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### World Forum for Harmonization of Vehicle Regulations

### Working Party on Passive Safety

Forty-ninth session

Geneva, 16–20 May 2011

## Report of the Working Party on Passive Safety on its forty-ninth session

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## **I. Attendance**

1. The Working Party on Passive Safety (GRSP) held its forty-ninth session in Geneva from 16 to 20 May 2011, chaired by Mrs. S. Meyerson (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 and Amend.1): Australia; China; Czech Republic; France; Germany; India; Italy; Japan; Netherlands; New Zealand; Norway; Poland; Republic of Korea; Russian Federation; Spain; Sweden; Switzerland; United Kingdom of Great Britain and Northern Ireland and United States of America. An expert from the European Commission (EC) participated. Experts from the following non-governmental organizations participated: International Organization of Motor Vehicle Manufacturers (OICA); European Association of Automotive Suppliers (CLEPA); Consumers International (CI); European Enhanced Vehicle-Safety Committee (EEVC); Foundation for the Automobile and Society (FIA Foundation) and International Motorcycle Manufacturers Association (IMMA).

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

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

*Documentation:* ECE/TRANS/WP.29/GRSP/2011/1  
Informal document GRSP-49-02-Rev.1

3. GRSP considered and adopted the agenda (ECE/TRANS/WP.29/GRSP/2011/1) proposed for the forty-ninth session with the new agenda items 21(c), 21(d) and 22 as well as the running order (GRSP-49-02-Rev.1). The list of GRSP informal groups is contained in Annex X to this report.

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

*Documentation:* ECE/TRANS/WP.29/GRSP/2011/3  
ECE/TRANS/WP.29/GRSP/2011/4  
ECE/TRANS/WP.29/GRSP/2010/28

4. GRSP considered ECE/TRANS/WP.29/GRSP/2011/3 (superseding ECE/TRANS/WP.29/GRSP/2010/28) and ECE/TRANS/WP.29/GRSP/2011/4 (final progress report) as the final consolidated proposal for amendments to gtr No. 1. GRSP noted that the proposal introduced new provisions with respect to the present text of Regulation No. 11. Accordingly, it was agreed to resume consideration on this subject at its December 2011 session, to adopt the amendment to the gtr aligned with provisions of Regulation No. 11 as a whole package (see para. 16).

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

*Documentation:* ECE/TRANS/WP.29/AC.3/25/Rev.1

5. GRSP noted that the Executive Committee of the 1998 Agreement (AC.3) at its

March 2011 session (see ECE/TRANS/WP.29/1089, para. 99) had adopted a revised proposal to develop the amendment to the gtr (ECE/TRANS/WP.29/AC.3/25/Rev.1) and had agreed to transmit it to GRSP. Accordingly, the Chair of the informal group, reported on the work progress made by the group:

(a) The informal group is already working on the basis of ECE/TRANS/WP.29/AC.3/25/Rev.1.

(b) Solutions to pending issues such as the calibration of the biofidelic rear impact dummy II (BioRID II) (i.e. jacket stiffness) are in progress.

(c) A draft proposal could be submitted to the December 2011 session of GRSP, pending the finalization of injury criteria and financial constraints.

6. GRSP also noted that three informal groups would convene again in Washington D.C. and discuss: (i) 8 June, harmonization of side impact dummies, (ii) 9 June, pole side impact and (iii) 10 June, gtr No. 7 Phase 2.

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

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

*Documentation:* ECE/TRANS/WP.29/GRSP/2011/13  
Informal documents GRSP-49-15, GRSP-49-23, GRSP-49-24 and  
GRSP-49-38

7. GRSP considered ECE/TRANS/WP.29/GRSP/2011/13 and GRSP-49-15 concerning the introduction of the flexible pedestrian legform (Flex-PLI) into the gtr. The expert from the United States of America made a presentation (GRSP-49-23) showing the outcome of a comparison research study conducted in his country between the Flex-PLI and the current lower legform. He concluded that additional research, testing and additional world fleet data is needed to address the injury criteria concerns and to justify the introduction of the Flex-PLI. The expert from Japan gave a presentation (GRSP-49-24), showing that the Flex-PLI and the current legform have a totally different structure and injury criteria. Therefore, he concluded that direct comparison between the two legforms would take misleading results. GRSP agreed that pending issues should be addressed by an informal group, co-chaired by Germany and Japan and aimed at finalizing proposals for the introduction of the Flex-PLI into the gtr and in the draft Regulation on pedestrian safety in the same time.

8. GRSP agreed to seek consent from WP.29 and the administrative Committee of the 1998 Agreement (AC.3) at its June 2011 session to mandate an informal group on the Flex-PLI. GRSP also noted the draft terms of reference of the informal group (GRSP-49-38) and agreed to refer to this group for finalization. Finally, it was agreed to resume consideration on this agenda item on the basis of a revised proposal (including ECE/TRANS/WP.29/GRSP/2011/13, GRSP-49-15 and possible amendments proposed by the informal group), if any.

### **B. Proposal for Corrigendum 3**

*Documentation:* ECE/TRANS/WP.29/GRSP/2011/12  
Informal documents GRSP-49-17 and GRSP-49-18

9. GRSP agreed to consider this subject under agenda item 4(c).

### **C. Proposal for Amendment 3**

*Documentation:* ECE/TRANS/WP.29/GRSP/2011/12  
Informal documents GRSP-49-09, GRSP-49-17, GRSP-49-18 and  
GRSP-49-31

10. GRSP considered ECE/TRANS/WP.29/GRSP/2011/12, GRSP-49-17 and GRSP-49-18 proposing a corrigendum to the gtr. The expert from OICA made a presentation (GRSP-49-31) justifying his proposal (GRSP-49-09) to clarify the headform test procedure. It was agreed to resume discussion on this agenda item at the December 2011 session of GRSP. The expert from the Netherlands volunteered to prepare a consolidated proposal of amendments (including ECE/TRANS/WP.29/GRSP/2011/12, GRSP-49-17, GRSP-49-18 and GRSP-49-09). He offered to submit it together with an official proposal of developing an amendment to the gtr for the November 2011 sessions of WP.29 and AC.3.

## **VI. Side impact (agenda item 5)**

### **A. Draft global technical regulation on Pole Side Impact (agenda item 5(a))**

*Documentation:* ECE/TRANS/WP.29/2011/87

11. GRSP noted the decision of AC.3 at its March 2011 session (see ECE/TRANS/WP.29/1089, para. 109) to transmit ECE/TRANS/WP.29/2011/87 (terms of references and first progress report of the informal group) to GRSP for information and comments. The expert from Australia informed GRSP about the outcome of the last meeting of the group held in Brussels (3-4 March 2011). He clarified that the group was still collecting data to address a candidate test procedure and that a second progress report would be probably available after the June 2011 meeting of the informal group (see para. 6). GRSP agreed to resume discussion on this subject at its December 2011 session on the basis of new information provided by the informal group.

### **B. Harmonization of side impact dummies (agenda item 5(b))**

12. The expert from the United States of America informed GRSP about the good progress made by the informal group on the harmonization work of the World Side Impact Dummy (WorldSID) 50<sup>th</sup> percentile dummy and that a concrete proposal would be finalized within the expected schedule. GRSP agreed to resume discussion on this agenda item at its December 2011 session on the basis of new information provided by the informal group.

## **VII. Crash compatibility (agenda item 6)**

13. No new information was provided for this agenda item.

## **VIII. Hydrogen and fuel cell vehicles (agenda item 7)**

*Documentation:* Informal documents GRSP-49-13 and GRSP-49-28

14. The expert from the United States of America made a presentation (GRSP-49-28) to introduce the draft gtr (GRSP-49-13) on hydrogen and fuel cell vehicles (HFCV) prepared by the special group safety (SGS). The expert from the United Kingdom urged clarification on the colors of tell-tales and suggested taking into consideration similar provisions already adopted for other gtrs. GRSP noted that the next meeting of the informal group SGS was scheduled to be held in the last week of June 2011 in Paris at OICA' s office. Due to the tight deadline of the new work plan (see ECE/TRANS/WP.29/1089, para. 103), GRSP invited all interested experts to attend the meeting of the informal group and to provide comments on GRSP-49-13 to the co-chairs of the informal group by July 2011, before the deadline for submission of official documents to the December 2011 session of GRSP.

## **IX. Regulation No. 11 (Door latches and hinges) (agenda item 8)**

*Documentation:* Informal document GRSP-49-10

15. The expert from OICA introduced GRSP-49-10, as an updated consolidation of preceding proposals (ECE/TRANS/WP.29/GRSP/2010/17 and GRSP-45-14) aimed at covering the risk of ejection in the scope of the Regulation and to correct the transitional provisions. The secretariat was requested to distribute GRSP-49-10 with an official symbol at the December 2011 session of GRSP.

16. Finally, GRSP agreed to resume consideration on this agenda item on the basis of a new proposal for aligning the Regulation with the draft amendment to gtr No. 1 (ECE/TRANS/WP.29/GRSP/2011/3), voluntarily prepared by the expert from EC.

## **X. Regulation No. 14 (Safety-belt anchorages) (agenda item 9)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2011/6  
ECE/TRANS/WP.29/GRSP/2011/9  
Informal documents GRSP-49-06, GRSP-49-11-Rev.1 and  
GRSP-49-21

17. Referring to the possibility of installing side-facing seats, under certain conditions, GRSP adopted ECE/TRANS/WP.29/GRSP/2011/6, as amended by Annex II to this report. The secretariat was requested to submit the proposal to WP.29 and the Administrative Committee of the 1958 Agreement (AC.1), for consideration and vote at their November 2011 sessions, as draft Supplement 3 to the 07 series of amendments to Regulation No. 14.

18. GRSP adopted GRSP-49-11-Rev.1, as reproduced in Annex II to this report, to introduce transitional provisions to Supplement 2 to the 07 series of amendments to the Regulation (ECE/TRANS/WP.29/2011/54). The secretariat was requested to submit the proposal as informal document WP.29-154-02 to WP.29 and AC.1, for consideration and vote at their June 2011 sessions, as draft amendment to ECE/TRANS/WP.29/2011/54.

19. The expert from OICA introduced GRSP-49-06 through a presentation (GRSP-49-21) to match the provisions of the draft Regulation on child restraint systems (CRS). GRSP agreed to refer GRSP-49-06 and ECE/TRANS/WP.29/GRSP/2011/9 to the informal working group on child restraint systems (CRS) in view of possible revisions to these proposals in relation to the requirements of the draft Regulation on CRS. Finally, GRSP recommended the informal group to submit the revised proposal as an official document for the December 2011 session of GRSP and then to adopt this as a full package with the new draft Regulation on CRS.

## **XI. Regulation No. 16 (Safety-belts) (agenda item 10)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2011/7  
Informal documents GRSP-49-07, GRSP-49-20 and GRSP-49-21

20. Concerning the reintroduction of side-facing seats (see para. 17), GRSP adopted ECE/TRANS/WP.29/GRSP/2011/7 as amended by Annex III to this report. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration and vote at their November 2011 sessions, as draft Supplement 2 to the 06 series of amendments to Regulation No. 16. The expert from Japan withdrew GRSP-49-20.

21. As agreed for Regulation No. 14 (see para. 19), GRSP referred GRSP-49-07 to the informal group on CRS for discussion and requested the informal group to submit a revised proposal as an official document to the December 2011 session of GRSP.

## **XII. Regulation No. 17 (Strength of seats) (agenda item 11)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2009/15  
ECE/TRANS/WP.29/GRSP/2009/23  
ECE/TRANS/WP.29/GRSP/2009/24  
ECE/TRANS/WP.29/GRSP/2011/8  
ECE/TRANS/WP.29/GRSP/2011/10  
ECE/TRANS/WP.29/GRSP/2011/11  
Informal documents GRSP-49-33 and GRSP-49-35

22. Concerning side-facing seats (see paras. 17 and 20), GRSP adopted ECE/TRANS/WP.29/GRSP/2011/8, as amended by Annex IV to this report. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration and vote at their November 2011 sessions, as draft Supplement 1 to the 08 series of amendments to Regulation No. 17.

23. The expert from CLEPA gave a presentation (GRSP-49-33) on clarifying provisions for integrated head restraints. GRSP adopted ECE/TRANS/WP.29/GRSP/2011/11 (amended by GRSP-49-35 and superseding ECE/TRANS/WP.29/GRSP/2009/23) as reproduced in Annex IV to the report. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration and vote at their November 2011 sessions, as part of (see. para. 22) draft Supplement 1 to the 08 series of amendments to Regulation No. 17.

24. GRSP noted ECE/TRANS/WP.29/GRSP/2011/10, dealing with provisions of folding seats. GRSP agreed to resume discussion on this agenda item on the basis of a revised proposal voluntarily prepared by the expert from Germany.

25. Finally, GRSP agreed to defer discussion of ECE/TRANS/WP.29/GRSP/2009/15 and ECE/TRANS/WP.29/GRSP/2009/24 to its future sessions, awaiting the outcome of the informal group on gtr No. 7 Phase 2.

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

*Documentation:* ECE/TRANS/WP.29/GRSP/2011/5

26. The expert from the FIA Foundation informed GRSP that no concrete proposal was yet available concerning basic requirements for light-weight protective helmets to fit the needs of some Asian countries. GRSP agreed to defer discussion on this subject at its



December 2011 session on the basis of a proposal tabled by the expert from the FIA Foundation.

27. Moreover, GRSP adopted ECE/TRANS/WP.29/GRSP/2011/5 as amended below. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration and vote at their November 2011 sessions, as draft Corrigendum 4 to the 05 series of amendments to Regulation No. 22.

*Paragraph 5.1.4.1.2.1.*, correct to read:

"5.1.4.1.2.1. a slash **and** symbol:

..."

...

#### **XIV. Regulation No. 44 (Child restraint systems) (agenda item 13)**

*Documentation:* Informal document GRSP-49-37

28. The expert from CLEPA introduced GRSP-49-37 to inform GRSP about the use of false type approval labels on illegal child restraint systems or parts. GRSP agreed to resume discussion at its December 2011 session and invited experts to examine this information and to provide answers on this issue or to refer it to the competent administrative departments of their countries.

#### **XV. Regulation No. 80 (Strength of seats and their anchorages (buses)) (agenda item 14)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2010/36  
Informal document GRSP-49-04

29. Concerning side-facing seats (see paras. 17, 20 and 22), GRSP adopted ECE/TRANS/WP.29/GRSP/2010/36, as amended by Annex V to this report. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration and vote at their November 2011 sessions, as draft 03 series of amendments to Regulation No. 80. The expert from Japan withdrew GRSP-49-04.

#### **XVI. Regulation No. 94 (Frontal collision) (agenda item 15)**

*Documentation:* Informal document GRSP-49-36

30. The Chair of the informal group on Frontal collision introduced GRSP-49-36 to inform GRSP on the work progress of his group. As an outcome of the work carried out so far, he informed GRSP that four possible scenarios to amend Regulation No. 94 were possible. He concluded that the group scheduled two further meeting on 27 June and 7 September 2011 in Paris, at OICA's office, to better define these options. Accordingly, GRSP agreed to seek consent of a six months extension of the mandate of the informal group at the June 2011 session of WP.29. Finally, GRSP invited all its experts to send their comments or proposals on the possible scenarios to amend the Regulation before the deadline for submission of official documents of its December 2011 session.

## **XVII. Regulation No. 100 (Construction and functional safety of battery electric vehicles) (agenda item 16)**

*Documentation:* Informal documents GRSP-49-03-Rev.1, GRSP-49-22 and GRSP-49-30

31. The expert from Germany introduced the terms of reference for the group of interested experts (GRSP-49-03-Rev.1) on rechargeable energy storage systems (RESS), working under the responsibility of the electric safety informal group (ELSA). He clarified that the work plan had two steps for developing safety requirements of RESS:

(a) As a first step, the group would consider revising the existing Regulations under the 1958 Agreement concerning functional, mechanical, chemical and electric safety requirements of RESS for vehicle categories M and N. The creation of a new Regulation would not be excluded.

(b) In a second step, the group might consider requirements for vehicles of category L and the development of a gtr in the framework of the 1998 Agreement.

32. GRSP adopted GRSP-49-03-Rev.1 on the terms of reference of the group of interested experts on RESS (superseding GRSP-49-22), as reproduced in Annex VI to this report and agreed to seek consent from WP.29 at its June 2011 session.

33. Finally, GRSP agreed to extend the mandate of the ELSA informal group until December 2012 (pending the finalization of the draft gtr by the informal group SGS) and to seek consent from WP.29 at its June 2011 session. Accordingly, GRSP adopted GRSP-49-30, on the proposal extending the ELSA mandate, as reproduced in Annex VII to support this request.

## **XVIII. Collective amendments (agenda item 17)**

### **A. Regulation Nos. 12, 14, 16, 17, 21, 25, 29, 32, 33, 80, 94, 95 and 114**

*Documentation:* ECE/TRANS/WP.29/GRSP/2010/15 and Corr.1

34. The expert from CLEPA withdrew ECE/TRANS/WP.29/GRSP/2010/15 and Corr.1. GRSP agreed to remove this item from the agenda from its December 2011 session.

### **B. Regulation Nos. 12, 94, 95 and 100**

*Documentation:* ECE/TRANS/WP.29/GRSP/2011/2

35. GRSP adopted ECE/TRANS/WP.29/GRSP/2011/2 on the definition of exposed conductive parts in electric vehicles as amended by Annex VIII to this report. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration and vote at their November 2011 sessions, as draft Supplement 1 to the 04 series of amendments to Regulation No. 12, draft Supplement 1 to the 02 series of amendments to Regulation No. 94, draft Supplement 1 to the 03 series of amendments to Regulation No. 95 and as draft Supplement 1 to the 01 series of amendments to Regulation No. 100.

## **XIX. Buses and coaches (agenda item 18)**

*Documentation:* Informal document GRSP-49-32

36. Following the request of the expert from EC at the December 2010 session of GRSP, the expert from Spain provided information (GRSP-49-32) on some legislative initiatives for allowing the fitting, under certain conditions, of built-in child restraint systems in buses in his country. The expert from France suggested that the same information should be submitted to the group of experts on general safety (GRSG).

## **XX. Draft Regulation on pedestrian safety (agenda item 19)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2011/14  
Informal documents GRSP-49-12, GRSP-49-14, GRSP-49-16,  
GRSP-49-19, GRSP-49-26 and GRSP-49-38

37. With reference to the discussion held under agenda item 4 (see paras. 7–8), concerning the proposal to introduce the Flex-PLI into the draft Regulation (ECE/TRANS/WP.29/GRSP/2011/14), GRSP agreed to resume discussion at its December 2011 session on the basis of the outcome of the informal group. GRSP also agreed that the Regulation would not provide any monitoring period for the introduction of the Flex-PLI, to prevent that legal texts would be used as research instruments.

38. GRSP agreed to resume consideration on the proposals of amendments and corrigenda to the draft Regulation on pedestrian safety (ECE/TRANS/WP.29/2010/127) at its December 2011 session. The secretariat was requested to distribute GRSP-49-12, GRSP-49-14, GRSP-49-16 merged with GRSP-49-19 and GRSP-49-26 with official symbols.

## **XXI. Draft new Regulation on child restraint systems (agenda item 20)**

*Documentation:* ECE/TRANS/WP.29/GRSP/2011/15  
Informal documents GRSP-49-01-Rev.1, GRSP-49-08, GRSP-49-25,  
GRSP-49-27, GRSP-49-29, GRSP-49-34 and GRSP-49-39

39. The Chair of the informal group on CRS introduced the latest Regulation proposal from his group (ECE/TRANS/WP.29/GRSP/2011/15 and GRSP-49-08) and the new terms of reference of the informal group (GRSP-49-01-Rev.1) showing a multistep approach, in three phases:

- (a) Phase 1 dealing only with ISOFIX-Integral CRS, keeping Regulation No. 44 valid during its implementation.
- (b) Phase 2 dealing with Non-Integral CRS.
- (c) Phase 3 dealing with amendments to Regulation Nos. 44, 14 and 16 to cover the category of child restraints secured with adult safety belts.

40. The expert from France gave a presentation (GRSP-49-25) on data available from the field indicating safety priorities for children in cars. The Regulation proposal received several comments (GRSP-49-27, GRSP-49-29, and GRSP-49-34). Some experts stated that the proposal should not address the use of CRS. GRSP noted that the next meetings of the informal group were scheduled on 5 July, in Bonn (Germany) and 8 September 2011 at OICA's office in Paris. Following the suggestion of the expert from the United Kingdom,

GRSP agreed that the informal group should: continue (i) discussion on Phase 2 (ISOFIX non-integral "Universal") in parallel to the finalization of Phase 1 (ISOFIX integral) and (ii) review if the proposed frontal impact crash test pulse is still appropriate.

41. GRSP requested the secretariat to distribute GRSP-49-39, encompassing all the changes to the draft Regulation agreed during the session (including GRSP-49-08, GRSP-49-27, GRSP-49-29 and GRSP-49-34), with an official symbol at its December 2011 session. Moreover, it was recommended to experts and to the informal group to send comments to GRSP-49-39 as official documents for the next session of GRSP to give time to the experts to examine the changes proposed.

42. Finally, GRSP adopted the new terms of references of the informal group (GRSP-49-01-Rev.1) as reproduced in Annex IX and agreed to seek consent of WP.29 at its June 2011 session.

## **XXII. Other business (agenda item 21)**

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

43. No new information was provided.

### **B. 1997 Agreement (Inspections) – Development of draft rule No. 2**

44. GRSP noted that WP.29 was expected to vote Rule No. 2 on roadworthiness at its June 2011 session.

### **C. Intelligent Transport Systems (ITS)**

*Documentation:* Informal document GRSP-49-05

45. The secretariat introduced GRSP-49-05, informing GRSP about the public consultation on the UNECE strategy for the deployment of ITS, launched in February 2011 and closed on 31 May 2011 (see ECE/TRANS/WP.29/1089 para. 20).

### **D. Tributes**

46. Learning that Mr. H. Kubota 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.

47. The Chair also shared the sad news that Mr. Mr. H. Yonezawa (Japan) passed away after an illness and posthumously thanked him for his excellent contribution to GRSP.

## **XXIII. Provisional agenda for the next session (agenda item 22)**

48. For its fiftieth session, scheduled to be held in Geneva from 6 (2.30 p.m.) to 9 (12.30 p.m.) December 2011, GRSP agreed that the Chair, in collaboration with the secretariat, would prepare the provisional agenda. GRSP noted that the deadline for submission of official documents to the secretariat was 9 September 2011, twelve weeks prior to the session.

## Annexes

[English only]

## Annex I

**List of informal documents (GRSP-49-...) 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- Rev.1	Chair of CRS informal group	20	E	Draft Terms of Reference for Phase 2 and Phase 3 of the GRSP informal group on Child Restraint Systems	(d)
02- Rev.1	Chair of GRSP	1	E	Revised running order of the forty-ninth session of GRSP	(a)
03- Rev.1	Chair of RESS group of interested experts	16	E	Terms of reference of the group of interested experts on rechargeable energy storage systems	(d)
04	Japan	14	E	Draft corrigendum to ECE/TRANS/WP.29/GRSP/2010/36 (Regulation No. 80 - Strength of seats and anchorages in buses)	(d)
05	Secretariat	21(c)	E	Intelligent transport systems (ITS) - UNECE role to promote ITS	(a)
06	OICA	9	E	Proposal for amendments to Regulation No. 14 (Safety-belt anchorages)	(a)
07	OICA	10	E	Proposal for amendments to Regulation No. 16 (Safety-belts)	(a)
08	France	20	E	Proposal for amendments to ECE/TRANS/WP.29/GRSP/2011/15 (draft Regulation on CRS)	(a)
09	OICA	4(c)	E	Proposal of amendments to grt No. 9 (Pedestrian safety)	(b)
10	OICA	8	E	Proposal for Corrigendum 2 to the 03 series of amendments to Regulation No. 11 (Door latches and hinges)	(b)

<i>No.</i>	<i>Transmitted by</i>	<i>Agenda item</i>	<i>Language</i>	<i>Title</i>	<i>Follow-up</i>
11- Rev.1	OICA	9	E	Proposal for Corrigendum 1 to draft Supplement 2 to Regulation No. 14 (safety-belt anchorages) (ECE/TRANS/WP.29/2011/54)	(d)
12	OICA	19	E	Proposal for amendments to ECE/TRANS/WP.29/2010/127 (draft Regulation on pedestrian safety)	(d)
13	USA	7	E	Draft gtr on hydrogen and fuel cells vehicles	(a)
14	Japan	19	E	Proposal for amendments to ECE/TRANS/WP.29/GRSP/2011/14 (draft 01 series of amendments to the draft Regulation on pedestrian safety)	(b)
15	Japan	4(a)	E	Proposal for amendments to ECE/TRANS/WP.29/GRSP/2011/13 (draft amendment 2 to gtr No. 9 - Phase 2 on pedestrian safety)	(a)
16	Japan	19	E	Proposal for corrigendum to ECE/TRANS/WP.29/GRSP/2010/127 (draft Regulation on pedestrian safety)	(b)
17	Japan	4(b)	E	Proposal for corrigendum 3 to gtr No. 9 (Pedestrian safety)	(b)
18	Japan	4	E	Proposal of amendments to gtr No. 9 (Pedestrian safety)	(b)
19	Japan	19	E	Proposal for amendments to ECE/TRANS/WP.29/2010/127 (draft Regulation on pedestrian safety)	(b)
20	Japan	10	E	Proposal for amendments to ECE/TRANS/WP.29/GRSP/2011/7 (Regulation No. 16 - Safety-belts )	(a)
21	OICA	9 and 10	E	Overview of draft amendments to Regulation Nos. 14 (safety-belt anchorages) and 16 (safety-belts)	(a)
22	Japan	16	E	Proposal of amendments to GRSP-49-03 (Terms of references of RESS)	(a)
23	USA	4(a)	E	Update on pedestrian leg testing	(a)
24	Japan	4(a)	E	Difference of Transport Research Laboratory (TRL) legform impactor/injury criteria and Flex pedestrian legform impactor/injury criteria	(a)
25	France	20	E	Priorities for the protection of children in cars: available data from the field	(a)

<i>No.</i>	<i>Transmitted by</i>	<i>Agenda item</i>	<i>Language</i>	<i>Title</i>	<i>Follow-up</i>
26	Germany	19	E	Proposal for amendments to ECE/TRANS/WP.29/2010/127 (draft Regulation on pedestrian safety)	(a)
27	CLEPA	20	E	Proposal for amendments to ECE/TRANS/WP.29/GRSP/2011/15 (draft Regulation on CRS)	(a)
28	USA	7	E	Hydrogen fueled vehicle - draft global technical regulation (gtr)	(a)
29	CLEPA and OICA	20	E	Proposal of amendments to ECE/TRANS/WP.29/GRSP/2011/15 (draft Regulation on CRS)	(a)
30	Germany	16	E	Informal group on electric safety (ELSA)	(d)
31	OICA	4(c)	E	Request for clarification of the test procedure in gtr No. 9 (pedestrian safety)	(a)
32	Spain	18	E	Requirements for "in built" CRS in vehicles M <sub>3</sub> Class I in Spain	(a)
33	CLEPA	11	E	Proposal of amendments to Regulation No. 17 (Seat-strength)	(a)
34	CLEPA	20	E	Proposal of amendments to ECE/TRANS/WP.29/GRSP/2011/15 (draft Regulation on CRS)	(a)
35	NL and CLEPA	11	E	Proposal of Supplement 1 to the 08 series of amendments to Regulation No. 17 (Seat-strength)	(d)
36	(Chair of frontal impact informal group)	15	E	Status report of the informal group on frontal impact	(a)
37	CLEPA	13	E	False copies of approval lables and products according to Regulation No. 44 (CRS)	(c)
38	Japan and Germany	4(a) and 19	E	Draft terms of reference for the informal group on pedestrian safety Phase 2 (IG PS2)	(d)
39	Chair of GRSP	20	E	Amendments agreed to ECE/TRANS/WP.29/GRSP/2011/15 during the forty-ninth session of GRSP	(b)

*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 informal document
- (d) Adopted and to be submitted to WP.29

## Annex II

### Draft amendments to Regulation No. 14

#### Amendments adopted to ECE/TRANS/WP.29/GRSP/2011/6 (see para. 17 of the report)

...

Paragraph 5.4.2.5., amend to read:

"5.4.2.5. The distance between ...plane of the **vehicle** and each passing through a different one of the two effective lower belt anchorages  $L_1$  and  $L_2$  of the same safety-belt shall not be less than 350 mm. **In the case of side-facing seats the distance between the two vertical planes parallel to the median vertical longitudinal plane of the seat and each passing through a different one of the two effective lower belt anchorages  $L_1$  and  $L_2$  of the same safety-belt shall not be less than 350 mm.** In the case of any central seating positions ... $L_1$  and  $L_2$  and shall be at least 120 mm from these points."

...

**New paragraphs 14.17. to 14.18., shall be deleted**

...

Annex 6, the table, amend to read:

#### "Annex 6

...

Vehicle	Forward facing seating positions				Rearward facing	Side facing
	Outboard		Centre			
	Front	Other	Front	Other		
$M_1$	3	3	3	3	2	-
$M_2 \leq 3.5$ tonnes	3	3	3	3	2	-
<del><math>M_3</math></del> & $M_2 > 3.5$ tonnes	3 ⊕	3 or 2 †	3 or 2 †	3 or 2 †	2	-
<b><math>M_3</math></b>	3 ⊕	3 or 2 †	3 or 2 †	3 or 2 †	2	<b>2</b>
$N_1$	3	3 or 2 Ø	3 or 2 *	2	2	-
$N_2$ & $N_3$	3	2	3 or 2 *	2	2	-

..."



**Amendments adopted to ECE/TRANS/WP.29/2011/54, on the basis of GRSP-49-11-Rev.1 (see para. 18 of the report)**

...

*Add new paragraphs 14.17. to 14.19., to read:*

- "14.17. As from the official date of entry into force of supplement 2 to the 07 series of amendments, no Contracting Party applying this Regulation shall refuse to grant UNECE type approval under this Regulation as amended by supplement 2 to the 07 series of amendments.**
- 14.18. As from 12 months after the official date of entry into force of supplement 2 to the 07 series of amendments, Contracting Parties applying this Regulation shall grant UNECE type approvals only to those types of vehicle which comply with the requirements of this Regulation as amended by supplement 2 to the 07 series of amendments.**
- 14.19. Contracting Parties applying this Regulation shall not refuse to grant extensions of approvals, even if Supplement 2 to the 07 series of amendments is not fulfilled."**

## Annex III

### Draft amendments to Regulation No. 16

#### Amendments adopted to ECE/TRANS/WP.29/GRSP/2011/7 (see para. 20 of the report)

...

Insert a new paragraph 1.6., to read:

"1.6. At the request of the manufacturer, it also applies to safety-belts designated for installation on side-facing seats in vehicles of **category M<sub>3</sub> (Class II, III or B).**<sup>1</sup>"

...

Annex 16, the table, insert a new column "side-facing", to read:

"Annex 16

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>	...	...	...	...	...	-
M <sub>2</sub> ≤ 3.5 t	...	...	...	...	...	-
M <sub>2</sub> > 3.5 t	...	...	...	...	...	-
M <sub>3</sub>	...	...	...	...	...	<b>Br3, Br4m and Br4Nm</b>
N <sub>1</sub>	...	...	...	...	...	-
	...	...	...	...	...	-
N <sub>2</sub>	...	...	...	...	...	-
N <sub>3</sub>	...	...	...	...	...	-

..."

## Annex IV

### Draft amendments to Regulation No. 17

#### Amendments adopted to ECE/TRANS/WP.29/GRSP/2011/8 (see para. 22 of the report)

...

*Paragraph 5.1.1.*, amend to read:

"5.1.1. The installation of side-facing seats shall be prohibited in vehicles of categories **M<sub>1</sub>, N<sub>1</sub>, M<sub>2</sub> (of class II, III and B) and M<sub>3</sub> of a technically permissible laden mass not exceeding 10 tonnes (of class II, III and B).**"

...

*New paragraphs 13.12. to 13.14.*, shall be deleted

#### Amendments adopted to ECE/TRANS/WP.29/GRSP/2011/11 (see para. 23 of the report)

*Paragraph 5.5.1. to 5.5.6.*, amend to read:

"5.5.1. **The presence of the head restraint must not be an additional cause of danger to occupants of the vehicle. In particular, it shall not in any position of use exhibit any dangerous roughness or sharp edge liable to increase the risk or seriousness of injury to the occupants.**

5.5.1.1. **Parts of the front and rear faces of head restraints situated in area 1 as defined in paragraph 6.8.1.1.3. below, shall be so padded as to prevent any direct contact of the head with the components of the structure and shall meet the requirements of paragraph 5.2.4.**

5.5.1.2. Parts of the front and rear faces of head restraints situated in area 2, as defined in paragraph 6.8.1.2. below, shall be so padded as to prevent any direct contact of the head with the components of the structure and shall meet the requirements of paragraph 5.2.4. above applicable to the rear parts of seats situated in area 2. In the case of head restraints integrated with the seat back, **the front face of the head restraint is considered as the area** located above a plane perpendicular to the reference line at 540 mm from the R point and between two vertical longitudinal planes at 85 mm on either side of the reference line.

5.5.2. **Parts of the front and rear faces of the head restraints situated in area 1, as defined in paragraph 6.8.1.1.3. below shall pass the energy absorption test.**

5.5.2.1. **This requirement is deemed to be met if in the tests carried out by the procedure specified in Annex 6 the deceleration of the headform does not exceed 80 g continuously for more than 3 ms. Moreover, no dangerous edge shall occur during or remain after the test.**

- 5.5.3.** The requirements of paragraphs 5.5.1. and 5.5.2. above, shall not apply to rear parts of head restraints designed to be fitted to seats behind which no seat is provided.
- 5.5.4.** The head restraints shall be secured to the seat or to the vehicle structure in such a way that no rigid and dangerous parts project from the padding of the head restraint or from its attachments to the seat-back as a result of the pressure exerted by the headform during the test.
- 5.5.5.** In the case of a seat fitted with a head restraints, the provisions of paragraph 5.2.3. may, after agreement of the technical service, be considered to be met if the seat fitted with its head restraint complies with the provisions of paragraph 5.5.2. above."

## Annex V

### Amendments to Regulation No. 80

#### Amendments adopted to ECE/TRANS/WP.29/GRSP/2010/36 (see para. 29 the report)

...

*Insert new paragraphs 12.7. to 12.9., to read:*

"...

12.8. As from 24 months after ...

**12.9. Starting 60 months after the entry into force of the 03 series of amendments to this Regulation, Contracting Parties applying this Regulation may refuse national or regional type approval and may refuse first national or regional registration (first entry into service) of a vehicle which does not meet the requirements of the 03 series of amendments to this Regulation.**

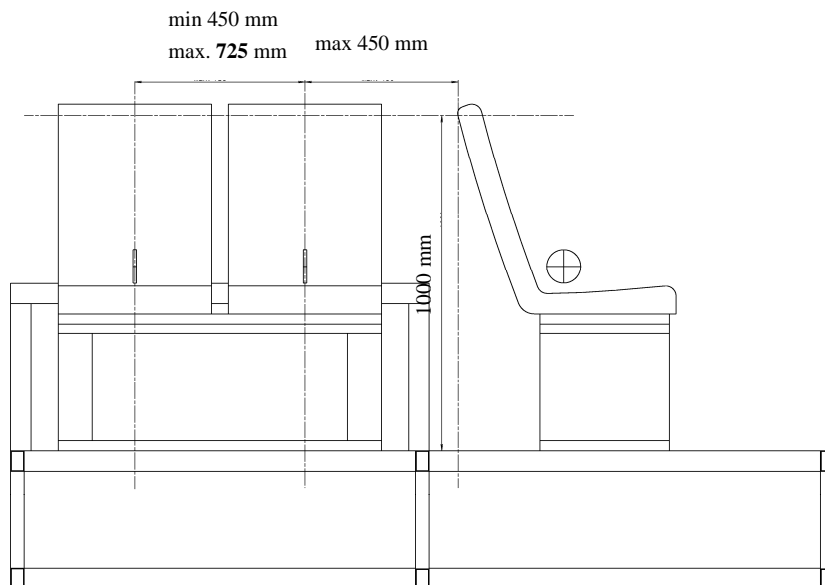
..."

...

*Insert a new Appendix 7, to read:*

"...

Figure 1  
Positioning requirements for side-facing seats



..."

...

## Annex VI

### **Proposal of terms of reference, rules of procedures and description of future work of the group of interested experts on Rechargeable Energy Storage Systems (RESS)**

**Adopted text based on GRSP-49-03-Rev.1 (see para. 31 of the report)**

#### **A. Introduction**

1. GRSP agreed to set up a group of interested experts to establish legal requirements for Rechargeable Energy Storage Systems (RESS).
2. Therefore the World Forum agreed to extend the mandate of the Electric Safety informal group (ELSA) to cover these new activities through a group of interested experts, instead of establishing a new informal group under GRSG (see report of 151th session WP.29 in June 2010, ECE/TRANS/WP.29/1085).
3. The informal group ELSA deals with safety requirements under the 1998 Agreement. While it was agreed that the RESS component and system requirements are part of the Type Approval Process under the 1958 Agreement ELSA decided at its eighth meeting to start the business in a separate subgroup.
4. In a first step the group considers requirements for RESS in vehicles of categories M and N. In a second step the group may consider also requirements for RESS in vehicles of category L **and development of a new global technical regulation (gtr) under the 1998 Agreement.**

#### **B. Objective of the proposal**

5. Ensure safety of rechargeable energy storage systems (RESS) which provide electric energy for electrical propulsion installed in vehicles of categories M and N during normal operation, **unusual circumstances** and post crash.
6. For that purpose existing regulations if possible and practicable under the 1958 agreement should be amended for RESS requirements concerning their functional, mechanical, chemical and electrical safety. Details of the issues to be tackled by the group are laid down in Annex 1.
7. An approach for approval of components and systems (e.g. Regulation No. 28) should be achieved. Existing regulations and standards (e.g. IEC, ISO) will be considered.

#### **C. Candidate requirements**

- (a) Participants shall include Contracting Parties, Vehicle Manufacturers and Suppliers, Technical Services, Electric Safety Experts, etc.
- (b) The group will be chaired by Germany, secretary will be provided by OICA.
- (c) The official language of the group will be English.

- (d) All documents will be submitted to the UNECE secretariat and posted on the website [http://live.unece.org/trans/main/wp29/wp29wgs/wp29grsp/elsa/elsa\\_subgroup2\\_#.html](http://live.unece.org/trans/main/wp29/wp29wgs/wp29grsp/elsa/elsa_subgroup2_#.html) in advance of the meetings. The group may postpone discussion of any item or proposal which has not been circulated 10 working days in advance of the scheduled meeting.
- (e) Proposals will be developed by consensus. When consensus cannot be reached, the Chair shall present the different view points to GRSP. The Chair may seek guidance from GRSP as appropriate.
- (f) Sessions shall be held in agreement with the majority of the participants after the group has been established in a constitutional meeting.
- (g) A provisional agenda shall be drawn up by the secretariat in accordance with the participants of the group. The first item of the provisional agenda for each session shall be the adoption of the agenda.
- (h) The second item on the provisional agenda will be the discussion, matters arising and adoption of the Minutes of the previous session.

#### **D. Work plan and time schedule**

November 2010	Constitutional meeting, ToR to GRSP (informal document)
December 2010	Adoption of ToR by GRSP
January 2011	Second meeting of the RESS group
March/April 2011	Third meeting of the RESS group
May 2011	Progress-Report to GRSP
June 2011	Fourth meeting of the RESS group
September 2011	Formal Document to GRSP
December 2011	Adoption by GRSP
June 2012	Adoption by WP.29

## Annex VII

### **Proposal extending the mandate of the electric safety (ELSA) informal group**

#### **Adopted text based on GRSP-49-30 (see para. 33 of the report)**

1. The Informal Group on Electric Safety (ELSA) was endorsed by WP.29 at its 144<sup>th</sup> session with a limited mandate to work under the 1958 and the 1998 agreement limited until June 2010. The objective of the group was to establish electric safety provisions for electric, hybrid and hydrogen/fuel cell-vehicles during "in-use" and "post-crash" and to give guidance on electric safety to the hydrogen and fuel-cell vehicles (HFCV) subgroup safety (SGS). The informal group has also developed the 01 series of amendment of Regulation No. 100 on the electric safety of vehicles especially to incorporate the requirements for high voltage components.
2. The HFCV SGS informal has proposed submitting a draft gtr on HFCV to GRSP for the December 2011 session. The adoption of the draft gtr is scheduled for the session of WP.29 in June 2012.
3. Within GRSP it was agreed to start further activities on developing requirements for electric vehicles under the mandate of the ELSA group like the activities of the group of interested experts to set up electric vehicle post crash requirements (EVPC) and the activities of the group of interest experts to introduce safety requirements for rechargeable energy storage systems of electric vehicles (RESS). These activities were reported to and endorsed by WP.29. The EVPC activities were finalized in amending the ECE regulations 12, 94 and 95. The RESS activity is still ongoing. Phase 1 of this activity, which is covered by the terms of reference in Informal document GRSP-49-03, is planned to be finalized by end of 2011.
4. Germany is proposing to extend the mandate of the ELSA group for three reasons:
  - (a) The first reason is to enable the ELSA group to guide the HFCV gtr until the adoption by WP.29 and to give further advice to the HFCV GTR SGS if it is requested.
  - (b) The second reason is to let the RESS group finalize the work on setting up requirements on the safety of energy storage systems.
  - (c) The third reason is with regard to future potential ECE activities on safety requirements for electric vehicles. The current discussions and requests within the RESS group show that there is a global interest in having internationally harmonized requirements for electric vehicles. A gtr on the safety of RESS might be a candidate for a new gtr. It could therefore be beneficial to have the possibility of discussing this subject within the group of experts of ELSA.
5. During its May 2011 session, GRSP agreed with the request of the expert from Germany to extend the mandate of the ELSA group in principle until December 2012 (fifty-second session of GRSP) but it should be linked to the progress and the finalisation of the work on the HFCV gtr. The adoption of the HFCV gtr was scheduled for the AC.3 session of WP.29 in June or November 2012 the latest.



## Annex VIII

### Proposal of amendments to Regulation Nos. 12, 94, 95 and 100

Amendments adopted to ECE/TRANS/WP.29/GRSP/2011/2 (see para. 35 the report)

**A. Proposal for Supplement 1 to the 04 series of amendments to Regulation No. 12 (Steering mechanism)**

*Paragraph 2.24.*, amend to read:

"2.24. "Exposed conductive part" means the conductive part which can be touched under the provisions of the protection IPXXB **and which becomes electrically energized under isolation failure conditions. This includes parts under a cover that can be removed without using tools.**"

**B. Proposal for Supplement 1 to the 02 series of amendments to Regulation No. 94 (Frontal collision protection)**

*Paragraph 2.20.*, amend to read:

"2.20. "Exposed conductive part" means the conductive part which can be touched under the provisions of the protection IPXXB **and which becomes electrically energized under isolation failure conditions. This includes parts under a cover that can be removed without using tools.**"

**C. Proposal for Supplement 01 to the 03 series of amendments to Regulation No. 95 (Lateral collision protection)**

*Paragraph 2.20.*, amend to read:

"2.20. "Exposed conductive part" means the conductive part which can be touched under the provisions of the protection IPXXB **and which becomes electrically energized under isolation failure conditions. This includes parts under a cover that can be removed without using tools.**"

**D. Proposal for Supplement 1 to the 01 series of amendments to Regulation No. 100 (Battery electric vehicles safety)**

*Paragraph 2.12.*, amend to read:

"2.12. "Exposed conductive part" means the conductive part which can be touched under the provisions of the protection IPXXB **and which becomes electrically energized under isolation failure conditions. This includes parts under a cover that can be removed without using tools.**"

## Annex IX

### **Proposal of new terms of reference, rules of procedures and description of future work of GRSP informal group on child restraint systems (CRS)**

**Adopted text based on GRSP-49-01-Rev.1 (see para. 42 of the report)**

#### **I. Introduction**

1. The informal group, during its 25 meetings has developed according to the first mandate:

(a) An independent regulation: "Draft new Regulation on uniform provisions concerning the approval of enhanced Child Restraint Systems used on-board of motor vehicles" (Regulation No. 44 remains valid during the implementation of the new Regulation).

(b) A multistep approach, in three Phases 1, 2 and 3:

(i) The scope of Phase 1 of this new regulation concerns only "ISOFIX – Integral" CRS.

(c) A new philosophy of classification:

(i) No mass groups

(ii) Classification based on standing height, maximum permissible weight (Child + CRS) and age limit for forward facing use.

(iii) Use of measurement device for CRS size control

(d) The use of the Q dummies for frontal, rear and lateral dynamic impact on a new test bench.

(e) The use of a support leg as well as a top tether as universal anti rotation device.

2. The main achievement of Phase 1 was:

(a) To create the I-Size concept:

(i) Stature based classification.

(ii) Integral ISOFIX Child Restraints Systems only.

(iii) Vehicle compatibility of CRS with Support Leg or Top Tether.

(b) To introduce new Anthropomorphic Q dummies with their criteria.

(c) To introduce a side impact procedure including an advanced test bench.

(d) To extend the mandatory rear facing transport of children up to 15 months.

(e) To redefine Specific to Vehicle CRS requirements.

(f) The introduction of an improved frontal impact test bench based on NPACS recommendations.

3. The main objectives of the group for Phase 1 have been achieved and a draft proposal was assessed by GRSP at its 2011 May session (ECE/TRANS/WP.29/GRSP/2011/15).
4. The completion of Phase 1 requires two documents amending Regulation No. 16 and Regulation No. 14 which assess I-Size compatibility of vehicles. There were introduced by the expert from OICA at the May 2011 session of GRSP.
5. This draft covers only ISOFIX Integral CRS. The group is ready to extend its work in Phase 2 to the second category of ISOFIX CRS (non-Integral CRS with ISOFIX attachments). This Phase 2 could also include a review of the test pulse for frontal impact (Increased severity and CRS integrity check).
6. At the end of Phase 2 (end 2012) no new type approval for ISOFIX CRS could be issued according to Regulation No. 44. Transitional provisions should be discussed at further sessions of GRSP.
7. For the Phase 3 concerning seatbelt mounted CRS, there are still two options: (i) one is to introduce these types of CRS into the new regulation and (ii) the other one is to keep them in an improved Regulation No. 44 including the outcome of the work done in Phases 1 and 2 (Stature based classification, new anthropomorphic Q dummies, vehicle compatibility of CRS with support leg, side impact procedure, mandatory rear facing transport of children up to 15 months).

## II. Terms of Reference for Phase 2 and Phase 3

8. The informal group shall consider in Phase 2, the development into the new draft Regulation for "enhanced Child Restraint Systems used on-board of motor vehicles" of the necessary amendments to integrate the category of non-integral CRS with ISOFIX attachments and to extend the I-size concept to these CRS for consideration by GRSP.
9. The completion date for Phase 2 shall be targeted for the fifty-first session of GRSP (May 2012).
10. Phase 2 will develop definitions, performance criteria and test methods for non-Integral CRS with ISOFIX attachments (Restraint done for the adult safety belt).
11. In Phase 2, the test pulse for frontal impact (Increased severity and CRS integrity check) will be reviewed in the light of recent accident data.
12. In Phase 2, the strict application of recognized and accepted injury criteria related to the new generation baby/child crash test Q-dummies, as supported through the European Enhanced Vehicle-safety Committee (EEVC) and other EU research programs, will be reviewed in the light of recent accident data.
13. Develop transitional provision to withdraw ISOFIX application from Regulation No. 44 after WP.29 adopts Phase 1 and Phase 2.
14. The completion date for Phase 3 shall be targeted for the fifty-third session of GRSP (May 2013).
15. Phase 3 will develop the necessary amendments to upgrade Regulation No. 44 for the Seatbelt mounted CRS and Regulation Nos. 14 and 16 in order to introduce for this category of CRS the outcome of Phase 1 and 2.

16. The informal group will consider among other things, the technical expertise of EEVC working group 18 (WG.18), EEVC WG12, ISO TC22/SC12, the new programme for the assessment of child-restraint systems (NPACS), the child advanced safety project for European roads (CASPER) as well as the results of the discussions held in the informal group and at GRSP.

17. If necessary, the informal group shall develop complementary test methods and propose alternative judgement criteria.

18. Consider appropriate measures to limit misuse of child restraint systems, in particular for children less than 15 months of age.

## Annex X

[English only]

## List of GRSP informal groups

<i>Informal group</i>	<i>Chairman</i>	<i>Expiry date of the mandate [pending WP.29 decision]</i>	<i>Secretary</i>
Truck cab strength	Mr. Vladimir Salnikov Phone : +7 495-9949917 Fax : +7 495-9949940 Email : <a href="mailto:v.salnikov@autorc.ru">v.salnikov@autorc.ru</a>	Expired	(OICA)
Frontal Impact	Mr. Pierre Castaing Phone : +33 1-69801750 Fax : +33 1-69801719 Email : <a href="mailto:pierre.castaing@utac.com">pierre.castaing@utac.com</a>	[December 2011]	
Head restraints	Mr. Bernard Frost Phone : +44-(0)207 9442107 Fax : +44-(0)207 9449623 Email : <a href="mailto:bernie.frost@dft.gsi.gov.uk">bernie.frost@dft.gsi.gov.uk</a>	December 2012	(OICA)
Hydrogen and fuel cells subgroup safety	Mr. Kazuyuki Narusawa Phone : +81 4-22413218 Fax : +81 4-22768604 Email : <a href="mailto:narusawa@ntsel.go.jp">narusawa@ntsel.go.jp</a>	December 2011	USA
Child restraint systems	Mr. Pierre Castaing Phone : +33 1-69801750 Fax : +33 1-69801719 Email : <a href="mailto:pierre.castaing@utac.com">pierre.castaing@utac.com</a>	[May 2013]	
Electric safety	Mr. Gerd Kellermann Phone : +49 228 99 300 4304 Mobile : +49 151-16822235 Fax : +49 228 99 300 807 4304 E-Mail: <a href="mailto:Gerd.Kellermann@bmvbs.bund.de">Gerd.Kellermann@bmvbs.bund.de</a>	[December 2012]	