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**Economic Commission for Europe**
**Inland Transport Committee**
**World Forum for Harmonization of Vehicle Regulations**
**Working Party on Passive Safety**
**Fifty-ninth session**  
 Geneva, 9–13 May 2016

**Report of the Working Party on Passive Safety on its  
 fifty-ninth session**
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## I. Attendance

1. The Working Party on Passive Safety (GRSP) held its fifty-ninth session in Geneva from 9 to 13 May 2016, chaired by Mr. Nha Nguyen (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, Amend.1 and Amend.2): Australia; Belgium; China; Czech Republic; Denmark; France; Germany; Italy; Japan; Netherlands; Norway; Poland; Republic of Korea; Russian Federation; Spain; Sweden; Switzerland, United Kingdom of Great Britain and Northern Ireland (United Kingdom) and United States of America. An expert from the European Commission (EC) participated. Experts from the following non-governmental organizations participated: Consumers International (CI); European Association of Automotive Suppliers (CLEPA); International Motorcycle Manufacturers Association (IMMA) and International Organization of Motor Vehicle Manufacturers (OICA). At the invitation of the secretariat, an expert from the Association of the European Bicycle Industry (CONEBI) also attended.

2. The informal documents distributed during the session are listed in Annex I of this report.

3. GRSP agreed with the suggestion by the expert from United Kingdom to amend paragraph 1. of the report ECE/TRANS/WP.29/GRSP/58 of the previous GRSP session as follows:

"... Australia; Belgium; China; Czech Republic; Denmark; France; Germany; Hungary; India; Italy; Japan; Netherlands; Norway; Poland; Republic of Korea; Russian Federation; South Africa; Spain; Sweden; Switzerland, **United Kingdom of Great Britain and Northern Ireland (United Kingdom)** and United States of America..."

## II. Adoption of the agenda (agenda item 1)

*Documentation:* ECE/TRANS/WP.29/GRSP/2016/1 and Add.1  
Informal document GRSP-59-07

4. GRSP considered and adopted the agenda (ECE/TRANS/WP.29/GRSP/2016/1 and Add.1) proposed for the fifty-ninth session with the new agenda items 22(g), 22(h), 22(i) and 23 and the running order (GRSP-59-07). The list of GRSP informal working groups is in Annex VI of this report.

## III. Global technical regulation No. 1 (Door locks and door retention components) (agenda item 2)

*Documentation:* ECE/TRANS/WP.29/2016/72  
Informal document GRSP-59-13

5. GRSP noted that a request for authorization to develop an amendment to UN GTR No. 1 (ECE/TRANS/WP.29/2016/72) was submitted to the June 2016 session of the Executive Committee of the 1998 Agreement (AC.3). In the meantime, the expert from EC introduced a concrete proposal of amendments to UN GTR No. 1 (GRSP-59-13). The secretariat was requested to distribute GRSP-59-13 with an official symbol at the December 2016 session of GRSP, pending the adoption of ECE/TRANS/WP.29/2016/72 by AC.3 at its June 2016 session.

## **IV. Global technical regulation No. 7 (Head restraints) (agenda item 3)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2015/34

6. The expert from the United Kingdom, on behalf of the Chair of the Informal Working Group (IWG) on the UN Global Technical Regulation (UN GTR) No. 7 - Phase 2, clarified that the IWG was following a more empirical approach to determine biomechanical criteria and that alternative methodologies were under study. He reported that the IWG expected to finalize proposals for the December 2016 session of GRSP on UN GTR No. 7 and on Addendum 1 to Mutual Resolution No. 1 (M.R.1) to incorporate Bio Rear Impact Dummy (BioRID) specifications. He concluded that an extension of the mandate of the IWG until March 2017 was needed to complete the final proposals and that AC.3 endorsed this request at its March 2016 session.

## **V. Global technical regulation No. 9 (Pedestrian safety) (agenda item 4)**

### **A. Proposal for Phase 2 of the global technical regulation**

*Documentation:* ECE/TRANS/WP.29/GRSP/2014/15  
ECE/TRANS/WP.29/GRSP/2014/16  
ECE/TRANS/WP.29/GRSP/2015/2  
Informal document GRSP-59-16

7. The expert from the United States of America reported that National Highway Traffic Safety Administration (NHTSA) had begun, but not yet completed its costs and benefits analysis. He reported that it remains unclear when the analysis will be completed, but that it is hoped that the United States of America will be able to present its results during the December 2016 session of GRSP. He also added that the Notice of Proposal of Regulation Making (NPRM) on pedestrian safety would address the process of transposition of both the UN GTR Phase 1 and Phase 2 in his country.

8. The expert from EC clarified that ECE/TRANS/WP.29/GRSP/2015/2, had been prepared by the experts of the Task Force on Bumper Test Area (TF-BTA) which is a subgroup of the IWG on Phase 2 of the UN GTR that would incorporate the flexible pedestrian legform impactor (FlexPLI). GRSP noted that once the issue of the Injury Assessment References Values (IARVs) for the flexible lower legform (FlexPLI) to bumper test, would be agreed upon by GRSP on the basis of ECE/TRANS/WP.29/GRSP/2015/2 to improve bumper test, the text would be incorporated into the draft proposal of UN GTR (ECE/TRANS/WP.29/GRSP/2014/15).

9. The expert from the Republic of Korea introduced a proposal of authorization to amend UN GTR (GRSP-59-16), to incorporate provisions for active deployable systems in the bonnet area. GRSP noted that the proposal would be preliminarily sent to AC.3 as an informal document to the June 2016 session of AC.3 aiming to its official adoption at the November 2016 session by the Committee. It was also agreed that the expert from the Republic of Korea would submit an official proposal of amendments to the December 2016 session of GRSP, amending the current text of the UN GTR (Phase 1) and the draft text of the Phase 2 of the UN GTR (ECE/TRANS/WP.29/GRSP/2014/15). GRSP noted that the proposed time schedule to finalization was tight (December 2017). The expert from the Republic of Korea proposed the establishment of a task force to develop the proposed amendments instead of an IWG. The expert from OICA recommended the participation of

the experts of all the Contracting Parties to the 1958 and 1998 Agreements so that the group could develop a globally harmonized test procedure.

## **B. Proposal for amendments to Phase 1 and draft Phase 2 of the global technical regulation**

*Documentation:* ECE/TRANS/WP.29/GRSP/2012/2  
ECE/TRANS/WP.29/GRSP/2014/2  
ECE/TRANS/WP.29/GRSP/2014/5

10. The expert from the United States of America informed GRSP that the NPRM activity above-mentioned in para. 7 was in progress and would incorporate a discussion of the new proposed requirements for the head form tests (ECE/TRANS/WP.29/GRSP/2014/2 and ECE/TRANS/WP.29/GRSP/2014/5). He recommended that interested parties comment on the proposed amendments to the head form tests in the NPRM so that a globally harmonized procedure could be developed. GRSP confirmed that the proposal of amendments would concern Phases 1 and 2 of the UN GTR.

## **VI. Global technical regulation No. 13 (Hydrogen and Fuel Cells Vehicles) (agenda item 5)**

11. GRSP noted that NHTSA was preparing a NPRM on Phase 1 of the UN GTR, expected for the end of the year. In the meantime, the Chair of GRSP informed the group that the number of former sponsors and co-sponsors countries of Phase 1 of the UN GTR would be broadened for Phase 2. He also announced that the programme of work of the GTR under the 1998 Agreement is expected to be finalized in a near future and that an informal proposal of authorization to develop the Phase 2 of the UN GTR would then be presented for approval at AC.3.

## **VII. Harmonization of side impact dummies (agenda item 6)**

12. The expert of the United States of America informed GRSP about the work progress of the IWG. He announced that the group planned meetings in June 2016 to finalize a draft addendum to the Mutual Resolution No. 1 to incorporate specifications of the 50<sup>th</sup> percentile World Side Impact dummy (SID). He confirmed that efforts on harmonization activities on the 5<sup>th</sup> percentile World SID female dummy still needed revision and time. GRSP agreed to keep this item on the agenda for further updating at its December 2016 session.

## **VIII. Global technical regulation on electric vehicles (agenda item 7)**

*Documentation:* Informal documents GRSP-59-10 and GRSP-59-11

13. The expert from the United States of America informed GRSP with a presentation (GRSP-59-11) on the progress of work of the IWG on Electric Vehicle Safety (EVS). He also introduced the progress report of the work of the IWG (GRSP-59-10). He informed GRSP that the most recent meeting of the IWG had been held, in Tokyo (March 2016). He explained that the work of the nine task forces of the IWG had progressed sufficiently to be able to conclude within the given mandate of Phase 1 of the UN GTR. Thus, he informed GRSP about the following schedule for the conclusion of the work of the IWG:

- (a) 13-17 June 2016: eleventh meeting of the IWG EVS will be held in Washington DC, United States of America. The Task Forces (TF) will also conduct meetings in the same week prior to the IWG meeting.
- (b) September 2016: twelfth IWG EVS meeting is being planned for the end of September 2016. Location will be decided at the eleventh meeting.
- (c) October-December 2016: possible drafting team meetings.
- (d) December 2016: presenting a draft UN GTR as an informal document to GRSP.
- (e) January-February 2017: possible EVS and/or editorial meeting.
- (f) June – November 2017: submission of the draft UN GTR to AC.3 and its establishment in the Global Registry.

14. The expert from France suggested a similar scope to UN Regulation No. 100 including heavy-duty vehicles. In the meantime the expert from EC requested clarification on requirements on a “barrier option” for protection against electric shock. GRSP noted that the TF No. 8 of the IWG has been working on the inclusion of heavy-duty vehicles. Moreover, it was noted that a NPRM, proposing to amend Federal Motor Vehicle Safety Standard 305 (Electric-powered vehicles: electrolyte spillage and electrical shock protection) and introducing a barrier option for electric safety, had been published in March 2016. The expert from the United States of America clarified that this NPRM would establish safety provisions for both in-use and post-crash scenarios. This would lead to harmonized requirements with the current effort of this IWG. He suggested that experts examine the above-mentioned NPRM at [www.nhtsa.gov/staticfiles/rulemaking/pdf/nprm-fmvss-305-03032016.docx](http://www.nhtsa.gov/staticfiles/rulemaking/pdf/nprm-fmvss-305-03032016.docx).

## **IX. Regulation No. 14 (Safety-belt anchorages) (agenda item 8)**

*Documentation:* Informal documents GRSP-58-13

15. The expert from Australia recalled the purpose of GRSP-58-13 aimed at solving the incompatibility of the requirements of the UN Regulation with the existing designs of Child Restraint Systems (CRS) in Australia and North America, and including UN Regulation No. 14 into Annex 4 of the future UN Regulation No. 0 on the IWVTA. He added that he received the following main comments: (i) recommending the exclusion of any provision to cover non-ISOFIX anchorages and leave to be regulated at the national level and (ii) changing the excursion limits to the test applied load. The expert from OICA reiterated his preference for splitting the UN Regulation into two Regulations: safety-belt anchorages and child restraint anchorages (the latter would be excluded by Annex 4 of UN Regulation No. 0). He explained that this solution would cope with the lack of harmonized provisions on CRS anchorages worldwide and would avoid type approval issues in countries like Australia. The expert from United Kingdom expressed his preference in a long-term solution by keeping a unique Regulation. However, he added that if this would result in design and type approval issues to vehicle manufacturers, he would eventually be in favour of the solution proposed by the expert from OICA. The expert from France supported the opinion of the expert from United Kingdom. However, he raised a study reservation to review all the consequences implied by splitting the UN Regulation.

16. GRSP agreed to resume discussion on this subject at its December 2016 session, on the basis of a possible revised proposal and to keep GRSP-58-13 on the agenda of the next session of GRSP as an informal document.

## X. Regulation No. 16 (Safety-belts) (agenda item 9)

*Documentation:* ECE/TRANS/WP.29/GRSP/2016/2  
ECE/TRANS/WP.29/GRSP/2016/8  
ECE/TRANS/WP.29/GRSP/2016/12  
ECE/TRANS/WP.29/GRSP/2016/13  
ECE/TRANS/WP.29/GRSP/2016/15  
Informal documents GRSP-58-15-Rev.1, GRSP-59-06-Rev.2, GRSP-59-12, GRSP-59-19-Rev.1 and GRSP-59-20

17. The expert from CLEPA informed GRSP that due the lack of time, no new updated proposals were available to introduce provisions for fixtures that would verify the availability of space to fit universal lateral facing CRS "lie-flat". The expert from France clarified that ISO was finalizing the discussion on this subject and that when a final standard was available, GRSP would be in the position to propose a harmonized amendment on this subject. GRSP agreed to resume discussion on this subject at its December 2016 session.

18. The expert from the Netherlands introduced ECE/TRANS/WP.29/GRSP/2016/8, intended to better clarify the availability of space for CRS installation. The expert from OICA also introduced a revised proposal of amendments (GRSP-59-20 superseding GRSP-58-15-Rev.1) to simplify information for consumers in the owner's manual. GRSP adopted ECE/TRANS/WP.29/GRSP/2016/8, as amended by Annex II to this report and GRSP-59-20, as reproduced in Annex II to this report. The secretariat was requested to submit both proposals for consideration and vote at the November 2016 sessions of WP.29 and AC.1 as draft Supplement 8 to the 06 series of amendments to UN Regulation No. 16.

19. The expert from Japan showed a presentation (GRSP-59-12) to introduce GRSP-59-06-Rev.2 (superseding ECE/TRANS/WP.29/GRSP/2016/2) aimed at introducing provisions on safety-belt reminders (SBRs) in all vehicle seats. The expert from the United Kingdom recognised technological and operational constraints and supported exemptions for certain vehicle categories and seats (e.g. Wheelchair Accessible Vehicles, removable seats and suspension seats). He thought that some of these need only be temporary to allow for the development of robust solutions. The expert from Italy highlighted the need for a definition of "suspension seat" missing in the current text of the UN Regulation No. 16 and in GRSP-59-06-Rev.2. Moreover, he questioned the reproducibility of the alternative use of human representing a 5<sup>th</sup> percentile adult female to test the activation of SBRs.

20. GRSP finally adopted ECE/TRANS/WP.29/GRSP/2016/2, as amended by Annex II to this report (GRSP-59-06-Rev.2). The secretariat was requested to submit the proposal for consideration and vote at the November 2016 sessions of WP.29 and AC.1 as draft 07 series of amendments to UN Regulation No. 16. It was agreed that possible changes to transitional provisions (paragraphs 15.4. to 15.10.) could be proposed and submitted as an informal document seven weeks before WP.29 November 2016 to allow consideration by the European Union Council and voting the proposal by AC.1.

21. The experts from Denmark introduced GRSP-59-19-Rev.1 (superseding ECE/TRANS/WP.29/GRSP/2016/12), jointly prepared with the expert from Japan, aimed at revising the table of Annex XVI "Safety-belt installation showing the belt types and retractor types" of the UN Regulation. GRSP adopted the proposal, as reproduced in Annex II to this report. The secretariat was requested to submit the proposal for consideration and vote at the November 2016 sessions of WP.29 and AC.1 as part of (see para. 18) draft Supplement 8 to the 06 series of amendments to UN Regulation No. 16.

22. GRSP also considered ECE/TRANS/WP.29/GRSP/2016/15, aimed at clarifying the provisions for dynamic testing of rear seat systems. GRSP adopted the proposal not

amended. The secretariat was requested to submit the proposal for consideration and vote at the November 2016 sessions of WP.29 and AC.1 as part of (see paras. 18 and 21) draft Supplement 8 to the 06 series of amendments to UN Regulation No. 16.

23. Finally, GRSP agreed to defer discussion on ECE/TRANS/WP.29/GRSP/2016/13 to its December 2016 session due to lack of time.

## **XI. Regulation No. 17 (Strength of seats) (agenda item 10)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2015/27  
Informal documents GRSP-57-23 and GRSP-58-28-Rev.1

24. The expert from the Netherlands informed GRSP on the progress of work of the "TF on Energy absorption of seats" (former group of interested experts on new restraint system technology). He clarified that the group met recently in Paris and was still working to update ECE/TRANS/WP.29/GRSP/2015/27. He added that the proposal would cover cases with more forward displacement of the restrained occupants in the fitment of new safety-belts equipped with load limiter devices. GRSP also noted that the task force would continue work as well on parallel amendments to UN Regulations Nos. 21, 25 and 80.

25. The expert from CLEPA reminded GRSP about informal document GRSP-57-23, that he had submitted during the fifty-seventh session of the group and showing different scenarios of seat strength testing as a result of lack of clarity of the current provisions. The expert from the Netherlands volunteered to prepare a proposal addressing the concerns of the expert from CLEPA for the December 2016 session of GRSP.

26. The expert from Japan also reminded GRSP about informal document GRSP-58-28-Rev.1, proposing to align UN Regulation No. 17 to those of draft UN GTR No. 7, Phase 2. GRSP agreed to keep GRSP-58-28-Rev.1 as a reference document on the agenda of its December 2016 session, awaiting the outcome of the IWG on UN GTR No. 7, Phase 2.

## **XII. Regulation No. 21 (Interior fittings) (agenda item 11)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2015/28

27. GRSP noted that no new information to updated ECE/TRANS/WP.29/GRSP/2015/28 was yet available on this agenda item (see para. 24 above) and agreed to resume discussion on this subject at its December 2016 session.

## **XIII. Regulation No. 22 (Protective helmets) (agenda item 12)**

28. GRSP noted a study, tabled by the UNECE secretariat, on helmets aimed at improving the awareness of UN Regulation No. 22 worldwide by addressing two-wheeler user safety, including riders of bikes assisted by an electric engine (pedalex) (also available on the main page of WP.29 at [www.unece.org/trans/main/welcwp29.html](http://www.unece.org/trans/main/welcwp29.html)). The expert from IMMA supported these initiatives aimed at increasing worldwide protection of motorized two-wheelers.

29. The expert from France informed GRSP on current issue experienced by national police in identifying authenticity of type approval markings of helmets. The expert from Germany announced that his Government had performed an analysis on helmets sold in his country and that among, the issues identified were type approval markings. Therefore, he announced a presentation for the December 2016 session of GRSP to introduce the issue in detail.



#### **XIV. Regulation No. 25 (Head restraints) (agenda item 13)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2015/22

30. No new information was provided under this agenda item (see paras. 24 and 27).

#### **XV. Regulation No. 44 (Child restraint systems) (agenda item 14)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2016/3  
ECE/TRANS/WP.29/GRSP/2016/9  
ECE/TRANS/WP.29/GRSP/2016/11  
ECE/TRANS/WP.29/GRSP/2016/14  
Informal documents GRSP-59-02-Rev.2, GRSP-59-04, GRSP-59-05,  
GRSP-59-15-Rev.1 and GRSP-59-17

31. The expert from CLEPA introduced ECE/TRANS/WP.29/GRSP/2016/3 and GRSP-59-04 proposing to update the references to the European standard on toxicity and flammability of materials used to manufacture Child Restraint Systems (CRS). The expert from Japan introduced GRSP-59-05 and amending this proposal. GRSP adopted ECE/TRANS/WP.29/GRSP/2016/3, as amended by Annex III to this report. The secretariat was requested to submit the proposal for consideration and vote at the November 2016 sessions of WP.29 and AC.1 as draft Supplement 12 to the 04 series of amendments to UN Regulation No. 44.

32. The expert from the Russian Federation introduced ECE/TRANS/WP.29/GRSP/2016/9 to align the Russian and English texts of the UN Regulation. GRSP adopted the proposal not amended and requested the secretariat to submit it for consideration and vote at the November 2016 sessions of WP.29 and AC.1 as draft Corrigendum 2 to Revision 3 to UN Regulation No. 44.

33. The expert from Consumer International (CI) introduced ECE/TRANS/WP.29/GRSP/2016/11 to withdraw ISOFIX CRS from UN Regulation No. 44. The expert from CLEPA questioned the proposal since too many ISOFIX products were already in the market. Therefore, he suggested that the proposal would set a proper sunset clause for extension of ISOFIX CRS type approvals according to the UN Regulation and, thus, to avoid distortions in the type approval system. Thus, the expert from CI introduced GRSP-59-15-Rev.1, in cooperation with the experts from CLEPA and OICA. The expert from OICA suggesting that a supplement, rather than a new series of amendments would better fit the scope the proposal. The expert from China explained that the proposal would cause a backlash of costs in his country: national legislation GB 14166 had taken over a great part of the provisions of UN Regulation No. 44 including ISOFIX provisions. Finally, GRSP adopted ECE/TRANS/WP.29/GRSP/2016/11, as amended by Annex III to this report (GRSP-59-15-Rev.1). The secretariat was requested to submit the proposal (as a separate official document) for consideration and vote at the November 2016 sessions of WP.29 and AC.1 as part of (see para. 31) draft Supplement 12 to the 04 series of amendments to UN Regulation No. 44.

34. The expert from the Netherlands introduced ECE/TRANS/WP.29/GRSP/2016/14, aimed at excluding different interpretations on the installations of CRS in UN Regulation No. 44. The expert from France, chairing the IWG on ECRS, reminded GRSP that IWG ECRS had dealt with this topic in working paper CRS-56-05, available at: [www2.unece.org/wiki/display/trans/CRS+56th+meeting](http://www2.unece.org/wiki/display/trans/CRS+56th+meeting). The Chair invited GRSP experts to further study ECE/TRANS/WP.29/GRSP/2016/14 and working paper CRS-56-05 and agreed to resume discussion on this subject at its December 2016 session.

35. Finally, the expert from Spain on behalf of the Technical Services Group (TSG) on Regulations Nos. 44 and 129 gave a presentation (GRSP-59-17) on the result of work of

TSG to introduce GRSP-59-02-Rev.2, updating testing provisions of UN Regulation No. 44. GRSP adopted the proposal as reproduced in Annex III to this report and requested the secretariat to submit the proposal for consideration and vote at the November 2016 sessions of WP.29 and AC.1 as part of draft Supplement 12 to the 04 series of amendments to UN Regulation No. 44 (see paras. 31 and 33).

## **XVI. Regulation No. 80 (Strength of seats and their anchorages (buses)) (agenda item 15)**

*Documentation:* Informal document GRSP-59-09-Rev.1

36. No new information was provided under this agenda item (see paras. 24, 27 and 30).

37. The expert from Germany introduced GRSP-59-09-Rev.1 to clarify requirements on the safety device to be installed on side-facing seats. GRSP adopted GRSP-59-09-Rev.1 as reproduced in Annex IV to this report. The secretariat was requested to submit the proposal for consideration and vote at the November 2016 sessions of WP.29 and AC.1 as draft Supplement 2 to the 03 series of amendments to UN Regulation No. 80.

## **XVII. Regulation No. 94 (Frontal collision) (agenda item 16)**

38. No new information was provided under this agenda item.

## **XVIII. Regulation No. 100 (Electric power trained vehicles) (agenda item 17)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2016/7

39. The expert from Belgium introduced ECE/TRANS/WP.29/GRSP/2016/7 to transfer additional safety provisions for electrical safety of trolleybuses from UN Regulation No. 107 (M<sub>2</sub> and M<sub>3</sub> vehicles) to UN Regulation No. 100 (Electric Power Trained Vehicles). She clarified that the proposal aimed at informing GRSP about the issue of interpretation of the scope of the two Regulations to cover electrical safety of trolleybuses. The expert from EC suggested an in-depth analyse to verify if the proposal would be correctly allocated as an amendment to UN Regulation No. 100. On this issue, the expert from OICA argued for more clarity. He added that for the time being he was not in the position to provide an answer. He suggested that closer coordination on this subject with other Working Parties, such as the Working Party on General Safety and the Working Party on Light and Lighting-Signalling, should be encouraged. He finally suggested asking guidance from WP.29 at its June 2016 session on the way forward. GRSP also noted that electrical safety of trolley buses had many implications on different UN Regulations such as UN Regulations Nos. 10 (Electromagnetic Compatibility) and 107 (Approval of category M<sub>2</sub> or M<sub>3</sub> vehicles with regard to their general construction). GRSP noted that GRSG at its April 2016 session had preferred to maintain the provisions on trolley buses into UN Regulation No. 107. GRSP agreed to resume discussion on this subject at its December 2016 session. In the meantime, the expert from Belgium volunteered to conduct a detailed analysis and to introduce a proposal on all related issues to GRSG and GRE and to submit an informal document to the June 2016 session of WP.29 to explain the issue and in the view of receiving guidance.

## **XIX. Regulation No. 127 (Pedestrian safety) (agenda item 18)**

40. No new information was provided under this agenda item.

## **XX. Regulation No. 129 (Enhanced Child Restraint Systems) (agenda item 19)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2016/4  
ECE/TRANS/WP.29/GRSP/2016/5  
ECE/TRANS/WP.29/GRSP/2016/6  
ECE/TRANS/WP.29/GRSP/2016/10  
Informal documents GRSP-59-03-Rev.1, GRSP-59-04, GRSP-59-05,  
GRSP-59-08-Rev.1, GRSP-59-14 and GRSP-59-17

41. The expert from Spain introduced GRSP-59-03-Rev.1, as a parallel amendment to UN Regulation No. 44 (see para. 35 above) to improve testing methods. GRSP adopted the proposal as reproduced in Annex V to this report. The secretariat was requested to submit the proposals for consideration and vote at the November 2016 sessions of WP.29 and AC.1, as draft Supplement 5 to the original text of UN Regulation No. 129 and as draft Supplement 1 to the 01 series of amendments to UN Regulation No. 129.

42. GRSP noted ECE/TRANS/WP.29/GRSP/2016/5, ECE/TRANS/WP.29/GRSP/2016/6, GRSP-59-04 and GRSP-59-05 as parallel amendments (already adopted for UN Regulation No. 44) to update the references to the European standard on toxicity and flammability of materials used to manufacture CRS (see para. 31 above). GRSP adopted ECE/TRANS/WP.29/GRSP/2016/5 and ECE/TRANS/WP.29/GRSP/2016/6, as amended by Annex V to this report. The secretariat was requested to submit the proposals for consideration and vote at the November 2016 sessions of WP.29 and AC.1, as part of (see para. 41) draft Supplement 5 to the original text of UN Regulation No. 129 (ECE/TRANS/WP.29/GRSP/2016/5) and as part of (see para. 41 above) draft Supplement 1 to the 01 series of amendments to UN Regulation No. 129 (ECE/TRANS/WP.29/GRSP/2016/6).

43. The expert from France, Chair of the IWG on Enhanced Child Restraint Systems (ECRS), gave a presentation (GRSP-59-14) on the work progress of the IWG which introducing the latest changes (GRSP-59-08-Rev.1) to the official proposal of the 02 series of amendments to the UN Regulation (ECE/TRANS/WP.29/GRSP/2016/4). He explained that the proposed new series of amendments aimed at including: (i) ECRS from the booster seat category (booster seat with backrest) into the scope of UN Regulation No. 129 and (ii) the proposal from Spain (GRSP-59-03-Rev.1). He concluded that this latest draft series would be acknowledged as Phase 2 of the UN Regulation.

44. GRSP finally adopted ECE/TRANS/WP.29/GRSP/2016/4, as reproduced in Addendum 1 to this report. The secretariat was requested to submit the proposal for consideration and vote at the November 2016 sessions of WP.29 and AC.1 as draft 02 series of amendments to UN Regulation No. 129.

45. Moreover, the expert from the Russian Federation introduced ECE/TRANS/WP.29/GRSP/2016/10, to align the Russian and English texts of the UN Regulation. GRSP adopted the proposal not amended and requested the secretariat to submit it for consideration and vote at the November 2016 sessions of WP.29 and AC.1 as draft Corrigendum 2 to the original version of UN Regulation No. 129.

46. Referring to the discussion held under agenda item 9 (see para. 17 above), GRSP agreed to defer discussion on this subject to a further session on the basis of a possible update of GRSP-58-21, to be submitted by the ECRS IWG.

## **XXI. Collective amendments to Regulations Nos. 14 and 16 (agenda item 20)**

*Documentation:* Informal document GRSP-58-03-Rev.1

47. GRSP noted that the expert from EC would submit a revised proposal (superseding GRSP-58-03-Rev.1), at the December 2016 session of GRSP, aimed at promoting the use of ISOFIX and especially the 'plug-and-play' concept of i-Size child restraint systems (to reduce misuse of CRS).

## **XXII. Collective amendments to Regulations Nos. 16, 44, 94 and 129 (agenda item 21)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2015/30  
Informal document GRSP-59-01

48. The expert from Hungary informed GRSP (GRSP-59-01) about his support to ECE/TRANS/WP.29/GRSP/2015/30, to harmonize the information of the airbag warning label on the correct installation of Child Restraint Systems (CRS). GRSP agreed to resume discussion on this subject at its December 2016 session to allow experts to provide fully their detailed comments to ECE/TRANS/WP.29/GRSP/2015/30.

## **XXIII. Other business (agenda item 22)**

### **A. Exchange of information on national and international requirements on passive safety**

*Documentation:* Informal document GRSP-59-21

49. The expert from Japan introduced a presentation (GRSP-59-21), to inform GRSP that pedestrians were the largest proportion of recent fatal traffic accidents in Japan.

50. The expert from EC informed GRSP about the forthcoming revision of the General Safety Regulation (EC) No 661/2009 of the European Parliament and of the Council. He announced that the European Parliament and the Council would be informed in July 2016 of the planned actions to ensure that road casualties continue to decrease. He announced that EC would develop a cost benefit analysis in close cooperation with stakeholders to deliver an impact assessment. He finally announced his intention to propose more concrete action at the December 2016 session of GRSP.

### **B. Definition and acronyms in the Regulations under the responsibilities of GRSP**

51. GRSP noted the excel files, that are permanently appended to its website, for the abbreviations and symbols of UN Regulations and UN GTRs ([www.unece.org/trans/main/wp29/wp29wgs/wp29gen/acronyms\\_definitions.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/acronyms_definitions.html)). The Chair of GRSP announced the preparation of an informal document for the December 2016 session of GRSP gathering acronyms and definitions present in UN GTR in cooperation with the Chairs of IWGs, to revise the document and provide comments to the secretariat.

### **C. Development of the International Whole Vehicle Type Approval (IWVTA) system and involvement of the Working Parties (GRs)**

*Documentation:* Informal document WP.29-168-12

52. GRSP noted the progress of work on draft Revision 3 of the 1958 Agreement (ECE/TRANS/WP.29/1120, paras. 45-55) and that the adoption was expected at the November 2016 sessions of WP.29. The expert from Japan, ambassador of IWVTA to GRSP, introduced the status report of the IWVTA IWG (WP.29-168-12). GRSP noted the still pending issue of UN Regulation No. 14 and encouraged a solution for its inclusion in list A of UN Regulation No. 0.

53. GRSP noted: (i) decision of the Inland Transport Committee to finance DETA from the regular budget; (ii) the decision of the WP.29 representative of Germany informed to resign from chairing the IWG on DETA and (iii) to withdraw the offer to host the DETA database until the financing and hosting at the UNECE was guaranteed.

### **D. Highlights of the March 2016 session of WP.29**

54. The Secretary reported on the highlights of the 168<sup>th</sup> session of WP.29 (ECE/TRANS/WP.29/1120).

### **E. Three-dimensional H-point machine**

55. The expert from Germany informed GRSP of his resignation from chairing the IWG on the harmonization of specifications of the 3-D H machine. He underlined that experts had showed interest in this activity and he urged GRSP to find a solution for a new chair of the IWG. GRSP noted the decision of the expert from Germany and agreed to inform WP.29 at its June 2016 session.

### **F. Intelligent transport systems**

56. No new information was provided under this agenda item.

### **G. Performance of vehicle software based systems subjected to Regulations**

*Documentation:* Informal document WP.29-168-15

57. The Secretary of GRRF reported to the follow-up to the decision of WP.29 at its March 2016 session (ECE/TRANS/WP.29/1120, para. 38): (i) discussion of GRRF in the framework of IWVTA (WP.29-168-15), (ii) the performance of automotive systems (e.g. Tyre Pressure Monitoring Systems) in conditions other than those tested according to the regulated test procedures. He informed GRSP that some safety systems, especially those relying on software, could possibly be designed to only work in limited conditions corresponding to those tested rather than in all the relevant driving conditions. GRSP did not provide any feedback on this subject and agreed to remove the item from the agenda of the next sessions.

## H. United States of America on non-traditional vehicles

*Documentation:* Informal document GRSP-59-18

58. The expert from the United States of America introduced GRSP-59-18, to provide evidence of an increasing number of Low Speed Vehicles (LSV's) and 3-Wheeled Motorcycles (Non-Traditional Vehicles) in use on American roadways and the compliance issues observed by his Administration.

## I. Tributes

59. Mr. Richard Damm (Germany) would no longer participate in future sessions of GRSP, the group acknowledged his fruitful contribution to the work of GRSP and wished him all the best in his future activities.

60. GRSP noted that Mr. Louis-Sylvain Ayrat (CLEPA) was retiring and would no longer attend the sessions. GRSP acknowledged his continued support during all the years of participation in the sessions. GRSP wished Mr. Ayrat a long and happy retirement and recognized the commitments of Messrs. Damm and Ayrat with a long applause.

## XXIV. Provisional agenda for the next session (agenda item 23)

61. The sixtieth session was scheduled to be held in Geneva from 13 December (9.30 a.m.) to 16 (12.30 p.m.) December 2016. GRSP noted that the deadline for the submission of official documents to the secretariat was 16 September 2016, twelve weeks prior to the session. GRSP agreed the following provisional agenda:

1. Adoption of the agenda.
2. Global technical regulation No. 1 (Door locks and door retention components).
3. Global technical regulation No. 7 (Head restraints).
4. Global technical regulation No. 9 (Pedestrian safety):
  - (a) Proposal for Phase 2 of the global technical regulation;
  - (b) Proposal for Amendments to Phase 1 and draft Phase 2 of the global technical regulation.
5. Global technical regulation No. 13 (Hydrogen and Fuel Cells Vehicles).
6. Harmonization of side impact dummies.
7. Global technical regulation on electric vehicles.
8. Regulation No. 14 (Safety-belt anchorages).
9. Regulation No. 16 (Safety-belts).
10. Regulation No. 17 (Strength of seats).
11. Regulation No. 21 (Interior fittings).
12. Regulation No. 22 (Protective helmets).
13. Regulation No. 25 (Head restraints).
14. Regulation No. 44 (Child restraints systems).
15. Regulation No. 80 (Strength of seats and their anchorages (Buses)).
16. Regulation No. 94 (Frontal collision).

17. Regulation No. 127 (Pedestrian safety).
18. Regulation No. 129 (Enhanced Child Restraint Systems).
19. Regulation No. 134 (Hydrogen and Fuel Cells Vehicles (HFCV)).
20. Regulation No. 135 (Pole Side Impact (PSI)).
21. Regulation No. 136 (Electric Vehicles of category L (EV-L)).
22. Regulation No. 137 (Frontal impact with focus on restraint systems).
23. Collective amendments to Regulations No. 14 and 16.
24. Collective amendments to Regulations No. 16, 44, 94 and 129.
25. Election of officers.
26. Other business:
  - (a) Exchange of information on national and international requirements on passive safety;
  - (b) Definition and acronyms in Regulations under GRSP responsibilities;
  - (c) Development of the International Whole Vehicle Type Approval (IWVTA) system and involvement of the Working Parties;
  - (d) Highlights of the June and November 2016 sessions of WP.29;
  - (e) Three-dimensional H-point machine;
  - (f) Intelligent transport systems.

## Annex I

**List of informal documents (GRSP-59-...) distributed without an official symbol during the session**

<i>No.</i>	<i>Transmitted by</i>	<i>Agenda item</i>	<i>Language</i>	<i>Title</i>	<i>Follow-up</i>
01	Hungary	21	E	Remarks to the Collective amendments to Regulations Nos. 16, 44, 94 and 129 (Enhanced Child Restraint Systems)	(a)
02/ Rev.2	Spain	14	E	Proposal for Supplement 12 to the 04 series of amendments to Regulation No. 44 (Child Restraint Systems)	(d)
03/ Rev.1	Spain	20	E	Proposal for draft Supplement 5 to Regulation No. 129 -Proposal for draft Supplement 1 to the 01 series of amendments to Regulation No. 129 (Enhanced Child Restraint Systems)	(d)
04	CLEPA	14 & 19	E	Collective amendments to working documents ECE/TRANS/WP.29/GRSP/2016/3 (Regulation No. 44), ECE/TRANS/WP.29/GRSP/2016/5 and ECE/TRANS/WP.29/GRSP/2016/6 (Regulation No. 129)	(d)
05	Japan	14 & 19	E	Proposal for collective amendments to Regulation Nos. 44 and 129	(d)
06/ Rev.2	France, Japan, R. Korea & EC	9	E	Proposal for the 07 series of amendments to Regulation No. 16 (Safety-belts)	(d)
07	GRSP Chair	1	E	Running order fifty ninth session of GRSP	(a)
08/ Rev.1	France	19	E	Proposal for the 02 series of amendments to Phase 2 of Regulation No. 129 (Enhanced Child Restraint Systems)	(d)
09/ Rev.1	Germany	15	E	Proposal for the 04 series of amendments to Regulation No. 80 (Strength of seats and their anchorages)	(d)
10	USA	7	E	Draft Meeting Minutes of the tenth Meeting of the Informal Working Group on Electrical Vehicle Safety - Global Technical Regulation	(a)
11	USA	7	E	Informal Working Group on Electric Vehicle Safety Global Technical Regulation	(a)
12	Japan	9	E	Report and explanation document of SBR-Task Force	(a)



<i>No.</i>	<i>Transmitted by</i>	<i>Agenda item</i>	<i>Language</i>	<i>Title</i>	<i>Follow-up</i>
13	EC	2	E	Proposal to develop amendment 2 to global technical regulation No. 1 concerning door locks and retention components	(b)
14	France	19	E	Status report of the CRS IWG on Regulation No. 129 Phase 2	(a)
15/ Rev.1	IC	14	E	Proposal for 05 series of amendments to Regulation No. 44 (Child Restraint Systems)	(d)
16	Rep. of Korea	4(a)	E	Request for authorization to develop an amendment to global technical regulation No. 9 (Pedestrian safety)	(b)
17	Spain	14	E	Meeting of Technical Special Group on CRS (TSG)	(a)
18	USA	22(g)	E	NHTSA Experience with Non-Traditional Vehicles	(a)
19/ Rev.1	Denmark/Japan	9	E	Proposal for Supplement 8 to the 06 series of amendments to Regulation No. 16 (Safety-belts)	(d)
20	OICA	9	E	Proposal for Supplement 8 to the 06 series of Amendments to Regulation No. 16 (seat belts)	(d)
21	Japan	22(a)	E	Pedestrian Safety Research in Japan	(a)

*Notes:*

- (a) Consideration completed or superseded.
- (b) Continue consideration at the next session with an official symbol.
- (c) Continue consideration at the next session as an informal document.
- (d) Adopted and to be submitted to WP.29.

## Annex II

### Draft amendments to Regulation No. 16 (Safety-belts)

#### Amendments adopted to ECE/TRANS/WP.29/GRSP/2016/8 (see para. 18 of this report)

Paragraph 8.3.4., amend to read:

"8.3.4. Safety-belts or restraint systems incorporating retractors shall be so installed that the retractors are able to operate correctly and stow the strap efficiently. In case of both a belt adjusting device for height as well as a flexible shoulder adjustment device for height, in at least its highest and its lowest position, checks shall be made that the retractor automatically adjusts the strap to the shoulder of the concerned wearer after **buckling**, as well as that the tongue-plate rolls up in case of an **unbuckling** ."

...

#### Amendments adopted on the basis of GRSP-59-20 (see para. 18 of this report)

Contents, *amend to read*:

#### "Contents

....

#### Annexes

....

17 Requirements for the installation of safety-belts and restraint systems for adult occupants of power-driven vehicles on forward facing seats, for the installation of ISOFIX child restraint systems and i-size child restraint systems.....

..

Appendix 3:

**Example of detailed information e.g. for child restraint system manufacturers** .....

Appendix 4: Installation of 10-year manikin positions .....

....

Annex 17, amend to read:

## "Annex 17

### **Requirements for the installation of safety-belts and restraint systems for adult occupants of power-driven vehicles on forward facing seats, for the installation of ISOFIX child restraint systems and i-size child restraint systems**

1. Compatibility with child restraint systems
  - 1.1. The vehicle manufacturer shall include in the vehicle handbook **simple advice to the vehicle user** on the suitability of each passenger seating position **for the fitting of child restraint systems**. This information shall be given **by pictograms, or** in the national language, or at least one of the national languages, of the country in which the vehicle is offered for sale.

For each forward-facing passenger seating position, and for each **specified ISOFIX position**, the vehicle manufacturer shall **indicate**:

- (a) **If the seating position is suitable for child restraints of the "universal" category (see paragraph 1.2. below), and/or**
- (b) **If the seating position is suitable for i-size child restraint systems (see paragraph 1.4. below), and/or**
- (c) **If the seating position is suitable for child restraint systems other than those specified above (e.g. see paragraph 1.3. below).**

**If a seating position is only suitable for use with forward-facing child restraint systems, this shall also be indicated in the vehicle handbook.**

**In addition to the above defined information for the vehicle user, the vehicle manufacturers shall make available the information as defined by Appendix 3 of this Annex. For example, this information can be included in separate Annexes of the vehicle handbook, or in technical descriptions of the vehicle or on a dedicated webpage.**

- 1.2. **A child restraint system of the universal category means a child restraint approved to the "universal" category of Regulation No. 44, Supplement 5 to 03 series of amendments. Seating positions, which are indicated by the vehicle manufacturer as being suitable for the installation of child restraints systems shall comply with the provisions of Appendix 1 to this annex.**
- 1.3. **An ISOFIX child restraint shall be approved to Regulation No. 44, Supplement 5 to 03 series of amendments or to Regulation No. 129. ISOFIX positions, which are indicated by the vehicle manufacturer as being suitable for the installation of ISOFIX child restraints systems shall comply with the provisions of Appendix 2 to this annex.**
- 1.4. An i-Size child restraint means a child restraint approved to the i-Size category of Regulation No. 129. Seating positions, which are indicated by the vehicle manufacturer as being suitable for the installation of i-Size child restraints systems shall comply with the provisions of Appendix 2 to **this annex.**

Annex 17, Appendix 2, paragraph 2, amend to read:

- "2. Test procedure

ISOFIX positions in the vehicle, **defined** by the vehicle manufacturer **shall** be checked **to ensure** that the CRF listed in paragraph 4 of this Appendix can be accommodated. Where the vehicle manufacturer has indicated that the ISOFIX position(s) will accommodate a particular CRF, then it shall be assumed that smaller CRFs of the same orientation may be accommodated.

i-Size seating positions, defined by the vehicle manufacturer, shall be checked to ensure that it is possible to accommodate both the ISO/R2 and the ISO/F2X child restraint fixtures (see paragraph 4 of this Annex) including the i-Size support leg installation assessment volume.

For both, ISOFIX and i-size position(s), the following procedure shall apply:"

*Annex 17, Appendix 3,*

*Tables 1 to 3, shall be deleted*

*Insert new Table 1, to read:*

**"Annex 17 – Appendix 3**

**Example of detailed information e.g. for child restraint system manufacturers**

Table 1

**This table gives technical information specifically intended e.g. for child restraint system manufacturer and as such translation into national languages is not required.**

<i>Seating position</i>									
<b>Seat position number</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
<b>Seating position suitable for universal belted (yes/ no)</b>									
<b>i-Size seating position (yes/no]</b>									
<b>Seating position suitable for lateral fixture (L1/ L2)</b>									
<b>Largest suitable rearward facing fixture (R1/ R2/ R3)</b>									
<b>Largest suitable forward facing fixture (F1/F2/F2X/F3)</b>									

1. Add information for each non i-size seating position compatible with a support leg, as described in this regulation.
2. Add information for each seating position equipped with lower ISOFIX anchorages but without Top Tether, according to this regulation.
3. Add information if the adult safety belt buckles are located laterally in between both ISOFIX lower anchorages.

**Note:**

1. Orientation is normal driving direction; columns for seating positions not available in a vehicle can be deleted.
2. The numbering of seating positions shall be made on basis of following definition:

<i>Seat Number</i>	<i>Position in the vehicle</i>
<b>1</b>	<b>Front left</b>
<b>2</b>	<b>Front centre</b>
<b>3</b>	<b>Front right</b>
<b>4</b>	<b>2<sup>nd</sup> row left</b>
<b>5</b>	<b>2<sup>nd</sup> row centre</b>
<b>6</b>	<b>2<sup>nd</sup> row right</b>
<b>7</b>	<b>3<sup>rd</sup> row left</b>
<b>8</b>	<b>3<sup>rd</sup> row centre</b>
<b>9</b>	<b>3<sup>rd</sup> row right</b>

The information about the seat position number can be given by means of a table or by sketches or pictograms.

### **Amendments adopted to ECE/TRANS/WP.29/GRSP/2016/2 (see para. 20 of this report)**

...

Paragraphs 2.45. and 2.46., amend to read:

- "2.45. "Second level warning" means a visual and audible warning activated when the vehicle is operated **in accordance with paragraphs 8.4.2.4.1.1. to 8.4.2.4.1.3. with the safety-belt** for any of the **front row** occupants **being unfastened and the safety-belt for any of the rear row occupants either being or becoming unfastened.**
- 2.46. "Safety-belt is unfastened" means, at the option of the manufacturer, either the safety-belt buckle **of any occupant** is not engaged or the **length of the pulled out webbing is less than the length of the webbing which is needed to buckle an unoccupied seat in the rear most seating position.**"

...

Paragraphs 8.4.1. and 8.4.1.1., shall be deleted and insert new paragraphs 8.4.1. to 8.4.1.3., to read:

- "8.4.1. Requirements per specific seating position and exemptions
- 8.4.1.1. The seating position of the driver of M and N categories of vehicles<sup>10</sup> as well as the seating positions of the occupants of seats in the same row as the driver

<sup>10</sup> As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.4, para. 2 - [www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html)

seat of M and N categories of vehicles shall be equipped with a safety-belt reminder satisfying the requirements of paragraph **8.4.3**.

- 8.4.1.2. All seating positions of the rear seat row(s) of M<sub>1</sub> and N<sub>1</sub> category vehicles<sup>10</sup> shall be equipped with a safety-belt reminder satisfying the requirements of paragraph 8.4.4.

Where the vehicle manufacturer provides a safety-belt reminder system on a rear seating position in another category of vehicle, the safety-belt reminder system may be approved according to this Regulation.

- 8.4.1.3. A safety-belt reminder is not compulsory on folding seats (i.e. normally folded and designed for occasional use, **e.g. foldable crew seats in the buses and coaches**) as well as seating positions fitted with an S-type belt (**including** harness belt).

Notwithstanding paragraphs 8.4.1.1. and 8.4.1.2. above, safety belt reminders are also not required **for rear seats** in ambulances, hearses, **and motor-caravans** as well as **for all seats for** vehicles used for transport of disabled persons, vehicles intended for use by the armed services, civil defence, fire services and forces responsible for maintaining public order."

**Paragraphs 8.4.2., amend to read:**

**"8.4.2. General requirements"**

**Paragraph 8.4.2.1., amend to read:**

**"8.4.2.1. Visual warning"**

*Paragraph 8.4.2.1.1., amend to read:*

- "8.4.2.1.1. **The visual warning** shall be so located as to be readily visible and recognisable in the daylight and at night time by the driver and distinguishable from other **alerts.**"

*Paragraph 8.4.2.1.2., amend to read:*

- "8.4.2.1.2. **The visual warning** shall be a steady or flashing tell-tale."

*Insert a new paragraph 8.4.2.2., to read: amend to read:*

**"8.4.2.2. Audible warning"**

*Paragraph 8.4.2.1.3.(former), renumber as paragraph 8.4.2.2.1. and amend to read:*

- "8.4.2.2.1. **The audible warning** shall consist of a continuous or an intermittent (**pauses shall not exceed 1 second**) sound signal or of continuous vocal information. Where vocal information is employed, the **vehicle** manufacturer shall ensure that the alert is able to employ the languages of the market into which the vehicle is intended to be placed."

**Paragraph 8.4.2.1.4.(former), renumber as paragraph 8.4.2.2.2. and amend to read:**

- "8.4.2.2.2. **The audible warning** shall be easily recognized by the driver."

*Insert a new paragraph 8.4.2.3., to read:*

**"8.4.2.3. First level warning"**

*Paragraph 8.4.2.2.(former), renumber as paragraph 8.4.2.3.1. and amend to read:*

- "8.4.2.3.1. **The first level warning** shall be at least a visual warning activated for 30 seconds or longer for **seating positions** covered by paragraph 8.4.1.1. and for

60 seconds or longer for **seating positions covered by paragraph 8.4.1.2.** when the safety-belt of any of the seats is not fastened and the ignition switch or master control switch is activated."

*Insert a new paragraph 8.4.2.3.2., to read:*

**"8.4.2.3.2. The first level warning may be discontinued when**

- (a) **none of the safety-belts which triggered the warning are unfastened, or**
- (b) **the seat or seats which triggered the warning are no longer occupied."**

*Paragraph 8.4.2.3., renumber as paragraph 8.4.2.3.3.*

*Insert a new paragraph 8.4.2.4., to read:*

**"8.4.2.4. Second level warning"**

*Paragraph 8.4.2.4.(former), renumber as paragraph 8.4.2.4.1. and amend to read:*

**"8.4.2.4.1. The second level warning shall be a visual and audible signal activated for at least 30 seconds not counting periods in which the warning may stop for up to 3 seconds when at least one—or any combination of the conditions **at the choice of manufacturer**, set out in paragraphs **8.4.2.4.1.1. to 8.4.2.4.1.3.** is/are fulfilled. The second level warning shall supersede the first level warning when the first level warning is still active."**

*Paragraphs 8.4.2.4.1. to 8.4.2.4.3.(former), renumber as paragraphs 8.4.2.4.1.1. to 8.4.2.4.1.3. and amend to read:*

**"8.4.2.4.1.1. The distance driven greater than the distance threshold. The threshold shall not exceed 500 m. The distance **driven when** the vehicle is not in normal operation shall be excluded."**

**8.4.2.4.1.2. The vehicle speed greater than the speed threshold. The threshold shall not exceed 25 km/h.**

**8.4.2.4.1.3. The duration time (engine running, **propulsion system activated, etc.**) is greater than the duration time threshold. The threshold shall not exceed 60 seconds. The first level warning duration time and the duration time **when** the vehicle is not in normal operation shall be excluded."**

*Insert new paragraphs 8.4.2.4.2. to 8.4.2.4.5., to read:*

**"8.4.2.4.2. The thresholds to trigger safety belt reminder listed in paragraphs 8.4.2.4.1.1. to 8.4.2.4.1.3., may be reset when :**

- (a) **any of the doors have been opened while the vehicle is not in normal operation; or**
- (b) **the seat or seats which triggered the warning are no longer occupied.**

**8.4.2.4.3. The second level warning may be discontinued when**

- (a) **none of the safety-belts which triggered the warning are unfastened;**
- (b) **the vehicle ceases to be in normal operation, or**
- (c) **the seat or seats which triggered the warning are no longer occupied.**

- 8.4.2.4.4.** The second level warning shall be resumed for the remainder of the required duration when one or any combination of the conditions, at the choice of the manufacturer, set out in paragraphs 8.4.2.4.1.1. to 8.4.2.4.1.3. is again fulfilled.
- 8.4.2.4.5.** For the condition that a safety belt becomes unfastened pursuant to paragraphs 8.4.3.3. and 8.4.4.5., the thresholds set out in paragraphs 8.4.2.4.1.1. to 8.4.2.4.1.3. shall be measured from the point in time at which unfastening occurs."

*Paragraph 8.4.2.5.(former), renumber as paragraph 8.4.2.4.6.*

*Insert new paragraphs 8.4.3. to 8.4.4.6., to read:*

- "8.4.3. Safety-belt reminder for driver and occupants of seats in the same row as the driver**
- 8.4.3.1.** Safety-belt reminders for driver and occupants of seats in the same row as the driver shall fulfil the requirements set out in paragraph 8.4.2.
- 8.4.3.2.** The colour and symbol of the visual warning shall be as defined in item 21 in Table 1 of Regulation No. 121.
- 8.4.3.3.** The second level warning shall be activated when a safety-belt is or becomes unfastened while the vehicle is in normal operation and while, at the same time, any one condition or any combination of the conditions, at the choice of the manufacturer, set out in paragraphs 8.4.2.4.1.1. to 8.4.2.4.1.3. is satisfied.
- 8.4.4. Safety-belt reminder for occupants of rear seat row(s).**
- 8.4.4.1.** Safety-belt reminders for occupants of rear row(s) shall fulfil the requirements set out in paragraphs 8.4.2.
- 8.4.4.2.** The visual warning shall indicate at least all rear seating positions to allow the driver to identify, while facing forward as seated on the driver seat, any seating position in which the safety-belt is unfastened. For vehicles that have information on the occupancy status of the rear seats, the visual warning does not need to indicate unfastened safety-belts for unoccupied seating positions.
- 8.4.4.3.** The colour of the visual warning may be other than red and the symbol of the visual warning for safety-belts covered by paragraph 8.4.1.2. may contain different symbols other than defined in Regulation No. 121. In addition, the first level warning of seating positions covered by paragraph 8.4.1.2. may be cancelled by the driver.
- 8.4.4.4.** A common tell-tale may be used for safety-belts covered by paragraphs 8.4.1.1. and 8.4.1.2.
- 8.4.4.5.** The second level warning shall be activated when a safety-belt becomes unfastened while the vehicle is in normal operation and while, at the same time, any one condition or any combination of the conditions, at the choice of the manufacturer, set out in paragraphs 8.4.2.4.1.1. to 8.4.2.4.1.3. is satisfied."

*Paragraphs 8.4.2.6. to 8.4.2.6.2. , renumber as paragraphs 8.4.5. to 8.4.5.2. and amend to read:*

- "8.4.5.** The safety-belt reminder may be designed to allow deactivation.



- 8.4.5.1. In the case that a short term deactivation is provided, it shall be **significantly** more difficult to deactivate the safety-belt reminder than buckling the safety-belt on and off (**i.e. it shall consist of an operation of specific controls that are not integrated in the safety-belt buckle**) and **this operation shall only be possible when the vehicle is stationary**. When the ignition or master control switch is **deactivated** for more than 30 minutes and **activated** again, a short-term deactivated safety-belt reminder shall reactivate. **It shall not be possible to provide short term deactivation of the relevant visual warning(s).**
- 8.4.5.2. 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. **It shall not be possible to provide long term deactivation of the relevant visual warning(s)"**

*Insert new paragraphs 15.4. to 15.10., to read:*

- "15.4. As from the official date of entry into force of the 07 series of amendments, no Contracting Party applying this Regulation shall refuse to grant or refuse to accept type approvals under this UN Regulation as amended by the 07 series of amendments. Contracting Parties shall continue to grant extensions of approvals to the preceding series of amendment.
- 15.5. As from 1 September 2019, Contracting Parties applying this Regulation shall not be obliged to accept type approvals to the preceding series of amendments that were first issued on or after 1 September 2019.
- 15.6. A safety-belt reminder is not compulsory on removable rear seats and on any seat in a row in which there is a suspension seat, for the purpose of granting type-approval to the 07 series of amendment, until 1 September 2022.
- 15.7. Until 1 September 2021, Contracting Parties applying this Regulation shall accept type approvals to the preceding series of amendments that were first issued before 1 September 2019.
- 15.8. As from 1 September 2021, Contracting Parties applying this Regulation shall not be obliged to accept type approvals issued to the preceding series of amendments to this Regulation.
- 15.9. Notwithstanding paragraph 15.8, Contracting Parties applying the Regulation shall continue to accept UN type approvals of safety-belts and restraint systems to the preceding series of amendments to the Regulation.
- 15.10. Notwithstanding paragraph 15.8., Contracting Parties applying the Regulation shall continue to accept type approvals to the preceding series of amendments to the Regulation, for vehicles which are not affected by the changes introduced by the 07 series of amendments."

...

*Annex 18, amend to read:*

## "Annex 18

### Safety-belt reminder tests

*Paragraphs 1., amend to read:*

"1. The first level warning shall be tested according to the following conditions:

...

- (e) **A load of 40 kg is placed on each seat cushion in the same row as the driver's seat, or the simulated state in which occupants are on-board the vehicle by an alternative method specified by the vehicle manufacturer, provided an occupant's load does not exceed 40 kg. This may also be done for the rear seats at the request of the vehicle manufacturer.**

**Or alternatively (at the choice of the manufacturer):**

**An object or human representing a 5<sup>th</sup> percentile adult female<sup>1</sup> is placed on each seat cushion as specified by the manufacturer in the same row as the driver seat, or the state in which occupants are on-board the vehicle is simulated by an alternative method specified by the vehicle manufacturer as agreed by the technical service and the approval authority. This may also be done for the rear seats at the request of the vehicle manufacturer.**

- (f) **The state of the safety-belt reminder is checked for all of the relevant seat(s), in conditions (a) to (e)."**

...

*New paragraph 2.1.1., amend to read:*

"2.1.1. Testing the driver's seat when the safety-belt is unfastened before the journey

...

- (d) **The state of the safety-belt reminder is checked for the driver's seat, in conditions (a) to (c)."**

*New paragraph 2.2.1., amend to read:*

"2.2.1. Testing the seat(s) in the same row as the driver's seat when the safety-belt is unfastened before the journey:

...

- (c) A load of 40 kg is applied to the seat(s) in the same row as the driver's seat, or the state in which occupants are on-board the vehicle is simulated by a method specified by the manufacturer;

---

<sup>1</sup> The technical specifications and detailed drawings of Hybrid III, corresponding to the principal dimensions of a 5<sup>th</sup> percentile female of the United States of America, and the specifications for its adjustment for this test are deposited with the Secretary-General of the United Nations and may be consulted on request at the secretariat of the Economic Commission for Europe, Palais des Nations, Geneva, Switzerland. A female who weighs between 46.7 and 51.25 kg, and who is between 139.7 and 150 cm tall may be used.

**Or alternatively (at the choice of the manufacturer):**

**An object or human representing a 5<sup>th</sup> percentile adult female is placed on each seat cushion as specified by the manufacturer in the same row as the driver seat, or the state in which occupants are on board the vehicle is simulated by an alternative method specified by the vehicle manufacturer as agreed by the technical service and the approval authority. This may also be done for the rear seats at the request of the vehicle manufacturer.**

..."

***New paragraph 2.2.2., amend to read:***

"2.2.2. Testing the seating position in the same row as the driver's seat when the safety-belt becomes unbuckled during the journey.

- (a) The safety-belts of the driver's seat and seats other than the driver's seat are fastened;
- (b) A load of 40 kg is applied to the seat(s) in the same row as the driver's seat, or the state in which occupants are on-board the vehicle is simulated by a method specified by the manufacturer;

**Or alternatively (at the choice of the manufacturer):**

**An object or human representing a 5<sup>th</sup> percentile adult female is placed on each seat cushion as specified by the manufacturer in the same row as the driver seat, or the state in which occupants are on board the vehicle is simulated by an alternative method specified by the vehicle manufacturer as agreed by the technical service and the approval authority. This may also be done for the rear seats at the request of the vehicle manufacturer.**

- (c) The test ... or combination thereof;
- (d) The safety-belt(s) of the seats in the same row as the driver's seat is (are) unbuckled.

..."

...

**Amendments adopted to ECE/TRANS/WP.29/GRSP/2016/12 (see para. 21 of this report)**

*Annex 16*, amend to read:

## "Annex 16

## Safety-belt installation showing the belt types and retractor types

Minimum requirements for safety-belts and Retractors						
Vehicle category	Forward facing seating positions				Rearward-facing seating positions	Side-facing seating position
	Outboard seating positions		Centre seating position			
	Front	Other than front	Front	Other than front		
M <sub>1</sub>	Ar4m	Ar4m	Ar4m	Ar4m	B, Br3, Br4m	-
M <sub>2</sub> < 3.5 t	Ar4m, Ar4Nm	Ar4m, Ar4Nm	Ar4m, Ar4Nm	Ar4m, Ar4Nm	Br3, Br4m, Br4Nm	-
M <sub>2</sub> > 3.5 t	Br3, Br4m, Br4Nm, or Ar4m or Ar4Nm ●	Br3, Br4m, Br4Nm, or Ar4m or Ar4Nm ●	Br3, Br4m, Br4Nm or Ar4m or Ar4Nm ●	Br3, Br4m, Br4Nm or Ar4m or Ar4Nm ●	Br3, Br4m, Br4Nm	-
M <sub>3</sub>	Br3, Br4m, Br4Nm, or Ar4m or Ar4Nm ● See para. 8.1.7. for conditions when a lap belt is permitted	Br3, Br4m, Br4Nm, or Ar4m or Ar4Nm ● See para. 8.1.7. for conditions when a lap belt is permitted	Br3, Br4m, Br4Nm or Ar4m or Ar4Nm ● See para. 8.1.7. for conditions when a lap belt is permitted	Br3, Br4m, Br4Nm or Ar4m or Ar4Nm ● See para. 8.1.7. for conditions when a lap belt is permitted	-	B, Br3, Br4m, Br4Nm
N <sub>1</sub>	Ar4m, Ar4Nm	Ar4m, Ar4Nm, Br4m, Br4Nm Ø Para. 8.1.2.1. lap belt permitted if seat is inboard of a passageway	B, Br3, Br4m, Br4Nm or A, Ar4m, Ar4Nm* <sup>1</sup> Para. 8.1.6. lap belt permitted if the windscreen is not in the reference zone	B, Br3, Br4m, Br4Nm	B, Br3, Br4m, Br4Nm	-
N <sub>2</sub>	Br3, Br4m, Br4Nm or Ar4m, Ar4Nm* <b>Para. 8.1.6. lap belt permitted if the windscreen is outside the reference zone and for the driver's seat</b>	B, Br3, Br4m, Br4Nm	B, Br3, Br4m, Br4Nm, or A, Ar4m, Ar4Nm* <b>Para. 8.1.6. lap belt permitted if the windscreen is not in the reference zone</b>	B, Br3, Br4m, Br4Nm	B, Br3, Br4m, Br4Nm	-
N <sub>3</sub>	<b>Br3, Br4m, Br4Nm or Ar4m, Ar4Nm*</b> Para. 8.1.6. lap belt permitted if the windscreen is outside the reference zone and for the driver's seat	<b>B, Br3, Br4m, Br4Nm</b>	<b>B, Br3, Br4m, Br4Nm, or A, Ar4m, Ar4Nm*</b> Para. 8.1.6. lap belt permitted if the windscreen is not in the reference zone	<b>B, Br3, Br4m, Br4Nm</b>	<b>B, Br3, Br4m, Br4Nm</b>	-

A: three-point (lap and diagonal) belt

B: 2-point (lap) belt

r: retractor

m: emergency locking retractor with multiple

3: automatically locking retractor

4: emergency locking retractor

N: higher response threshold

sensitivity

\*: Refers to para. 8.1.6. of this Regulation<sup>2</sup>

Ø: Refers to para. 8.1.2.1. of this Regulation

●: refers to para. 8.1.7. of this Regulation<sup>2</sup>

(see Regulation No. 16, paras. 2.14.3. and 2.14.5.)

<sup>1</sup> Erratum to Supplement 12 to the 04 series of amendments, applicable "ab initio."<sup>2</sup> Erratum to Revision 4, applicable "ab initio."*Note:* In all cases all S-type belts may be fitted in place of all possible A or B type belts, provided their anchorages comply with Regulation No. 14.

Where a harness belt has been approved as a S-type belt according to this Regulation, using the lap belt strap, the shoulder belt straps and possibly one or more retractors, one or two additional crotch straps including their attachments for their anchorages may be provided by the manufacturer/applicant. These additional anchorages need not meet the requirements of Regulation No. 14 (Erratum to Supplement 14 to the 04 series of amendments, applicable "ab initio.").

"

## Annex III

### Draft amendments to Regulation No. 44 (Frontal collision)

#### Amendments adopted to ECE/TRANS/WP.29/GRSP/2016/3 (see para. 31 of this report)

...

Paragraphs 6.1.5. and 6.1.6., amend to read:

"6.1.5. The Child Restraint ... parts of EN 71-3:2013+A1:2014 (paragraph 4.2., Table 2, Category III for specific requirements and paragraph 7.3.3. for test methodology). Tests ...

6.1.6. The flammability of Child Restraint Systems submitted for approval shall be assessed by one of the following methods:

...

Method 2

The applicant ... more than **100 mm** per minute. Each ..."

...

#### Amendments adopted to ECE/TRANS/WP.29/GRSP/2016/11 (see para. 33 of this report)

Paragraph 6.1.3., amend to read:

"6.1.3. According ... structure.

#### Possible configurations for approval Groups / categories table

Group category		Universal (1)		Semi-universal (2)		Restricted		Specific vehicle	
		CRS	ISOFIXCRS	CRS	ISOFIXCRS	CRS	ISOFIXCRS	CRS	ISOFIXCRS
0	Carry-cot	A	NA	A	A(3)	A	NA	A	A(3)
	Rearward facing	A	NA	A	A(3)	A	NA	A	A(3)
0+	Rearward facing	A	NA	A	A(3)	A	NA	A	A(3)
I	Rearward facing	A	NA	A	A(3)	A	NA	A	A(3)
	Forward facing (integral)	A	A(3)	A	A(3)	A	NA	A	A(3)
	Forward facing (non-integral)	NA	NA	NA	NA	NA	NA	NA	NA
	Forward facing (non-integral – see	A	NA	A	NA	A	NA	A	A(3)

Group category		Universal (1)		Semi-universal (2)		Restricted		Specific vehicle	
		CRS	ISOFIXCRS	CRS	ISOFIXCRS	CRS	ISOFIXCRS	CRS	ISOFIXCRS
paragraph 6.1.12.)									
II	Rearward facing	A	NA	A	NA	A	NA	A	A
	Forward facing (integral)	A	NA	A	NA	A	NA	A	A
	Forward facing (non integral)	A	NA	A	NA	A	NA	A	A
III	Rearward facing	A	NA	A	NA	A	NA	A	A
	Forward facing (integral)	A	NA	A	NA	A	NA	A	A
	Forward facing (non integral)	A	NA	A	NA	A	NA	A	A
<p>With:  CRS: Child restraint system  A: Applicable  NA: Not Applicable</p> <hr/> <p>(1) ISOFIX universal CRS means forward facing restraints for use in vehicles with positions equipped with ISOFIX anchorages system and a top tether anchorage.  (2) ISOFIX semi universal CRS means:  <ul style="list-style-type: none"> <li>• Forward facing restraints equipped with support leg or</li> <li>• Rearward facing restraints equipped with a support leg or a top tether strap for use in vehicles with positions equipped with ISOFIX anchorages system and a top tether anchorage if needed</li> <li>• Or rearward facing restraints, supported by the vehicle dashboard, for use in the front passenger seat equipped with ISOFIX anchorages system,</li> <li>• Or lateral facing position restraint equipped if needed with an anti-rotation device for use in vehicles with positions equipped with ISOFIX anchorages system and top tether anchorage if needed.</li> </ul> (3) <b>New approvals and extensions will be granted in accordance with paragraphs 17.16. and 17.17.</b></p>									

Insert new paragraphs 17.16. and 17.17., to read:

**"17.16. As from 1 September 2017, no new approvals shall be granted under this Regulation to integral class child restraint systems of groups 0, 0+ and 1 that are equipped with ‘ISOFIX attachments’ (as specified in paragraph 6.3.2. of this Regulation), unless they form part of a multi-group child restraint system that will also be approved for group 2 and above.**

**17.17. As from 1 September 2020, no extensions shall be granted under this Regulation to integral class child restraint systems of groups 0, 0+ and I that are equipped with ‘ISOFIX attachments’ (as specified in paragraph 6.3.2 of this Regulation), unless they form part of a multi-group child restraint system that is also approved for group II and above."**

## Amendments adopted on the basis of GRSP-59-02-Rev.2 (see para. 35 of this report)

*Paragraph 7.1.3.1., amend to read:*

"7.1.3.1. The child ... bench, **once the applied load has been removed.**"

*Paragraph 8.1.2.3., amend to read:*

"8.1.2.3. At this static inverted position a mass equivalent to 4 times that of the dummy, **with a tolerance of -0/+5% with reference to dummies nominal masses as in Annex 8**, shall be ... acceleration or 400 mm/min. Maintain the prescribed maximum load for a duration of 30 -0/+5 seconds."

*Paragraph 8.1.3.1.1.3.1., amend to read:*

"8.1.3.1.1.3.1. Deceleration test device:

The deceleration ... paragraph 8.1.3.4. and hereafter specified:

**For frontal impact, the trolley shall be so propelled that, at the beginning of the test, its velocity is 50 + 0/- 2 km/h and its acceleration curve is within the hatched area of the graph in Annex 7, Appendix 1.**

**For rear impact, the trolley shall be so propelled that, at the beginning of the test, its velocity is 30 +2/- 0 km/h and its acceleration curve is within the hatched area of the graph in Annex 7, Appendix 2.**

**Tests performed at a higher speed and/or with an acceleration that exceeds the upper boundary of the hatched area shall be considered satisfactory if the child restraint system meets the performance requirements for the test.**

**Tests performed at a lower acceleration shall be considered satisfactory only if the acceleration curve crosses the lower boundary of the hatched area for a cumulative period of up to 3 ms.**

**In fulfilling the above requirements, the Technical Service shall use a mass of trolley (equipped with its seat), as specified in paragraph 1. of Annex 6, greater than 380 kg."**

*Paragraphs 8.3. to 8.3.3., amend to read:*

"8.3. Certification of test bench cushion

8.3.1. The test **bench** cushion shall be certified when new to establish initial values for impact peak deceleration, and then after every 50 dynamic tests or at least every month, whichever is the sooner.

8.3.2. The certification ... channel filter class (CFC) 60.

Using the test device defined in Annex 17 to this Regulation, conduct 3 tests **on the bench base prepared as described in Annex 6, foam covered with textile**, 150 ± 5 mm from the front edge of the cushion on the centre line and at 150 ± 5 mm in each direction from the centre line.

Place the **bench cushion** on a flat rigid surface. Place the device vertically above the test point **at a height of 500 ± 5 mm** and allow it to fall freely to make impact on the seat surface. Record the deceleration curve.

8.3.3. **The initial peak recorded values for impact deceleration shall be  $18 \pm 3$  g and subsequent** peak values recorded shall not deviate by more than 15 per cent from the initial values."

Paragraph 9.1., amend to read:

"9.1. The test report ...

...

- (f) **The following dummy criteria: Resultant Chest acceleration, Vertical Chest acceleration, and their cumulative time duration above prescribed limits;**
- (g) The place occupied by the buckle during the tests, if it can be varied, and
- (h) **The name and address of the laboratory where tests have been performed;**
- (i) And any failure or breakage."

Annex 6, paragraph 3.1.5., Table 1, amend to read:

"

Density according to ISO 485 (kg/m <sup>3</sup> )	<b>40 -0/+5</b>
Bearing strength according to ISO 2439B (N)	
p - 25 percent	125
p - 40 percent	155
Bearing strength factor according to ISO 3386 (kPa)	4
Elongation at rupture according to ISO 1798 (percent)	180
Breaking strength according to ISO 1798 (kPa)	100
Compression set according to ISO 1856 (percent)	3

"

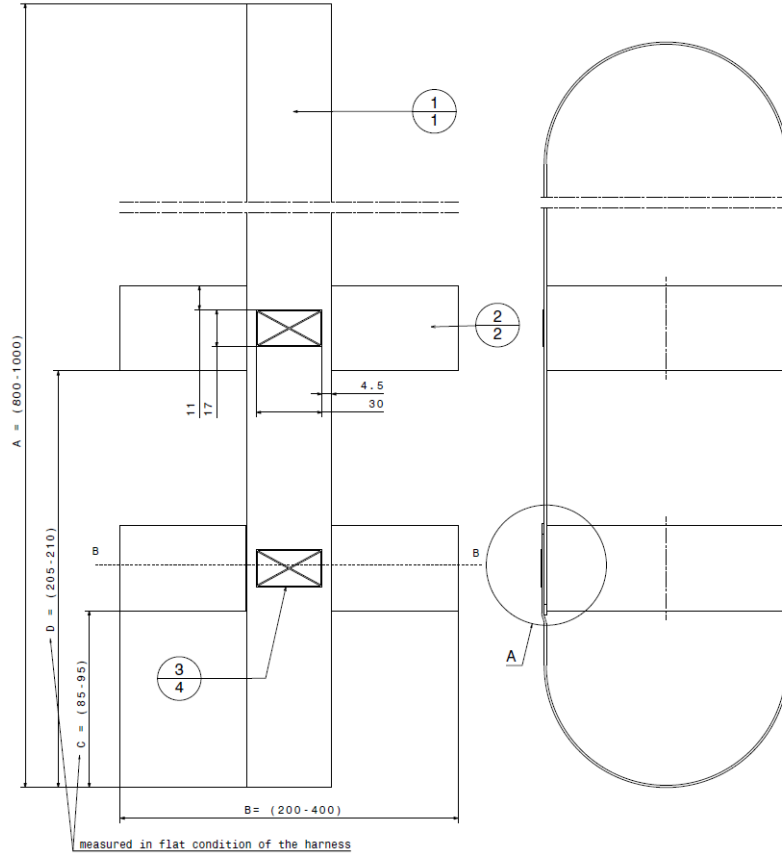
Annex 23, amend to read:



"Annex 23

...

**Load application device II**



..

## Annex IV

### **Draft amendments to Regulation No. 80 (Strength of seats and their anchorages (buses))**

#### **Amendments adopted on the basis of GRSP-59-09-Rev.1 (see para. 41 to this report)**

*Paragraph 7.4.4.*, amend to read:

- "7.4.4. The passengers in side-facing seats shall be safeguarded by a vehicle part (e.g. partition, wall or seat back of a forward-facing seat) forward of the foremost side-facing seat. This vehicle part shall meet the requirements of Appendix 7. **It shall maintain its safeguard function during testing.**"

## Annex V

### Draft amendments to Regulation No. 129 (Enhanced Child Restraint Systems)

Amendments adopted on the basis of GRSP-59-03-Rev.1 (see para. 41 to this report)

#### A. Proposal for Supplement 5 to Regulation No. 129

*Paragraph 6.6.3.1.*, amend to read:

"6.6.3.1. The **Enhanced Child Restraint System** shall be tested as prescribed in paragraph 7.1.2. **of this Regulation**; at no point during the whole test shall the manikin be fully ejected from the device. In addition when the test **bench** is in the upside down position, the dummy's head shall not move more than 300 mm from its original position in a vertical direction relative to the test **bench**; **this measurement shall be performed after the load has been removed.**"

*Paragraph 7.1.2.3.*, amend to read:

"7.1.2.3. At this static inverted position a mass equivalent to four times that of the dummy, **with a tolerance of -0/+5 per cent with reference to dummies nominal masses as in Annex 8**, shall be applied ..."

*Paragraph 7.1.3.1.1.5.1.*, amend to read:

"7.1.3.1.1.5.1. Deceleration test device:

The deceleration ... hereafter specified:

**For frontal impact, the trolley shall be so propelled that, at the beginning of the test, its velocity is 50 + 0/- 2 km/h and its acceleration curve is within the hatched area of the graph in Annex 7, Appendix 1.**

**For rear impact, the trolley shall be so propelled that, at the beginning of the test, its velocity is 30 +2/-0 km/h and its acceleration curve is within the hatched area of the graph in Annex 7, Appendix 2.**

**Tests performed at a higher speed and/or with an acceleration that exceeds the upper boundary of the hatched area shall be considered satisfactory if the child restraint system meets the performance requirements for the test.**

**Tests performed at a lower acceleration shall be considered satisfactory only if the acceleration curve crosses the lower boundary of the hatched area for a cumulative period of up to 3 ms.**

**In fulfilling the above requirements, the Technical Service shall use a mass of trolley (equipped with its seat), as specified in paragraph 1. of Annex 6, greater than 380 kg."**

*Paragraphs 7.3. to 7.3.3.*, amend to read:

7.3. Certification of test bench cushion

- 7.3.1. The test bench cushion shall be certified when new to establish initial values for **impact peak** deceleration, and then after every 50 dynamic tests or at least every month, whichever is the **sooner**.
- 7.3.2. The ... filter class (CFC) 60.  
 Using the test device defined in Annex 14 to this Regulation, conduct three tests **on the bench base prepared as described in Annex 6, foam covered with textile**, 150 ± 5 mm from the front edge of the cushion on the centre line and at 150 ± 5 mm in each direction from the centre line.  
 Place the **bench cushion** on a flat rigid surface.. Place the device vertically above the test point, **at a height of 500 ± 5 mm** and allow it to fall freely to make impact on the seat surface. Record the deceleration curve.
- 7.3.3. **The initial peak recorded values for impact deceleration shall be 24 ± 4 g and subsequent** peak values recorded shall not deviate by more than 15 percent from the initial values.

*Paragraph 8.1.*, amend to read:

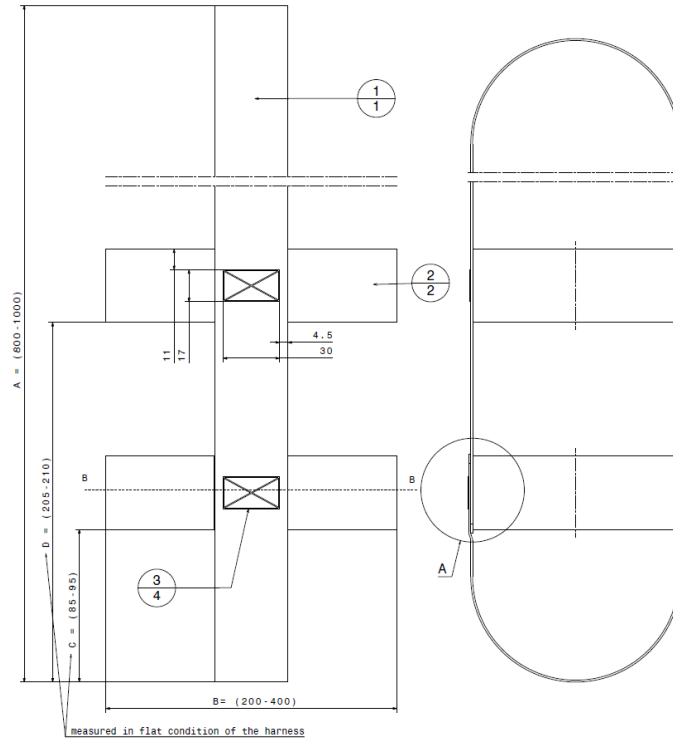
- "8.1. The test ... data:  
 ...  
 (g) **The name and address of the laboratory where tests have been performed;**  
 (h) And any failure or breakage;  
 (i) The following dummy criteria: HPC, Head acceleration **Cum3 ms**, Upper neck tension force, Upper neck moment, **Chest acceleration Cum3 ms Chest deflection Abdominal Pressure (in frontal impact).**"

Annex 21, amend to read:

## "Annex 21

...

### Load application device II



..."

## B. Proposal for Supplement 1 to the 01 series of amendments to Regulation No. 129

Paragraph 7.1.2.3., amend to read:

"7.1.2.3. At this static inverted position a mass equivalent to four times that of the dummy, with a tolerance of  $-0/+5$  per cent with reference to dummies nominal masses as in Annex 8, shall be applied ..."

Paragraph 7.1.3.1.1.5.1., amend to read:

"7.1.3.1.1.5.1. Deceleration test device:

The deceleration ... hereafter specified:

**For frontal impact, the trolley shall be so propelled that, at the beginning of the test, its velocity is  $50 + 0/- 2$  km/h and its acceleration curve is within the hatched area of the graph in Annex 7, Appendix 1.**

**For rear impact, the trolley shall be so propelled that, at the beginning of the test, its velocity is  $30 +2/- 0$  km/h and its acceleration curve is within the hatched area of the graph in Annex 7, Appendix 2.**

Tests performed at a higher speed and/or with an acceleration that exceeds the upper boundary of the hatched area shall be considered satisfactory if the child restraint system meets the performance requirements for the test.

Tests performed at a lower acceleration shall be considered satisfactory only if the acceleration curve crosses the lower boundary of the hatched area for a cumulative period of up to 3 ms.

In fulfilling the above requirements, the Technical Service shall use a mass of trolley (equipped with its seat), as specified in paragraph 1. of Annex 6, greater than 380 kg."

Paragraphs 7.3. to 7.3.3., amend to read:

"7.3. Certification of test bench cushion

7.3.1. The test bench cushion shall be certified when new to establish initial values for **impact peak** deceleration, and then after every 50 dynamic tests or at least every month, whichever is the **sooner**.

7.3.2. The certification ... filter class (CFC) 60.

Using the test device defined in Annex 14 to this Regulation, conduct three tests **on the bench base prepared as described in Annex 6, foam covered with textile**, 150 ± 5 mm from the front edge of the cushion on the centre line and at 150 ± 5 mm in each direction from the centre line.

Place the **bench cushion** on a flat rigid surface. Place the device vertically above the test point, **at a height of 500 ± 5 mm** and allow it to fall freely to make impact on the seat surface. **Record** the deceleration curve.

7.3.3. **The initial peak recorded values for impact deceleration shall be 24 ± 4 g and subsequent** peak values recorded shall not deviate by more than 15 percent from the initial values."

Paragraph 8.1., amend to read:

"8.1. The test report ... data:

...

(g) **The name and address of the laboratory where tests have been performed;**

(h) And any failure or breakage;

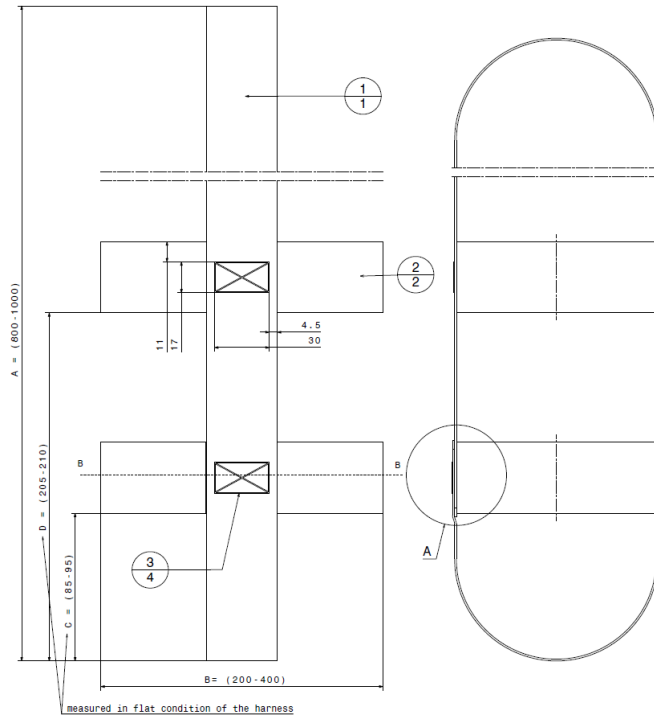
(i) The following dummy criteria: HPC, Head acceleration **Cum3 ms**, Upper neck tension force, Upper neck moment, **Chest acceleration Cum3 ms Chest deflection Abdominal Pressure (in frontal impact).**"

Annex 21, amend to read:

## "Annex 21

...

## Load application device II



..."

**Amendments adopted to ECE/TRANS/WP.29/GRSP/2016/5 (see para. 42 to this report)**

Paragraphs 6.3.1.1. and 6.3.1.2., amend to read:

"6.3.1.1. The Child Restraint System manufacturer shall declare in writing that the toxicity of materials used in the manufacture of restraint systems and accessible to the restrained child is in conformity with the relevant parts of **EN 71-3:2013+A1:2014 (paragraph 4.2., Table 2, Category III for specific requirements and paragraph 7.3.3. for test methodology)**. Tests confirming the validity of the declaration may be carried out at the discretion of the Technical Service.

6.3.1.2. The flammability of Child Restraint Systems submitted for approval shall be assessed by one of the following methods:

...

## Method 2

The applicant shall declare in writing that when testing materials in accordance with Annex 23 of this regulation, the materials used shall not burn, nor transmit a flame front across its surface, at a rate of more than **100 mm** per minute. ....

..."

**Amendments adopted to ECE/TRANS/WP.29/GRSP/2016/6 (see para. 42 to this report)**

*Paragraphs 6.3.1.1. and 6.3.1.2., amend to read:*

"6.3.1.1. The Enhanced Child Restraint System manufacturer shall declare in writing that the toxicity of materials used in the manufacture of restraint systems and accessible to the restrained child is in conformity with the relevant parts of **EN 71-3:2013+A1:2014 (paragraph 4.2., Table 2, Category III for specific requirements and paragraph 7.3.3. for test methodology)**. Tests confirming the validity of the declaration may be carried out at the discretion of the Technical Service.

6.3.1.2. The flammability of Enhanced Child Restraint Systems submitted for approval shall be assessed by one of the following methods:

...

Method 1

The Enhanced Child Restraint System manufacturer shall declare in writing that the flammability of materials used to manufacture the **Child Restraint System** is in conformity with the **method of section 5.4 of EN 71-2:2011+A1:2014 with a maximum rate of spread of flame of 30 mm/s**. Tests confirming the validity of the declaration may be carried out at the discretion of the Technical Service. **Where fabrics are assembled together, these shall be tested as a composite.**

...

Method 2

The applicant shall declare in writing that when testing materials in accordance with Annex 23 of this regulation, the materials used shall not burn, nor transmit a flame front across its surface, at a rate of more than **100 mm** per minute...

..."



## Annex VI

[English only]

## List of GRSP informal working groups

<i>Informal working group</i>	<i>Chair</i>	<i>Expiry date of the mandate [pending WP.29 decision]</i>	<i>Secretary</i>
Harmonized side impact dummies	Mr. David Sutula (USA) Phone : +1 202 366 32 73 Fax : +1 202 493 29 90 e-mail : david.sutula@dot.gov	December 2016	
Head Restraints (GTR7-Phase 2)	Mr. Bernard Frost (UK) Phone : +44-(0)207 9442107 Fax : +44-(0)207 9449623 e-mail : bernie.frost@dft.gsi.gov.uk	March 2017	OICA
Child Restraint Systems (CRS)	Mr. Pierre Castaing (France) Phone : +33 1-69801750 Fax : +33 1-69801719 e-mail : pierre.castaing@utac.com	December 2016	
Pedestrian Safety (GTR9-Phase 2)	Mr. Richard Damm (Germany) Tel.: +49 (0) 228 99 300 4302 Fax: +49 (0) 228 99 300 807 4302 e-mail: richard.damm@bmvbs.bund.de	December 2016	
Electric Vehicle Safety (EVS)	Mr. N. Nguyen (USA), (vice-chaired by the European Union and China) Phone: +1 202 366 69 34 Fax: +1 202 493 29 90 e-mail : nha.nguyen@dot.gov	December 2016	Japan
Three-dimensional H-point machine	Vacant	[...]	