



**Economic and Social
Council**

Distr.
GENERAL

ECE/TRANS/WP.29/GRRF/2006/17
6 July 2006

Original: ENGLISH
ENGLISH AND FRENCH ONLY

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations (WP.29)

Working Party on Brakes and Running Gear (GRRF)

Sixtieth session

Geneva, 18–22 September 2006

Item 1.1.2. of the provisional agenda

PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 13-H
(Braking)

Submitted by the expert from Germany

Note: The text reproduced below was prepared by the expert from Germany to insert into the Regulation provisions regarding the periodical technical inspection (PTI) (see report ECE/TRANS/WP.29/GRRF/59, para. 4). The modifications to the current text of the Regulation are marked in **bold** characters.

Note: This document is distributed to the Experts on Brakes and Running Gear only.

GE.06-

A. PROPOSAL

Paragraph 5.1.1.5., should be deleted.

Paragraph 5.1.1.6., renumber as paragraph 5.1.1.5.

Add new paragraphs 5.1.4. to 5.1.4.3., to read:

"5.1.4. Provisions for the periodic technical inspection of braking systems

5.1.4.1. It shall be possible to assess the wear condition of the components of the service brake that are subject to wear e.g. friction linings and drums/discs (in the case of drums or discs, wear assessment may not necessarily be carried out at the time of periodic technical inspection). The method by which this may be realized is defined in paragraphs 5.2.11.2. of this Regulation.

5.1.4.2. It shall be possible to verify, in a simple way, the correct operational status of those complex electronic systems which have control over braking. If special information is needed, this shall be made freely available.

5.1.4.2.1. At the time of type approval, the means implemented to protect against simple unauthorized modification of the operation to the verification means chosen by the manufacturer (e.g. warning signal) shall be confidentially outlined. Alternatively, this protection requirement is fulfilled when a secondary means of checking the correct operational status is available.

5.1.4.3. It shall be possible to generate maximum braking forces under static conditions on a rolling road or roller brake tester."

Paragraph 5.2.11.2., amend to read:

"5.2.11.2. Checking the wear of the service brake friction components

5.2.11.2.1. It shall be possible to easily check this wear on service brake linings from the outside or underside of the vehicle utilizing only the tools or equipment normally supplied with the vehicle, for instance by the provision of appropriate inspection holes or by some other means. Alternatively, acoustic or optical devices warning the driver at his driving position when lining replacement is necessary are acceptable. The yellow warning signal specified in paragraph 5.2.21.1.2. below may be used as the optical warning signal.

5.2.11.2.2. Assessment of the wear condition of the friction surfaces of brake discs or drums may only be performed by direct measurement of the actual components, which may necessitate some level of disassembly. Therefore, at the time of type approval, the vehicle manufacturer shall define the following:

(a) The method by which wear of the friction surfaces of drums and discs may be assessed, including the level of disassembly required and tools and process required to achieve this.

(b) Information defining the maximum acceptable wear limit at the point at which replacement becomes necessary.

This information shall be made freely available e.g. vehicle handbook or electronic data record."

B. JUSTIFICATION

Following the discussion at the fifty-ninth GRRF session, the expert from Germany prepared this document proposing to insert into Regulation No. 13-H provisions regarding the periodical technical inspection (PTI) (see report ECE/TRANS/WP.29/GRRF/59, para. 4). The existing paragraph 5.1.1.5. is deleted, but the text is re-inserted as new paragraph 5.1.4.3.
