- **B.** Restraining of children travelling in buses and coaches (Agenda item C.2)
- 52. GRSP recalled the proposal by France (GRSP-40-17) aimed at amending the scope of Regulations Nos. 16 and 14 to allow the transportation of children in vehicles of categories  $M_2$  and  $M_3$  (para. 43). GRSP agreed to resume consideration on this subject at its next session.
- C. Safety of wheelchair users in buses and coaches (Agenda item C.3)
- 53. The Chairman of GRSG informed GRSP about the ongoing work in its group. GRSP experts were invited to express their views on the development of requirements regarding this issue to GRSG or to participate in the informal working group.
- V. OTHER BUSINESS (Agenda item D)
- **A.** Exchange of information on national and international requirements on passive safety (Agenda item D.1)

<u>Documentation</u>: Informal document No. GRSP-40-04 of Annex 1 to this report

54. The expert from Japan gave a presentation on the current situation of hybrid and electric vehicles in his country (GRSP-40-04) and the legislative action necessary to make feasible the type approval of those vehicles. GRSP experts were invited to contribute to an exchange of information about the ongoing national legislative developments on this subject.

# **B.** Rear impact assessment (Agenda item D.2)

55. The expert from EEVC gave a presentation on the work results of EEVC Working Groups 20 and 12 (see website: http://www.eevc.org).

# C. Tribute to Mr. G. Mouchahoir (Agenda item D.3)

56. Learning that Mr. George Mouchahoir (United States of America) had decided to take his retirement and that he would no longer attend the sessions, GRSP acknowledged his fruitful professional contributions over the last 10 years and his excellent performance as Chairman during the last 2 years. GRSP honoured him with a long applause.

# VI. ELECTION OF OFFICERS (Agenda item E)

57. In compliance with Rule 37 of the Rules of Procedure (TRANS/WP.29/690), Mrs. S. Meyerson (United States of America) was unanimously elected as Chairperson for the GRSP sessions in 2007.

# VII. PROVISIONAL AGENDA FOR THE NEXT SESSION

58. For its forty-first session, scheduled to be held in Geneva from 7 (14.30h) to 11 (12.30h) May 2007, GRSP agreed that the Chairperson, in collaboration with the secretariat, would prepare the provisional agenda. 1/

As part of the secretariat's efforts to reduce expenditure, all the official documents, as well as the informal documents, distributed prior to the session by mail or posted to the WP.29 website will not be available in the conference room for distribution to session participants. Delegates are kindly requested to bring their copies of documents to the meeting. With regard to the translated official documents, experts can now access the new public Official Documents System (ODS) at the website address: http://documents.un.org

 $\underline{\text{Annex I}}$  LIST OF INFORMAL DOCUMENTS DISTRIBUTED DURING THE SESSION (GRSP-40- ...)

No.	Transmitted by	Agenda item	Language	Proposal for draft Corrigendum 3 to Revision 4 to Regulation No. 17 (Seat Strength of Seats)		
01.	Australia	B.1.9.	E			
02.	Australia	B.1.11.	E	Proposal for draft amendment to Regulation No. 94 (Frontal collision)		
03 Rev.1	France	B.1.3.	E/F	Proposal for 05 series of amendments of Regulation No. 16 (Safety-belts)		
04.	Japan	D.1.	E	Regulations of Crash Safety about HEV and HV		
05.	Germany	B.1.5.	E	Measurement of Available Space in Cars: 800 mm Plane in Regulation No. 44		
06.	OICA	B.1.4.	E	Proposal for draft amendments to Regulation No. 29		
07.	Sweden	A.7.	Е	Possible development of a gtr on protection of the occupants of the cab of commercial vehicles		
08.	Italy/France	B.1.2.	E	Draft proposal for 07 series of amendments to Regulation No. 14		
09.	Italy/France	B.1.3.	E	Draft proposal for 05 series of amendments to Regulation No. 16		
10.	Italy/France	B.1.9.	E	Draft proposal for 08 series of amendments to Regulation No. 17		
11.	Czech Republic	B.1.4.	E	Comments to the proposal for draft 03 series of Amendments to UNECE Regulation No. 29, including Supplement 1		
12.	Japan	B.1.12.	E	Proposal for draft Corrigendum to Regulation No. 95-02 series		
13.	Japan	B.1.11.	E	Proposal for draft Corrigendum to Regulation No. 94		
14.	Japan	A.1.	E	Status report on Flexible pedestrian legfrom impactor Technical Evaluation Group (Flex-TEG) activities		

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No.	Transmitted by	Agenda item	Language	Title	Follow -up
15 Rev.1	EC	B.1.5.	E	Draft proposal for amendments to Regulation No. 44 (Child restraints)	(d)
16.		B.1.3.	E	Survey on the effectiveness of Safety Belt Reminder System	(a)
17.	France	B.1.8.	E/F	Extension of ECE R44 CRS for $M_2$ and $M_3$ vehicles	(b)
18.	United States of America	A.2.	E	Draft head restraint gtr: Status of requirements (December 2006)	(b)
19.	United States of America	A.2.	E	Draft fourth progress report of the informal group on head restraints	(b)

# Notes:

- (a)
- Consideration completed or superseded Continue consideration at the next session with an official symbol Continue consideration at the next session as informal document (b)
- (c)
- Adopted with amendments (d)

#### Annex II

# AMENDMENTS TO REGULATION No. 16 ADOPTED BY GRSP AT ITS FORTIETH SESSION BASED ON TRANS/WP.29/GRSP/2004/26/Rev.1 (see paragraph 27 of this report)

# The title, amend to read:

# "UNIFORM PROVISIONS CONCERNING THE APPROVAL OF:

- I. SAFETY-BELTS, RESTRAINT SYSTEMS, CHILD RESTRAINT SYSTEMS AND ISOFIX CHILD RESTRAINT SYSTEMS FOR OCCUPANTS OF POWER-DRIVEN VEHICLES
- II. VEHICLES EQUIPPED WITH SAFETY-BELTS, SAFETY-BELT REMINDER, RESTRAINT SYSTEMS, CHILD RESTRAINT SYSTEMS AND ISOFIX CHILD RESTRAINT SYSTEMS"

# <u>Insert a new paragraph 1.4.</u>, to read:

"1.4. Vehicles of categories M<sub>1</sub> with regard to safety belt reminder."

# <u>Insert new paragraphs 2.39. to 2.45.</u>, to read:

- "2.39. "Safety-belt reminder", means a system dedicated to alert the driver when he/she does not use the safety-belt. The system is constituted by a detection of an unfastened safety-belt and by two levels of driver's alert: a first level warning and a second level warning."
- 2.40. "<u>Visual warning</u>" means a warning by visual signal (lighting, blinking or visual display of symbol or message).
- 2.41. "Audible warning" means a warning by sound signal.
- 2.42. "<u>First level warning</u>" means a visual warning activated when the ignition switch is engaged (engine running or not) and the driver's safety-belt is not fastened. An audible warning can be added as an option.
- 2.43. "Second level warning" means a visual and audible warning activated when a driver operates a vehicle without fastening the safety-belt.
- 2.44. "Safety-belt is not fastened" means, at the option of the manufacturer, either the driver safety-belt buckle is not engaged or the webbing length pulled out of the retractor is 100 mm or less.
- 2.45. "Vehicle is in normal operation" means that vehicle is in forward motion at the speed greater than 10 km/h."

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Paragraph 5.2.2., amend to read:

"An approval number ....... Its first two digits (at present 05 corresponding to the 05 series of amendments) shall indicate the ...... above."

<u>Paragraph 8.1.</u>, including a new footnote \*/, amend to read:

"8.1. Safety-belt and restraint systems equipment"

Insert new paragraphs 8.4. to 8.4.1.1., to read:

- "8.4. Safety-belt reminder equipment.
- 8.4.1. The driver seating position of the M<sub>1</sub> category of vehicles \*/, shall be equipped with a safety-belt reminder satisfying the requirements of this Regulation. Where the vehicle manufacturer provides a safety-belt reminder system on the driver seat in another category of vehicle, the safety-belt reminder system may be approved according to this Regulation \*\*/.
- 8.4.1.1. Contracting Parties may allow deactivation of the safety-belt reminder provided that such deactivation satisfies to the requirements of paragraph 8.4.2.6."

Insert new paragraphs 8.4.2. to 8.4.2.6.2., to read:

- "8.4.2. Safety-belt Reminder.
- 8.4.2.1. General requirements.
- 8.4.2.1.1. Visual warning shall be so located as to be readily visible and recognisable in the daylight by the driver and distinguishable from other alerts. Where the visual signal warning employs the colour red, it shall use a symbol in accordance with item 21 in table 1 of ECE Regulation No. 121.



(item K.01 - ISO 2575:2000) or,



- 8.4.2.1.2. Visual warning shall be by continuous or intermittent signal.
- 8.4.2.1.3. Audible warning shall be by continuous or intermittent sound signal or by vocal information. Where vocal information is employed, the manufacturer shall ensure that

<sup>\*/</sup> As defined in the Consolidated Resolution of Construction of Vehicles (R.E.3), Annex 7 (document TRANS/WP.29/78/Rev.1/Amend.2).

 $<sup>\</sup>underline{**}$ / While the current requirements for a safety-belt reminder is limited to the driver's seat of vehicles category  $M_1$ , it is understood that the scope of this Regulation will be extended to vehicles of other categories and to other seating positions. In recognition of the importance of human factors, the delivery of driver stimuli, future safety-belt reminder requirements demanded by this Regulation will seek a harmonized convergence of the alert systems.

the alert uses the language(s) of the market into which the vehicle is sold. This audible warning may be constituted by more than one step.

- 8.4.2.1.4. Audible warning shall be easily recognized by the driver.
- 8.4.2.2. First level warning shall be at least a visual warning activated for 4 seconds or longer when the driver safety-belt is not fastened and the ignition switch is engaged.
- 8.4.2.3. The activation of the first level warning shall be tested according to the test procedure defined in Annex 18, paragraph 1.
- 8.4.2.4. Second level warning shall be a visual and audible signal activated for 30 seconds or longer except for cases in which the warning stops for over 3 seconds when the safety-belt is not fastened, when the vehicle is in normal operation and when at least one of the following conditions (or any combination of these conditions), is fulfilled:
- 8.4.2.4.1. Distance driven greater than the distance threshold. The threshold shall not exceed 500 m. The distance the vehicle is not in normal operation shall be excluded.
- 8.4.2.4.2. Speed greater than the speed threshold. The threshold shall not exceed 25 km/h.
- 8.4.2.4.3. Duration time (engine running) greater than the duration time threshold. The threshold shall not exceed 60 seconds. The first level warning duration time and the duration time the vehicle is not in normal operation shall be excluded.
- 8.4.2.5. The activation of the second level warning shall be tested according to the test procedure defined in Annex 18, paragraph 2.
- 8.4.2.6. The safety-belt reminder may be designed to allow deactivation.
- 8.4.2.6.1. In the case a short term deactivation is provided, it shall be more difficult to deactivate the safety-belt reminder than buckling the safety-belt on and off. When the ignition is switched off for more than 30 minutes and switched on again, a short-term deactivated safety-belt reminder must reactivate.
- 8.4.2.6.2. In the case that a facility for a long term deactivation is provided, it shall require a sequence of operations to deactivate, that are detailed only in the manufacturer's technical manual and/or which requires the use of tools (mechanical, electrical, digital, etc.) that are not provided with the vehicle."

# Paragraph 15.2., amend to read:

"15.2. Installation of safety-belts and safety-belt reminder

These transitional provisions only apply to the installation of safety-belts and safety-belt reminders on vehicles and do not change the mark of the safety-belt."

# <u>Insert new paragraphs 15.2.10. to 15.2.16.</u>, to read:

- "15.2.10. As from the official date of entry into force of the 05 series of amendments, no Contracting Party applying this Regulation shall refuse to grant ECE approvals under this Regulation as amended by the 05 series of amendments.
- 15.2.11. As from 18 months after the date of entry into force, Contracting Party applying this Regulation shall grant approvals only if the vehicle type to be approved meets the requirements of this Regulation as amended by the 05 series of amendments.
- 15.2.12. As from 72 months after the date of entry into force of the 05 series of amendments to this Regulation, approvals to this Regulation shall cease to be valid, except in the case of vehicle types which comply with the requirements of this Regulation as amended by the 05 series of amendments.
- 15.2.13. Notwithstanding paragraph 15.2.12., approvals of the vehicle categories other than M<sub>1</sub> to the preceding series of amendments to the Regulation which are not affected by the 05 series of amendments related to the requirements concerning the fitting of safety-belt reminders shall remain valid and Contracting Parties applying the Regulation shall continue to accept them.
- 15.2.14. Notwithstanding paragraph 15.2.12., approvals of the vehicle categories other than N<sub>2</sub> and N<sub>3</sub> to the preceding series of amendments to the Regulation which are not affected by the 05 series of amendments related to minimum requirements for safety-belts and retractors in Annex 16 shall remain valid and Contracting Parties applying the Regulation shall continue to accept them.
- 15.2.15. Even after the date of entry into force of the 05 series of amendments, approvals of the components and separate technical units to the preceding series of amendments to the regulation shall remain valid and Contracting Parties applying the regulation shall continue to accept them and shall not refuse to grant extensions of approval to the 04 series of amendments to this Regulation
- 15.2.16. Notwithstanding the transitional provisions above, Contracting Parties whose application of this Regulation comes into force after the date of entry into force of the 05 series of amendments are not obliged to accept approvals which were granted in accordance with any of the preceding series of amendments to this Regulation."

# Annex 1, insert a new item 3.3., to read:

"3.3. Driver's safety-belt reminder (indicate yes / no  $\underline{2}$ /)"

Annex 2, paragraphs 1. and 2., amend the figure "04" to read "05" (22 times, including all figures)

# Annex 16, the table, amend to read:

#### "Annex 16

# MINIMUM REQUIREMENTS FOR SAFETY-BELTS AND RETRACTORS

Vehicle	Forward	Rear facing				
Category	Outboard seating p	ositions	Centre seating positions		Seating	
	Front	Other than front	Front	Other than front	positions	
••••			••••	••••		
N2	Br3, Br4m, Br4Nm or					
N3	Ar4m, Ar4Nm*	••••	••••	••••	••••	
	••••	••••	••••	••••	••••	

<u>Insert a new Annex 18</u>, to read:

# "Annex 18

#### SAFETY-BELT REMINDER TESTS

- 1. The first level warning shall be tested according to the following conditions:
  - (a) Safety-belt is not fastened;
  - (b) Engine is stopped or idling and the vehicle is not in forward or reverse motion;
  - (c) Transmission is in neutral position;
  - (d) Ignition switch is engaged.
- 2. The second level warning shall be tested according to the following conditions:
  - (a) Safety-belt is not fastened;
  - (b) Test vehicle driven with one or any combination of the conditions of paragraphs 2.1. to 2.3. of this annex at the manufacturer's choice.
- 2.1. Accelerate the test vehicle to 25 0 / + 10 km/h from a halt and continue on the same speed.
- 2.2. The test vehicle is driven forward at least 500 m from a halt position.
- 2.3. The vehicle is tested when the vehicle is in normal operation for at least 60 seconds.
- 3. A system that the first level warning stops after a certain period of time, the second level warning shall be tested according to paragraph 2. of this annex after the first level warning has been deactivated. A system that the first level warning does not stop after a certain period of time, the second level warning shall be tested according to paragraph 2. of this annex while the first level warning is activated."

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#### Annex III

# AMENDMENTS TO REGULATION No. 44 ADOPTED BY GRSP AT ITS FORTIETH SESSION BASED ON ECE/TRANS/WP.29/GRSP/2006/17 (see paragraph 38 of this report)

Paragraph 2.26.1., amend to read:

"2.26.1. ... restrain the child directly."

Paragraph 6.1.3., the table, replace the sixth row by the following two rows:

"Forward (non-integra	facing al)	NA							
Forward	facing	A	NA	A	A	A	NA	A	A"
(non-integra	al – see								
para. 6.1.12	.)								

# <u>Insert new paragraphs 6.1.11. and 6.1.12.</u>, to read:

- "6.1.11. Child restraint systems of groups 0 and 0 +, with the exception of carry cots as defined in paragraph 2.4.1., shall belong to the integral class.
- 6.1.12. Child restraint systems of group I shall belong to the integral class unless they are fitted with an impact shield as defined in paragraph 2.7."

# Paragraph 6.2.9., amend to read:

"6.2.9. ... after the child has been installed; for this purpose the requirements of paragraph 7.2.5. (lock-off devices) shall be fulfilled; any device that ..."

# Insert new paragraphs 17.14. and 17.15., to read:

- "17.14. As from six months from the date of entry into force of Supplement 4 to the 04 series of amendments approvals granted in accordance with the 03 or 04 series of amendments for child restraint systems belonging to groups 0, 0+ and I which do not comply with paragraph 6.1.11. or 6.1.12. shall cease to be valid.
- 17.15. From the date of entry into force of Supplement 4 to the 04 series of amendments of this Regulation, by way of derogation to the obligations of Contracting Parties during the transitional period set out in paragraph 17.14. and based on the declaration made by the European Community at the time of its accession to the 1958 Agreement (Depositary Notification C.N.60.1998.TREATIES-28), member states of the European Community may prohibit the placing on the market of child restraint systems which do not meet the requirements of Supplement 4 to the 04 series of amendments of this Regulation."

Annex 15, the note to paragraph 6.1.8., amend to read:
"6.1.8. The 150 mm requirement also applies to carry cots."
Annex 16, paragraph 2.2.1.4., the note, amend to read:
" <u>Note</u>
MH signifies harder configuration (the least)
LH signifies a less hard configuration.
This dual sampling
"

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