

Status report on WMTC/Stage 2

Transmitted by the WMTC - Fundamental Element Group

After adoption of GTR No. 2 in June 2005, the work on Stage 2 of WMTC started. A first meeting of WMTC-FEG (Fundamental Element Group) took place on April 20 to 21 in Pune (India) at the Centre of ARAI (Automotive Research Association of India).

Performance Requirements

WMTC was adopted as GTR No. 2 without performance requirements in Stage 1. For Stage 2, the WMTC group was mandated to collect data and prepare information as a basis for the discussion about the introduction of performance requirements in GTR No. 2.

FEG recommends focusing on only solving the issues raised by India and limit values in Stage 2. The discussion about the worldwide harmonization of other performance requirements like durability, off cycle emissions or evaporative emissions should be postponed to a subsequent Stage 3.

In line with the 1998 Agreement, Contracting Parties are preparing proposals for the introduction of GTR No. 2 as an alternative to the existing national/regional legislation. This means the development of equivalent limit values on the basis of WMTC. FEG was informed about the situation and timelines:

EU: Proposal by the European Commission to introduce WMTC can be expected in 2006. A correlation study conducted by JRC is available.

Japan: Japan is conducting additional emissions tests with motorcycles meeting the latest Japanese emission legislation to establish equivalent limits on WMTC. Foreseen implementation is in 2 years, but final schedule still has to be decided.

US: Similar to EU and Japan, the USA is also expected to introduce WMTC as an optional alternative with equivalent limits to the present USA emission legislation.

China: China is expected to follow the EU approach.

In parallel, IMMA has already collected comparative data and test results for a correlation study, based on technology and regulations that will be in use/force in 2006-08. This can be the basis for further discussion by Contracting Parties of a possible harmonization of limit values, aiming on a timeframe of 2010 – 2012. For further progress in this field it is important to get additional correlation data from Contracting Parties and political guidance on exactly how individual Contracting Parties intend to act.

Analysis of Indian in-use data in relation to the test cycle modules of GTR No. 2

India is one of the biggest markets for motorized two wheelers in the world. The special situation in India (traffic, vehicles) leads to problems with the application of the existing WMTC cycle in GTR No. 2. WMTC doesn't reflect the Indian driving behaviour, and the current classification leads to problems with cycle-traceability for some of the Indian vehicle types.

Three reports are available from ARAI, TÜV Nord and JARI/IMMA. On this basis FEG considered the technical aspects and various possibilities. The outcome of the very intensive discussion was that a solution which meets the needs of all parties seems possible, taking the following principles into account:

- Avoid options in the GTR, if possible.
- Avoid fundamental differences to the existing cycles in GTR No. 2, if possible.
- Focus on reduced speed parts of the existing cycle in GTR No. 2 for changes.
- Identification of best possible distinguishing technical parameters for vehicle classification.

IMMA is organizing a small ad hoc group of experts (August and October) to analyse the existing data in detail and to prepare a proposal for next meeting of FEG (November).

Amendments / corrections to the text of GTR No. 2 and the Technical Report

The official documents of GTR No. 2, the regulation-text (ECE/TRANS/180/Add.2) and the Technical Report (ECE/TRANS/180/Add.2/Appendix1) require some corrections and can be improved upon in some fields. In addition to several minor points, FEG is considering the following items:

- Introduction of the USA's engine family concept as a basis for worst case decisions (IMMA proposal).
- Reduction of numbers of options in GTR No. 2. The remaining options should be clarified concerning the responsibilities (Contracting Parties, manufacturers, etc.).
- The 4-mode analysis results should be added to the Technical report.

With regard to the gearshift calculation programme, the current programmes on the ECE website should be replaced by the updated Access programme with an Excel output file.

Timeline and action plan

- Updated gearshift calculation programme on ECE website (after GRPE in June 2006).
- Continued inventory of corrections/amendments to GTR and TR in parallel to cycle review work, aiming for a document to GRPE in 2007, IMMA document already in circulation.
- Contracting Parties to review consequences of proposed engine family concept, for which IMMA will prepare a new document explaining current practices, with examples.
- Development of a proposal for the India issues (meeting of the ad hoc group at IMMA offices on August 2 – 3, and again October 10-12).
- WMTC FEG meeting in between GRPE in June 06 and Jan 07 (To be confirmed: November 20 – 21, 2006, US, Ann Arbor).
- WMTC informal group meeting in conjunction with GRPE, either to finalise the details or make a special presentation to GRPE delegates, in order to save time in the main GRPE session. (request to GRPE to reserve a half day before the GRPE meeting in January 2007).
- Proposal / document to GRPE in the course of 2007, if possible for the June GRPE.
- Continuation of work on limits in parallel, but discussion has to be postponed until solution to the Indian issue (cycle revision) is decided and the collection of data and information from Contracting Parties and IMMA is finalized.

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