PVGTR 2004-4 (USA)

DESCRIPTION of the proposed GLOBAL BRAKING REGULATION

The GTR on **passenger vehicle braking systems** will be applicable primarily to vehicles of Category 1-1.* The performance and test requirements for the vehicles being certified will be based on the stringency needed to at least maintain the **current** safety benefits in a cost effective manner. The GTR will be developed based in part on existing National Regulations, Directives of Contracting Parties, and International Voluntary Standards and Recommended Practices..

INTENT AND PROCESS

The primary focus of the GTR process is to develop harmonized performance requirements and test procedures. The harmonized requirements will be developed from the existing performance requirements currently included in the described contents of the Compendium of Candidate Regulations. Since the ECE R13-H and the FMVSS No. 135 appear to be the Regulations that are most widely used at the National level in many countries, requirements in these Regulations will be given special consideration as one of the main starting points for developing the GTR. These two Regulations contain many identical performance requirements, which were agreed on when the Standards were initially harmonized in the early-1990s, and include such requirements as cold effectiveness performance, high-speed performance, ABS performance, hot performance and parking brake performance.
All of these requirements, along with some others, are important elements of a good brake standard and will be fully considered for the GTR covering passenger vehicle braking. The GTR must also include test procedures for each performance requirement so as to minimize misinterpretation by the testing facilities. The results of additional research and testing, conducted by any Contracting Parties since the existing regulations were promulgated, will also be considered in developing the requirements of the draft GTR.

The secondary focus of the GTR process is to develop harmonized equipment requirements, where it is possible to do so. Even though ECE R13-H and FMVSS No. 135 are clearly not as harmonized in this area, further agreement will be needed on aspects of each Standard's braking system equipment requirements. . The equipment requirements in the GTR will be specified in the General Requirements section. These are likely to include labeling requirements, warning indicator requirements, and other general requirements that are not performance-based but are included under current legislative regimes.

There are some requirements in the Regulations, which will be difficult to harmonize due to differences in philosophy, or significant technical issues
The administrative procedures could be drafted as a separate Annex to the body of the GTR.

*TRANS/WP29/2004/25

ECE R13-H, as written, contains many elements of a good Braking System Regulation – general requirements, equipment requirements, performance requirements, and vehicle conditions. However, the Regulation lacks clear test procedures and test conditions, which could result in misinterpretation of the Regulation when conducting vehicle tests. This introduces a level of subjectivity into the Regulation, which could pose a problem for countries that use a Self-Certification regime for compliance. The GTR will try to resolve these differences.
However, if an element of the GTR cannot be resolved by the Working Party, it will be identified and dealt with in accordance with the protocol established by AC.3 and WP.29.

STRUCTURE

The GTR will be written based on the Alternative format, as described in TRANS/WP.29/883, for Regulations with many different Requirements and Test Procedures for each vehicle type. This format will present a clear and self-contained description of each performance requirement, the specified vehicle parameters, and test conditions and procedures. Brake system regulations typically include a range of tests, each of which has its own vehicle conditions, test conditions and performance requirements. For example, some tests require that the vehicle be tested both in the lightly-loaded and laden conditions, whereas others require testing only in the laden condition. Other parameters typically specified for each test include the initial brake temperature, the initial test speed, the number of stops, the peak friction coefficient of the surface, and the allowed pedal force requirements etc. The format selected will make it easier for the user of the Regulation to easily find and understand what each requirement contains, which will be an important factor in limiting the possibility of misinterpretation.