

Fourteenth Plenary meeting of the Working Group On Off-Cycle Emissions 6 June 2006 Geneva, Switzerland

Agenda Item 1

- A. The draft agenda was reviewed and approved by the plenary group.

Agenda Item 2

- A. The Chairperson advised the group that the minutes of the Thirteenth Plenary Meeting ("13th") have been finalized, after review by those members who had attended the 13th Plenary Meeting.
- B. The final minutes have been submitted to the GRPE secretary for posting.

Agenda Item 3

- A. The Chairperson advised the group that a very good discussion took place at the 13th and at the Editorial Group meeting which followed. The Plenary group made good progress working through some of the key issues, particularly the definitions, and on the structure of the GTR. During the Editorial Committee meeting, the committee was able to review the draft GTR line by line.

Agenda Item 4

- A. **Presentation by the European Commission.** The European Commission ("EC") provided an update on the joint project between TNO and DG Enterprise (please refer to Minutes of Thirteenth Plenary Meeting, Agenda Item 3. A).

DG Enterprise has commissioned TNO to evaluate the WNTe Control Zone using EURO certified vehicles and studying European driving behaviors. The EC made a presentation highlighting the various Tasks associated with the study. The tasks include looking at the WNTe Control Zone based on a number of vehicles and driving styles, forecasting how the Control Zone concept will apply to future vehicles, looking at how the Control Zone will work with the WHDC, and the impact of temperature and altitude ranges. The study will also consider alternative concepts, such as the work-based window.

The Chairperson asked if they anticipate recommending improvements to the WHDC. The EC replied that it is not the intention of this study to recommend improvements to the WHDC, but if an issue arises, they will make it known.

The EC indicated that the study is underway and it is anticipated that it will be completed by early June. This will provide ample opportunity for discussions within the EU and thus should have clear conclusions for the group at the next plenary meeting.

- B. **Presentation by JRC.** The European Commission's JRC made a brief presentation on the evaluation of WNTe and some alternative options. This presentation is an abbreviated version of the presentation made at the 13th (please refer to Minutes of Thirteenth Plenary Meeting, Agenda Item 3. B).

The Chairperson asked what test cycle the data, which was looked at over the 30, 20 and 10 second windows, was based on. The representative from JRC said he was not absolutely certain, but he believes the data was derived using the US EPA NTE approach.

The representative from the UK stated that the presentation also referred to a filter based approach, but he wanted to know what the current status was with particle mass measurement on vehicles. The JRC stated that they are currently testing the filter method in a manner which is parallel to the type approval method, but is not in a position to provide a conclusion on the suitability of the devices. The Chairperson stated that in the USA the EPA finalized a rule in June of 2005 for a manufacturer run in-use test program. The initial phase of the program begins in 2006 and the plan is that it will continue indefinitely. Each year manufacturers will be required to choose engines in the field and will have to test those engines for all pollutants and submit the data to EPA. This requirement will be implemented in two phases: first gaseous emission measurement requirements and second PM emissions

measurement requirements. The EPA has been working with some portable PM measurement equipment manufacturers to review the suitability of the available technology. Some instruments will be tested in a laboratory to see how they compare to the filter method of measurement. This test program should begin in the Fall of 2006 and will be used to determine if there will be a need for an on-road compliance allowance for PM. Generally the EPA has been satisfied with the current instrumentation available for on-road PM measurement. The Chairperson committed to having further discussions with the EPA so that he can provide a more thorough response at the next plenary meeting. The Chairperson also stated that perhaps an EPA expert may be able to attend the next plenary meeting to make a presentation to the group on this topic.

The Chairperson asked the EC how the work the JRC is doing relate to the study TNO is completing. The EC stated that the two projects are independent tasks, using different data sets. There will be dialogue between the two groups in terms of the WNTE control zone. The EC views these as being complimentary activities.

Agenda Item 5

- A. The Chairperson gave a presentation to the group highlighting the work completed to date on the draft GTR, which he will present to the 52nd GRPE session on June 8, 2006. This presentation is the most detailed presentation given at GRPE to date. The presentation includes a timeline of the groups activity to the present date and covers all of the sections of the draft GTR and provided a brief summary for the majority of the sections. The presentation also includes a list of key issues which require further discussion by the plenary group. The Chairperson asked if there were any comments on the presentation they could be provided to the Chairperson now or before the formal GRPE meeting.

Agenda Item 6

- A. The Chairperson stated that the most current version of the draft GTR (Draft V) has been circulated to the group and posted on the OICA website.

The EC commented that the current draft is missing some text regarding the compliance statement, which was agreed to at the 13th. The Chairperson stated that the missing text will be incorporated into the draft GTR. The missing text is reproduced below, in italics, and will be included at the end of paragraph 10.1 of the draft GTR:

10.1 Statement of WNTE compliance.

The manufacturer shall provide a statement in the application for certification that the engine complies with the applicable WNTE emission limits in Section 5, when operating under all conditions which may reasonably be encountered in normal vehicle operation and use, and which are subject to the requirements of the WNTE regulation. *For contracting parties that operate a type approval system for vehicles and/or engines, this compliance statement is the beginning of the authorization procedure. In addition to this statement, compliance with the WNTE limits shall be verified through additional tests and certification procedures defined by the contracting parties.*

- B. **Presentation by OICA.** At the 13th OCE meeting, OICA indicated it would make a presentation on the WNTE factors at this meeting. OICA proposed that the WNTE factors should be additive rather than multiplicative. The proposed WNTE factors are quadratic functions based on three points:

- a 1.25 NTE multiplier at 4.0 g/kW-hr NO_x and 0.08 g/kW-hr PM as in the NTE table of the draft GTR;
- a 1.25 NTE multiplier at the split point of 2.0 g/kW-hr NO_x and 0.05 g/kW-hr PM as in the NTE table of the draft GTR; and
- a y-intercept at zero of 0.3 g/kW-hr NO_x and 0.005 g/kW-hr PM.

The rationale for the intercept is that OICA believes that the WNTE factor needs to be fixed to a nearly constant value for very low emissions, as was previously explained at the 13th. This approach is more appropriate because it is independent of limit values.

The Chairperson asked if OICA had developed quadratic functions for CO and HC. OICA indicated it had not developed these functions, it would do so. The Chairperson stated he would be interested in seeing how these would look, for further discussion at the last meeting.

Agenda Item 7

The Chairperson stated that the studies currently underway by DG Enterprise and JRC may have an impact on the timing of completing the GTR, depending on the outcome of the contractor's work and what recommendations the European Commission might put forward based on their contractor's Report. The upcoming fall meetings will be very important in terms of working through the open issues and reviewing the draft GTR. Therefore, at this time, it is not appropriate to try to establish a timeline for completion of the GTR.

Agenda Item 8

The Chairperson stated that the next plenary and editorial meetings will take place in the United States tentatively starting October 10, 2006 at a location to be announced.

Joanna Vardas, Secretariat
Dated June 7, 2006