

Minutes of 11th meeting of The Informal Group on Child Restraint System

Held at CLEPA Offices - BRUSSELS

2nd July, 2009

1 Welcome and Introductions

Louis-Sylvain AYRAL opened the meeting, welcomed the delegates and presented the meeting arrangements for the 11th meeting.

2 Roll call

See participation list

Attendees and Apologies for Absence: See Annex 1

3 Approval of the agenda

Doc. INF GR / CRS-11-1

Marianne HYND proposed to present the progress on Epoch project, in particular on recommendations on Q dummies from Epoch => this point was added in the agenda.

Farid Bendjellal suggested adding a point about Classification → this point was a part of the DRAFT discussion.

4 Approval of the Minutes of last meetings

- Adoption of the minutes of the 9th meeting without any remarks.

Doc. INF GR / CRS-9-11

- Adoption of the Minutes of the 10th meeting: reported to next meeting (2nd of September, Paris)

Doc. INF GR / CRS-10-8

5 Chairman's feedback from last GRSP meeting

See presentation of Pierre Castaing

Doc. INF GR / CRS-11-2

Marianne Hynd made a remark because the presentation doesn't include child until 1.5 m. This remark wasn't taking into account because the ad-hoc group concerns only ISOFIX universal and integral CRS.

Another remark concerned the potential modifications in others regulations (for example

ECE16 and ECE14) due to this new regulation on CRS. PC said in this case, the GRSP will take into account the modifications to apply in others regulations independently of this ad-hoc group.

The classification introduces a maximum weight of 32kg. So Farid bendjellal and François Renaudin asked why the maximum weight is not 33kg which is the sum of the maximum weight CRS and maximum weight child for Group 1 CRS in R44. PC said that 32kg was the maximum mass used by ISO (so ECE14) to determinate the tensile strength to apply for ISOFIX anchorages.

Concerning the pulse

- Hans Ammerlaan said the PDB barrier should not be representative of the real crash severity.
- François Renaudin thinks the ECE94 should be used for the CRS as it is used for the adults.

This question on the pulse choice has been reported in the afternoon.

To be included: Decisions from GRSP??

6 EPOCH Information (Marianne Hynd / EPOCH = Enable Protection for Older Children)

Doc. INF GR / CRS-11-3

This goal of this project is to develop an older Q dummy: Q10yo or Q12yo.

The website www.epochfp7.org presents the progress of this project.

Marianne Hynd presented general specifications coming from EPOCH project to determinate which dummy should be developed (Q10 or Q12) and asked for any comments or remarks (agreement or disagreement with argues) concerning the choice of the age of the new dummy for the next week (email : EPOCH@trl.co.uk)

Discussions:

Hans Ammerlaan: The question of submarining is not a CRS issue but a car issue. Q12 will be 150cm whereas the small female is 152 cm, and used without booster to validate non-submarining → a Q12 is not necessary for submarining issue.

François Renaudin suggested differentiating the performance issue (dynamic tests) to usability issue (static and geometric tests) with tallest and biggest dummies developed specifically for this task.

Pierre Castaing remarked that

when choosing a 150cm dummy, the gap between Q6 and Q12 would be too large,

all regulations used a dummy representative of the average population

submarining depends on the geometry of the seatbelt anchorages and buckle so this point can't be validated on a bench with standard anchorages.

Heiko Johannsen: confirms that it is recommended to use a booster until 12yo because of the

size of the pelvis to prevent risk of submarining for children in Germany.

7 Actions from the Minutes of last Meeting

7.1 Review of ISO position regarding support leg form (V.Denier)

See presentation

Doc. INF GR / CRS-11-4

Expected results: standard geometry rules for support leg (pushing surface, length ...), contact area with support leg on the car floor (area where the support can/may be applied), maximum load applied by all CRS (gr0+, gr1, FWD and RWD facing CRS) ...

If case of these data be included in new regulation for CRS, an update of ECE14/ECE16 will be necessary to include the definition of a universal support leg and others concerns.

An OICA position of this work is required.

7.2 Frontal Impact Test Procedure – definition of Frame Work for technical specifications

Which pulse? ECE44, ECE94, ODB, PDB ...

Hans Ammerlaan: comparison of different barriers (ODB, PDB...) against small family car

Farid Bendjellal suggested two alternatives based on the fact that: car approval used ECE94 pulse:

- To be consistent, new regulation for CRS used the same pulse for children than for adults.
- No change with the current ECE44 pulse.

Heiko Johannsen presented the pulse curve coming from CHILD and CREST projects but these pulses are based on real crash very severe (not representative of the real crash conditions)

Doc. INF GR / CRS-11-5

Pierre Castaing suggested not modifying the current frontal pulse until we have a good technical reason to change it.

Misuses: Is-it necessary to test misuse ?

Pierre Castaing: regulations concern a product but not the use of the product → it is not necessary to considered misuse with a dynamic test but we have to prevent any risk of misuse of the product (for example with labeling).

Specific Category:

Pierre Castaing proposed to include this category in the new regulation in case of a (good) idea of a product to be able to approve this product as a CRS.

Validation Criteria (to prevent risk of body injury)

Frontal impact measure displacement in (X, Y) plan, deceleration

Dummies criteria: see CEVE or NPACS criteria.

Head: not applicable to contact because HIC

Farid Bendjellal: suggested to use as starting point the CEVE report which describes which body regions which risked an injury for each type of CRS to consider basically what are the body regions to be protected.

Pierre Castaing asked for a volunteer to summarize the CEVE report conclusions and to compare with the current criteria used for P dummies (using the same format as current ECER44 to avoid losing some important information)

Pierre Castaing asked also for so to write the requirements and test procedure for the frontal impact?

Dummies (annex8)

Pierre Castaing for so to write a draft based on current ECE44 format: FTSS should be the best for dynamic Q dummies but including also the geometric/handling dummies.

7.3 Side Impact Test Procedure – definition of Frame Work for technical specifications

Heiko Johannsen: suggested to have a longer backrest of 800 mm as the cushion according to NPACS test bench.

We have to write what we do with the test bench (within bracket if we have doubt) based on ISO PAS input recommendations (intrusion, velocity, door orientation, foam...)

Farid Bendjellal and François Renaudin proposed to write together this draft annex 10 on side impact test procedure.

Pierre Castaing: It is important to define the test bench as everybody wants to test it.

8 Definition of a Frame Work for drafting a regulation

8.1 Draft proposal (chairman)

Doc. INF GR / CRS-11-6

NON-ISOFIX: included this definition should avoid any confusion (as current one between European Directives and ECE regulations). Currently, booster seats with ISOFIX hooks are not ISOFIX CRS.

Classification:

The draft doesn't take into account all the propositions done on classification including no classification alternative as suggested by Pierre Castaing → this part must be reviewed in this way, including some information concerning the limit on use of the product (for example maximum mass, using FWD facing CRS is forbidden with a child under 1.5yo)

Farid Bendjellal: based on customer knowledge of Britax-Romer Marketing department, it is not recommended to drop the mass classification.

Pierre Castaing: a classification based on a maximum weight is not consistent with the size of ISOFIX test fixtures, the length of the harness ...

Several remarks were made on the fact that CRS is changed because of the size of the children and not because of his weight.

To define FWD/RWD facing: what is defining the position of a CRS in a car must be reviewed (Pierre Castaing) – for example in case of a car seat that should be reverse when traveling.

Specific to vehicle :

No risk of confusion with boosters using ISOFIX anchorages because this new regulations concerns only integral CRS.

With this category, it should be possible to approved ISOFIX CRS fixed for example in the luggage areas.

All observations on the DRAFT have to be sent to Jean-Philippe Lepretre before first week of August.

9 Date and Venue of next Meetings

Modification of venue for September's meeting 02 of September, BNA, in Paris.

10 AOB

No other business.

11 Attachments and Working Documents.

Annex No.	Presented by / on behalf of	Title
1	PC	Attendance list
2	PC	Actions list
3	PC	Documents list

JP LEPRETRE

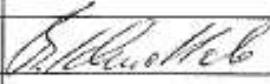
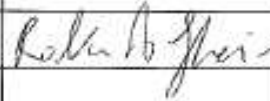
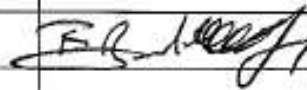

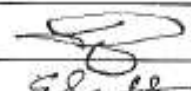
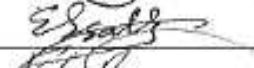


Secretary

August, 11th 2009

GRSP_INF_CRS

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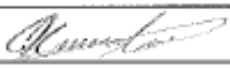

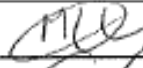
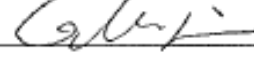
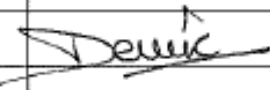

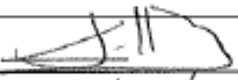
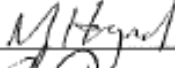


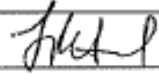
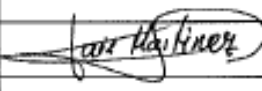
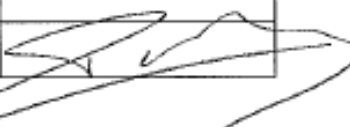
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Action Number	Action	Target Date	Action By	Comp Date
1.1	Terms of reference	01/04/08	Chairman	01/04/08
1.2	Test Bench definition – Information/Presentation following NPACS protocol	13/05/08	OICA / CI	13/05/08
1.3	R point / Cr point correlation	Postponed 13/05/08	MPA	13/05/08
1.4	Floor positioning versus R (H) point	Postponed 13/05/08	OICA	13/05/08
1.5	Classification – Anthropometry data	01/04/08	CLEPA	01/04/08
1.6	Classification – Load level in Isofix anchorages	Postponed 13/05/08	OICA / CLEPA	13/05/08
1.7	Dummies – FTSS presentation	13/05/08	RDW / EEVC-WG12	13/05/08
1.8	Dummies – Results from test labs	13/05/08	All	
1.9	Dummies – NPACS experience	13/05/08	CI	13/05/08
1.10	Dummies – DFT Validation	13/05/08	DFT	13/05/08
1.11	Side Test protocols in the world	13/05/08	CLEPA	13/05/08
1.12	Validation of door velocity in side impact procedure	Postponed	OICA	
1.13	APROSYS study on vehicle's interior arrangement	Postponed	UPM	02/09/08
1.14	Misuses – Marking of Isofix anchorages	ASAP	TUV Rheinland	
1.15	Information to GRSP concerning CRS regulation for Buses and Coaches	05/08	IDIADA	05/08
1.16	Pulses – Presentations/Analysis	Postponed	UTAC	18/06/08
1.17	ISO data on accidentology and accident scenario	Postponed 13/05/08	ISO	13/05/08
1.18	EEVC-WG18 final report	01/04/08	EEVC-WG18	01/04/08
1.19	Invitation of EEVC-WG12, WG18 and TUB	01/04/08	Secretary	01/04/08

Action Number	Action	Target Date	Action By	Comp Date
2.01	EEVC WG18 final report (version of February 07)	18/06/08	Netherlands	
2.02	NPACS study on rear impact	18/06/08	IDIADA	Postponed
2.03	US situation on rear impact	18/06/08	Chairman	Postponed
2.04	Side impact data upgraded	18/06/08	LAB	Postponed
2.05	Dummy family comparisons by NPACS	13/05/08	TRL	13/05/08
3.01	Comparison between ECE.R44 and NPCAS test bench	18/06/08	TRL	02/09/08
3.02	Information on acceptable limits of vehicle floor	18/06/08	All	
4.01	Classification – Load level in Isofix anchorages	02/09/08	OICA	
4.02	Dummies – Repeatability and reproducibility in Q-family	02/09/08	All	
4.03	EEVC WG18 Chairman to discuss for future collaborations	02/09/08	Chairman	02/09/08
4.04	Information on safety level for A P10 dummy with CRS in case of accidents (tests)	02/09/08	Daimler	Postponed
4.05	Background on Directive 2003/20/EC	02/09/08	Chairman	
4.06	Synthesis document on Q-series family upgrades	02/09/08	FTSS	
4.07	Tests to assess differences between ECE.R44 and R94 pulses	02/09/08	UTAC	
5.01	Draft proposal on a new test bench	07/10/08	TRL	
5.02	Table with anthropomorphic data	07/10/08	NL	
5.03	A workshop may be organized after the next meeting, if needed.	25/11/08	FTSS	
5.04	Working Document Matrix: Issue / Subject	07/10/08	NL	
6.01	FTSS specification of foam for test bench cushions	25/11/08	FTSS	
6.02	Max size used at present in RF'4 years in Sweden	25/11/08	Sweden	

Action Number	Action	Target Date	Action By	Comp Date
6.03	Load level in Isofix AnchorageS	25/11/08	CLEPA	
6.04	Comments on NL documents	25/11/08	All	
6.05	Q3s/C3s comparisons (repeatability, reproducibility)	ASAP	NHTSA	
6.06	NPACS experience on Q dummy durability	21/01/09	NPACS	
6.07	Tests to assess differences between ECE.R44 and R94 pulses	21/01/09	UTAC/OICA	
6.08	Working document on Side Impact	21/01/09	F.Bendjellal	
7.01	Classification Synthesis	21/01/09	Secretary	
7.02	State of the art regarding rear impact in Japan	ASAP	Japan representatives	
7.03	State of the art regarding rear impact in Europe	ASAP	WG18/WG20	
8.01			

Document Number	Title	Origin
INF GR / CRS-10-8	Minutes of 10th meeting of the Informal Group on Child Restraint System	Secretary
INF GR / CRS-10-7	Geometrical prerequisites for a third ISOFIX type anchorage	CSI
INF GR / CRS-10-6	VTI 3 rd ISOFX	VTI
INF GR / CRS-10-5	Matrix Test Method	Group
INF GR / CRS-10-4	“Kettering University” Methodology Presentation	DOREL
INF GR / CRS-10-3	R44 lateral Dorel Presentation	DOREL
INF GR / CRS-10-2	R44 lateral CSI presentation	CSI
INF GR / CRS-10-1	Provisional Agenda for 10th meeting of the Informal Group on Child Restraint System	Secretary
INF GR / CRS-9-11	Minutes of 9th meeting of the Informal Group on Child Restraint System	Secretary
INF GR / CRS-9-10	Classification synthesis	Chairman
INF GR / CRS-9-9	Contribution to the definition of test seat	TRL
INF GR / CRS-9-8	CRS Bench foam definition (V2)	FTSS
INF GR / CRS-9-7	Key metrics of existing side impact methods	BRITAX
INF GR / CRS-9-6	German View Point on side impact test procedure	TUB
INF GR / CRS-9-5	Side impact child program	Transports Canada
INF GR / CRS-9-4	Side impact dynamic test method	TUV
INF GR / CRS-9-3	ISO PAS 13396 document	ISO
INF GR / CRS-9-2	NHTSA's initial evaluation of Child Side Impact Protection - Update	NHTSA
INF GR / CRS-9-1	Provisional Agenda for 9th meeting of the Informal Group on Child Restraint System	Secretary

INF GR / CRS-8-6	Minutes of 8th meeting of the Informal Group on Child Restraint System	Secretary
INF GR / CRS-8-5	CLEPA- An approach for a side impact test procedure for new EU Regulation_Draft5	CLEPA
INF GR / CRS-8-4	Stiftung Warentest- Presentation	Stiftung Warentest
INF GR / CRS-8-3	CRS Bench foam definition	FTSS
INF GR / CRS-8-2	ISO_PAS_00000_CRS_Side_impact_GRSP-20090120	ISO
INF GR / CRS-8-1	Provisional Agenda for 8th meeting of the Informal Group on Child Restraint System	Chairman
INF GR / CRS-7-9	Minutes of 7th meeting of the Informal Group on Child Restraint System	Secretary
INF GR / CRS-7-8	Answer from ISO_TC22_SC12	ISO
INF GR / CRS-7-7	Vehicle Pulses	UTAC
INF GR / CRS-7-6	NPACS_C17_Rear_impact_Task_Final_Report	NPACS
INF GR / CRS-7-5	Swedish viewpoints on the centilong classification_19aug08	Folksam
INF GR / CRS-7-4	TUB _German Viewpoint CRS Classification -20081125	TUB
INF GR / CRS-7-3	CLEPA _Isofix loads	CLEPA
INF GR / CRS-7-2	CLEPA _Load level in ISOFIX anchorages	CLEPA
INF GR / CRS-7-1	Provisional Agenda for 7 th meeting of the Informal Group on Child Restraint System	Chairman
INF GR / CRS-6-9	Minutes of 6 th meeting of the Informal Group on Child Restraint System	Secretary
INF GR / CRS-6-8	Sled test presentation from VRTC/NHTSA	VRTC
INF GR / CRS-6-7	FTSS Memorandum on Q-dummies configuration - FINAL	FTSS
INF GR / CRS-9-6	FTSS Q-dummies configuration synthesis	FTSS
INF GR / CRS-6-5	VRTC Side Impact Child Dummy development Q3s 3CS	VRTC

INF GR / CRS-6-4	NL contribution CRS categorization	NL
INF GR / CRS-6-3	OICA presentation on load level in ISOFIX anchorages	OICA
INF GR / CRS-6-2	ECE R44 and NPACS benches comparison	TRL
INF GR / CRS-6-1	Provisional Agenda for 6 th meeting of the Informal Group on Child Restraint System	Chairman
INF GR / CRS-5-6	Minutes of 5 th meeting of the Informal Group on Child Restraint System	Secretary
INF GR / CRS-5-5	Proposal Regarding Amendment of the CRS Regulation at the Informal Group on child Restraints	JASIC
INF GR / CRS-5-4	ISOFIX load measurements	CLEPA
INF GR / CRS-5-3	NPACS test bench	TRL
INF GR / CRS-5-2	(APROSYS) Evaluation of the side impact test procedure proposed by IHRA/SIWG	INSIA
INF GR / CRS-5-1	Provisional Agenda for 5 th meeting of the Informal Group on Child Restraint System	Chairman
INF GR / CRS-4-9	Minutes of 4 th meeting of the Informal Group on Child Restraint System	Secretary
INF GR / CRS-4-8	Japanese accidentology presentation	JASIC
INF GR / CRS-4-7	Study of the performance of restraints used by children aged three years and under, with recommendations for the development of the new Regulation	Consumer International
INF GR / CRS-4-9	Full-scale Tests with and without ISOFIX	TUB
INF GR / CRS-4-5	Short report on Forward Component in ISO Side Impact Test Procedure for CRS	TUB
INF GR / CRS-4-4	Short report on Side Impact Testing with Big Rear-Facing Scandinavian Child Restraints	TUB
INF GR / CRS-4-3	ECE.R94 / EuroNCAP / PDB pulses comparison	UTAC
INF GR / CRS-4-2	Q-dummies Update (2004-2009) Presentation	FTSS
INF GR / CRS-4-1	Provisional Agenda for 4 th meeting of the Informal Group on Child Restraint System	Chairman
INF GR / CRS-3-18	Minutes of 3 rd meeting of the Informal Group on Child Restraint System	Secretary

INF GR / CRS-3-17	Load level in Isofix Anchorages	CLEPA
INF GR / CRS-3-19	Side Impact Test Methods for Evaluating Child Restraint Systems. A Summary for GRSP Informal Group on Child Restraints Systems	CLEPA
INF GR / CRS-3-15	Dummies NPACS comparison	TRL
INF GR / CRS-3-14	Q-dummies ready to enter regulations	FTSS
INF GR / CRS-3-13	Child Occupant Protection Research & Considerations for Future Regulations	Canada
INF GR / CRS-3-12	JPMA/Vehicle Manufacturer LATCH WG	US
INF GR / CRS-3-11	Classification - Anthropometry	CLEPA
INF GR / CRS-3-10	Data from child anthropometry data base CANDAT	Netherlands
INF GR / CRS-3-9	Selection of Size of Child Restraints	Australia
INF GR / CRS-3-8	Indicative Anthropometric Data	Australia
INF GR / CRS-3-7	Data on floor position	OICA
INF GR / CRS-3-9	Location of ISOFIX Top-tether anchorages Location of Cr-Point	OICA
INF GR / CRS-3-5	NPACS presentation	TRL
INF GR / CRS-3-4	ISO information on CRS International Standards	ISO
INF GR / CRS-3-3	SMMT directions	SMMT
INF GR / CRS-3-2	ISO/TR 14646 - Road vehicles - Side impact testing of child restraints systems	ISO
INF GR / CRS-3-1	Provisional Agenda for 3rd meeting of the Informal Group on Child Restraint System	Chairman
INF GR / CRS-2-8	Minutes of 2nd meeting of the Informal Group on Child Restraint System	Secretary
INF GR / CRS-2-7	NPACS Final Report_Project Report Version2.pdf	TRL
INF GR / CRS-2-6	WHO_Growth.ppt – Anthropometric data	UPM

INF GR / CRS-2-5	05-0157-O.pdf – ESV presentation	EEVC WG18
INF GR / CRS-2-4	CANDAT_data.pdf – Anthropometric data	Netherlands
INF GR / CRS-2-3	EEVC WG18 report	Netherlands
INF GR / CRS-2-2	Proposal for Terms of Reference and Rules of Procedure	Chairman
INF GR / CRS-2-1	Provisional Agenda for 2 nd meeting of the Informal Group on Child Restraint System	Chairman
INF GR / CRS-1-8	Minutes of 1st meeting of the Informal Group on Child Restraint System	Secretary
INF GR / CRS-1-7	Informal document No.GRSP-42-27	GRSP
INF GR / CRS-1-6	Informal document No.GRSP-42-02	GRSP
INF GR / CRS-1-5	Proposed Schedule for a Review of ECE Regulation 44.03	EEVC WG18
INF GR / CRS-1-4	Effect of Q-dummies and Criteria on the EEVC Test Database Results	EEVC WG12&18
INF GR / CRS-1-3	Injury Criteria for Q Dummies	EEVC WG12&18
INF GR / CRS-1-2	DRAFT OF Q-DUMMIES INJURY CRITERIA	EEVC WG12
INF GR / CRS-1-1	Provisional Agenda for 1st meeting of the Informal Group on Child Restraint System	Chairman