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NOTE FOR THE MEMBERS OF TCMV

Subject: **Further clarification and update on the status concerning the draft new regulation on uniform provisions concerning the approval of enhanced Child Restraint Systems used onboard of motor vehicles, of GRSP under the UNECE 1958 Agreement.**

1. INTRODUCTION

The current UNECE regulation no. 44 on Child Restraint Systems (CRS) has been in existence for more than 30 years and has been applied in the European Union since a long time.

The development of the draft new regulation on enhanced Child Restraint Systems has been well under way under the UNECE framework in Geneva for already three years.

The main goal of the draft new regulation has naturally been that to improve the overall level of safety for children transported in cars and the aim was to address issues which could lead to unintended misuse and incorrect usage in traffic, causing a higher risk of severe injury or death of the child. However, certain issues related to the proposed regulatory text have recently been identified which are clearly not in the interest of improved safety for the youngest citizens of the European Union and these issues have initially been outlined in general terms in a previous note for the TCMV of 17 November 2010.

This note explains in detail the issues which have been observed and the steps which have been agreed in the TCMV of 8 February 2011 in order to quickly arrive at an acceptable situation.

2. BRIEF ANALYSIS OF THE NEW DRAFT REGULATION

Concerning the new draft regulation for Child Restraint Systems, as it stands today, the following can be noted:

- It concerns only a very limited group of ISOFIX CRS for children up to 6 years of age;

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- Frontal impact in new regulation is based on the old regulation;
- Rear impact in new regulation is based on the old regulation;
- General safety and performance requirements are all based on the old regulation;
- Side impact is fully new;
- Different classification focussing on child's size instead of weight (so-called *i*-size);
- Certain features which are prohibited in the old regulation will now be allowed;
- Facilitation for a limited category of CRS products, currently on the market as "semi-universal" with support leg or foot prop, which under the new regulation can be type-approved as fully "universal" systems. Currently the CRS manufacturers must undergo additional steps to ensure compatibility with all relevant vehicle types (i.e. cumbersome for the CRS industry).

The draft new regulation is heavily based on the old regulation, with a few changes and updates. The CRS manufacturers will have more freedom to benefit from, but it does not address certain specific challenges for the vehicle industry and end-users.

Rather than creating a fully new regulation, we feel that these updates should have been incorporated in the old regulation, which would have lead to a smooth transition in terms of implementation and transposition in EU law. Instead, with the proposed new regulation, there will be administrative burden for the EU and its Member States. These views were not shared by all in the Working Group.

Therefore, the old and new regulation will co-exist for identical products with different and conflicting requirements, causing additional confusion and implementation challenges, complicating matters even more.

As a conclusion, in order to qualify as a truly new regulation with considerable improvements for EU end-users, the level of safety should have been increased considerably, with a clear distinction between the old and new products.

3. BRIEF ANALYSIS OF THE CLAIMED BENEFITS OF THE DRAFT NEW REGULATION

One of the true potential safety improvements which should be noted is that of the requirement that rearward facing child restraints shall be used until at least the age of 15 months. However, for illustration, this age normally reaches up to 4 years in Sweden. Furthermore, the 15 month requirement is not even a design requirement for child seat makers, it is only a printed statement on yet another label.

The most popular baby seats on the market today, as described above, are already suitable for babies of up to 15 months of age, hence, there will be no overall improvement to speak of.

Therefore, just as is the case today, it is still left up to the end-user to find any truly safe baby seat in the marketplace, and those are basically only available in countries like Sweden.

Under the new rules, any child seat manufacturer would not even be obliged to make CRS which are capable of seating babies from 0 up to 15 months. They could produce a

seat which is suitable for babies up to, say, 9 months of age. Consumers are therefore highly likely to end up buying the 'old style' forward facing baby seats, which the same CRS manufacturers will be able to continue to produce under the old and not-updated regulation, as, unfortunately, there are no plans to ban these types of baby seats from the marketplace any time soon and this is truly a missed opportunity.

A second highly touted improvement is that of the introduction of side-impact protection in the new draft regulation. This would certainly be the case if it were not so that the requirements have in fact been watered down to the extent that a wafer thin side wing is expected to easily pass the proposed requirements.

A third claimed benefit is the reduction of issues related to misuse, the incorrect installation of the child seat in the vehicle and the incorrect strapping in of the baby. These are very important issues which should be considered strongly. Analysis of the new draft regulation shows that it has potential for such real improvements. However, the diverging views between vehicle manufacturers and CRS industry have so far impaired a clear way forward in terms of the relevant gains related to child safety. The CRS industry is demanding considerable changes and adaptations on the side of the vehicle manufacturers.

4. WHAT IS THE NEW DRAFT REGULATION REALLY BRINGING, AND FOR WHO

A number of very marketable updates, changes and improvements to child restraint systems have been incorporated in the draft new regulation, whereas true safety improvements have been cast aside.

CRS manufactures can start using seatbelt clips to align the routing of the belts over the baby's shoulders. This is certainly an improvement for those baby's which tend to move a lot. However, it also enables not-so-good designs to pass the requirements more easily in the future.

A CRS with support leg standing on the vehicle floor (and connection to the vehicle seat by means of two anchorage points in the seatback cushion, ISOFIX) can in the near future be type-approved as "universal". However, there are no cars on the market today which would be compatible with these new rules, as the rules for vehicles have not been developed yet. The burden of proof concerning child safety is simply shifted from CRS manufacturer to the car industry.

The overall level of side impact protection should improve in theory. In practise there are no CRS available on the market, which do not already have some form of protection. The proposed pass/fail criteria level for type-approval testing has been subject to continuous adjustments and reductions. It has become evident that the real-world comparison testing, which forms the basis of the most recently updated proposal, was carried out in an exceptionally good performing and safe vehicle and therefore all current products on the EU market are expected to easily meet the proposed requirements.

5. FOR CONSIDERATION

In order to save a significant number of additional lives, the key issue to resolve is indeed the prevention of the large-scale problem with misuse of the child restraint systems by parents and care-givers, namely children who are incorrectly restrained and child restraint systems which are installed improperly and dangerously in the vehicle. The ease of use in order to install these baby seats safely should be better addressed. Although the draft new regulation aims to address these issues, it is reasonable to conclude that the proposed improvements will yield minimal benefits.

The introduction of yet another class of child restraint systems, deemed to be fitted in a limited number of future vehicle models, will only create further confusion amongst users. It has not even been decided yet what such future compatible vehicles should look like and how such compatibility is subsequently communicated to the public.

There is a realistic threat that citizens can unintentionally install the new child restraint systems in older vehicles not meeting the criteria. The baby seats will simply physically fit in any car with ISOFIX, suitable or not.

There is the additional threat that some vehicles will be placed on the market in which only one seating position would be compatible with the new generation baby seats (i.e. *i*-size ready), whereas the position right next to it would not be. Parents and care-givers will be confused and the new baby seat could certainly be fitted in both locations, unintentionally.

Stakeholders and notably the international consumer's organisations have been particularly unclear on the way forward regarding these potential misuse threats and made comments in the Working Group to the extent that it should be left up to the end-user to ensure that the baby seat is installed in the right car and the correct designated installation position. This has been unacceptable for the Commission. We fervently hope that a solid and clear agreement can be reached concerning this important topic, as obviously, this can lead to life threatening situations concerning the babies placed in such vehicles.

The suspected increase of inertia crash forces exerted to the ISOFIX anchorages in case of larger children in *i*-size restraints has not been assessed either.

The status quo is the result of the fact that child restraint manufacturers are reluctant to produce child seats which will fit in a larger number of vehicles, and the vehicle industry is reluctant to change vehicle designs drastically to make them fully compatible with child restraint maker's offerings.

Besides the above, and not connected to any of the aforementioned issues, the Commission has attempted (as a last resort) to continue working on a true improvement in connection to the new regulation and proposed to introduce more stringent requirements with regard to frontal impact safety. The Commission's proposal serves mainly as an answer to the severe German Automobile Club (ADAC) testing, which continuously shows dramatic failures with (cheap) child restraint systems which are widely available on the EU market and some of this information is freely available on the internet.

The baby seat shown in these videos (http://www.youtube.com/watch?v=rayxFm3vYy8, http://www.youtube.com/watch?v=hInyljw7y5E as well as the alternative view as shown in http://www.youtube.com/watch?v=RaF4_dGA4qQ) will pass the future proposed baby injury criteria comfortably at about half of the maximum allowable levels. However, if a baby occupant is riding in a modern car which is involved in such a very common frontal crash with a higher severity, this baby will not stand a chance to survive.

6. CONCLUSIONS

At the TCMV of 8 February 2011, at the initiative of the Commission, TCMV supported a further extension to the time frame for the new regulation, due to the obvious need for further and necessary discussions at the Working Group level in order to achieve the best outcome possible and to have the safest car seats available throughout the EU for the protection of our youngest citizens.

7. NEXT STEPS AND THE WAY FORWARD CONCERING CRS SAFETY

During the TCMV of 8 February 2011, Member States have clearly voiced the opinion that the proposed first phase should be finalised as soon as possible as to at least benefit from the early small improvements. This view is shared by the Commission. Member States have however also indicated that it is indeed necessary to set strict and clear conditions for the second phase which will be developed in the coming time.

Commission proposed that the elements which shall be taken onboard, are as follows:

- Seatbelt mounted CRS shall fall solely under UNECE regulation no. 44;
- ISOFIX mounted CRS shall fall solely under the draft new UNECE regulation;
- Ban the application of any forward facing baby seats, including those CRS which can be turned to a forward facing mode, for baby occupants less than 15 months old;
- Improve the frontal crash pulse, whilst maintaining the appropriate speed of 50 km/h (according to scientific research concerning child exposure during on-road transport) to reflect modern vehicles under full overlap crash conditions (common crashes such as head on collision, rear impact, T-bone impact, wide object, etc.);
- Strict application of recognised and accepted injury criteria related to the new generation baby/child crash test Q-dummies, as supported through EEVC and other EU research programmes, instead of watered down criteria;
- Integral approach to address UNECE R14 (ISOFIX anchorages) and R16 (seatbelt and CRS installation) to ensure compatibility and combat misuse;
- Possible introduction of a high speed CRS integrity check to ensure that designs are stable even under severe loading conditions (particularly for ISOFIX systems).

These elements should therefore be reflected in the Terms of Reference which will be drafted up by the Working Group on Child Restraint Systems under GRSP following the

upcoming UNECE WP.29 meeting from 8 to 11 March 2011, with the support of the EU Member States.