Global registry

Created on 18 November 2004, pursuant to Article 6 of the Agreement concerning the establishing of global technical regulations for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles (ECE/TRANS/132 and Corr.1) done at Geneva on 25 June 1998

Addendum 2: Global technical regulation No. 2

Measurement procedure for two-wheeled motorcycles equipped with a positive or compression ignition engine with regard to the emission of gaseous pollutants, CO₂ emissions and fuel consumption

Amendment 3 - Appendix 1

Proposal and report pursuant to Article 6, paragraph 6.3.7. of the Agreement

• Authorization to develop amendments to global technical regulation No. 2 (Worldwide harmonized motorcycle emission test cycle) (ECE/TRANS/WP.29/AC.3/34).

• Report on the development of Amendment 3 to global technical regulation No. 2 (Worldwide harmonized motorcycle emission test cycle) (ECE/TRANS/WP.29/2013/54) adopted by AC.3 at its thirty-eighth session (ECE/TRANS/WP.29/1104, para. 105).

NATIONS UNIES
Authorization to develop amendments to gtr No. 2
(Motorcycles emissions)

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:

$$ HC_m = \frac{HC_c \times V \times dHC}{\text{dist} \times 10^{-3}} $$

Equation 8-2

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

$$ CO_m = \frac{CO_c \times V \times dCO}{\text{dist} \times 10^{-3}} $$

Equation 8-4

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

$$ NO_x_m = \frac{NO_{x_c} \times K_h \times V \times dNO_2}{\text{dist} \times 10^{-3}} $$

Equation 8-6

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

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

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
Report on the development of Amendment 3 to global technical regulation No. 2 (World-wide Motorcycle emissions Test Cycle (WMTC))

1. The Japanese experts have identified editorial errors in gtr No.2 (measurement procedure for two-wheeled motorcycles equipped with positive or compression ignition engine with regard to the emission of gaseous pollutants, CO$_2$ emissions and fuel consumption) on the World-wise harmonized Motorcycle Test Cycle (WMTC) as below:

   (a) Corrections to ECE/TRANS/180/Add.2: the equations 8-2, 8-4, 8-6 and 8-10 under paragraph 8. need to be made in accordance with the unit of each factor in the equation;

   (b) Correction to ECE/TRANS/180/Add.2/Corr.2: Figure A13-1 in the Annex 13, paragraph 1 needs to be replaced reflecting actual use conditions.

2. The Working Party on Pollution and Energy (GRPE) agreed, at its sixty-fourth session, to the Proposal of Japan, to correct these editorial errors (described in the informal document No. GRPE-64-05). The proposal was submitted with document ECE/TRANS/WP.29/GRPE/2013/4 to GRPE for adoption at the sixty-fifth GRPE session in January 2013.