

**Draft Minutes of the 40th meeting of the Informal Group on
Child Restraint System**

Date:	Start	September 18th	9:30 AM
	End	September 18th	5:00 PM

Place:

**Bast offices
Bruederstraße 53
D-51427 Bergisch Gladbach
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1. Welcome and Roll call ([Doc.CRS-40-07e](#))
2. Adoption of the agenda ([Doc. CRS-40-01e amended](#))
3. Adoption and modification of the last minutes meeting ([Doc. CRS-39-08e amended](#))
4. Work on Phase 2
 - 4.1. Status report on dummy availability
 - ✦ Abdominal sensors from Humanetics will be available from December 2013.
 - ✦ The dummy kinematic does not produce abdominal loading in any test configurations even without booster (P. LESIRE). A Task Force lead by Heïko Johanssen is working to improve this situation (plastic insert on pelvis area, new abdominal & thorax sensors).
 - ✦ Hans Ammerlaan (RDW) is afraid that phase 2 will offer a new regulation, new dummies, new side impact but no solution to verify adequate abdominal protection.
 - ✦ Paul Lemmen (Humanetics) explains that the Q10 will be used in frontal impact for R129 but also thanks to a replacement parts kit in lateral impact for EuroNCAP.

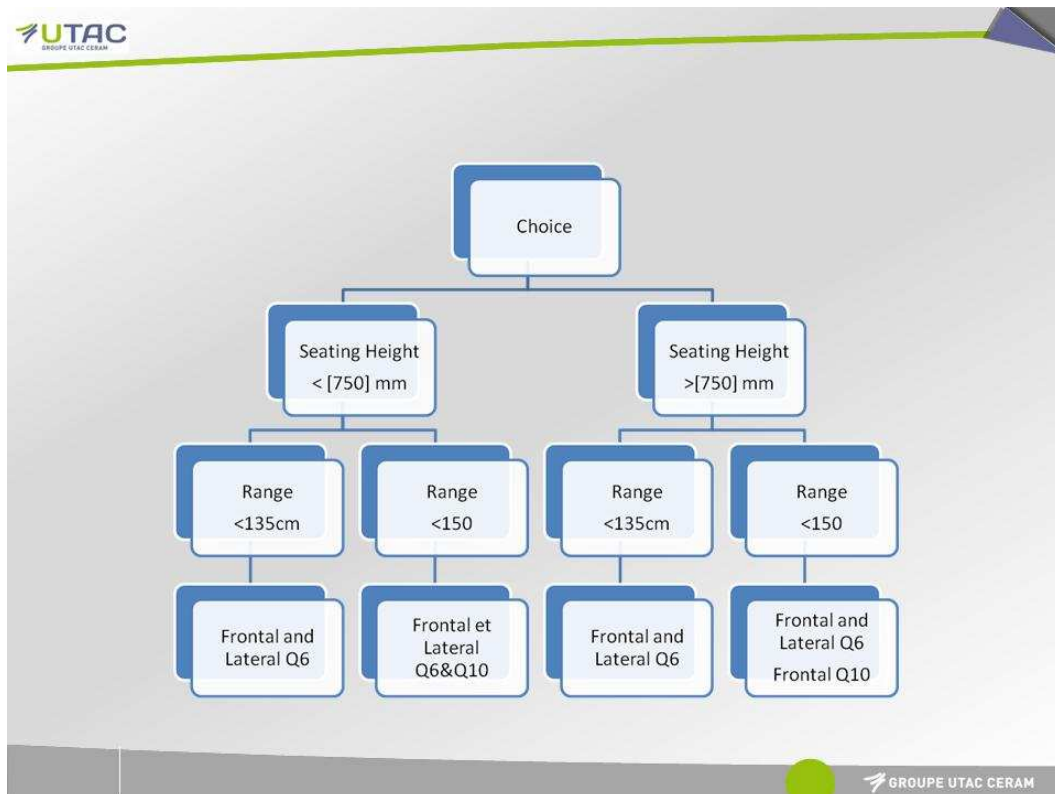
- ✦ Dinos Visvikis (TRL) questioned if we are assuming that all vehicles can actually offer protection for children > 135cm. Would they all have mandatory side airbags?
- ✦ Tommy Petterson (VTI) asked to the chair if a CRS that is adjustable from 135 statures to 150 statures, is considered to be Universal. The chair (P. Castaing) confirmed that the answer is “Yes.”
- ✦ A summary of the discussions was given by the Chair, by request of Ronald Vroman.
 - The child needs to be protected in Side impact until a certain head position (height). 1st proposition: dimension of 135 cm child. 2nd proposal seating height of head, compared to 5 percentile female. We need to ensure that these Crs-ses are universal, and we need to have the maximum achievable envelope.
 - CRS can be larger than the [135] envelope, but they need to have a usage configuration to fit within the [135] envelope. This would be still fall under the concept of universal. It is assumed that the vehicle will be protecting children in side impact safely above [135] cm.

4.2. Belt anchorage status from TRL ([doc CRS-40-05e](#))

- ✦ There is interaction between the door and the lower belt sensors. The first proposition is to cut out the door. The second proposition is to change the lower anchorage point position. The group decided to cut the door & keep the belt anchors positions. The group decides to use the NPACS belt anchors except 30 mm slide inboard for the upper anchorage. (see [doc CRS-31-02e](#) presented during 31st IG meeting)

4.3. Feed back from ISO SC12 WG1 TF4 ([doc CRS-40-02e](#))

- ✦ Information was shared on ISO Task Force 4 activity which was dedicated on compatibility between CRS and vehicles (belt compatibility, Isofix compatibility for support leg & top tether; Isofix & belt anchors position). The group is focussing now on booster compatibility only. Initial CAD reconstructions were conducted. They were useful to define improvements areas on the current fixture. A physical fixture confirms these modifications needs during a Workshop held last August in Renault Lardy technical centre. A new version of the CRF will be proposed soon.
- ✦ TF4 is also investigating lateral protection responsibility. The position of the 5th percentile female dummy was chosen as a reference. It was observed that P10 head position in current booster is always higher than the HIII 5th percentile female dummy. The Q6 head is located lower to the 5th percentile head but not so much (4 to 10 cm). Q6 head's position is highly dependant from the booster used.
- ✦ 5th percentile female head's position was determined when seated on the i-Size bench. TF4 propose to test lateral protection when child's head is below an horizontal plane located [750 mm] above the Cr point. Above [750 mm] the car needs to protect the head.
- ✦ This proposal was debated widely. The possibility or the requirement to propose side impact protection above [750 mm] or outside the fixture was discussed. Will this imply a compatibility list? What about the responsibility in case of bad side curtain deployment?
- ✦ The following diagram ([doc CRS-40-04e](#)) from the chairman give a summary of the situation :



- The IG is interested by ISO/TF4 proposals but suggests integrating a belt routing in the fixture.

4.4. Input from NTSEL JAPAN ([doc CRS-40-03e](#))

- ✦ NTSEL reviewed seatbelt anchorage and test bench seat cushion dimensions. Comparison test were performed to compare movable and fixed ISOFIX anchorage using two different CRS. Dummy readings with fixed or movable anchorages were almost similar. With fixed anchorages, the removal of the seat from the bench was sometime difficult.
- ✦ Using seat belt anchorages, this difficulty doesn't exist. It is suggested for an easier bench construction to keep the belt anchorages fixed.
- ✦ To easily determine T0, NTSEL suggests repositioning the centre of the CRS 350 mm from the cushion limit.

5. Time table for deliverables

6. Formal document Draft amendment R129 for 54th GRSP sessions 17-20 December 2013.

6.1. Draft amendment for Infant carrier module (doc ECE/TRANS/WP.29/GRSP/2013/21)

6.2. Phase II amendment ([doc CRS-40-06e](#) or ECE/TRANS/WP.29/GRSP/2013/23)

7. Next meetings

7.1. 41st meeting will be held in OICA Paris (4 rue de Berri PARIS - FRANCE)– 6th November (9.30 AM to 5.00 PM)

7.2. 42nd meeting will be held in CLEPA Brussels (Boulevard Brand Whitlock 87/B1 1200 BRUSSELS) – 15th January 2014 (9.30 AM to 5.00 PM). Due to capacity only 30 persons maximum will be allowed.

8. A.O.B.

PLEASE CONFIRM YOUR ATTENDANCE

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