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World Forum for Harmonization of Vehicle Regulations

Executive Committee of the 1998 Global Agreement

**PROPOSAL TO DEVELOP A GLOBAL TECHNICAL REGULATION CONCERNING
TYRES OF LIGHT VEHICLES**

Transmitted by the representative of France

Note: The text reproduced below was considered and adopted by the Executive Committee (AC.3) of the 1998 Global Agreement at its eighteenth session, in November 2006. It is based on document ECE/TRANS/WP.29/2006/139 that had been submitted by France, not amended (ECE/TRANS/WP.29/1056, para. 111).

A. OBJECTIVE OF THE PROPOSAL

Tyres are the point of contact between the vehicle and the road, so they have a major impact on road safety, road noise, energy consumption and hence emissions. For this reason they are subject to various technical requirements in many countries.

These requirements address similar concerns. Tyres should provide optimum performance at all technically possible speeds; their performance should be consistent and verified by a high-speed endurance test. Correct behaviour in the event of under-inflation and good grip on wet surfaces are other essential safety features. Certain additional parameters are less universally required yet merit consideration from the standpoint of global harmonization.

In addition, the conditions of geometric compatibility between a vehicle and its tyres, either on first use or when the tyre is changed, ensure standardization of the definition and measurement of the main dimensional parameters and enable the relevant specifications to be indicated on the sidewall of the tyre. Conformity with regulations may also be indicated on the sidewall.

It is both feasible and desirable to ensure global harmonization of the different regulations listed below.

The objective of this proposal is:

- (a) To establish a set of tests according to parameters that the Contracting Parties judge essential for road safety and environmental protection;
- (b) To define a uniform set of globally standardized markings.

B. DESCRIPTION OF THE PROPOSED REGULATION

As indicated below, certain regulations are considered to be universal requirements, whereas others are less universal, and the proposed regulation should reflect this.

The proposed regulation has three modules:

- (a) A core module containing the minimum requirements enforced by all the Contracting Parties. It would include:
 - Prescribed markings
 - Dimension codes
 - High-speed safety test
 - Endurance test, including for under-inflated tyres
 - Wet grip test

- (b) Two optional modules, at the discretion of each Contracting Party
 - (i) Optional module 1
 - Perforation energy test
 - Loosening test
 - (ii) Optional module 2
 - Road noise regulations

The core module should be subscribed to by all Contracting Parties. Each Contracting Party would be free to apply either or both optional modules, or neither.

C. International regulations and norms in force

C.1. Regulations annexed to the 1958 Agreement

- (a) Regulation No. 30
- (b) Regulation No. 117, amended

C.2. Directives of the European Union (relating to C.1)

- (a) Directive 92/23/EEC
- (b) Directive 2001/43/EC

C.3. United States of America

- (a) U.S. Code of Federal Regulations (CFR) Title 49: Transportation; Part 571.109: New Pneumatic Tires
- (b) U.S. Code of Federal Regulations (CFR) Title 49: Transportation; Part 571.110: Tire Selection and Rims
- (c) U.S. Code of Federal Regulations (CFR) Title 49: Transportation; Part 571.119: New Pneumatic Tires for Vehicles other than Passenger Cars
- (d) U.S. Code of Federal Regulations (CFR) Title 49: Transportation; Part 571.202: Tire Selection and Rims for Motor Vehicles other than Passenger Cars
- (e) U.S. Code of Federal Regulations (CFR) Title 49: Transportation; Part 571.138: Tire Pressure Monitoring Systems
- (f) U.S. Code of Federal Regulations (CFR) Title 49: Transportation; Part 571.139: New Pneumatic Tires for Light Vehicles
- (g) SAE J918c Passenger Car Tire Performance Requirements and Test Procedures
- (h) U.S. Code of Federal Regulations (CFR) Title 49: Transportation; Part 569: Regrooved Tires
- (i) U.S. Code of Federal Regulations (CFR) Title 49: Transportation; Part 574: Tire Identification and Record Keeping

C.4. International norms

- (a) ISO 4000-1 Passenger car tyres and rims (metric series)
- (b) ISO 10191 Passenger car tyres - Verifying tyre capabilities – Laboratory test methods
- (c) ISO 16992 Passenger car tyres - Spare unit substitutive equipment (SUSE)
- (d) ISO 17269 Passenger car tyres - Methods for measuring rolling circumference - Loaded new tyres
- (e) ISO 23671 Passenger car tyres - Method for measuring relative wet grip performance - Loaded new tyres
- (f) ISO 18164 Passenger car, truck, bus and motorcycle tyres - Methods of measuring rolling resistance
