

**Economic and Social Council**Distr.: General
19 December 2012

Original: English

Economic Commission for Europe**Inland Transport Committee****World Forum for Harmonization of Vehicle Regulations****159th session**

Geneva, 12–15 March 2013

Item 16.1 of the provisional agenda

Progress on the development of new global technical regulations (gtrs) and of amendments to established global technical regulations (gtrs) – Gtr No. 2 (motorcycles emissions)**Authorization to develop amendments to gtr No. 2 (motorcycles emissions)****Submitted by the representative of Japan***

This document, prepared by Japan as technical sponsor, contains the authorization to GRPE to develop amendments to gtr No. 2 on motorcycles emissions. It is based on informal document WP.29-158-11 considered at the 158th session of the World Forum (ECE/TRANS/WP.29/1099, para. 112). It is distributed to the World Forum and to the Executive Committee of the 1998 Agreement (AC.3) for consideration. In accordance with the provisions of paras. 6.3.4.2., 6.3.7. and 6.4. of the 1998 Agreement, this document shall be appended to the gtr once adopted

* In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106 and ECE/TRANS/2010/8, 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. Background

1. The Executive Committee of the 1998 Agreement (AC.3) agreed to give a mandate to the Working Party on Pollution and Energy (GRPE) to propose amendments to global technical regulation (gtr) No. 2 on Worldwide harmonized motorcycle emissions test cycle (WMTC) as outlined below, in accordance with paragraph 6.4 of the 1998 Agreement (ECE/TRNAS/WP.29/1099, para. 112).

II. Justification

2. Japanese experts have identified some items of concerns in gtr No.2 on WMTC. Therefore, a number of amendments should be introduced into the text of the gtr. The identified concerns are outlined in document GRPE-64-05, which contains a concrete proposal to develop amendments and its justification. GRPE-64-05 is reproduced in the following pages. The proposal was presented to GRPE at its sixty-fourth session (ECE/TRANS/WP.29/GRPE/64, paras. 50-52).

3. Following the AC.3 agreement, Japan volunteers to work on the basis of above-mentioned document together with interested Contracting Parties to present a proposal for amending gtr No. 2 at the sixty-fifth session of GRPE in January 2013.

III. Proposal for a supplement to gtr No. 2 (ECE/TRANS/180/Add.2/Amend.1)

Paragraph 8.1.1.4.2., replace the Equation 8-2, to read:

$$HC_m = \frac{HC_c \times V \times dHC}{dist \times 10^{6-3}} \quad \text{Equation 8-2}$$

Paragraph 8.1.1.4.3., replace the Equation 8-4, to read:

$$CO_m = \frac{CO_c \times V \times dCO}{dist \times 10^{6-3}} \quad \text{Equation 8-4}$$

Paragraph 8.1.1.4.4., replace the Equation 8-6, to read:

$$NO_{xm} = \frac{NO_{xc} \times K_h \times V \times dNO_2}{dist \times 10^{6-3}} \quad \text{Equation 8-6}$$

Paragraph 8.1.1.4.5., replace the Equation 8-10, to read:

$$CO_{2m} = \frac{CO_{2c} \times V \times dCO_2}{dist \times 10^2} \times 10 \quad \text{Equation 8-10}$$

Annex 13, paragraph 1. Figure A13-1, correct the line for "acc.gear 1" in the upper figure for "gear use during acceleration phases" as reproduced below.

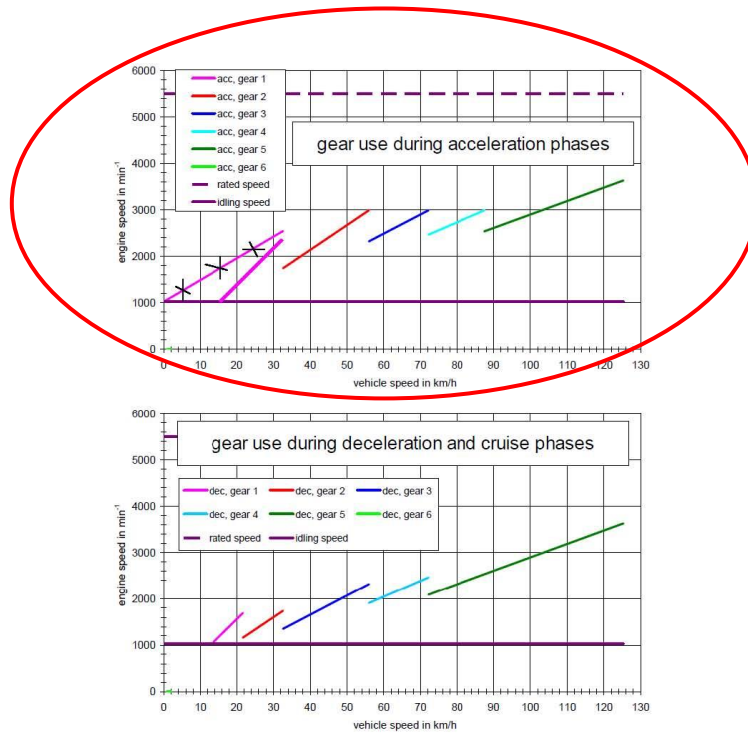


Figure A13-1: Example of a gearshift sketch