UNITED NATIONS



Distr. GENERAL

TRANS/WP.29/GRSP/28 19 March 2001

Original: ENGLISH

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
ON ITS TWENTY-EIGHTH SESSION

(27 November - 1 December 2000)

1. GRSP held its twenty-eighth session from 27 November (afternoon) to 1 December (morning) 2000 under the chairmanship of Mr. C. Lomonaco (Italy). 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): Austria; Canada; Czech Republic; Finland; France; Germany; Hungary; Italy; Japan; Netherlands; Norway; People's Republic of China; Poland; Russian Federation; Spain; Sweden; Switzerland; 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); European Enhanced Vehicle-safety Committee (EEVC); Consumers International (CI).

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

DRAFT REGULATION ON AIRBAGS

Documentation: TRANS/WP.29/GRSP/2000/4; TRANS/WP.29/GRSP/2000/5; TRANS/WP.29/2000/11; informal document No. 3 of annex 1 to this report.

- 3. The expert from Switzerland informed GRSP that a crash test had been conducted in order to verify the statement of a car manufacturer that the occupants involved in accidents rated the crash noise higher than the airbag deployment noise. He said that the result of a test (informal document No. 3) demonstrated that the noise resulting from the collision was approximately 30 dB below the noise caused by airbag deployment, in both the peak and the sound exposure level (SEL).
- 4. As a conclusion he confirmed that his country continued to ask for the introduction of a limit of the airbag deployment noise, as indicated in documents TRANS/WP.29/GRSP/2000/4 and TRANS/WP.29/GRSP/2000/5.
- 5. The expert from the United States of America informed GRSP that SAE was working on the same issue but using another concept, based on "auditory damage unit (ADU)". He said that the result of the work might be presented at the next GRSP session.
- 6. The expert from France, who circulated document TRANS/WP.29/GRSP/2000/11, based on a document distributed without a symbol at the twenty-seventh session (TRANS/WP.29/GRSP/27, para.7), insisted that permanent ear damage caused by the airbag deployment noise could not be scientifically demonstrated. He reminded GRSP that airbags were excellent in reducing head and chest injuries, and expressed his concerns about possible opinion against airbag use, based on a non-demonstrated possibility of ear damage. He also said that the criteria used in both research studies, in Switzerland and in the United States of America were not applicable to the airbag-noise deployment and its influence on humans. Finally, he concluded that more research was necessary before taking a decision on this issue.
- 7. The expert from Switzerland informed GRSP that a third case was known of a person involved in a crash who claimed temporary hearing problems, and that the number of people who complained of permanent hearing problems could rise to almost 10 per cent of accident victims.
- 8. The expert from France said that in more than two hundred cases he had analysed, he did not find any complaint concerning hearing problems.
- 9. The expert from the European Union pointed out that a risk factor below 20 per cent was too low to take actions. He also insisted on avoiding that the vehicle's passengers could decide not to use the airbag, by disconnecting it, if the non-demonstrated idea of ear damage would be spread.
- 10. GRSP considered that research in this area should continue, and requested the experts from France and Switzerland to join efforts on this issue.

11. The expert from the United Kingdom informed GRSP that, in his country, a research programme concerning airbags was in progress, in order to improve their performance. He said that data supplied by the United Kingdom were part of the European data and asked for collaboration from Governments and non-governmental organizations on the project, by providing data from their countries.

AMENDMENTS TO ECE REGULATIONS

(a) Regulation No 14 (Safety-belt anchorages)

<u>Documentation</u>: TRANS/WP.29/GRSP/1997/11; TRANS/WP.29/GRSP/2000/7; TRANS/WP.29/GRSP/2000/9; TRANS/WP.29/GRSP/2000/10; informal documents Nos. 6 and 13 of annex 1 of this report.

- 12. Concerning the definition of effective anchorage, the expert from Spain introduced document TRANS/WP.29/GRSP/2000/10, based on informal document No. 9 which had been distributed during the twenty-seventh session (TRANS/WP.29/GRSP/27, para. 25).
- 13. The experts from Germany, Italy, the United Kingdom, and OICA indicated their preferences to maintain the current wording of the Regulation, but offered to collaborate in order to find a better definition.
- 14. GRSP requested the expert from Spain to update the proposal for consideration during the May 2001 session.
- 15. Concerning the ISOFIX system, the expert from France, who had been requested to prepare a proposal for a first step introducing two low anchorages for both Regulation No. 14 and Regulation No. 44, informed GRSP that informal documents Nos. 6 and 7 contained the expected proposals. He also said that, as a result of the work done, Regulations Nos. 16 and 17 would also be affected by the introduction of the ISOFIX system and informed GRSP that the corresponding proposals would be transmitted for consideration at the session of May 2001.
- 16. Concerning the second step, he informed GRSP that the work had been initiated, and that he expected to present an advance proposal also at the May 2001 session.
- 17. The expert from Germany confirmed his support of a two steps work, but insisted that a third support (top tether or support leg) should only be included if it would be proved that its introduction would improve child safety. In order to support his statement, he gave a presentation showing that the reaction of a CRS with a top tether was essentially not much different from that of a CRS without top tether. He also said that the mandatory introduction of a top tether support could block the development of Regulation No. 14 and the side and rear impact protection for children. He also insisted that a top tether could increase the misuse of the ISOFIX child restraints.

- 18. The expert from Canada explained to GRSP that in his country tests had been made concluding that a top tether was the best solution to control the child's excursion. The experts from AIT/FIA and CI supported the idea of having a third support, but said that they could accept a top tether or a support leg.
- 19. The experts from OICA and CLEPA insisted on considering, as a first step, the proposal for the two lower ISOFIX anchorage points. With respect to the third support they suggested to wait until ISO would finalize the work searching for the best solution.
- 20. The expert from the United Kingdom stated that it was dangerous to introduce the two lower anchorages only as a first step. He regretted that, after having positive test results showing the need for a third anchorage, GRSP have chosen a non-universal solution. He expressed his concerns about the child ejection and expressed his fear that the adopted approach could give to ISOFIX a bad reputation.
- 21. The expert from ISO explained to GRSP the state of the work on the ISOFIX system. He said that Part I of standard ISO 13216, concerning the two low anchorages was finished, and that the work on Part II could be finished by the end of 2001.
- 22. Concerning informal document No. 22 specifically, the expert from EEVC explained to GRSP that ISOFIX should guarantee universality of the CRS, and that this concept was not preserved.
- 23. After a first consideration of informal document No. 6 the following amendments were suggested:

Paragraph 2.17., amend to read:

"2.17. "ISOFIX low anchorage" means

Paragraph 2.18., amend to read:

"2.18. "ISOFIX low anchorage systems" means"

Considering this paragraph and at the suggestion of C.I., GRSG agreed on the concept that another anchorage was needed to avoid rotation (top tether or support leg).

Paragraph 2.19., should be revised.

Figure 2: The need to have a reference to the mass for the device should be considered, and the expert from Spain expressed his reservation concerning the too defined construction of the device. He also expressed that the movement of the X point could exceed 2 mm if the foam was soft.

<u>Paragraph 5.2.2.1.</u>, the expert from CLEPA requested to introduce the tolerances of the ISO standard.

<u>Paragraph 5.2.2.2.</u>, the experts from Canada, Spain and EEVC suggested that the position of CRS should be included.

The expert from OICA suggested to insert a new paragraph 5.2.3., as contained in informal document No. 13. GRSP agreed with the drafting reproduced below.

Insert a new paragraph 5.2.3., to read:

"5.2.3. ISOFIX anchorage system shall be permanently in position or storable. In case of storable anchorages, the requirements relating to ISOFIX anchorages shall be fulfilled in the deployed position."

<u>Paragraph 5.3.10.</u>, the expert from CI requested that ISOFIX anchorages should only be installed in the rear seats of vehicles. The expert from Sweden requested to have ISOFIX anchorages for rear face child restraint systems in the front passenger seat. The expert from Germany suggested that manufacturers should have the freedom to install ISOFIX anchorages in all the vehicle seats.

Paragraph 5.3.10.1.1., the expert from Spain offered to redraft it.

<u>Paragraph 5.3.10.1.2.</u>, the expert from the United Kingdom expressed his concerns and offered to propose a better wording jointly with the expert from France.

<u>Paragraph 6.6.4.2.</u>, the expert from Spain raised the question of the possibility of applying lateral forces simultaneously, given the X point position. GRSP agreed that this issue should be considered jointly by the experts from France and Spain.

Paragraph 6.4.4.4., amend to read:

".... if the required force and displacements of table 2 are sustained for the"

<u>Paragraph 11.2.</u>, the expert from Sweden suggested to amend the words reading "ISOFIX child restraint system" by "child restraint system". The expert from CI requested that it shall be clearly indicated where ISOFIX anchorages were installed. He also requested that a guidance for the CRS installation would be available at any time during the vehicle's life.

- 24. GRSP requested the expert from France to provide an updated version of the proposal to be considered at the May 2001 session, taking into consideration different suggestions made by the experts.
- 25. Concerning the proposal for a global technical regulation (TRANS/WP.29/GRSP/2000/7 and TRANS/WP.29/GRSP/2000/9), GRSP made a first consideration of the proposal. The following questions were raised.
- 26. In the scope (paragraph 2.2.), it was agreed to postpone the consideration of the definitions until the work was completed by the GRSG informal group on "Common tasks".

- 27. The expert from OICA explained to GRSP that paragraph 2.3. was in square brackets to mark that Regulation No. 14 contained a more convenient definition of belt anchorages than FMVSS No. 210. The expert from USA said that a complete definition was needed in order to ensure the required extent of the test. The expert from Japan supported the need for a short definition. GRSP did not take any decision on this issue and agreed to continue its consideration.
- 28. For the definition of an effective anchorage (para. 2.4.), GRSP agreed to await the decision on the proposal concerning the same subject (TRANS/WP.29/GRSP/2000/10) for Regulation No. 14. The expert from the United States of America stated his reservation to this decision.
- 29. Concerning paragraph 2.6.1., the expert from Spain raised the question if the passenger seat is behind the driver's "R" point. The expert from Germany requested clarification concerning which part of the seat is to be folded (para. 2.9). For paragraph 2.1.4. it was suggested that the title should be amended.
- 30. Concerning the minimum number of safety-belt anchorages to be provided (paras. 3.2. to 3.2.6.), the expert from the United Kingdom suggested that all the seats should have 3 safety-belt anchorages, and also the ISOFIX anchorages. GRSP requested the expert from the United States of America to clarify his position at the next session.
- 31. The experts from the Netherlands and CI were against making any references to Regulation No. 94, FMVSS No. 208 and to Japanese standards (paragraph 3.3.).
- 32. For the location of the effective lower belt anchorages (para. 3.3.2.), the expert from OICA explained that the proposal contained the prescriptions of Regulation No. 14. The expert from United Sates of America was requested to give his comments at the next session.
- 33. Concerning the tests, the Chairman suggested to consider their prescriptions at the next session and requested the experts to study them prior to the session.
- 34. The expert from Germany proposed, and GRSP agreed, to amend the title of paragraph 5. to read: "INSPECTION DURING AND AFTER THE TEST".
- 35. Concerning the annexes of the proposal, the Chairman suggested to consider them at the May 2001 session, and kindly requested the experts from countries having different prescriptions to give their advice at that session. He also said that he would request instructions from WP.29 about the inclusion of references to other standards (ECE Regulations, FMVSS, or Japanese standards) once the work was more advanced.
- 36. It was noted that, in annex 3, figure 1, some dimensions were missing. GRSP requested the expert from OICA to provide them to the secretariat in order to elaborate an addendum to the proposal in due time for the next session. The expert from OICA clarified that in paragraph 3.3.3.1., the reference to paragraph 5.1.2. should be corrected to read "paragraph 2.5. of

annex 2.", in paragraph 3.3.3.7., the reference to paragraph 5.4.3.1., should read "paragraph 3.3.3.1.", and finally in paragraph 4.4. of annex 2 the reference to "2-9" should be corrected to read "(tilt angle, height difference with a seat mounting, surface texture, etc.)."

(b) Regulation No. 16 (Safety-belts)

 $\underline{\texttt{Documentation}}\colon$ TRANS/WP.29/GRSP/2000/12; informal documents Nos. 2, 5 and 18 of annex 1 to this report.

- 37. The expert from Italy introduced informal document No. 5 which contained a proposal to align Regulation No. 16 with the corresponding European Community Directive 2000/3/EC. GRSP adopted the proposal as reproduced in annex 2 to this report and agreed to transmit it to WP.29 and AC.1 for consideration at their June 2001 sessions as a draft Supplement 12 to the 04 series of amendments to Regulation No. 16.
- 38. It was also agreed that, in the definitive text of the Supplement, the dates of the transitional provisions should be identical to those of the European Community Directive 2000/3/EC.
- 39. The expert from Germany announced a proposal to amend the note at the end of the table "Minimum requirements for safety-belts and retractors."
- 40. The expert from the Russian Federation introduced informal document No. 2 which contained the necessary amendments to include acceleration devices to be used during the dynamic tests. To allow a more detailed consideration of the proposal, the secretariat was requested to distribute informal document No. 2 with an official symbol for the May 2001 session.
- 41. Nevertheless, GRSP stated that acceleration devices would only be accepted as an alternative if the comparison test being conducted by France and Japan demonstrated the equivalence with the current deceleration device.
- 42. The expert from Japan introduced informal document No. 18 which contained an explanation to the concerns that some experts had raised during the twenty-seventh session (TRANS/WP.29/GRSP/27, paras. 26 to 30) to his proposal of document TRANS/WP.29/GRSP/2000/12.
- 43. The expert from Finland expressed his concerns about the reduction of the retraction forces, and the expert from the Netherlands was against the value indicated in paragraph 6.2.5.3.6., suggesting a value of 0.1 daN. Te expert from CLEPA suggested that, before adopting new values for the retraction forces, it should be convenient to verify its implication with child restraint systems. GRSP agreed to continue consideration of this proposal at its next session.

(c) Regulation No. 17 (Strength of seats)

<u>Documentation</u>: TRANS/WP.29/GRSP/1997/1; TRANS/WP.29/GRSP/1997/6/Rev.1; and TRANS/WP.29/GRSP/1997/9; informal document No. 9 of annex 1 to this report.

- 44. The expert from Spain presented informal document No. 9 in which he asked for an interpretation of paragraph 2.1.1.6. of annex 9 to Regulation No. 17.
- 45. GRSP considered the text of the above-mentioned paragraph as sufficiently clear in both English and French languages, indicating that "seats behind which the type 1 blocks cannot be installed are exempted from this test". It was also noted that for vehicles with more than two rows of seats, paragraph 2.1.1., indicated that the removal and/or the folding of the rearmost row of seats should be done following the manufacturer's instructions in order to test the seat row immediately in front of this rearmost row.
- 46. GRSP adopted the Corrigendum to the Regulation suggested by Italy at the twenty-seventh session (TRANS/WP.29/GRSP/27, para. 36) and reproduced below. It was also agreed to transmit it to WP.29 and AC.1 for consideration in their June 2001 session.
- Annex 9, paragraph 3.1., correct the value of "50 + 2/- 0 km/h" to read "50 + 0/- 2 km/h".
- 47. The expert from Spain informed GRSP that work continued on the proposal of TRANS/WP.29/GRSP/2000/6/Rev.1 and that an updated proposal would be transmitted for consideration at the May 2001 session.
- (d) Regulation No. 21 (Interior fittings)

<u>Documentation</u>: TRANS/WP.29/GRSP/1998/17; TRANS/WP.29/GRSP/1999/11; informal documents Nos. 1, 14, 15 and 22 of annex 1 to this report.

- 48. The expert from Germany informed GRSP about the three meetings of the informal group (Madrid, February 2000; Cologne, May 2000; and Madrid, September 2000). He said that, as a result of the work, a proposal for the first step had been prepared (informal document No. 1). He explained to GRSP that a new revised proposal should be transmitted on time to be considered, as an official proposal, at the May 2001 session.
- 49. The expert from Spain recalled that the proposal of informal document No. 1 was the result for a first step and that the dynamic test included in FMVSS No. 201 would be considered in the second step of the amendments to Regulation No. 21. He also said that the proposal of document TRANS/WP.29/1999/11 should be incorporated in the future proposal.
- 50. The expert from OICA introduced informal documents Nos. 14 and 22, which superseded informal document No. 15. The documents contained proposed amendments regarding power operating windows, opening roofs and partitions, and a new procedure for testing energy dissipating materials.

- 51. The expert from EEVC informed GRSP that final data for the head impact would be provided by the middle of 2001, and clarified that both belted and unbelted passengers would be considered. He also said that a side pole test had been also considered but that the full test procedure had not been developed.
- 52. The experts from Italy, Netherlands, and FIA expressed their doubts about the use of a dummy test (annex 8), and the expert from Netherlands expressed his serious reservation to the elimination of the test with the undeployed airbag.
- 53. The expert from OICA explained to GRSP that his proposal intended to test the performance with all the restraint systems engaged and insisted that, if an airbag is provided with a disconnection switch, the test should be done with the airbag uninflated.
- 54. GRSP agreed to continue consideration of this at its next session subject to the availability of the proposal.
- (e) Regulation No. 29 (Cabs of commercial vehicles)

<u>Documentation</u>: TRANS/WP.29/GRSP/1998/13; TRANS/WP.29/GRSP/1999/1; informal documents Nos. 8, 23 and 24 of annex 1 to this report.

- 55. The expert from the United Kingdom presented a proposal to include into the scope of the Regulation vehicles with a maximum authorized mass exceeding 7.0 tonnes (informal document No. 8). He explained to GRSP that the proposal was the result of a research study which had considered 200 accidents in which the driver was killed.
- 56. The expert from the Russian Federation showed data (informal document No. 24) from his country. He expressed concerns about tests for N3 category vehicles and suggested to modify the test procedure.
- 57. The expert from Italy tabled informal document No. 23, which contained the remarks of the Italian expert to the report tabled by the United Kingdom on which the informal document No. 8 was based. He said that, in accordance with that report, only 4 lives per annum could be saved if the prescriptions of informal document No. 8 would be adopted. He asked the expert from the United Kingdom to make available the complete report in order to facilitate the consideration of the subject.
- 58. The expert from the United Kingdom offered to circulate the cost-benefit analysis of the report only, but offered the complete report to the experts who would require it.
- 59. GRSG requested the secretariat to distribute informal document No. 8 with an official symbol for the May 2001 session. It was also agreed to continue consideration of informal documents Nos. 23 and 24 at the next session, together with the cost-benefit analysis to be provided by the expert from the United Kingdom. Due to lack of time GRSP postponed consideration of documents TRANS/WP.29/GRSP/1998/13 and TRANS/WP.29/1999/1 to the next session.

- 60. The expert from OICA announced that a global technical regulation (gtr) concerning cabs of commercial vehicles was being prepared by his organization. The Chairman reminded GRSP that WP.29 was expected to establish priorities for gtrs and that such a proposal should comply with the priorities to be given by WP.29.
- (f) Regulation No. 44 (Child restraints)

Documentation: TRANS/WP.29/GRSP/1997/12; TRANS/WP.29/GRSP/2000/2; TRANS/WP.29/GRSP/2000/3; TRANS/WP.29/GRSP/2000/15; TRANS/WP.29/GRSP/2000/16; informal documents Nos. 4, 4a, 4b, 4c, 4d, 7, 19, 20 and 21.

- 61. Consideration of this item was initiated with the proposal for an ISOFIX system for Regulation No. 44 (informal document No. 7), which had been transmitted by the expert from France.
- 62. Concerning definitions, the comments were made identical to those received for Regulation No. 14 (see para. 23 above).
- 63. The expert from the Netherlands suggested that the device of figure 1 should have considerably bigger the interior space in height.
- 64. The expert from Sweden suggested to revise paragraph 6.1.3.2. in a way similar to paragraph 6.1.3.1. The expert from Consumers International insisted on the use of the universal and semi-universal category of child restraints, not confusing the term ISOFIX with universal.
- 65. The expert from EEVC indicated that, in his opinion, the figures of paragraphs 6.3.2.1. and 6.3.2.2. were reversed.
- 66. The expert from Consumers International asked for clarification of the marking (paragraph 6.2.3.2.).
- 67. Concerning ISOFIX attachment specifications (paragraph 7.2.6.), the expert from the United Kingdom proposed an alternative drafting in order to have in the test trolley the same latching cycles as in the vehicle.
- 68. Concerning the label for the ISOFIX Child restraint (paragraph 14.2.11.), the expert from the United Kingdom suggested to reconsider part 2 of the notice, once the prescriptions for Regulation No. 16 were adopted. The expert from Consumers International asked that the ISOFIX of the first step, with only two lower anchorages, should be clearly distinguished from the future ISOFIX for child restraints which should have a third support.
- 69. It was agreed that the expert from France should revise the inserted figure of annex 6, paragraph 8.
- 70. The value of 135 \pm 15 N of paragraph 1.3. of annex 21 was also considered. No agreement was reached and GRSP agreed to continue its consideration at the May 2001 session.

- 71. GRSP requested the expert from France to update the proposal with the comments received, and to transmit it for consideration at the May 2001 session.
- 72. The expert from Finland presented informal document No. 21 containing concerns of the Central Organization for Traffic Safety in his country about a new restraint model with an adjustable backrest. GRSP agreed that the expert from Finland would provide GRSP with more information at the May 2001 session.
- 73. The proposal of document TRANS/WP.29/GRSP/2000/16 was considered and the following problems were raised: the expert from CLEPA offered to transmit an alternative wording for paragraph 2.28., the expert from CI was against the deletion of paragraph 4.4., and the expert from the United Kingdom introduced a reservation to paragraph 7.1.2.2. The experts from France and the United Kingdom offered to prepare a text for conformity of production checks (paragraph 11.4.).
- 74. GRSP agreed to continue consideration of the pending issues at the May 2001 session.
- 75. Finally, GRSP adopted informal document No. 19 as reproduced below and agreed to transmit it as Supplement 4 to 03 series of amendments to Regulation No. 44 to WP.29 and AC.1 for consideration at their June 2001 sessions.

Paragraph 7.2.1.8.2.1., amend the value of "60" to read "80".

- 76. The expert from the Netherlands introduced document TRANS/WP.29/GRSP/2000/15 and informal document No. 20 containing a proposal for incorporating into the test the rebound movement after an impact.
- 77. GRSP agreed in principle with the idea of considering the rebound movement, and accepted the intention of the experts from the Netherlands and France to prepare a common proposal for the next session.
- 78. The expert from Japan introduced informal document No. 4. He explained to GRSP that the document contained additional proposals to document TRANS/WP.29/GRSP/2000/3 concerning prescriptions for decelerating devices.
- 79. GRSP thanked the expert from Japan but reiterated that comparison tests should be carried out to ensure that decelerating test devices would be equivalent to the current accelerating devices. GRSP requested the secretariat to distribute informal document No. 4 with an official symbol for the May 2001 session.
- 80. Following the suggestion by the expert from Sweden, GRSP agreed to postpone consideration of document TRANS/WP.29/GRSP/2000/3 (see also para. 68 of TRANS/WP.29/GRSP/27) to the next session.

(g) Regulation No. 94 (Frontal collision protection)

<u>Documentation</u>: TRANS/WP.29/GRSP/1999/5; TRANS/WP.29/GRSP/2000/13; informal documents Nos. 12, 16 and 17 of annex 1 to this report.

- 81. GRSP considered the proposal of document TRANS/WP.29/GRSP/2000/13 modified by informal document No. 17, which contained the amendments needed to adapt Regulation No. 94 in parallel to the European Community Directive 1999/98/EC.
- 82. GRSP adopted the text of document TRANS/WP.29/GRSP/2000/13 with the amendments indicated below. It was also agreed to transmit it, as a draft Supplement 1 to the 01 series of amendments to Regulation No. 94, to WP.29 and AC.1 for consideration at its June 2001 session.

Annex 10,

Paragraphs 1.3.5. 2.3.5. and 3.3.5., amend to read (French only):

"..... latéral, vertical ou pivotant."

<u>Paragraph 1.3.5.</u> (English only), correct the value of "125 \pm 1 mm" to read "1250 \pm 1 mm".

Paragraph 2.3.4., amend to read (English only):

" and perpendicular to the direction of the impact with a tolerance of \pm 3° and such that the mid sagittal"

Paragraph 3.3.5., amend to read (English only):

- " \dots shall be guided to exclude significant lateral, vertical or rotational movement."
- 83. The expert from the European Community informed GRSP that, with the amendments to document TRANS/WP.29/GRSP/2000/13 adopted (see paragraph 81 above), the errors introduced into the European Community Directive 1999/98/EC were corrected. He announced that he would prepare a corrigenda to the Directive (see para. 82).
- 84. The expert from Sweden presented informal document No. 12, which contained the amendments to European Directive 96/79/EC in order to incorporate the EEVC proposal for the front impact barrier mounting. He offered to elaborate for GRSP a parallel proposal for Regulation No. 94. GRSP accepted the offer and agreed to consider the proposal at the May 2001 session, if available.
- 85. Concerning the labelling, the expert from OICA tabled informal document No. 16 as an alternative proposal to document TRANS/WP.29/GRSP/1999/5, which had been transmitted by the expert from Consumers International.

- 86. The expert from Consumers International insisted that the label warning of the danger of an airbag for a child in a rear facing CRS should contain the same information as the labelling adopted for Regulation No. 44.
- 87. A majority of experts expressed their agreement with the Consumers International approach. Nevertheless, GRSP requested the experts from OICA and Consumers International to transmit their definitive written proposals to be considered at the next session, in order to resolve the matter.
- (h) Regulation No. 95 (Lateral collision protection)

<u>Documentation</u>: Informal documents Nos. 10 and 11 to this report.

- 88. The expert from EEVC briefed GRSP on the draft EEVC proposal for revised design specifications for the mobile deformable barrier (MDB) used in the side impact test procedure (informal document No. 11).
- 89. He said that it was very important to validate the revised specification in order to ensure reliability, repeatability and production conformity of MDB faces produced. He also said that an additional advantage would be to enable the improved dynamic performance corridors for this design to be generated.
- 90. Concerning the timetable, he expected that the validation tests should be finished during the first half of 2001, and that a final proposal should be transmitted to GRSP for the May 2001 session.
- 91. He informed GRSP about financial difficulties to conduct the validation tests and asked for contributions from EEVC countries.
- 92. GRSP thanked the expert from EEVC for the work done and also thanked the expert from France, who had chaired the ad-hoc group of the EEVC working group 13 in charge of defining the revised design specification of the honeycomb MDB.
- 93. The expert from Germany presented informal document No. 10 explaining to GRSP that the current back-plate defined in Regulation No. 95 influenced the Euro SID 1 dummy by means of a reduction of the load on the ribs. He said that to avoid this negative influence, the edges of the back-plate had been bent forward, and proposed to allow the use of this modified back-plate. He suggested to include into the report such authorization.
- 94. After consideration, GRSP agreed on finding a quick solution to the problem, and suggested to act in two steps. As a first step, a new design of the plate should be adopted to assure a better force distribution of the forces on the dummy thorax. The second step should be the inclusion into the Regulation of a new Euro SID 2 dummy currently being developed.
- 95. The expert from France urged that a solution be found and suggested resuming consideration of this issue at the May 2001 session.

OTHER BUSINESS

(a) <u>Exchange of information on national and international requirements on passive safety</u>

- 96. The expert from the United States of America informed GRSP about Act H.R.5164 of the Congress which required the NHTSA to develop a programme to improve the safety of child restraint systems (CRS). He said that the intention of NHTSA was to elaborate a more comprehensive test, including a dynamic test, and side and rear impact tests.
- 97. He informed GRSP that the future programme would be developed in several phases. At first, the European CRS should be considered and also a new ISO test procedure. The second phase would reflect the vehicle seats design in order to propose a new seat. Finally, the programme would include antropomorphic child devices for 10 year-old children. He said that the total programme should be finished in two years time, but that during the first year the proposal should already be elaborated.
- 98. He offered to elaborate the corresponding new standard on a harmonized basis and asked GRSP experts for information to facilitate the programme's elaboration. He also said that more details could be found at the NHTSA website at the following address: "http://www.nhtsa.dot.gov"
- 99. The expert from Germany offered his help in developing the side impact procedure. The expert from Consumers International also offered to share information concerning dynamic tests.
- 100. The expert from Italy informed GRSP that his country had incorporated into its national law European Community Directive 2000/3/CE and the draft European Community Directive on safety against frontal and central collision, and frame resistence for motorcycles.

(b) Sled test procedure for the dummy test in rear impacts

- 101. The expert from Germany informed GRSP that, after the formal consent of WP.29 to start work on a new draft Regulation concerning whip-lash injury avoidance in rear end accidents (TRANS/WP.29/735, para. 69), work had continued in collaboration with ISO. He announced that the research group would transmit a first official proposal to GRSP to be considered at its May 2001 session.
- 102. The expert from EEVC said that his organization was also working in this area and asked for collaboration.
- 103. At the request of the expert from France the expert from Germany clarified that the research group work was also taking into consideration the European Community programme concerning rear impacts. Finally, he asked for collaboration from those experts which had experience in this matter.

(c) Regulation No. 22 (Protective helmets)

<u>Documentation</u>: Informal documents Nos. 25 and 26 of annex 1 to this report.

- 104. The expert from the United Kingdom introduced informal document No. 25 which contained a proposal for a Corrigendum to Regulation No. 22. In order to improve drafting of paragraph 8.7., he tabled informal document No. 26.
- 105. GRSP was, in principle, in favour of the proposed corrigendum, as reproduced in annex 3 of this report, but agreed to consider it definitively at the May 2001 session.

(d) <u>Elections of the Chairman and Vice-Chairman</u>

- 106. GRSP was informed that due to the entering into force of the Terms of Reference and Rules of Procedure of WP.29 (TRANS/WP.29/690) the Chairman and, if desired, Vice-Chairman should be elected every second session of the year also by the subsidiary bodies of WP.29. This procedure should be applied mandatorily for the year 2001, whilst for 2000, the continuation under the current Chairman was allowed (TRANS/WP.29/735, para. 17).
- 107. GRSP was also informed on the GRRF's Chairman's suggestion that the Chairmen of the different informal groups should be proposed as Vice-Chairmen if they were representing their Governments.
- 108. GRSP agreed to maintain the current situation, and to hold the election of Chairman and Vice-Chairman at its December 2001 session.

AGENDA FOR THE NEXT SESSION

- 109. For the twenty-ninth session, to be held in Geneva from 7 May (14.30h) to 11 May (12.30h) 2001 $\underline{1}$ / $\underline{2}$ /, GRSP agreed on the following agenda:
 - 1. Draft Regulation on airbags development
 - 2. Amendments to ECE Regulations (1958 Agreement)
 - 2.1. Regulation No. 14 (Safety-belt anchorages)
 - 2.2. Regulation No. 16 (Safety-belts)
 - 2.3. Regulation No. 17 (Strength of seats)

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.

^{2/} GRSP agreed to consider ISOFIX items after agenda item No. 1.

TRANS/WP.29/GRSP/28

page 16

- 2.4. Regulation No. 21 (Interior fittings)
- 2.5. Regulation No. 29 (Cabs of commercial vehicles)
- 2.6. Regulation No. 44 (Child restraints)
- 2.7. Regulation No. 94 (Frontal collision protection)
- 2.8. Regulation No. 95 (Lateral collision protection)
- 3. Other business
- 3.1. Exchange of information on national and international requirements on passive safety
- 3.2. Regulation No. 22 (Protective helmets)
- 3.3. Sled test procedure for the dummy test in rear impacts.

 $\underline{\text{Annex 1}}$ LIST OF INFORMAL DOCUMENTS DISTRIBUTED WITHOUT A SYMBOL DURING THE SESSION

No.	Transmitted by	Agenda item	Language	Title
1.	Germany	2.4.	E	Draft short term modifications of ECE-R21 - Interior Fittings
2.	Russian Federation	2.2.	R/E	Proposal for amendment to Regulation No. 16, Revision 3
3.	Switzerland	1.	E	Detonation on impact - hearing damage due to collision noise and airbags
4.	Japan	2.6.	E	Proposal for draft amendment to Regulation No. 44
5.	Italy	2.2.	E	Proposal of supplement xx to Regulation No. 16
6.	France	2.1.	E	Revised proposal for draft 06 series of amendments to Regulation No. 14
7.	France	2.6.	E	Revised proposal for draft 04 series of amendments to Regulation No. 44
8.	United Kingdom	2.5.	E	Draft United Kingdom proposal for amending Regulation No. 29
9.	Spain	2.3.	E	Doubts regarding Regulation No. 17.07, annex 9
10.	Germany	2.8.	E	ECE Regulation No. 95. Lateral protection collision
11.	EEVC	2.8.	E	EEVC proposal for a revised specification for the Mobile Deformable Barrier Face for use in the Side Impact Test Procedure
12.	Sweden	2.7.	E	Regulation 94 (Frontal collision)
13.	OICA	2.1.	E	ISOFIX anchorages. Revised proposal for draft 06 series of amendments to Regulation No. 14
14.	OICA	2.4.	Е	OICA proposal for amendments to ECE Regulation No. 21 regarding power operating windows, opening roofs and partitions
15.	OICA	2.4.	E	Proposed amendment to ECE R21
16.	OICA	2.7.	E	Proposal for draft amendments to Regulation No. 94
17.	OICA	2.7.	E	Proposal for draft amendments to ECE R94

No.	Transmitted by	Agenda item	Language	Title	
18.	Japan	2.2.	E	Supplemental document for proposed changes in ECE R.17 Safety-Belts	
19.	Netherlands	2.6.	E	Proposal for amending Regulation No. 44	
20.	Netherlands	2.6.	E	Proposal for amending Regulation No. 44	
21.	Finland	2.6.	E	Baby restraints with an adjustable backrest	
22.	OICA	2.4.	E	Proposed amendment to ECE R21	
23.	Italy	2.5.	E	Italian Remarks Cranfield Impact Centre Limited Safety of heavy goods vehicles cabs Report (Ref: S050H9, April 1999	
24.	Russian Federation	2.5.	E	ECE UNO rules No. 29 to be changed	
25.	United Kingdom	3.3.	E	Draft corrigendum 3 to the 05 series of amendments to Regulation No. 22	
26.	United Kingdom	3.3.	E	Draft corrigendum 3 to the 05 series of amendments to Regulation No. 22	

Annex 2

DRAFT SUPPLEMENT 12 TO THE 04 SERIES OF AMENDMENTS TO REGULATION No. 16 ADOPTED BY GRSP AT ITS TWENTY-EIGHTH SESSION

Paragraph 8.1.3., should be deleted.

Paragraphs 8.1.4. to 8.1.13. (former), renumber as paragraphs 8.1.3. to 8.1.12.

<u>Paragraph 8.1.7. (former 8.1.8)</u>, amend the reference to paragraph "8.1.9." to read "8.1.8.".

<u>Paragraph 8.1.10. (former 8.1.11.)</u>, amend the reference to paragraph "8.1.12." to read "8.1.11.".

<u>Paragraph 8.1.11.</u> (former 8.1.12), amend the reference to paragraph "8.1.11." to read "8.1.10.".

Annex 16, amend to read:

"Annex 16: MINIMUM REQUIREMENTS FOR SAFETY-BELTS AND RETRACTORS

	Forward facing seating positions							
Vehicle	Outboard seating	positions	Centre seating position		Seating positions			
Category	Front	Other than front	Front	Other than front				
M1	Ar4m	Ar4m	Ar4m	Ar4m	B, Br3, Br4m			
M2 <u><</u> 3.5 t	Ar4m, Ar4Nm	Ar4m, Ar4Nm	Ar4m, Ar4Nm	Ar4m, Ar4Nm	Br3, Br4m, Br4Nm			
M2 > 3.5 t	Br3, Br4m, Br4Nm, or Ar4m or Ar4Nm Z	Br3, Br4m, Br4Nm, or Ar4m or Ar4Nm Z	Br3, Br4m, Br4Nm or Ar4m or Ar4Nm Ž	Br3, Br4m, Br4Nm or Ar4m or Ar4Nm Ž	Br3, Br4m, Br4Nm			
м3	See para. 8.1.9. for conditions when a lap belt is permitted	See para. 8.1.9. for conditions when a lap belt is permitted	See para. 8.1.9. for conditions when a lap belt is permitted	See para. 8.1.9. for conditions when a lap belt is permitted				
N1	Ar4m, Ar4Nm	B, Br3, Br4m, Br4Nm or none #	B, Br3, Br4m, Br4Nm or Br4Nm, Ar4Nm *	B, Br3, Br4m, Br4Nm or none #	None			
		Para. 8.1.7. and 8.1.8. lap belt required in exposed seating positions.	Para. 8.1.6. lap belt permitted if the windscreen is not in the reference zone.	Para. 8.1.7. and 8.1.8. lap belt required in exposed seating positions.				
12	B, Br3, Br4m, Br4Nm or A, Ar4m, Ar4Nm *	B, Br3, Br4m, Br4Nm or none #	B, Br3, Br4m, Br4Nm, or A, Ar4m, Ar4Nm *	B, Br3, Br4m, Br4Nm or none #	None			
1 3	Para. 8.1.6. lap belt permitted if the windscreen is outside the reference zone and for the driver's seat.	Para. 8.1.7. and 8.1.8. lap belt required in exposed seating positions.	Para. 8.1.6. lap belt permitted if the windscreen is not in the reference zone.	Para. 8.1.7. and 8.1.8. lap belt required in exposed seating positions.				

A: three-point (lap and diagonal) belt

3: automatically locking retractor

*:Refers to para .8.1.6. of this annex

B: 2-point (lap) belt

annex

4: emergency locking retractor #: Refers to paras. 8.1.7. and 8.1.8., of this r: retractor

N: higher response threshold Z:(refers to para. 8.1.9. of this annex)

m: emergency locking retractor with multiple sensitivity (see Regulation No. 16, paras 2.14.3. and 2.14.5.) Note: In all cases S-type belts may be fitted in place of an A or B type belt, provided anchorages complying with Regulation 14 are used."

Insert new paragraphs 15.2 to 15.2.3., to read:

"15.2 <u>Transitional provisions</u> <u>*</u>/

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

- 15.2.1. As from the official date of entry into force of supplement 10 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 10 to the 04 series of amendments.
- 15.2.2. Upon expiration of a period of 36 months following the official date of entry into force referred to in paragraph 15.2.1. above, 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 10 to the 04 series of amendments.
- 15.2.3. Upon the expiration of a period of 60 months following the official date of entry into force referred to in paragraph 15.2.1. above, the Contracting Parties applying this Regulation may refuse to recognize approvals not granted in accordance with Supplement 10 to the 04 series of amendments to this Regulation.

 $^{^{*}}$ / The definitive dates to be adopted should be the same as those of European Community Directive 2000/3/EC."

TRANS/WP.29/GRSP/28
page 21
Annex 3

Annex 3

DRAFT CORRIGENDUM TO REGULATION No. 22 ADOPTED IN PRINCIPLE BY GRSP AT ITS TWENTY-EIGHTH SESSION

Paragraph 6.7., amend to read:

- "6.7. All external projections shall be radiused and any external projections other than press-fasteners shall be smooth and adequately faired.
- 6.7.1. All external projections not more than 2 mm above the outer surface of the shell (e.g. rivet heads) shall have a radius of a minimum of 1 mm.
- 6.7.2. All external projections more than 2 mm above the outer surface of the shell shall have a radius of a minimum of 2 mm.

The latter specific requirements shall not apply if a projection satisfies the requirements in 7.4.1. or 7.4.2."

Paragraph 7.4.1.2.4., amend to read:

"7.2.1.2.4. Mobile system and guides

The mobile system supporting the head form shall ... be such that any point in the area above the line ACDEF on the helmet can be positioned

Paragraph 7.4.1.3., amend to read:

"7.4.1.3. Selection of impact points

Any point above the line ACDEF on the helmet may be selected. The impact point should be selected with regard to"

Paragraph 7.4.2.2.6., amend to read:

"7.4.2.2.6. Head form support

The system supporting the head form shall be such that any point above the line ACDEF on the helmet can be positioned

Paragraph 7.4.2.3., amend to read:

"7.4.2.3. Selection of test points

Any point above the line ACDEF on the helmet may be selected for friction and/or shear assessment. A helmet shall be"