Amendments to ECE R129

ECETRANS-WP.29-GRSP-2017-15e (Phase 1)  
ECE-TRANS-WP.29-GRSP-2017-16e (Phase 2)  
ECE-TRANS-WP.29-GRSP-2017-17e (Phase 3)
Proposal for Supplement 3 to the 01 series of amendments to Regulation No. 129

This document supersedes ECE/TRANS/WP.29/GRSP/2017/15.

It includes all proposals of modifications made by the IWG ECRS during the three last meetings (2017/01/25, 2017/03/09 and 2017/04/19)

The proposed amendments to the text have been developed to authorise the type approval of integral Enhanced Child Restraint Systems equipped with impact shield as restraint device.

A vertical displacement of 840 mm. should be accepted for all dummies, since it's already accepted for the Q10 dummy.

A method describing how to conduct the internal geometry assessment, as required by 6.3.2.1., to verify the stature range of the ECRS declared by the manufacturer was needed.

22/06/2017 Report of 61st Session of GRSP 08 to 12 May 2017
Proposal for Supplement 2 to the 02 series of amendments to Regulation No. 129

This document supersedes ECE/TRANS/WP.29/GRSP/2017/16.

It includes all proposals of modifications made by the IWG ECRS during the three last meetings (2017/01/25, 2017/03/09 and 2017/04/19)

The proposed amendments to the text have been developed to authorise the type approval of integral and non integral Enhanced Child Restraint Systems equipped with impact shield as restraint device.

A vertical displacement of 840 mm. should be accepted for all dummies, since it’s already accepted for the Q10 dummy.

A method describing how to conduct the internal geometry assessment, as required by 6.3.2.1., to verify the stature range of the ECRS declared by the manufacturer was needed.
Proposal for the 03 series of amendments as Phase 3 of Regulation No. 129

This document supersedes ECE/TRANS/WP.29/GRSP/2017/17.

The proposed amendment includes Enhanced Child Restraint Systems from the universal belted or specific to vehicle belted categories into the scope of UN Regulation No. 129. This represents Phase 3 of the UN Regulation.

Improved indication of correct belt path.

The text includes all modifications proposed by GRSP up to and including its sixtieth session (13-16 December 2016) as well as those of the Informal Working Group on Child Restraint Systems including all proposals of modifications made by the IWG ECRS during the three last meetings (2017-01-25, 2017/03/09 and 2017/04/19).

The proposed amendments to the text have been developed to authorise the type approval of integral and non-integral Enhanced Child Restraint Systems equipped with impact shield as restraint device.

A vertical displacement of 840 mm. should be accepted for all dummies, since it's already accepted for the Q10 dummy.

A method describing how to conduct the internal geometry assessment, as required by 6.3.2.1., to verify the stature range of the ECRS declared by the manufacturer was needed.
Most safely approach is: one product for one use
No combined ECRS to preserve safe use and installation
No opportunity to combine Integral & Non-Integral. A clear separation is required
All injuries have to be evaluated according to possible misuse
To prevent misuse of early switch between RW & FW only one adult belt routing is needed
Permanently attached parts: all means used for restraining the child must be well attached and positioned on the child seat
Do not repeat mistake done in ECE R44 with semi universal category
Do we want to authorize combination of ECRS types?
- ISOFIX (including I-Size) & Universal Belted
- I-Size & Specific to vehicle
- Integral & Non-Integral
- Rearward & Forward

If so, under what conditions?
- Only for baby-carrier?
- Only for extension of size range, beyond I-Size size range?
- Reversibility of the transformation?
- Base (ISOFIX or Belted) associated with modules and only one adult belt routing by ECRS for Belted ECRS

Guiding principles
- Avoid misuse
- Avoid confusion for the parents
- Plug & Play system
Do we want to authorize the sales of ECRS “not ready for use”:
- Not permanently fixed
  - support leg
  - top tether
  - Shield
  - Backrest
  - Anti-rebound bar
  - ...

If so, under what conditions?
- Only for shipping and assembled at the point of sale?
- Integral ECRS with impact shield: permanently attached or not?

Guiding principles
- Avoid misuse
- Plug & Play system
CP demand guidance from GRSP (3)

Do we want to authorize the use of “add-on” fixing points other than:
- ISOFIX anchorages with support leg or top tether for I-Size & ISOFIX products
- Adult 3 point belt for belted ECRS

If so, under what conditions?
- Only for specific to one vehicle?
- If the product could be type approved in the worst case condition (W/O “add-on”)?

Guiding principles
- Not all universal seating positions in a vehicle are equipped with a Top-Tether or a type approved floor plan
- Plug & Play system
Other issues

- Inflatable ECRS
- Foldable ECRS
- Definition of belt routing best practice
  - INSTALL SCHEMAS AND RESULTS
- Better definition of main load bearing points is needed
- Review of dummies criteria (planned 3 years after series 01)
34. The expert from OICA introduced ECE/TRANS/WP.29/GRSP/2017/11 to update the cross references to UN Regulation No. 14 and to the new UN Regulation on ISOFIX. He also presented GRSP-61-27 to introduce the same update to the original text of UN Regulation No. 129. GRSP adopted ECE/TRANS/WP.29/GRSP/2017/11, as amended by Annex VI and GRSP-61-27 as reproduced in Annex VI to this report. The secretariat was requested to submit the proposals for consideration and vote at the November 2017 sessions of WP.29 and AC.1 as:

(i) draft Supplement 6 to UN Regulation No. 129 (GRSP-61-27),
(ii) draft Supplement 3 to the 01 series and
(iii) draft Supplement 2 to the 02 series of amendments to Regulation No. 129 (ECE/TRANS/WP.29/GRSP/2017/11).
35. The expert from France, Chair of the IWG on Enhanced Child Restraint Systems (ECRS), gave a presentation (GRSP-61-28) on the work progress of the IWG on amendments to the UN Regulation. He explained that ECE/TRANS/WP.29/GRSP/2017/15 and ECE/TRANS/WP.29/GRSP/2017/16 were aimed, amongst others, at introducing provisions for ECRS equipped with impact shields as such restraint systems were not yet covered by the 01 and 02 series of amendments. The expert from CLEPA gave a presentation (GRSP-61-33) showing concerns on the proposals tabled by France. The expert from OICA raised concern on the increased head excursion (840 mm) during the dynamic test on rearward-facing CRS. The expert from France finally introduced GRSP-61-15-Rev.1 and GRSP-61-16-Rev.1 superseding respectively ECE/TRANS/WP.29/GRSP/2017/15 and ECE/TRANS/WP.29/GRSP/2017/16 and including the comments received. GRSP adopted ECE/TRANS/WP.29/GRSP/2017/15 and ECE/TRANS/WP.29/GRSP/2017/16 as amended by Annex VI to this report. The secretariat was requested to submit the proposals for consideration and vote at the November 2017 sessions of WP.29 and AC.1 as part (see para. 34 above):

- (i) draft Supplement 3 to the 01 series (ECE/TRANS/WP.29/GRSP/2017/15) and
- (ii) Supplement 2 to the 02 series of amendments to UN Regulation No. 129 (ECE/TRANS/WP.29/GRSP/2017/16).
36. The expert from France introduced GRSP-61-17-Rev.2, superseding ECE/TRANS/WP.29/GRSP/2017/17 aimed at introducing the third phase of the UN Regulation which is meant to introduce "Universal belted" and "Specific vehicle belted" category of CRS. He further explained that the basic principle of Phase 3 was to reach a compromise from misuse and bad installation and having as much as possible seat places to install CRS where ISOFIX anchorages cannot be allocated. Moreover, GRSP noted the request of guidance to Contracting Parties proposed in GRSP-61-28 concerning:

- (i) which kind of combinations of ECRS should be allowed (e.g. ISOFIX and Universal Belted)
- (ii) under which conditions and
- (iii) guiding principles.

The expert from the Netherlands raised concerns on "inserts" used on CRS to adapt them to the size of the occupant. He stated that inserts should be identified (labelled with identification and with size information) and that requirements should be devised to prevent camouflage of bad CRS. The expert from the United Kingdom supported the principle of a performance-based approach and requested more data on misuse. However, he shared the concern of the expert from the Netherlands. The expert from IC stated that ISOFIX had the priority to avoid misuse while other solutions and combinations with ISOFIX were just secondary and should be limited. The experts from Germany and Sweden raised a study reservation and stated that "plug-and-play" solution was the key principle for having a simple and efficient system; while now the ECRS IWG was opening to combinations that could have misuse implications.
37. GRSP agreed to resume discussion on Phase 3 of the UN Regulation at its December 2017 session on the basis of more data analyses. In the same time, GRSP referred back to the IWG GRSP-61-17-Rev.2 and invited representatives of Contracting Parties of the 1958 Agreement to participate in the 21-22 June meeting of the IWG to cover the request of guidance mentioned above.

38. Finally, GRSP noted a translation into Korean language of the leaflet (GRSP-61-23) promoting UN Regulation No. 129 and appreciated the contribution of the expert from the Republic of Korea in promoting the UN Regulation in his country.