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**ECONOMIC COMMISSION FOR EUROPE**

**INLAND TRANSPORT COMMITTEE**

World Forum for Harmonization of Vehicle Regulations

Executive Committee of the 1998 Global Agreement

**PROPOSAL TO DEVELOP A GLOBAL TECHNICAL REGULATION  
CONCERNING ELECTRONIC STABILITY CONTROL SYSTEMS**

United States of America \*/

Note: The text reproduced below was considered and adopted by the Executive Committee (AC.3) of the 1998 Global Agreement at its nineteenth session, in March 2007. It is based on document ECE/TRANS/WP.29/2007/17 that had been submitted by the United States of America, not amended (ECE/TRANS/WP.29/1058, para. 97).

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\*/ Technical sponsor of this global technical regulation (gtr).

A. Objective of the proposal

1. The United States of America proposes the development of a global technical regulation (gtr) under the 1998 Agreement for Electronic Stability Control (ESC) systems. Crash data studies conducted in Europe, Japan and the United States of America indicate that ESC systems are very effective in reducing single-vehicle crashes involving light vehicles (passenger cars, multipurpose passenger vehicles (vans and sport utility vehicles), buses and pickup trucks with a gross vehicle weight rating of 4,536 kg or less). Studies in the United States of America indicate that the installation of ESC systems would reduce single-vehicle crashes of passenger cars by 34 per cent and single vehicle crashes of sport utility vehicles (SUVs) by 59 percent in the United States of America.

2. ESC systems use automatic, computer-controlled braking of individual wheels to assist the driver in maintaining control (and the vehicle's intended heading) in critical driving conditions in which the vehicle is beginning to lose either directional stability at the rear wheels (spin out) or directional control at the front wheels (plow out). It is estimated that if all light vehicles on the road in the United States of America were equipped with ECS systems, 5,300 to 10,300 lives would be saved and 168,000 to 252,000 injuries would be prevented in all types of crashes annually. These would be the greatest benefits produced by any vehicle safety device since the introduction of seat belts.

3. Work on the proposed gtr for ESC systems would provide an opportunity to consider international safety concerns as well as available technological developments. This proposal reflects a recent proposal to establish an ESC standard in the United States of America. In light of its rulemaking proceeding, the United States of America believes that this would be an excellent opportunity for the international community to take the next step and develop and establish a gtr in this area.

B Description of the proposed regulation

4. The gtr would specify requirements for ESC systems to reduce the loss of control of vehicles and the risk of death and serious injury resulting from loss of control. The United States of America expects the gtr will specify the requirements for ESC systems, and require that vehicles be equipped with those systems, and meet dynamic performance tests.

5. Any element of the gtr that could not be resolved by the Working Party would be identified and dealt with in accordance with the protocol established by AC.3 and WP.29. The proposed gtr would be drafted in the format adopted by WP.29 (TRANS/WP.29/882).

C. Existing regulations and directives

6. The following regulations and standards would be taken into account during the development of the new gtr regarding ESC systems:

- (a) U.S. Code of Federal Regulations (CFR) Title 49: Transportation; Parts 571 and 585: Electronic Stability Control Systems (Proposed).

- (b) International Voluntary Standards – SAE J2564 revised in June 2004 – Automotive Stability Enhancement Systems.

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