



## Economic and Social Council

Distr.: General  
1 April 2010

Original: English

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### Economic Commission for Europe

#### Inland Transport Committee

#### World Forum for Harmonization of Vehicle Regulations

##### One-hundred-and-fifty-first session

Geneva, 22 – 25 June 2010

Item 16.7 of the provisional agenda

**Progress in the development of new global technical regulations or amendments to established global technical regulations - Tyres**

### **Addition of rolling resistance provisions to the global technical regulation on tyres**

#### **Submitted by the representative of the European Union\***

The text reproduced below was introduced by the representative of the European Union for the development of the addition of rolling resistance provisions to the global technical regulation on tyres. It is based on informal document WP.29-150-23, distributed at the 150<sup>th</sup> session (ECE/TRANS/WP.29/1083, paragraph 98).

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\* In accordance with the programme of work of the Inland Transport Committee for 2006–2010 (ECE/TRANS/166/Add.1, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

## I. Objective of the proposal

1. The objective of this proposal is to include provisions for tyre rolling resistance test requirements and limits in the draft global technical regulation (gtr) on tyres, in order to enable the gtr requirements to be deemed as equivalent to existing Regulations for Contracting Parties who require rolling resistance limits in their domestic legislation.

## II. Background

2. As part of the European Union strategy to reduce CO<sub>2</sub> emissions from road vehicles, type approval legislation<sup>1</sup> was adopted in 2009 to require tyres for road vehicles to meet specified requirements with regard to rolling resistance. It is estimated that the use of low rolling resistance tyres can reduce the average rolling vehicle fuel consumption by around 3 per cent, without any significant adverse effect on other critical tyre parameters. The proposed requirements will come into effect in two phases, according to the timetable indicated below.

<i>Tyre category</i>	<i>Maximum Rolling Resistance(kg/Tonne)</i>	
	Stage 1	Stage 2
C1 (car tyres)	12	10.5
C2 (light commercial tyres)	10.5	9
C3 (heavy commercial tyres)	8	6.5
	Implementation dates	
New types	2012	2016
Existing types	2014 (2016 for C3 tyres)	2018 (2020 for C3 tyres)

3. It is intended to implement the new requirements by mandating an amended version of Regulation No. 117, currently in the form of document ECE/TRANS/WP.29/GRB/2010/3, which is expected to be on the agenda for the World Forum at its June 2010 session. The requirements for wet grip and rolling noise, also contained in Regulation No. 117 will also become mandatory for the purposes of European Union (EU) type-approval, both for tyres as components and tyres fitted to new vehicles.

## III. Effect of adopting the tyre gtr.

4. The first phase of the tyre gtr is now expected to be adopted by the World Forum in March 2012 at the earliest, so it will not enter into force until after the rolling resistance

<sup>1</sup> Regulation (EC) no 661/2009 of the European Parliament and of the Council of 13 July 2009 concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefore. See: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:200:0001:0024:EN:PDF>.

requirements become mandatory within the EU. Therefore if there are no rolling resistance provisions in the gtr (or if the rolling resistance provisions are inferior to those contained in Regulation No. 117) it will be not be possible for tyres meeting the gtr requirements to be automatically considered as equivalent to tyres meeting the existing regulations. Therefore, in order for the gtr to be acceptable for purposes of type- approval either in the European Union or in the territories of other Contracting Parties to the 1958 Agreement, who apply the rolling resistance requirements as of Regulation No. 117, it would be necessary to include equivalent provisions to those of the Regulation No. 117, at least as an 'optional' element of the gtr. If the modular approach for the gtr is retained, it is envisaged that rolling resistance requirements could be included in the same optional module as rolling noise. Alternatively, if Contracting Parties to the 1998 Agreement agree, rolling resistance could be included as one of the core requirements of the gtr.

#### **IV. Proposal**

5. Subject to the agreement of the Executive Committee of the 1998 Agreement (AC.3) and the adoption of the proposed amendments to Regulation No. 117 by the Contracting Parties to the 1958 Agreement, the European Commission will propose amendments to the draft gtr for the next meeting of the informal group, in order to include provisions for rolling resistance on tyres, based on the provisions agreed for Regulation No. 117.

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