

**9th STCBC Meeting****Safer Transport of Children in Buses and Coaches**

Date: 1 &amp; 2 March 2022

Time : 12h-14h CET

**Draft Minutes – STCBC 9th Meeting – 1 & 2 March 2022****1) Welcome & Meeting Arrangements (Chair Marta)**

Marta welcomed the participants and introduced the agenda.

**2) Adoption of minutes from last meeting STCBC 8<sup>th</sup>**

Adopted by the IWG.

**3) Adoption of the agenda – STCBC-09-01**

Adopted with no comments.

**4) Actions from last meeting**

- a. Checking R129 gabarits in M3 vehicles of classes II & III (Michael & TUV). **(STCBC-09-02)**

Michael presenting. In 2 SETRA vehicles, single deck and double deck. B2 and R2 envelops. It's possible to fit ISO/B2 in other seats, but the partition seat needs 70 to 80 mm more space. When placing two ISO/B2 side by side there was a very little space in between; reaching the belt buckle might be difficult. Moving ISO/B2 was challenging because of narrow gangways and entrance passage. Wit ISO/R2, a contact between the envelop and the window pillar and glass-breaking device on double deck vehicle was observed. The glass breaking contact could be solved. Moving ISO/B2 in double deck was challenging for the same reasons as for the single deck vehicle. Same with ISO/R2.

**Conclusion from Michael: this investigation confirms what was seen in the CAD task.**

- b. OICA proposal to address the compatibility issue of CRSs in Buses & Coaches **(STCBC-09-03)**

Salim: As a follow up from last meeting where Marta asked for CLEPA and OICA to address the compatibility issue. Clepa declined the invitation for a call because there is no possibility to address it as vehicle regulations can't be changed. OICA to look for other solutions without refusing the R129 CRSs. Salim presented a document addressing the installation of a forward facing booster for 6 years old, with ISO B2 and within 650 mm space. They found a contact with the upper part of the ISO/B2. They suggest cutting the top part of B2 to meet the R107 requirements. In addition, one solution could be a booster cushion that can be compatible, like a R44 cushion.

**Action: Clepa to discuss about this.**

Salim presented 2 examples of built-in CRSs. A rear facing installation for children up to 1.5 years and a harnessed system for children up to 6y old.

One question arose (Farid): Would the R107 allow to have a front seat with a reclined backseat

to accommodate a built-in CRS as shown in slide 5? This is to be checked for next meeting.

**Action: OICA to check R107 if the inclination of front seat is allowed.**

How built-in seats will be assessed (Marianne)? Marta responded that this will be addressed in the test section of the new regulation.

**Conclusion: Marta summarizing the situation: We will then focus on the definition of the regulation, and this will be reported to GRSP.**

Rudolf: The original idea was to see if existing seats and existing buses can be installed without changing both regulations. For the buses, we should focus on Frontal and Rollover accidents. As for side impact, is there a real need? For example, for R44 cushion it should be checked if it can pass R129.

## 5) Definition of key elements of the regulation (as from CLEPA comments @ the 8<sup>th</sup> meeting)

As we can't change the vehicle regulation the IWG STCBC should focus on defining test procedure and labelling

### a. Discussion on test procedure

#### i. Test bench (R107?) - seat & seat back

Marta; There is a need to develop a test bench for buses and coaches. Need to have dimensions from vehicle seat construction; seat back stiffness should be considered as it moves in R80 test. Need for volunteers to define the test bench. Salim mentioned that we have to look into both regulations R107 and R80.

Marta: would a Task Force be needed?

Rudolf: Why do we need a test bench ? For built-in CRS that should be no need for test bench-

Rudolf: First we should develop test procedure for integrated seats. The other CRSs should be addressed in a 2<sup>nd</sup> step.

Marta: if a CRS is R129 approved then no need for a test. For built-in we need to develop a test procedure

Rudolf summary: There a potential solution with R44 booster to be checked for R129; There could be 3 pts belt system in certain buses and by the way 3-point belt systems in buses/coaches are discussed in GRSP.

Question from Marianne: how to ensure the equipment of built-in systems in buses/coaches? This is up to national authorities to decide;

Dinos: Was in favour for 2-point belt systems. There are very few 3 pts belt systems in buses and coaches and no regulatory incentive for integrated CRSS. The best is to cover both options if we want to quickly have products in the market; it will be quicker to have a non-built-in CRS than built-in.

Summary from Dinos: to have a simple bench to test both options.

Mary Versailles comment: There is a need to develop a regulation as she can't imagine any legislation using CRS if there are not regulations covering that product.

Rudolf: we can start easily, otherwise the definition of test bench will take years. Michael would agree and supports Rudolf but what about the issue for small children?

Victor: First phase for built-in OK and R129 products should not be tested.

**Conclusion: Marta to explain to GRSP our situation by stating that we will start with built-in systems and allowing systems approved under R129 which can be installed in buses and coaches.**

**Marta asked who is in favour for the conclusion: In favour: Spain, Rudolf, ANEC, OICA, BAST, CLEPA.**

ii. Test pulse: R80 already agreed

Marta: Do we need 2 rows of seats or just 1 row as in R129. According to R107, the smallest distance should be considered. Michael: taking the smallest distance is not right as distance can vary between 650 and 900 mm.

Rudolf: Need to use the distances that exist in buses/coaches.

**Action: OICA (and others) to check the distance for next meeting**

Gonzalo: It's important to consider the worst case scenario which is not the R80.

Rudolf: We should leave R80 and think about CRSs. Checking only the distance is not enough.

iii. Installation of CRS

Not discussed.

iv. Dummies: Q dummies already agreed

v. Injury criteria: R129

Already agreed

b. Discussion on labelling

Is the labelling to be applied to both CRS and vehicles (Farid). For built-in seats, yes ; for R129 CRSs this is still under discussion.

Should be easy for built-in seat as they should have a label, but for phase 2 we will need to define labelling for other CRSs.

**Decision Spreadsheet (ICTBC-09-06)**

The IWG started the 2<sup>nd</sup> day meeting with the discussion on decision spreadsheet. Discussion took place on various items such as considering 2 phases for the regulation: 1a) CRS approved according to R-129 with 3point belt and or ISOFIX, 1b) Built in systems; and then phase 2 with CRSs in combination with 2 point belts. Dinos questioned the content of Phase 1a). It was reported that it could be just a statement in the regulatory text. CRS can be used where a 3 point-belt is provided. Ronald: are 3-point belts available in first row seats in buses and coaches? Michael: not so many vehicles have such a 3-point belt.

Marta discussed her proposal for fitting a CRS within a space located in the 1<sup>st</sup> row. That would

lead to having an envelope and basically to a modification of R129 (Dinos).

**Conclusion : Leave that for Phase 2.**

Rudolf: Checking the space is one thing but there are other considerations like the belt length, or the booster cushion than doesn't need to pass the 770 mm plan criterion and thus could be used for stature from 100 cm.

Marianne: This will involve a foreseeable misuse as consumers will have to understand a different use for cars and for buses.

**6) Defining the Regulation (STCBC-09-04)**

Marta presented a draft for the new regulation. The scope was discussed and agreed. Proposal to have an introduction where general statements are added was also agreed. Discussion took place on para 8. Tests.

**7) Confirmation of tasks & responsibility**

- **Clepa to check if a R44 booster cushion can pass R129**
- **OICA to check R107 if the inclination of front seat is allowed**
- **OICA (and others) to check the distance between seat rows for the dynamic test**

Marta thanked all for their participation and closed the meeting.

**8) AOB**

- a. A report to GRSP 71<sup>st</sup> session will be circulated by Marta before the GRSP

**9) Next meeting**

Marta suggested to have more frequent meetings before GRSP December 2022.

**All agreed to have a meeting every 2 months.** Next meeting: May 18 and 19 same timing - 12h to 14h CET.

Participation

Marta Angles – Chair

Farid Bendjellal (Secretary)

Britta Schnottale

Mark Pitcher

Ronald Vroman

Anthony Jaz

Cristina Echemendia

Costandinos Visvikis

Gonzalo Casas

Hasan Sahin

Kazumi Watanabe

Jose Martinez

Sinwook Kwon

Mary Versailles  
Marianne Leclaire  
Michael Becker  
Rudolf Gerlach  
Salim Abdennadher  
Tomasz Lorenc-Osowski  
Yoshinori Tanaka  
Yuta Nozaki  
Jun Gue Kwak  
Victor Calzadilla  
Hyoung Gu Kim  
Breillard