



Technical Working Subgroup on GTR9 Amendment 3: Status Report

Working Party on Passive Safety (GRSP)

70th Session

06 – 10 December 2021

The Technical Working Subgroup, chaired by Germany and reporting to the Task Force on Amendment 3, has held three meetings (online).

The meetings were attended by the European Commission, national representatives from Japan, the Republic of Korea, the Netherlands, the US, Germany and members of Industry.

Aim of TWSG was to create a mutual understanding between all CP's under the 1998 Agreement on technical discrepancies towards the adoption of an Amendment to GTR9 for a clarification of the headform test procedure.

The Task Force was planning to subsequently solve potential political issues that may arise from the technical proposal.

Since the TWSG held its last meeting on 3 December without reaching a consensus, no proposal could be brought forward to the TF (and GRSP).

The first meeting of TWSG was held on 28 September 2021.

It was pointed out that Draft Amendment 3 (ECE/TRANS/WP.29/2021/53) serves as a clarification of the headform test procedure that is currently in practice without changing or imposing any new requirements.

It was found that the sequence of test area determination being a key point to clarify the situation.

It was also found that the US interpretation of the GTR9 markup is that HIC1,000 in the tested zone must at least lead to a HIC1,000 area expanding over 2/3 of the area of the complete bonnet top, and that this approach is different to the prescriptions in Draft Amendment 3 to UN-GTR9 and UN-R 127 where 2/3 of the impact area must meet HIC1,000.

Consensus was reached on the need to first create a common understanding regarding the markup sequence, main contributing factors to the actual headform acceleration (measuring point, target/aiming point, CoG, first contact point) and the permission of tests in the offset zone. Intention would be to implement a consensus on markup and test area to the best possible extent.

The second meeting of TWSG was held on 02 November 2021.

During the meeting it was found that, different to Draft Amendment 3, the US interpretation of UN-GTR9 would allow tests outside the reference lines, but in that case without a need to meet any performance targets (“no requirement zone”).

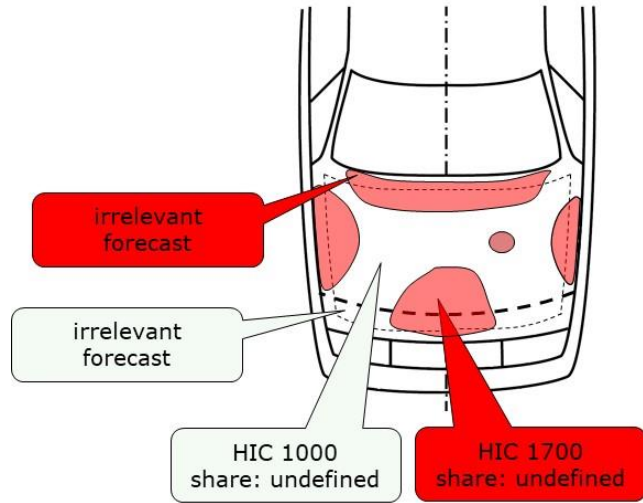
It was clarified that additional provisions were needed according to the US interpretation, to address contingencies in the current text.

Though not convinced from the advantages of the “2D” headform alignment, the US indicated agreement to this method in case of permitting tests with the headform center of gravity aiming at points located well within the lateral offset zones.

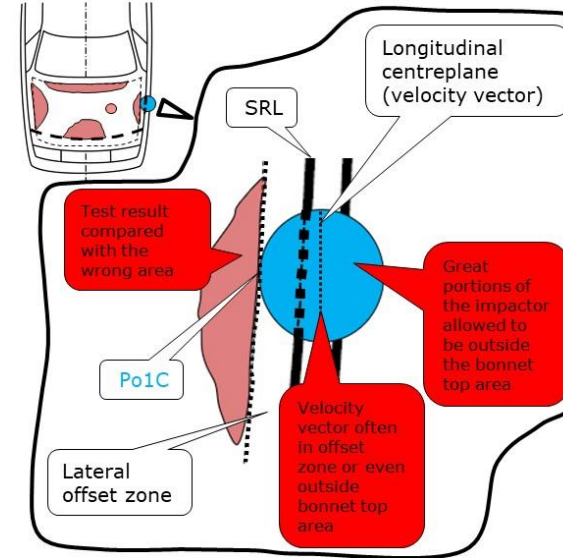
For that purpose, a alternative lateral boundary line was evolved during the meeting, without agreement on this being an interpretation of the markup allowed by GTR9 in its version in force.

The final meeting of TWSG was held on 03 December 2021.

The only two possible interpretations of markup sequence and headform alignment as understood by the majority of group members were compared and possible shortcomings of what was believed being the US interpretation were discussed.



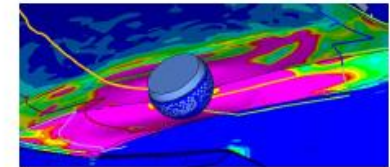
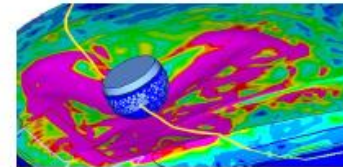
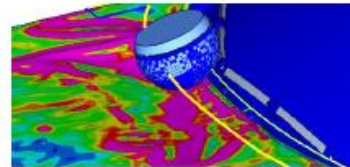
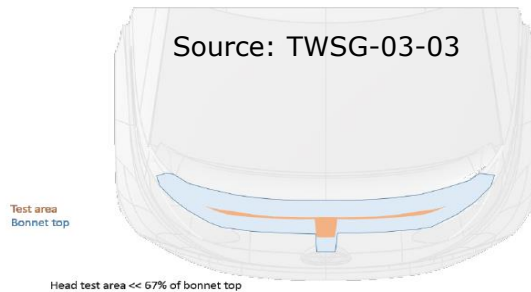
Source: TWSG-03-02



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However, it turned out that neither of the two depicted ways of interpretation of UN-GTR9 entirely corresponded to the understanding of the US who read GTR9 in a way that at least two thirds of the bonnet top area must be located in the impact area and zones rather than impact points are to be assessed.

It was demonstrated in the meeting, that those prerequisites cannot always be met. Besides, a "no test zone" for hiding areas as one of the US concerns does not exist.



Source: TWSG-03-03

The majority of the group understood Draft Amendment 3 as a clarification of the practice already in place in the European Union, Japan and Korea, while the US interpretation of transposing GTR9 to compliance testing still being under development, with rulemaking not yet started.

At this point in time, based on the only available fully elaborated procedure which is in place since many years already (and always based on UN-R 127.01), no common agreement could be achieved for the 1998 agreement.

It was found that without a clear and complete proposal from the US containing alternative changes to GTR9 different to Draft Amendment 3 it would be difficult to anonymously agree upon anything else.

An adoption of Draft Amendment 3 to UN-GTR9 as laid down in document ECE/TRANS/WP.29/2021/53 remains unlikely.

Due to the absence of a full technical understanding of NHTSA's concerns and any alternative proposal, no modifications to Draft Amendment 3 could be proposed for the time being.

For further information, please refer to:

<https://files.bast.de/index.php/s/pk4WdyfgyRk5A9H>

For questions, please contact:

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