GRSP INFORMAL GROUP ON CRS

Phase 3 – works on the fixation of a CRS using the adult seatbelt

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Summary

• It is proposed to make a status point on what was done up to now,

  – to check if initial questions have been addressed

  – to define what remains to be done (including milestones)
Field data (1)

• Collected data have shown that:

  – Convertible CRS are mostly used forward facing, (independently of the age of the child)

  – Harness boosters are used as G2/3 CRS too early

A multi group CRS often leads to inappropriate use during its life time (not possible to measure on the field)
Field data (2)

- Collected data have shown that
  - Forward facing installation:
    - Few data with shield (and inspectors not always trained on such systems, difficulty to identify them if shield is not used)
    - CRS with only one seatbelt route possible are globally better installed than the others (convertible or harness booster).
Field data (3)

• Collected data have shown that
  – Rearward facing installation:
    • Few data with G1 CRS
    • Rear infant carriers even with installation limited to 1 seatbelt route are the worst category in terms of installation quality that often leads to no restraint of the system.
Workshops (1)

• Dorel - July – 2016 : Discussions around car and CRSs with installation in vehicles and reporting of good and hard points.

– GENERALITIES ON INTEGRAL SYSTEMS:

• Number of operations and complexity of each is a large part of the successful installation of a system.
• Quality of signaletic on the system
• Nb of picture / drawings on the system
• Support Leg: compatibly issues at non Isize positions (tunnel, floor resistance,...)
Workshops (1)

- Dorel - July – 2016 :

  - **REAR INFANT CARRIER:**
    - Issue of seatbelt length with an « upper seatbelt route »
    - If CRS on a basis only: we lose a part of the practical use *(one basis per vehicle becomes necessary)*, but it is already the case with Isize systems
    - If seatbelt used as a 2pt, issue with impact against dashboard
    - Issue of representativity of the dashboard in the regulation
    - In the US, inclination to be respected during installation and dynamic test
Workshops (1)

• Dorel - July – 2016

  – REARWARD FACING (shell systems):
    • Only one facing direction or combination (RWD/FWD) CRS possible with seatbelt installation?
      – If yes, same seatbelt route (*rotation of the shell*) for fixation?
    • Antirotational device for rearward facing: mandatory?
      – If yes, what kind of device?
    • In case of lower tether anchorages, responsibility issue (rails/ CRS),
Workshops (1)

• Dorel - July – 2016

  – FORWARD FACING (integral)
    • Separation basis / shell makes things easier for the installation

    • Complex seatbelt routes with re-routing seatbelt in many directions: impossible to have a tension of the seatbelt in a single action.
Workshops (1)

• Dorel - July – 2016

  – FORWARDED FACING (integral)
    • The handle of the seatbelt/CRS not always clear and easy: G123, behind cover, through the backrest over armrests and above armrests

    • Space for hands, not always compatible with the size of 50 percentiles adults hands!
Workshops (2)

• Bast – September 2016
  – Focus on seatbelt length:
    • Highlight of differences in terms of seatbelt length necessary between gabarit /CRS in vehicles/bench
Workshops (2)

• Bast – September 2016

• The open topics for the vehicle side:
  – Belt length & measured by using gabarit
  – Buckle to CRS contact
  – Combination gabarit and belt support leg requirements
  – Lower tether attachments
Workshops (2)

• Bast – September 2016

• The open topics for the CRS side:
  – Belt length (measured on the test bench) and belt path
  – New definition of universal belted / vehicle specific
  – Support leg compatibility
Workshops (3) – to be done

• Half day

• **CRS designers: seatbelt challenge: what is/seems possible what is not?**
  – Rear infant carrier
  – Forward facing integral systems
  – What needs to be required/changed/adapted in R129 to make solutions possible?
  – What does it imply for the consumer (information, change from today’s habits)?
  – Simple application to be tested possible?
Workshops (3) – to be done

• Half day / day
• Customer panels: what is easy, what is not?
  – Installation of CRSs by end users, to better know what are
    the difficult operations in today's systems that lead to
    misuse (including the easy solution found in the first part of the workshop if any).
  – What are the expectation of consumers (what is acceptable)
    in terms of number and difficulty of operations to install a
    CRS with the seatbelt. What sounds a reasonable time to
    install it properly?
  – If you were designer, how would you make it?
  – What sounds to be a natural way of fixing a CRS in a car?
Discussions (1) – DO WE ALLOW MIXED PRODUCTS?

GENERALITIES ON INTEGRAL SYSTEMS:

- Isize for one « size category » and seatbelt attached for another one

- Isize or belted for a given « size category »

- Combination of seatbelt and top tether

- Combination of seatbelt and ISOFIX
Discussions (1) – DO WE ALLOW MIXED PRODUCTS?

I-SIZE PRODUCTS:

- Are they limited to phase 1 or could they be used as Phase 2 products when the child grows *(in the limit of 1 seatbelt route if decided)*

- If on a base, can the other part be used for other ages?

- If on a base, can the other part be fixed with the seatbelt? *(in other words, can a « phase 3 CRS » be part of an I-Size products?)*
Discussions (2)

• Any other geometrical limitation to ensure a good compatibility?
  – Check to be done with Heiko’s reportings
  – The idea is at least to know what compatibility issues are remaining after the work already done.
  – Volunteers?
Discussions (3) during the meeting

- Concept points for Phase 3.1:
  - Universal, integral and belted. So no support leg, no TT, no lower anchorage. Only the adult seat belt will be used.
  - If stowable TT, leg, and ISOFIX connectors fitted (phase 1) then only universal if none of these are used for universal belted approval.
  - Only one belt routing.
  - Universal seating position as of today. Reg 16
  - ECRS geometrical assessments according to Phase 1 (internal and external).
Deadlines to be observed

• Workshop « n°3 » organisation:
  – Where, who is organizing?

• Reporting to this group:
  – Milestones?