
52nd GRSP Session

IWG on ~~draft~~ new Regulation on child restraint systems

Pierre CASTAING

- The IWG asks GRSP to extend the mandate until the end of 2014
 - Draft regulation for phase 2 (May 2013)
 - Development of transitional provision to withdraw ISOFIX application from ECE R44 (December 2013)
 - Draft regulation for phase 3 (May 2014)

Meetings



- 06 June 2012 at OICA – Paris
- 30 August 2012 at ACEA – Brussels
- 10 October 2012 at EC – Brussels
- 22 November 2012 at EC – Brussels
- 29 January 2013 at OICA – Paris *
- 28 February 2013 at CLEPA – Brussels
- 18 April 2013 at SMMT – London

Dummies Meetings



- 25 October 2012 Webex meeting
- *29 January 2013 at OICA – Paris
IWG CRS special meeting dedicated to Q10

- Child is restrained by the belt system of the vehicle
- Different categories for Booster seat & Booster cushion
 - With ISOFIX
 - Alignment
 - Misuse
 - Without ISOFIX
 - Similar to Current Universal
 - ISOFIX could be a Sub-category, class, ..

i-Size name



- Based on size of the child
- Based on “plug and play principle” on i-size ready positions
- i-Size position / i-Size vehicle

Phase 2

- Phase 2 is already underway
 - Non-integral CRS
 - Booster seats (up to 1,35 m)
 - Booster cushion (between 1,35 m and 1,5 m)
 - ISOFIX, simplified ISOFIX, no ISOFIX ?
 - Belt routing
 - geometric approach
 - Belt guidance
 - mechanical robustness control



Astra H

Golf 6

Adjusted



- Alignment data
- New i-Size gabarit influence
- Efficiency of ISOFIX connectors (rigid)
- ISO definition of vehicle / booster interface
Definition of interface between Child dummies and standard belt routing as defined by the 5th % female dummy
- 3D points for belt routing on 5th%

Work on progress



- Child Dummy Subgroup
 - Validation of the drawing packages for Q0, Q1, Q1,5, Q3 dummies
- Child Dummies definition for Q6 and Q10
- A Q10 production version is currently under development
 - Addressing issues raised in EPOCH and third party testing programs
 - Items needing decision from Stakeholders:
 - Belt penetration in pelvis thigh groin
 - Belt – suit interaction
 - Side impact performance
 - Injury thresholds
 - Abdominal sensor
 - Solutions (not affecting development of production version dummy):
 - Belt penetration dealt with using hip shields
 - Belt slip occurred after introducing Cordura layer in suit
 - For side impact a kit consisting of minimal number of parts under investigation
 - Injury thresholds proposed by EPOCH to be further evaluated
 - Abdominal sensor: research item which should not affect abdominal behavior
- **Need decision making on issues by group like EVC WG12 or alternative**

COUNCIL DIRECTIVE of 16 December 1991
relating to the compulsory use of safety belts
and child-restraint systems in vehicles
(91/671/EEC)

Amended by: Directive 2003/20/EC of the
European Parliament and of the Council of 8
April 2003

No reference made to the New regulation

- Still an open cogitation on belted integral CRS.
 - Still needed for non ISOFIX or i-Size positions
 - Still needed for old vehicles in current fleet
- Two solutions
 - Develop new requirements in a phase 3
 - Upgrade ECE R44

