

18 October 2004

UN ECE GRPE Informal WG NRMM Meeting  
Minutes of the meeting at EPA NVFEL,  
held from 27<sup>th</sup> to 29<sup>th</sup> September 2004

Objective of the meeting:

Based on the extensive comparison document the meeting aimed at discussing all the identified differences between the EU Directive (97/68/EC as amended), ISO Standard (ISO 8178 series), CFR subpart 1065 and Japanese input and develop solutions to overcome the open points in view of the future Global Technical Regulation (GTR) for engines intended to be installed on NRMM. (See enclosures 1 and 2)

Status of work before the meeting:

The work is based on the following jointly agreed strategy<sup>1</sup>:

- I. A complete comparison report between 1065 and ISO (*structured according to the index of 1065*) will be circulated to the members of WG NRMM before the 5th of May, 2004. It was agreed, that the experts of the NRMM WG will comment within the 15th of May on its structure and indicate their availability to actively work on this document, already specifying their area of contribution (e.g. subpart A, B, C...).
- II. MoE Japan, US-EPA and EC DG-JRC will organise the work distribution in the related geographic areas within end of May, based on the commitments by all the experts and considering the specific work to be done.
- III. The experts will analyse their allocated section of the comparison report and following their prioritisation explain the differences, giving comments resulting in a proposed solution for each point. By end of August the experts will supply their resulting document to DG-JRC. DG-JRC will make a composite table based on the different contributions.
- IV. A 2 or 3 day meeting of the experts taking part in this exercise (point III) will be arranged in US, immediately before the next NRMM WG meeting. This meeting will serve to identify, where possible, the solution to each difference in view of the world-wide harmonisation.
- V. The NRMM WG meeting on the following day will aim to decide on the strategy how to resolve the remaining open issues.

Point I to III have been completed and this meeting (Ann Arbor 27th – 29 Sep 2004) will work on points IV and V.

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<sup>1</sup> Quotation from Minutes of UN/ECE GRPE NRMM WG Meeting at DG-JRC in Ispra, 20th April 2004

### Progress during the meeting:

The meeting was attended by all the contributing experts (see enclosure 3).

The first two days of the meeting were dedicated to in depth discussion of the issues relating to:

- Applicability and general provisions
- Equipment for testing
- Measurement Instruments
- Calibrations and Performance Checks

The discussions were held in a constructive atmosphere determined by a highly scientific approach. Several important contributions were presented, for example by Dr. Knuth, on the calculation procedures. (Enclosure 4)

The agreed positions on the various issues discussed are listed in the updated comparison table (comparison20040929.xls available on request).

The last day, in a wider audience, was dedicated to reviewing and confirming the positions adopted and to decide on the work to be done in the next months.

The Japanese representative Mr. Koiwa informed the experts on the status of legislative developments in Japan (Enclosure 5).

On-Board Measurement Systems were presented by two manufacturers.

(Enclosures 6 and 7)

As this meeting did not cover the whole comparison document and given the progress made, it was decided to call a second meeting which will cover the rest of the comparison document:

- Engine Selection, Preparation and Maintenance
- Dynamometer Laboratory Test Protocols
- Calculations and Required Data for Certification
- Engine Fluids, Test Fuels and Analytical Gases
- Testing with Oxygenated Fuels
- Definitions and Other Reference Information

At this meeting all the contributing members will be present.

### Proposal of additional work:

Cleophas Jackson made a proposal for a measurement campaign to collect data on

- Constant speed variable load engines and
- Cold start phase weighting.

The proposal included the development of plan for data collection and the timetable for reporting (Enclosures 8). Mr Jackson presented also a questionnaire and asked for an initial feedback on these questions by November 1, 2004 (Enclosure 9).

EPA gave also a presentation on the update of their MOVES model for air quality modelling in the USA (Enclosures 10).

Next meetings:

The future schedule of the working group is scheduled as follows:

- 1) 2005.01.10 afternoon informal GRPE NRMM WG meeting in the frame of the 49<sup>th</sup> GRPE meeting
- 2) GRPE NRMM working meeting scheduled from 19 to 21 January 2005, tentatively in San Antonio (USA)
- 3) GRPE NRMM WG meeting tentatively scheduled from 12 to 13 April 2005 at DG JRC, Ispra.

The Chairman of WG NRMM thanks EPA, and especially Cleophas Jackson for the warm hospitality extended to all during the meeting.

ENCLOSURES LIST<sup>2</sup>:

- 1: Approved agenda
- 2: Introductory remarks (Rudolf Hummel)
- 3: Attendance list
- 4: Calculation procedure comparison (Dr. Hans W. Knuth)
- 5: Japanese legislation development and status of validation of the NRTC (Masayuki Koiwa)
- 6: Presentation by Horiba
- 7: Presentation by Sensors
- 8: US proposal on constant speed variable load cycle and cold start phase (Cleophas Jackson)
- 9: Survey Strategy Questionnaire
- 10: MOVES model update (John Koupal)

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<sup>2</sup> (The enclosures are not part of the GRPE informal document. Please contact Rudolf Hummel, DG-JRC, European Commission, for the enclosures).