

Transmitted by the Expert from the United States of America

PROPOSAL FOR DRAFT AMENDMENTS TO DRAFT GLOBAL TECHNICAL  
REGULATION (GTR) ON HEAD RESTRAINTS

**A. PROPOSAL**

Amendment to Part A., STATEMENT OF TECHNICAL RATIONALE AND  
JUSTIFICATION

Amend Section 4 to read as follows:

4. PROCEDURAL BACKGROUND

During the one-hundred-twenty-sixth session of the World Forum for Harmonization of Vehicle Regulation (WP.29) of March 2002, the Executive Committee of the 1998 Agreement (AC.3) adopted a Program of Work, which includes the development of a global technical regulation (gtr) to address neck injuries in crashes. The U.S.A. volunteered to lead the group's efforts and develop a document detailing the recommended requirements for the gtr. The U.S.A. presented an informal document (WP.29-134-12) in November 2004 proposing the work and highlighting the relevant issues to be addressed in the gtr. This proposal was adopted at the March 2005 session of WP.29 (TRANS/WP.29/AC.3/13). The Working Party on Passive Safety (GRSP) developed the head restraint gtr. **During the course of development, the Working Party of Experts sought and received guidance from AC.3 on some issues (WP.29-142-23 and WP.29-143-23rev.1).** At its December 2007 session, GRSP concluded its work and agreed to recommend to the Executive Committee the establishment of this gtr into the Global Registry.

**B. JUSTIFICATION**

During the informal group discussions, some delegates expressed a wish to explicitly recognize the direction received from AC.3 in this document. After reviewing how similar advice was addressed in the Glazing gtr, the United States recommends this language.

**A. PROPOSAL**

Amendment to Part A., STATEMENT OF TECHNICAL RATIONALE AND  
JUSTIFICATION

Insert the following footnote after each mention of an EEVC report submitted to the informal group after the November 2007 meeting in Basildon, UK:

This report was made available to the Working Party approximately one month before the session of GRSP where this gtr was finalized. As a result, all Contracting Parties did not have sufficient time to fully evaluate the report, and therefore have not accepted its conclusions at this time. It is anticipated that it will be part of the discussion within Phase 2.

## **B. JUSTIFICATION**

The United States has expressed these concerns about these reports and if the reports are to be mentioned in the document feels this opinion must also be included.

## **A. PROPOSAL**

### Amendment to Part A., STATEMENT OF TECHNICAL RATIONALE AND JUSTIFICATION

Replace the first and third full paragraphs on page 11 of GRSP-42-24 rev. 1 with the following three paragraphs:

While the Working Party of Experts is recommending this dynamic test option, **it is aware of** ~~there was some~~ criticism associated with the use of the Hybrid III dummy. Although there is a paper by Ford (SAE 973342), which argues that the 50th percentile male Hybrid III neck is sufficiently biofidelic in the rearward direction. The EEVC report “The Use of the Hybrid III Dummy in Low Speede Rear Impact Testing,” (September 2007) showed the 50th percentile male Hybrid III neck lacks sufficient biofidelity to be a useful tool for rear impact testing ~~and therefore cautioned against its use.~~ The EEVC also observed that the interaction of the rigid thoracic spine of the Hybrid III with the seat back is not humanlike ~~which might affect the real world performance of dynamic head restraints.~~

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~~At the direction of AC.3, recognising the desire of some contracting parties to proceed at a different pace~~**As some Contracting Parties believed that a modified dynamic test alternative should not be delayed,** even if it is only an interim step toward a more advanced dummy, the gtr contains recommendations to permit the use of the Hybrid III dummy in the assessment of dynamic head restraints. Nevertheless, the Working Party of Experts acknowledges the agreement of AC.3 that the option for a dynamic test using the BioRID II test dummy **also be** ~~is~~ recognised in this gtr. ~~We~~**The Working Group** also recognise that some Contracting Parties may wish to adopt alternative measures using the BioRID II dummy as soon as procedures suitable to the needs of their jurisdiction are developed.

## **B. JUSTIFICATION**

The United States has acknowledged the limitations of the Hybrid III test dummy. However, it is only test dummy that is available at this time. For this reason, the United States would like to remove the two stricken clauses in the first of these paragraphs which it feels makes strong conclusions that have not been accepted by all members of the Working Party.

We believe the first sentence is not an accurate reflection of the AC.3 guidance and have also found that it is confusing to some, and believe this edit accurately reflects the intent of the paragraph.