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**ECONOMIC COMMISSION FOR EUROPE**

**INLAND TRANSPORT COMMITTEE**

World Forum for Harmonization of Vehicle Regulations

Working Party on Brakes and Running Gear

Sixty-fourth session

Geneva, 16-19 September 2008

Item 8(d) of the provisional agenda

**TYRES**

Regulation No. 109

(Retreaded pneumatic tyres for commercial vehicles and their trailers)

Proposal for draft amendments to Regulation No. 109

Submitted by the expert from the European Tyre and Rim Technical Organisation <sup>\*/</sup>

The text reproduced below was prepared by the expert from the European Tyre and Rim Technical Organization (ETRTO) in order to improve in Regulation No. 109 the provisions on the mandatory visual inspection. The modifications to the existing text of the Regulation are marked in bold characters or as strikethrough.

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<sup>\*/</sup> 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 performance of vehicles. The present document is submitted in conformity with that mandate.

A. PROPOSAL

Paragraph 6.5.1., amend to read:

"6.5.1. After curing, whilst a degree of heat is retained in a tyre, each retreaded tyre shall be examined to ensure that it is free from any apparent defects. **When the tyre presents a visible defect, it has to be the subject of a specific examination to determine the appropriate action on the tyre.** During or after retreading the tyre shall be inflated to at least 1.5 bar (150 kPa) for examination. **Other methods more adapted than visual inspection which do not require tyre inflation can also be used with the agreement of the approval authorities.** ~~Where there is any apparent defect in the profile of the tyre (e.g. blister, depression, etc.) the tyre shall be specifically examined to determine the cause of this defect."~~

B. JUSTIFICATION

When Regulation No. 109 was originally written, the only viable method of examining a retreaded truck tyre was a visual inspection in a slightly inflated state. In the intervening years, technical progress has allowed the verification of retreaded tyres by new means (e.g. shearography, x-ray inspection, ultrasonic verification, etc.) that do not require the tyre to be inflated and visually examined. In order to allow this technological progress to be fully reflected in the retreading process, ETRTO proposes to add alternative methods in addition to the restrictive inflated visual examination. The inflated state examination, thus, remains as one of several possible alternatives, depending on the organisation of the plant. It should be noted that the requirement described in paragraph 6.5.2. for a test of the structural integrity of the retreaded tyre is not modified by this proposed amendment.

In addition, an investigation into the cause of any defect discovered should not be part of a Regulation.

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