23 January 2005

UN ECE GRPE Informal WG NRMM Meeting
Minutes of the meeting at SwRI San Antonio[1], 19th to 21st January 2005

Objective of the meeting:

After the successful Ann Arbor meeting[2] in September 2004, the January 2005 San Antonio meeting served to complete the discussion of the comparison document identifying and solving the open topics where possible and to define the line of work for 2005.

Main results of the meeting:

1. The progress of work in the last half year was acknowledged by all present experts. Especially, it was emphasized by the involved legislative bodies that the development of a simple and harmonised test protocol leading indeed to a global harmonisation of the NRMM technical regulation is of very high priority to their respective organisation.

2. Confirming the importance of the comparison report and its function as reference it was agreed to try to resolve all issues in 2005 and plan the drafting of the GTR in 2006. An editorial committee will be constituted in the second half of 2005.

3. The formal proposal for the development of an NRMM GTR by EC to AC.3 was acknowledged by the present experts.

4. A number of issues regarding the formal procedure of GTR's were raised. It was thought to ask GRPE / WP29 for some explanation. A list of questions will be prepared.

At the 49th GRPE Geneva meeting Mr Gauvin presented a thinking paper on the adoption of emission GTR's. His paper regards the question of limits within an emission GTR. He evaluates a number of solutions to the problem of inclusion of limits into GTR. One of the solutions foresees *to adopt in AC.3 a gtr with limit values "to be determined later". This option, if legally possible, seems to be the best:*

- *it freezes the technical discussion in GRPE;*
- *it entices the contracting parties to introduce the new technical procedure within their national system, and so to gather information on possible new limit values.*

The NRMM working group also on suggestion by Cle Jackson decided to use a split approach on open issues and to handle duty cycle issues and test cell procedures separately in order to not impede the progress of work.

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[1] The meeting was hosted and the venue well prepared by Imad Khalek from SwRI. The WG thanks SwRI for their support.

[2] Based on the extensive comparison document prepared by DG-JRC 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.

5. *"In order to overcome the discussion on wording such as "good engineering judgement", "good engineering practice", "we recommend", etc. that can be found in documents released by EU, ISO and EPA, they will be only accepted if there is no contradiction with a clear definition of each point of the GTR test protocol".* The working group decided to overcome this issue by introducing these sections into a separate annex of the GTR called "guidance document". This way all the necessary explanation can be present in the GTR without being part of its official body.

6. Discussion of the remainder of the comparison document (480 page Excel document) from section D to K:

- 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

The topic by topic discussion including the comments from USEPA, Japan, EC and ISO was very productive and the review of issues in the document was completed in the three days of technical work. Many of the topics where differences were found were resolved identifying the approach to be taken for the drafting of the GTR document. All the results are documented in additional columns in the reference document, which remains the central reference document.

7. A number of topics could not be resolved. In order to accelerate the work during 2005 these open items are collected into a working table which ordered by items defines the tasks and responsible (and deadline) to investigate specific questions and report on them. After distribution of the new documents, conference calls are planned from March 2005 onwards to resolve the issues in discussions between the experts. It is hoped that a number of items can be resolved in the April meeting.

8. The working group continues its work on cold starting and Constant speed variable load cycle evaluation. The concept presented by Cle Jackson was generally approved and it is planned to collect data in 2005.

9. The high quality of the NRMM WG meeting is further boosted by the participation of the technical experts responsible for the development of US/EPA CFR subpart1065, ISO8178 and EC/26/2004 (which are the major underlying legislation) and from Japan.

Next meetings:

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

1) The next NRMM meeting is foreseen for the 12th and 13th of April 2005 at DG-JRC Ispra. The JRC conference web page is open for registration[3].

2) The NRMM WG meeting in the frame of the 50th GRPE meeting will be held in Geneva on the 1st of June 2005 (9H30 to 12H30).

[3] This meeting will be followed on the 14th and 15th of April by an ISO TC70 SC8 meeting. This meeting requires separate registration.

3) The meeting afterwards is foreseen for the 26 and 27th of September in USA. M. McHattie suggests holding this meeting in Ottawa or Toronto. The venue will be decided in Ispra based on the working group's requirements.

ENCLOSURES LIST:
1: Approved agenda
2: Introductory remarks (Rudolf Hummel)
3: Current legislative situation on NRMM in EU (Giorgio Billi)
4: Work by Environment Canada (Malcolm McHattie)