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## ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations (WP.29)

Working Party on Passive Safety (GRSP)

## REPORT OF THE WORKING PARTY ON PASSIVE SAFETY (GRSP) ON ITS THIRTY-THIRD SESSION

(2 – 6 June 2003)

1. GRSP held its thirty-third session from 2 June (afternoon) to 6 June 2003 under the chairmanship of Ms. J. Abraham (United States of America). Experts from the following countries participated in the work following Rule 1(a) of the Rules of Procedure of WP.29 (TRANS/WP.29/690): Belgium; Canada; Czech Republic; Finland; France; Germany; Hungary; Israel; Italy; Japan; Netherlands; Norway; Poland; Republic of Korea; Russian Federation; Spain; Thailand; United Kingdom; United States of America. A representative of the European Commission (EC) participated. Experts from the following non-governmental organizations participated: International Organization for Standardization (ISO); International Touring Alliance / International Automobile Federation (AIT/FIA); International Organization of Motor Vehicle Manufacturers (OICA); International Motorcycle Manufacturers Association (IMMA); European Association of Automotive Suppliers (CLEPA); Consumers International (CI).

2. The documents without a symbol distributed during the session are listed in annex 1 to this report.

3. The expert from Poland requested the secretariat to indicate that he had participated at the thirty-first and thirty-second sessions.

GE.03-23636

## A. 1998 AGREEMENT

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

Documentation: Informal document No. 2 of annex 1 to this report.

4. The expert from Japan, Mr. Mizuno, Chairman of the informal group on pedestrian safety, submitted to GRSP a preliminary report on the results of the four meetings of the informal group (informal document No. 2), for consideration by AC.3 during its eighth session. He envisaged the submission of a recommended gtr at the GRSP May 2005 session. Mr. Mizuno requested the guidance of GRSP and WP.29 for the application of the gtr to new vehicle types. He also requested guidance on what methodology and monetary value should be used in the cost benefit analysis, since different countries use different values.

5. The Chairwoman congratulated the informal group for the excellent work made in such a short time. At the suggestion of the Chairwoman, GRSP agreed to demand the requested guidance of the Executive Committee (AC.3) of the 1998 Agreement and, to do so, asked the secretariat to transmit informal document No. 2 to WP.29 and AC.3 for consideration as an informal document at their June 2003 sessions. The Chairwoman announced her intention to seek AC.3's consent to begin the drafting of the gtr. GRSP also requested the secretariat to distribute informal document No. 2 with an official symbol at the December 2003 GRSP session.

## A.2. Draft global technical regulation on lower anchorages and tethers for child restraints

6. The Chairwoman recalled her report to the one-hundred-and-thirtieth session requesting guidance from AC.3 on how to proceed in amending Regulations Nos. 14, 16 and 44 related to ISOFIX, given the divergences between these proposed amendments and the existing regulations in the United States of America and Canada (TRANS/WP.29/909, paras. 32 and 142).

7. The expert from the United States of America volunteered to present at the next GRSP session a comparison between the requirements of the Regulations under the 1958 Agreement related to ISOFIX and the requirements of standards of Canada and his country. GRSP experts welcomed the proposal and agreed to consider it.

#### A.3. Draft global technical regulation on door retention components

Documentation: Informal document No. 5 of annex 1 to this report.

8. The expert from the United States of America, Mr. G. Mouchahoir, Chairman of the informal group, introduced informal document No. 5, a preliminary report on the group's activities. He said that all technical issues had been considered and had foreseen the submission of a recommended gtr for adoption at its May 2004 session. The Chairwoman congratulated the informal group for the work done and announced her intention to report AC.3 on the progress. She also announced her intention to request AC.3's consent to draft the gtr. She asked the secretariat to transmit informal document No. 5, as an informal document, to WP.29 and AC.3 for consideration at their June 2003 sessions. The secretariat was also requested to distribute informal document No. 5 with an official symbol at the December 2003 GRSP session.

## A.4. Draft global technical regulation on head restraints

Documentation: Informal document No. 11 of the thirty-first GRSP session.

The Chairwoman confirmed that the United States of America would lead the work on the 9. elaboration of a gtr on head restraints, once the final rule has been published in the United States of America. The expert from the United States of America presented again informal document No. 11 of the thirty-first GRSP session and clarified that only outboard positions were covered by the proposed rulemaking for FMVSS No. 202 (information available at: http://dms.dot.gov, docket No. NHTSA-2000-8570). He informed GRSP that the final rule on FMVSS No. 202 and Regulation No. 17 could constitute a good basis for a potential gtr. The experts from the Netherlands raised the issue of the avoidance of whiplash injuries and the expert from CLEPA asked if the research in the United States of America took into account the interaction of seats and child restraint systems (CRS). On these issues, the Chairwoman reminded the group of Dr. Runge's intervention during the one-hundred-andtwenty-ninth WP.29 session (TRANS/WP.29/909, para. 5). She clarified that, in a first step, the gtr would improve the head restraint performances, and that, after the research being conducted in different countries, the two above-mentioned questions could be considered. She suggested that the experts conducting research in this area share their expertise and give presentations at the next GRSP session. She also suggested resuming consideration of informal document No. 11 at that session.

## A.5. Exchange of views on side impact dummy

10. GRSP agreed to delay the presentation by the expert from ISO on the WorldSID dummy development to the December 2003 GRSP session.

#### A.6. Exchange of views on crash compatibility

11. The expert from the United States of America announced that he would make a presentation at the GRSP December 2003 session concerning his country's initiative on this matter. GRSP was also informed about the activities of the European Enhanced-Vehicle-safety Committee (EEVC) on crash compatibility of passenger-passenger vehicles and passenger-light truck vehicles. The Chairwoman suggested that both experts, as well any other expert working on this subject, should make presentations of their work at the December 2003 session. She also invited the newly elected Chairman of EEVC to give a more general presentation on the EEVC activities at the beginning of the same session.

#### B. 1958 AGREEMENT

## B.1. AMENDMENTS TO ECE REGULATIONS

#### B.1.1. <u>Regulation No 14</u> (Safety-belt anchorages)

Documentation: TRANS/WP.29/GRSP/2002/16; TRANS/WP.29/GRSP/2003/2; TRANS/WP.29/GRSP/2003/9; informal documents Nos. 1, 3 and 11 of annex 1 to this report.

12. The expert from Spain announced an updated proposal for effective anchorages for consideration at the GRSP December 2003 session.

13. GRSP considered the proposal by Japan for the mandatory equipment of three-point safety-belt anchorages for the rear outboard seats in N1 vehicles (TRANS/WP.29/GRSP/2002/16). The expert from OICA introduced informal document No. 3 suggesting amendments. Both experts collaborated on a final proposal (informal document No. 11) that was adopted by GRSP. The secretariat was requested to transmit the proposal, with the amendments reproduced in annex 2 to this report, to WP.29 and AC.1 for consideration at their November 2003 sessions as draft Supplement 1 to the 06 series of amendments to Regulation No. 14.

14. GRSP adopted TRANS/WP.29/GRSP/2003/9 and asked the secretariat to include the proposal in the draft Supplement 1 to the 06 series of amendments to Regulation No. 14 (see para. 13). Note by the secretariat: annex 2 to this report contained the consolidation of both proposals.

15. The expert from OICA withdrew TRANS/WP.29/GRSP/2003/2.

16. The expert from Germany introduced informal document No. 1, proposing the alignment of some requirements of the Regulation to FMVSS as well as some clarifications. To allow a better consideration of the proposal, the secretariat was requested to distribute informal document No. 1 with an official symbol for consideration at the next GRSP session.

B.1.2. <u>Regulation No. 16</u> (Safety-belts)

Documentation: TRANS/WP.29/GRSP/2001/19/Rev.1; TRANS/WP.29/GRSP/2002/17; informal document No. 12 of annex 1 to this report.

17. The expert from Spain withdrew document TRANS/WP.29/GRSP/2001/19/Rev.1.

18. GRSP adopted the proposal of TRANS/WP.29/GRSP/2002/17, as amended by informal document No. 12, concerning the mandatory equipment of three-point safety-belts for the rear outboard seats in N1 vehicles. The amendments are reproduced below. GRSP requested the secretariat to transmit it to WP.29 and AC.1 for consideration at their November 2003 sessions as draft Supplement 16 to the 04 series of amendments to Regulation No. 16.

Paragraph 15.3.1., amend to read:

"15.3.1. As from the official date of entry into force of Supplement 16 to the 04 series of amendments, no Contracting Party applying this Regulation shall refuse to grant ECE approvals under this Regulation as modified by Supplement 16 to the 04 series of amendments."

Insert new paragraphs 15.3.4. and 15.3.5., to read:

"15.3.4. After 16 July 2006, the Contracting Parties applying this Regulation shall grant approval only if the vehicle type satisfies the requirements of this Regulation as amended by the Supplement 16 to the 04 series of amendments.

15.3.5. After 16 July 2008, the Contracting Parties applying this Regulation may refuse to recognize approvals not granted in accordance with Supplement 16 to the 04 series of amendments to this Regulation."

B.1.3. <u>Regulation No. 17</u> (Strength of seats)

Documentation: TRANS/WP.29/GRSP/1997/6/Rev.1; TRANS/WP.29/GRSP/2001/20; TRANS/WP.29/GRSP/2003/1; TRANS/WP.29/GRSP/2003/3; informal document No. 4 of annex 1 to this report.

19. The expert from Spain withdrew document TRANS/WP.29/GRSP/1997/6/Rev.1.

20. GRSP adopted TRANS/WP.29/GRSP/2003/1 and requested the secretariat to transmit it to WP.29 and AC.1 for consideration at their November 2003 sessions as draft Corrigendum 1 to the Revision 4 to Regulation No. 17.

21. GRSP considered TRANS/WP.29/GRSP/2001/20, TRANS/WP.29/GRSP/2003/3 and informal document No. 4. The Czech Republic volunteered to update the proposal of TRANS/WP.29/GRSP/2001/20 and, jointly with OICA, revise informal document No. 4, to be distributed with an official symbol for the December 2003 session. GRSP agreed to resume consideration of the three proposals at its next session.

B.1.4. <u>Regulation No. 21</u> (Interior fittings)

Documentation: TRANS/WP.29/GRSP/1998/17; TRANS/WP.29/GRSP/2003/7.

22. The expert from the United States of America withdrew TRANS/WP.29/GRSP/1998/17.

23. The expert from Belgium presented TRANS/WP.29/GRSP/2003/7 in order to clarify that, during the head impact test, it could not be possible to measure the radius of curvature of the surfaces where a head impact might occur. GRSP agreed on the principle of the proposal, but asked for a reformulation. The expert form Belgium volunteered to prepare such a proposal for consideration at the next session.

B.1.5. <u>Regulation No. 29</u> (Cabs of commercial vehicles)

Documentation: TRANS/WP.29/GRSP/1998/13; TRANS/WP.29/GRSP/1999/1; TRANS/WP.29/GRSP/2001/3; TRANS/WP.29/GRSP/2002/18.

24. The expert from the Russian Federation informed GRSP that tests had been initialized in his country in order to help with the elaboration of the amendment to Regulation No. 29. The Chairwoman stated that the informal group should consider all the pending proposals and that its expected output would be the submission to GRSP of a unique proposal for amending the Regulation. She also invited the group to submit a progress report to the December 2003 session. The expert from the Russian Federation requested all experts who were interested in participating in the informal group to contact him, so that he could organize the first meeting of the informal group, to be held in October 2003.

## B.1.6. <u>Regulation No. 44</u> (Child restraints)

Documentation: TRANS/WP.29/GRSP/2001/13; TRANS/WP.29/GRSP/2002/10; TRANS/WP.29/GRSP/2002/13; TRANS/WP.29/GRSP/2003/4; TRANS/WP.29/GRSP/2003/5; TRANS/WP.29/GRSP/2003/8; TRANS/WP.29/GRSP/2003/11; informal documents Nos. 6, 7, 9 and 10 of annex 1 to this report.

25. The expert from France, explaining that Child Restraint Systems (CRS) were sensitive safetyproducts, equivalent to protective helmets for motorcyclists, reintroduced his proposal for conformity of production (COP) and product qualification procedure, which paralleled those of Regulation No. 22 (TRANS/WP.29/GRSP/2001/13). He indicated that this special procedure would not be extended to other Regulations. The expert from CLEPA stated that the proposal was not necessary if the Contracting Parties applied the COP procedure of the 1958 Agreement.

26. The expert from France presented the application of its proposal concerning the Conformity of Production (COP) and the product qualification of CRS tests. The expert from CLEPA announced that they would perform an analysis of the proper data and asked other experts from technical services to do the same with their data, in order to present the results to GRSP for consideration at its next session. Several experts raised their concerns on the number of examples to be tested for the product qualifications as well as on the standard deviation value for the acceptance of the product.

27. As no agreement on the principle could be reached, the Chairwoman suggested to seek the advice of WP.29. In order to try to solve the impasse, GRSP asked the expert from France to organize a meeting with other interested Contracting Parties and CLEPA to put in common data and to agree on a new proposal, if possible. The expert from CLEPA, insisting on the rejection of the concept, tabled informal document No. 6, proposing technical improvements to it. GRSP requested the secretariat to distribute informal document No. 6 with an official symbol at its next session.

28. GRSP considered TRANS/WP.29/GRSP/2002/10. The expert from the Netherlands tabled informal document No. 7, updating the proposal in line with the adopted proposal for ISOFIX. GRSP adopted the proposal (excluding paragraphs 8.4. to 8.4.2.) amended as reproduced in annex 3 to this report and requested the secretariat to transmit it to WP.29 and AC.1, for consideration at their November 2003 sessions, as draft Supplement 6 to the 03 series of amendments to Regulation No. 44.

29. The secretariat was requested to prepare a new official document with the proposal of paragraphs 8.4. to 8.4.2 of TRANS/WP.29/GRSP/2002/10 and agreed to consider it jointly with the proposal transmitted by Germany on behalf of the technical services concerning draft amendments to Regulation No. 44 (TRANS/WP.29/GRSP/2003/5).

30. GRSP also considered and adopted the proposals TRANS/WP.29/GRSP/2003/4 as amended by informal document No. 10, TRANS/WP.29/GRSP/2003/8 with the deletion of the suggested amendment to paragraph 2.1.3, and TRANS/WP.29/GRSP/2003/11, as amended by informal document No. 9. GRSP requested the secretariat to consolidate all these amendments together with the amendment adopted in paragraph 28 (see annex 3).

31. GRSP adopted TRANS/WP.29/GRSP/2002/13 and requested the secretariat to transmit it to WP.29 and AC.1, for consideration at their November 2003 sessions, as draft Corrigendum 5 to the 03 series of amendments to Regulation No. 44.

## B.1.7. <u>Regulation No. 95 (Lateral collision protection)</u>

Documentation: TRANS/WP.29/GRSP/2002/11.

32. GRSP considered the proposal to substitute the EUROSID-1 dummy by the EUROSID-2 (ES-2) (TRANS/WP.29/GRSP/2002/11). The expert from the United States of America informed GRSP that his country could not consider ES-2 without the proposed changes to the dummy's rib specifications to correct the problem of the grabbing of the back-plate of the thorax. The expert from OICA confirmed that, after having made some tests with ES-2, technical questions were still open and that these questions had been communicated to EEVC. The experts from the Netherlands and France informed GRSP that EEVC was considering possible solutions and that ES-2 would be modified accordingly. At the suggestion of the United Kingdom, to avoid a relative repeated amendment to the specifications of the dummy, GRSP agreed to introduce long transitional provisions that would allow use of the tests for either ES-2 or the previous version. It was also agreed that once the definitive version of ES-2 was defined, only the new dummy could be utilized.

33. GRSP identified the prescriptions subject to possible further amendments and agreed to mention them in the report. These parts, referring to the new annex 6 are the following: the thoracic spine box (para. 2.5.3.); the rib module (para. 2.5.6.); the tuning spring (para. 2.5.8.) and the requirements for full rib module certification (table 5, para. 5.9.8.).

34. Finally, GRSP adopted TRANS/WP.29/GRSP/2002/11 with the amendments reproduced in annex 4 to this report. GRSP requested the secretariat to transmit the amended proposal to WP.29 and AC.1, for consideration at their November 2003 sessions, as draft Supplement 1 to the 02 series of amendments to Regulation No. 95.

B.2. ISOFIX

Documentation: TRANS/WP.29/GRSP/2001/15/Rev.2/Corr.1; TRANS/WP.29/GRSP/2001/16/Rev.2/Corr.1.

35. As agreed at the thirty-second session (TRANS/WP.29/GRSP/32, para. 30), the expert from CLEPA proposed the introduction, in Regulations Nos. 16 and 44, of a new ISOFIX size class B1 (TRANS/WP.29/GRSP/2001/15/Rev.2/Corr.1 and TRANS/WP.29/GRSP/2001/16/Rev.2/Corr.1).

36. It was pointed out that GRSP was not the adequate forum to define and to establish the prescriptions of the Child Restraint Fixture (CRF), but it should correspond to ISO.

37. Finally, GRSP adopted the above-mentioned proposals and requested the secretariat to transmit them to WP.29 and AC.1, for consideration at their November 2003 sessions, as draft Corrigendum 1 to Supplement 15 the 04 series of amendments to Regulation No. 16 and draft Corrigendum 1 to Supplement 5 the 03 series of amendments to Regulation No. 44.

## B.3. ACCELERATION TEST DEVICES

<u>Documentation</u>: TRANS/WP.29/GRSP/2000/3; TRANS/WP.29/GRSP/2000/12; TRANS/WP.29/GRSP/2001/2; TRANS/WP.29/GRSP/2002/15, informal document No. 5 of the thirty-first session.

38. The expert from Japan made a presentation of informal document No. 5 of the thirty-first session. As the main conclusion, he indicated that the proposed accelerating test was equivalent to the current decelerating test, as the  $\Delta v$  was identical in both cases.

39. The expert from France confirmed that, for similar  $\Delta v$ , the tests were equivalent but stated that some differences existed regarding the cinematic. The expert from CLEPA confirmed the existence of these differences, occurring mainly during the rebound phase. He said that the accelerating device exceeded the limits of the Regulation. He also said that, if the complete range of the velocity were included in the test, the severity of the current Regulation would be reduced. The expert from France pledged for the non-modification of the current requirements, but to amend the proposals, making the accelerating test equivalent to current test method. The expert from the United States of America informed GRSP that FMVSS No. 213 had been amended and suggested that Regulation No. 44 should be harmonized with it, including the rebound phase in the test pulse. He indicated that FMVSS No. 213 was available at the following web address link: <u>http://www.nhtsa.dot.gov/nhtsasearch/index.asp</u> under docket number 11707. The expert from Germany suggested that, if the alternative accelerating method would be accepted, Regulation No. 44 should be amended to consider decelerating method to remove the reference to the stopping distance.

40. GRSP agreed with the concept that accelerating and decelerating tests were equivalent but that the proposals to amend the concerned Regulations needed to be discussed in detail at further sessions.

41. GRSP considered TRANS/WP.29/GRSP/2000/3. Several experts raised concerns and made suggestions. The expert from Japan agreed to consider them in detail and proposed to transmit amendments to the proposals, if necessary, at the December 2003 session. The expert from France announced a presentation of the tests required by Regulation No. 16 made using the accelerating test devices.

B.4. OTHER BUSINESS

B.4.1. Exchange of information on national and international requirements on passive safety

42. GRSP noted that the European Union Directive 2003/20/EC relating to the compulsory use of safety belts was considered under agenda item B.4.2. (see para. 48 below).

43. Regarding CRS, the expert form the United States of America informed GRSP on the progress of work in his country regarding side impact requirements for child seats. He also mentioned the work on safety-belts of the centre rear seat of passenger cars and on motor coach activities. He announced that, at the next GRSP session, he would report on the progress of these activities.

44. The expert from the European Commission said that work was being developed on bull-bars, on the mandatory use of safety-belts in all categories of vehicles, on the possible ban of lateral seats, and on school buses.

45. The expert from Canada reported that his country was working on rear impact, on the harmonization of frontal impact regulation with the United States of America, and on the installation of three-point safety-belts and ISOFIX anchorages regarding school buses.

46. The expert from the Russian Federation informed GRSP that his country was working on nondeformable barriers for frontal and lateral impact and on buses.

47. The expert from Germany reported on the development in his country of a test method for CRS lateral impact and on new child dummies. The expert from the Netherlands informed that his country was also involved in the development of the new child dummies.

## B.4.2. <u>Restraining of children travelling in buses and coaches</u>

Document: Informal document No. 8 of annex 1 to this report.

48. The Chairwoman informed GRSP about the purpose of the European Union Directive 2003/20/EC, and requested GRSP to study this issue carefully. In this respect, the expert from Italy introduced informal document No. 8 to which the above-mentioned Directive was attached. He reported that the Directive made mandatory the use of the restraint systems installed in buses and coaches for children aged 3 years and over. With regard to children of less than three years of age, national provisions shall be applied. The expert suggested that GRSP should report to WP.29 and WP.1 taking into consideration the research carried out by Working Group 18 of EEVC (car child occupant safety). The Chairwoman announced her intention to report to WP.29 on this important safety subject and requested GRSP experts to contribute with their available research results to elaborate the report on the GRSP opinion on the Directive.

## B.4.3. <u>Regulation No. 114 (Replacement airbag systems)</u>

Documentation: TRANS/WP.29/GRSP/2003/6.

49. The expert from the Czech Republic introduced a proposal to correct the draft Regulation in preparation by the secretariat. GRSP agreed with the proposal, except for the suggested amendment to the marking (annex 4). Given that all the corrections were editorial, GRSP requested the secretariat to correct the Regulation before its final publication.

B.4.4. Collective amendments to Regulations Nos. 11, 12, 14, 16, and 17

# Documentation: TRANS/WP.29/GRSP/2002/20

50. The expert from Japan raised his concerns with respect to the idea of the deletion of vehicle marking for systems as proposed in TRANS/WP.29/GRSP/2002/20. He considered that the current marking was essential for the identification of the safety level of the vehicle. The experts from France and the United Kingdom were in favour of the proposal for the deletion of the approval marking. The Chairwoman announced her intention to report to WP.29 and indicated that the general philosophy on

the subject should be taken by WP.29, but in any case the possible deletion needed to be considered Regulation by Regulation. She also suggested not considering this item at the December 2003 session.

#### B.4.5. <u>Amendments to the specifications of SAE J826 concerning the 3-D H machine</u>

51. The Chairwoman informed GRSP that, following her report on this issue to WP.29 at its March 2003 session, the expert from SAE had announced that the 3-D H machine would continue to be available (TRANS/WP.29/909, para. 41). Some experts from OICA and CLEPA deplored that SAE had announced in its website that the machine was not available any more and only the new HPM-II was offered. The experts from the two organizations agreed to provide concrete cases on the situation and to raise the issue again at the WP.29 level, if necessary.

## B.4.6. Consideration of draft Rule No. 2 to be annexed to the 1997 Agreement

Documentation: TRANS/WP.29/2003/16.

52. GRSP experts were informed that WP.29 had agreed to transmit the proposal for Draft Rule No. 2 (TRANS/WP.29/2003/16) to its subsidiary Working Parties for consideration (TRANS/WP.29/909, para. 160). GRSP experts were requested to consider the proposal in order to give their agreement or to transmit their comments for consideration at the next GRSP session.

## TRIBUTE TO Mr. G. FELTEN and Mr. D. BURLEIGH

53. GRSP acknowledged that Mr. G. Felten, expert from Germany, would retire at the end of the year. GRSP experts expressed appreciation of Mr. G. Felten's high quality work not only on passive safety, but also on general safety, expressed to him their gratitude with much applause, and wished him a long and happy retirement. Mr. G. Felten thanked GRSP for its appreciation and announced his possible participation to the GRSP December 2003 session.

54. The Chairwoman informed GRSP that Mr. D. Burleigh, expert from CLEPA, would also be retiring soon. The Chairwoman and GRSP experts thanked Mr. D. Burleigh for his high quality technical contributions to its work, mainly on the protection of children, and wished him a long, happy and merited retirement with a long ovation. Mr. D. Burleigh thanked GRSP for its wishes and expressed his personal satisfaction at having contributed to saving child lives through the GRSP work.

#### AGENDA FOR THE NEXT SESSION

55. GRSP agreed on the following provisional agenda of its thirty-fourth session to be held in Geneva from 8 December (14.30 h) to 12 December (17.30 h)  $2003 \frac{1}{2}$ .

- A. 1998 Agreement
- A.1. Draft global technical regulation on pedestrian safety
- A.2. Draft global technical regulation on anchorages and tethers for child safety seats
- A.3. Draft global technical regulation on door retention components

- A.4. Draft global technical regulation on head restraints
- A.5. Exchange of views on side impact dummy (including the evaluation of ES-2)
- A.6. Exchange of views on vehicle crash compatibility
- B. 1958 Agreement
- B.1. Amendments to ECE Regulations (1958 Agreement)
- B.1.1. Regulation No. 14 (Safety-belt anchorages), development
- B.1.2. Regulation No. 17 (Strength of seats) development
- B.1.3. Regulation No. 21 (Interior fittings) development
- B.1.4. Regulation No. 29 (Cabs of commercial vehicles) development
- B.1.5. Regulation No. 44 (Child restraints) development
- B.2. ISOFIX
- B.3. ACCELERATION TEST DEVICES
- B.4. RESTRAINING OF CHILDREN TRAVELLING IN BUSES AND COACHES
- B.5. OTHER BUSINESS
- B.5.1. Consideration of Draft Rule No. 2 to be annexed to the 1997 Agreement
- B.5.2. Regulation No. 114 (Replacement airbag systems)
- B.5.3. Amendments to the specifications of SAE J826 concerning the 3-D H machine
- B.5.4. Exchange of information on national, regional and international requirements on passive safety

<sup>1/</sup> As part of the secretariat's efforts to reduce expenditure, all the official documents distributed prior to the session by mail 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.

## Annex 1

# LIST OF INFORMAL DOCUMENTS DISTRIBUTED WITHOUT A SYMBOL DURING THE SESSION

No.	Transmitted by	Agenda item	Language	Title
1.	Germany	B.1.1.	E	Comments to the OICA proposal for amendment to Regulation No. 14 (TRANS/WP.29/GRSP/2003/2)
2.	Japan	A.1.	E	UN/ECE/WP.29/GRSP Pedestrian Safety gtr Informal Group Preliminary Report
3.	OICA	B.1.1.	E	Amendments to UN/ECE R14 – Safety belt anchorages. OICA comments to the proposal by Japan (TRANS/WP.29/GRSP/2002/16)
4.	OICA	B.1.3.	E	Amendments to UN/ECE R17 – Strength of seats. OICA comments to the proposal by the Czech Republic (TRANS/WP.29/GRSP/2003/3)
5.	USA	A.3.	E	UN/ECE/WP.29/GRSP Informal Group on Door Lock and Door Retention Components Preliminary Report
6.	CLEPA	B.1.6.	Е	CLEPA Proposals for revision to TRANS/WP.29/GRSP/2001/13
7.	Netherlands	B.1.6.	Е	Proposal for Draft Amendments to Regulation No. 44 (Child restraints)
8.	Italy	B.4.2.	E	Child safety in buses and coaches
9.	CLEPA	B.1.6.	E	Amendments to Regulation No. 44
10.	Germany	B.1.6.	E	Proposal for Draft Amendments to Regulation No. 44 (Child restraints)

No.	Transmitted by	Agenda item	Language	Title

				TRANS/WP.29/GRSP/33 page 13 Annex 1
11.	Japan	1.1.	Е	Amendments to Regulation No. 14
12.	OICA	B.1.2.	Е	ECE Regulation 16 OICA comments to document TRANS/WP.29/GRSP/2002/17
	CLEPA	B.2	E	Presentation on ISOFIX CRS Volume Envelope B1 Vehicle Fit
	ISO	A.5.	Е	Presentation on WorldSID Update

#### Annex 2

#### AMENDMENTS TO REGULATION No. 14 BASED ON TRANS/WP.29/GRSP/2002/16, TRANS/WP.29/GRSP/2003/9 AND INFORMAL DOCUMENTS Nos. 3 AND 11 ADOPTED BY GRSP AT ITS THIRTY-THIRD SESSION

#### Paragraph 5.3.3., amend to read:

#### <u>Annex 6</u>,

The table, amend to read:

VEHICLE	FORWAR	REAR			
CATEGORY	OUTE	BOARD	CENTRE		FACING
	FRONT	OTHER	FRONT	OTHER	
$M_1$	3	3	3	3	2
$M_2 \leq 3.5$ tonnes	3	3	3	3	2
M <sub>3</sub> & M <sub>2</sub> > 3.5 tonnes	3 ⊕	3 or 2 ⋕	3 or 2 ⋕	3 or 2 쀼	2
$N_1$	3	3 or 2 Ø	3 or 2 *	2	2
N <sub>2</sub> & N <sub>3</sub>	3	2	3 or 2 *	2	2

Insert new paragraphs 14.6. to 14.12., to read:

- "14.6. As from the official date of entry into force of Supplement 1 to the 06 series of amendments, no Contracting Party applying this Regulation shall refuse to grant ECE approvals under this Regulation as modified by Supplement 1 to the 06 series of amendments."
- 14.7. For vehicles not affected by Supplement 1 to the 06 series of amendments to this Regulation the existing approvals shall remain valid, if they had been granted in compliance with the 05 series of amendments, up to its Supplement 3.
- 14.8. As from 20 February 2005 for vehicles of category M1, Contracting Parties applying this Regulation shall grant ECE approvals only if the requirements of this Regulation, as amended by Supplement 1 to the 06 series of amendments, are satisfied.

"

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- 14.9. As from 20 February 2007 for vehicles of category M1, Contracting Parties applying this Regulation may refuse to recognize approvals which were not granted in accordance with Supplement 1 to the 06 series of amendments to this Regulation.
- 14.10. As from 16 July 2006 for vehicles of category N, Contracting Parties applying this Regulation shall grant approval only if the vehicle type satisfies the requirements of this Regulation as amended by the Supplement 1 to the 06 series of amendments.
- 14.11. As from 16 July 2008 for vehicles of category N, Contracting Parties applying this Regulation may refuse to recognize approvals not granted in accordance with Supplement 1 to the 06 series of amendments to this Regulation."

#### Annex 3

#### AMENDMENTS TO REGULATION No. 44 ADOPTED BY GRSP AT ITS THIRTY-THIRD SESSION (see para. 28 above)

#### Insert a new paragraph 2.11.1., to read:

"2.11.1. "<u>support leg</u>" means a permanent attachment to a child restraint creating a compressive load path between the child restraint and a vehicle structure in order to by-pass seat cushion effects during deceleration; a support leg may be adjustable."

Paragraph 2.14.1., amend to read:

"... under Regulation No. 14. This includes the trolley floor pan as described in annex 6 or other structural features of a the specific vehicle(s) when loaded by a support leg."

Paragraph 2.23.2., correct the words "look" to read "lock" and "looking" to read "locking".

Insert a new paragraph 2.37., to read:

"2.37. "<u>Adult safety-belt webbing guide</u>" means a device through which the adult belt passes for its correct routing, that allows free webbing movement."

Paragraph 4.3., amend to read:

"4.3. If the restraint is to be used in combination with an adult ...... methods of use.

There must be a clear differentiation between the intended routes for the lap section and the diagonal section of the safety belt. Indication such as colour coding, words, shapes etc. shall distinguish each section of the safety belt.

In any illustration of the belt route on the product, the orientation of the child restraint relative to the vehicle must be clearly indicated. Belt route diagrams that do not show the vehicle seat are not acceptable.

The marking defined in this paragraph ......"

Paragraph 4.4., should be deleted.

Paragraph 4.5. (former), renumber as paragraph 4.4. and amend to read (the label remains unchanged):

"4.4. On the visible inner surface (including the side wing beside the child's head) in the approximate area where the child's head rests within the child restraint, rearward facing restraints shall have the following .....

This label shall be provided .....

Label minimum size : 60 x 120 mm.

The label shall be stitched to the cover around its entire perimeter and/or permanently bonded to the cover over its entire back surface. Any other form of attachment that is permanent and not liable to removal from the product or to becoming obscured is acceptable. Flag type labels are specifically prohibited.

If sections of the restraint or any accessories supplied by the child restraint manufacturer are able to obscure the label an additional label is required. One warning label shall be permanently visible in all situations when the restraint is prepared for use in any configuration."

Paragraphs 4.6. to 4.9. (former), renumber as paragraphs 4.5. to 4.8.

Insert a new paragraph 6.1.3.7., to read:

"6.1.3.7. Child restraints utilizing a support leg shall only be approved under the "semiuniversal" or the "specific vehicle" category and the requirements of annex 11 to this Regulation shall be applied. The manufacturer of the child restraint system shall take into account the needs of the support leg for their correct functioning in each vehicle and provide this information."

Paragraph 6.1.6., amend the reference to "paragraph 1.42." to read "paragraph 1.20."

Insert a new paragraph 7.1.2.2., to read:

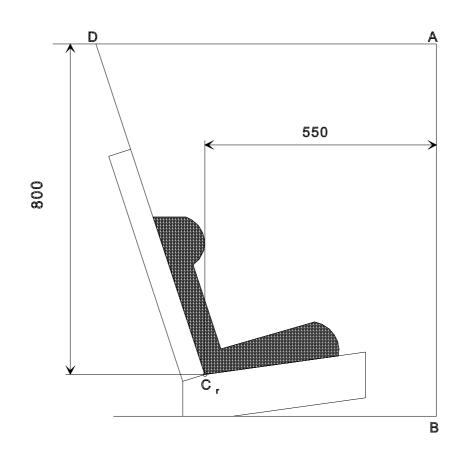
"7.1.2.2. In the case of child restraint systems with permanent mechanically attached adjustable head support devices, in which the height of either the adult safety-belt or of the child harness is directly controlled by the adjustable head support, it is not necessary to demand energy absorbing material in areas as defined in annex 18, which are not contactable by the manikin's head, i.e. behind the head support."

Paragraph 7.1.4.1.3., correct the word "preformed" to read "performed".

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Paragraph 7.1.4.4.1.1., amend to read:

"7.1.4.4.1.1. <u>Forward facing child restraints</u>: the head of the manikin shall not pass beyond the planes BA and DA as defined in Figure 1 below. This shall be judged up to 300 ms or the moment that the manikin has come to a definitive standstill whatever occurs first.



Dimensions in mm

Figure 1

Arrangement for testing a forward-facing device"

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"

Paragraph 7.1.4.4.1.2.1., amend to read:

"7.1.4.4.1.2.1. <u>Child restraints supported by dashboard</u>: the head of the manikin shall not pass beyond the planes AB, AD and DCr, as defined in Figure 2 below. This shall be judged up to 300 ms or the moment that the manikin has come to a definitive standstill whatever occurs first.

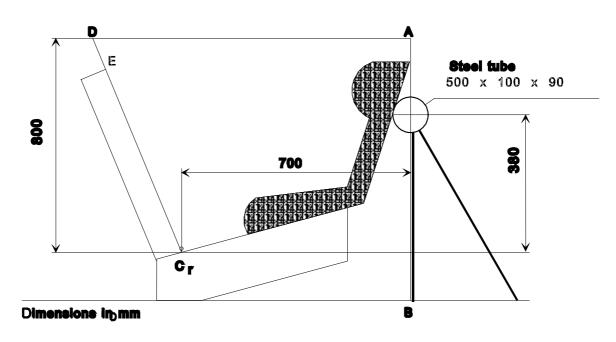


Figure 2: Arrangement for testing a rearward-facing device

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Paragraph 7.1.4.4.1.2.2., amend to read:

"7.1.4.4.1.2.2. <u>Child restraints in group 0 not supported by the dashboard, and carrycots</u>: the head of the manikin shall not pass the planes AB, AD and DE as shown in Figure 3 below. This shall be judged up to 300 ms or the moment that the manikin has come to a definitive standstill whatever occurs first.

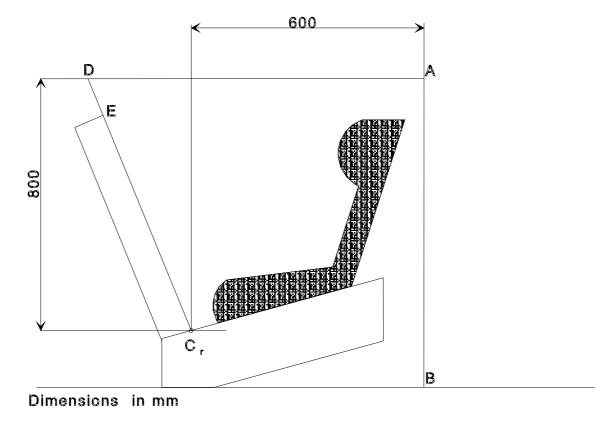


Figure 3

Arrangement for testing child restraint devices group 0, not supported by the dashboard"

Paragraph 7.1.4.4.1.2.3., amend to read:

"7.1.4.4.1.2.3. Child restraints other than group 0 not supported by the dashboard:

The head of the manikin shall not pass the planes FD, FG and DE, as shown in Figure 4 below. This shall be judged up to 300 ms or the moment that the manikin has come to a definitive standstill whatever occurs first.

In the case ...... "

Paragraph 7.2.1.2., amend to read:

" ..... in the position of actual unlocking and when projected into a plane perpendicular to the button's initial direction of motion: for enclosed devices an area of ...... two dimensions forming the prescribed area."

Paragraph 7.2.2.1., replace the word "throughout" to read "with all manikins of".

Insert a new paragraph 8.1.3.7.8., to read:

"8.1.3.7.8. If a child restraint system in group 0 or 0+ offers different configurations depending on the mass of the child, each configuration shall be tested with both manikins of the respective mass group."

Paragraph 8.2.1.1.2., amend to read:

" ...... or the vehicle without opening the buckle. A tension of  $200 \pm 2$  N shall be applied to the buckle. If the buckle is attached to a rigid part, the force shall be applied reproducing the angle formed between the buckle and that rigid part during the dynamic test."

Paragraph 9.1., amend to read:

"9.1. The test report shall record the results of all tests and measurements (including the deceleration curve of the trolley and the registration of the time (in msec) when the head of the manikin reaches its maximum displacement during the performance of the dynamic test), and the trolley speeds, the place occupied by the buckle during the tests, if it can be varied, and any failure or breakage."

Annex 6, appendix 3, figures 1 and 2, correct the text reading:

"DISTANCE C -  $R_e = 550$  mm ANGLE "ANG" = 30° MAXIMUM",

to read (in each figure):

"DISTANCE C -  $R_e = 530$  mm Re is located on the centerline of the retractor spool ANGLE "ANG" = 30° MAXIMUM"

#### <u>Annex 13</u>,

Paragraph 2., amend to read:

"..... two anchorages points (A1 and A2) (see Figure 1), and a central part (N, in detail in Figure 3). The retractor .....

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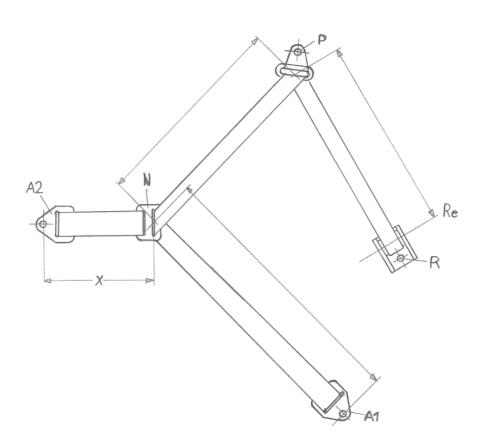
Paragraph 3., amend to read:

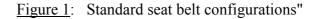
" .....

Belt retractor R shall be fitted to trolley anchorage such that the spool centre-line is positioned on Re.

The value of X in Figure 1 below is  $200 \pm 5$  mm. The effective strap length between A1 and the centre-line of the retractor spool Re (when the webbing is fully extracted including the minimum length of 150 mm  $\frac{*}{100}$  for testing of universal and semi-universal categories) shall be  $2820 \pm 5$  mm when measured in a straight line without load and on a horizontal surface; this length may be increased for testing of restricted category; for all categories with the child restraint installed there shall be a minimum of 150 mm  $\frac{*}{100}$  of strap length on the retractor spool."

Figure 1, amend to read:





## <u>Annex 17</u>,

Paragraphs 3.1. to 3.3., amend to read:

- "3.1. The test shall be conducted on a completely assembled child restraint with a minimum of modification only where necessary to ensure access for the support (directly beneath the point of impact) and for the impactor device and such that there is minimal effect on the performance by the modification.
- 3.2. The assembled child restraint shall be fully supported on its outer surface in the region of impact and be supported directly beneath the point of impact on a smooth rigid base, for example a solid concrete plinth.
- 3.3. Raise the headform to a height of 100 0/+5 mm from the respective upper surfaces of the assembled child restraint to the lowest point on the headform, and allow it to fall. Record the acceleration experienced by the headform during impact."

<u>Annex 18</u>,

Paragraph 1., amend to read:

"..... of the child seat. In the case of carry cot devices where a symmetrical installation of the dummy is not possible according to the device and manufacturer instructions, the lower limit of area at which material complying with annex 17 shall be used, shall be all areas beyond the dummy's shoulder in the head direction, when measured with this dummy in the carry cot in its worst position consistent with the manufacturer's instructions and the carry cot positioned on the test bench.

If a symmetrical installation of the dummy in the carry-cot may be possible, the whole inner surfaces shall be covered with material complying with annex 17; this material has to fulfil its purpose together with the inner side structure; the technical service may assess this aspect with further tests."

#### Annex 4

## AMENDMENTS TO DOCUMENT TRANS/WP.29/GRSP/2002/11 ADOPTED BY GRSP AT ITS THIRTY-THIRD SESSION (see paras. 32 to 34 above)

Through the text, amend the word "should" to read "shall".

The proposed insertion of paragraphs 11. to 11.3., amend to read:

Paragraph 10.1., amend to read:

"10.1. As from the official date of entry into force of Supplement 1 to the 02 series of amendments ....... as amended by Supplement 1 to the 02 series of amendments."

Insert new paragraphs 10.6. and 10.7., to read:

- "10.6. As from [36] months after the entry into force of Supplement 1 to the 02 series of amendments ....... as amended by Supplement 1 to the 02 series of amendments.
- 10.7. As from [84] months after the entry into force of Supplement 1 to the 02 series of amendments ...... as amended by Supplement 1 to the 02 series of amendments."

<u>Annex 1</u>,

Insert a new item 6, to read:

"6. Side impact dummy utilized ES-1/ES-2.  $\underline{2}$ /"

Items 6 to 14 (former), renumber as items 7 to 15.

<u>Annex 6</u>,

Paragraph 1.1., footnote 1/, should be completed with a document number and its date.

<u>Paragraphs 5.6.5. and 5.10.5.</u>, amend the reference to "ISO 6487:2000 CFC 60" to read "ISO 6487:2000 CFC 180".

Paragraph 5.11.7., amend the figure of "14.8 kN" to read "4.8 kN".