Informal document No. 11 (128th WP.29 - 6th AC.3 - 12-15 November 2002, agenda item B.2.1.1.)

PROPOSAL TO DEVELOP A GLOBAL TECHNICAL REGULATION CONCERNING MOTORCYCLE BRAKE SYSTEMS

Transmitted by the representative of Canada

<u>Note</u>: This document is submitted by Canada to AC.3 and WP.29 for consideration. It contains a proposal for a global technical regulation (gtr), regarding motorcycle brake systems, to be developed under the 1998 Agreement Concerning the Establishment of global technical regulation for Wheeled Vehicles, Equipment and Parts Which Can be Fitted and/or be Used on Wheeled Vehicles.

Objective of the proposal

The objective of this proposal is to develop a global technical regulation regarding motorcycle brake systems. The proposed regulation will be based on existing international regulations. If feasible the new regulation will contain provisions regarding modern technologies such as Anti-Lock Brake System (ABS) and Combine Brake System (CBS).

In view of the 1998 Global Agreement we now have an opportunity to harmonize the motorcycle brake systems regulations. Moreover, the work on the global forum will provide an opportunity to consider in the new regulation most, if not all, international concerns and technological developments available.

As motorcycles are usually sold around the world, everyone could benefit from harmonization and new technology based improvement of motorcycle brake systems regulations. The benefits to the governments would be the elimination of trade barriers; creation of better environment for efficient rule making and possibly improvement of motorcycle the safety. Manufacturers would benefit from reduction of the cost of development, testing and production process of new models. Finally the consumer would benefit by having better choice of motorcycle models built to higher, internationally recognized standards providing a better level of safety and at a lower price.

With the improvement of disc brake systems and the recent introduction of new technologies such as ABS and CBS, modern motorcycles are available with very sophisticated effective braking systems. It is now of interest to the international regulatory community to assess whether the current standards for motorcycle brakes are still appropriate in light of these developments. Furthermore, if these new technologies could provide significant improvement in rider safety.

Description of the proposed regulation

The global technical regulation will be developed in two distinct parts based on the existing regulations, directives and industry standards listed below. The first part will consist of harmonization of existing regulations based on their stringency and cost effectiveness.

The second part of the development of the gtr will consider the potential safety improvements and the corresponding cost benefits arising from incorporation of provisions related to new technologies like ABS and CBS.

The results of the motorcycle brakes test program initiated by the United States in conjunction with Canada, will be factored into the requirements of the proposed gtr.

Existing regulations and directives

Though there are no regulations currently contained in the Compendium of Candidates, the following regulations will be taken into account during development of the new global technical regulation regarding motorcycle brake systems.

- UN/ECE Regulation 78 Uniform provisions concerning the approval of vehicles of category L vehicles with regard to braking.
- U.S. Code of Federal Regulations (CFR) Title 49: Transportation; Part 571.122: Motorcycle brake systems.

Canada Motor Vehicle Safety Regulation No. 122 – Motorcycle brake systems.

EU Directive 93/14/EEC, braking for category L vehicles (in effect, the same as ECE Regulation 78)

Japan Safety Standard J12-61

Australian Design Rule 33/00 – Brake systems for motorcycles and mopeds.

International Voluntary Standards

ISO 8710:1995,	Motorcycles – Brakes and braking devices - tests and measurement methods
ISO 12364:2001,	Two-wheeled motorcycles - Antilock braking systems (ABS) - tests and measurement methods
ISO 8709:1995,	Mopeds – Brakes and braking devices - tests and measurement methods
ISO 12366:2001,	Two-wheeled mopeds - Antilock braking systems (ABS) - tests and measurement methods