

Proposal for a mandate to amend UN gtr No 2 (WMTC)

I. Proposal

1. The Executive Committee of the 1998 Agreement (AC.3) is requested to consider giving a mandate to the Working Party on Pollution and Energy (GRPE) to propose amendments to UN Global Technical Regulation (UN GTR) No. 2 on Worldwide harmonized motorcycle emissions test cycle (WMTC) as outlined below, in accordance with paragraph 6.4. of the 1998 Agreement.

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

Transmitted by the expert from Japan

Informal document GRPE-64-05
(64th GRPE, 5-8 June 2012,
agenda item 7)

Proposal for corrigendum to global technical regulation (gtr) No. 2
(ECE/TRANS/180/Add.2/Amend.1)

I. Proposal

Paragraph 8.1.1.4.2., replace the Equation 8-2 as below:

"8.1.1.4.2. Hydrocarbons

... by means of the following formula:

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

..."

Paragraph 8.1.1.4.3., replace the Equation 8-4 as below:

"8.1.1.4.3. Carbon monoxide

...by means of the following formula:

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

..."

Paragraph 8.1.1.4.4., replace the Equation 8-6 as below:

"8.1.1.4.4. Nitrogen oxides

...by means of the following formula:

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

..."

Paragraph 8.1.1.4.5., replace the Equation 8-10 as below:

"8.1.1.4.5. Carbon dioxide

... by means of the following formula:

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

..."

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 shown below.

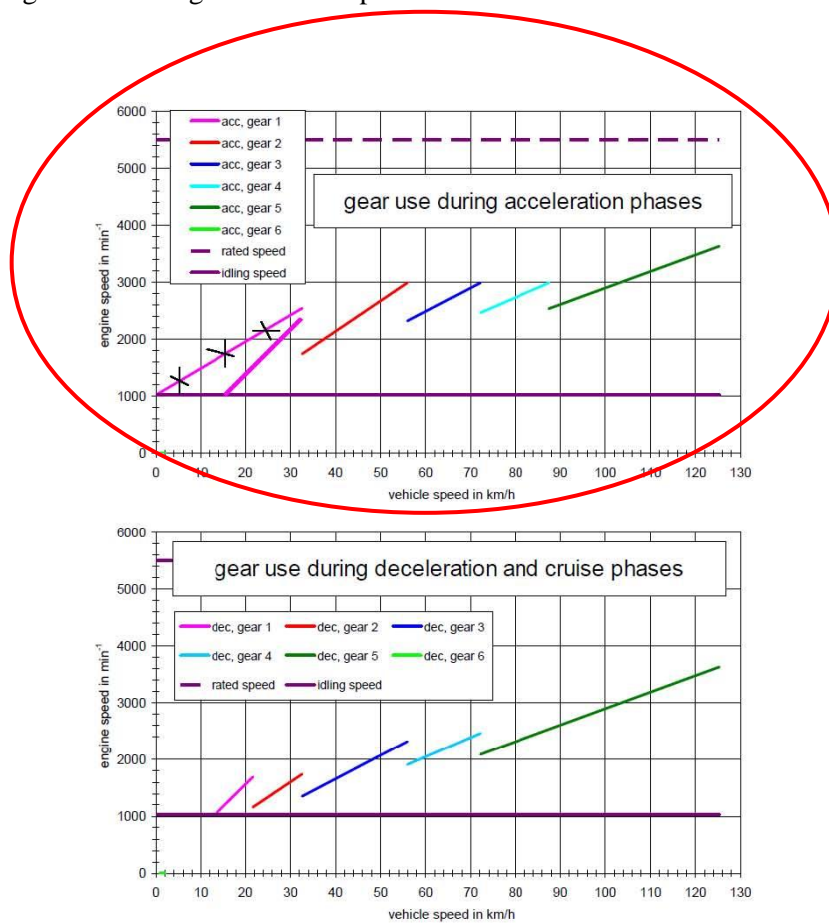


Figure A13-1: Example of a gearshift sketch

II. Justification

1. Paragraph 8

The equations 8-2, 8-4, 8-6, and 8-10 need to be corrected in accordance with the unit of each factor in the equation. The calculated pollutants are shown in kg/km, while the V is in m³ and dHC in kg/m³, which means the value needs to be multiplied by 10⁻³ (by 10 for CO₂) and the denominator needs to be corrected accordingly.

2. Annex 13, paragraph 1 Figure A13-1

In the upper figure for “gear use during acceleration phases”, the acceleration gear 1 starts from zero, which is not correct.
