

## **54<sup>th</sup> GRPE: Report from OCE Informal Working Group Chair to the 54<sup>th</sup> Session of GRPE**

**7 June 2007**

- I would like to provide a brief overview of the work performed by the Off-cycle Emissions informal working group in the last 12 months. My overview consists of 3 items;  
(1) A review of the 15<sup>th</sup> and 16<sup>th</sup> meetings of the OCE Plenary Group and associated Editorial Committee meetings held in October 2006 in Ann Arbor and in May 2007 in Tokyo.  
(2) A review of the Plenary Group meeting and the Editorial Committee held earlier this week on Tuesday afternoon, and  
(3) A discussion of the OCE working group time line and schedule for the next 12 months
- In addition, I would like to remind all of the delegates that the OCE plenary group meeting materials, including the official minutes from each meeting, are available on the OICA web site. Materials presented at the OCE meeting Tuesday should be available within the next 2 weeks.
- As a reminder to GRPE, the draft GTR contains two basic requirements for heavy-duty diesel engines;  
(1) Provisions prohibiting the use of defeat strategies; and  
(2) Performance based emission limits based on the World Harmonized Not-to-Exceed provisions (WNTE). The WNTE provisions, unlike traditional engine & vehicle test procedures, are not based on a pre-defined duty cycle, but rather includes a potential unlimited number of duty cycles constrained by a number of factors, including engine speed & torque values as well as specific ambient operating conditions.

It is also worth noting:

- The draft GTR has been developed with the specific intent to allow for testing of compliance with the WNTE during in-use, on the road operation of the engine
- GTR does not include requirements or specifications for in-use testing, or for on-vehicle emission measurement equipment
- Individual countries and regional authorities may specify their own provisions in this regard in order to enforce the GTR, and such enforcement provisions could include requirements for in-use, on-vehicle emissions testing of heavy-duty engines

### **Item (1): 15<sup>th</sup> OCE Meeting, October 2006, in Ann Arbor, USA**

- The Plenary Group and the Editorial Committee met in October 2006 in Ann Arbor for 3 days
- The purpose of this meeting was to continue work on the development of the OCE gtr, both the discussion of open issues and the continued improvement to the draft GTR

During the Ann Arbor meeting, the group heard presentations from the following members:

- The European Commission had a contractor, TNO, report on a joint project between TNO and DG Enterprise, financed by the Commission, to evaluate the WNTE Control Zone using EURO certified vehicles and studying European driving behaviors. The project reviewed data collected from in use tests conducted using Portable Emission Measurement Systems (PEMS) to determine if the current WNTE control zone would cover driving conditions or engine operation in the EU. Originally the project focused on evaluating the WNTE control zone concept in the EU, but then the scope of the project expanded at the request of the European Commission (EC) to review alternative approaches.
- The United States gave a presentation regarding portable PM measurement work. The presentation noted that, while the gaseous measurement allowance determination process is nearly complete, the PM program remains 1 to 2 years away.
- OICA presented their work regarding WNTE factors for CO and HC which were developed based on how the factors for NOx and PM were developed previously.
- In addition, the Plenary Group discussed reporting to AC.3 a status update at its 18<sup>th</sup> session in November 2006. The following primary points were subsequently reported AC.3:
  - The Draft GTR is developed – we are working on a hand full of remaining issues and are on a path for completion within next 18 months
  - Recent contractor technical report from one Contracting Party (noted earlier) evaluates alternative approaches to controlling off-cycle emissions (final report has not been released)

- If pursued, taking a new path could result in an additional 2-3 years development on the OCE gtr

#### **16<sup>th</sup> OCE Meeting, May 2007, in Tokyo**

- In Tokyo, the group heard the following presentations:
  - OICA presented an update to their presentation made in Ann Arbor in October 2006.
  - JARI presented on its PEMS testing of on-the-road vehicles in Japan.
  - The Commission presented again on their contractor report evaluating the WNTE control zone versus European driving behavior.
- The group then discussed at length the process for moving forward. A set of options was developed as a result of that discussion. Those options being in summary:
  - Continue with the gtr as has been reported to GRPE in June 2006 and AC.3 in November 2006, leaving it to a future gtr process or individual countries to develop in-use on-vehicle test procedures and associated emission limits;
  - Develop a revised gtr framework to address both type approval/certification and in-use testing, with the in-use provisions covering a wider range of operation;
  - Limit the scope of the OCE gtr to a prohibition against defeat strategies along with associated definitions, leaving it to a future gtr process or individual countries to develop off-cycle requirements, in-use on-vehicle test procedures and associated emission limits;

#### **Item (2): 17<sup>th</sup> OCE Meeting, Tuesday 5 June, in Geneva**

- At the OCE plenary meeting held Tuesday afternoon, the Plenary Group heard a report of the progress made at the Ann Arbor and Tokyo meetings.
- The group also heard a presentation from EMA regarding replacing altitude with barometric pressure to define conditions where the WNTE applies.
- The group then had considerable discussion of the options-for-moving-forward that had been developed in Tokyo. The result of that discussion was to eliminate the two options for limiting the scope of the gtr to definitions and a prohibition of defeat strategies. There remain then three options for moving forward. Those options being:
  - option 1 – finish the gtr with the existing framework and, via a future gtr or an amendment to the current gtr, address the issue of an alternative to the existing WNTE that would cover a wider range of engine operation along with associated emission limits
  - option 2 – finish the gtr with the existing framework and leave potential future work to cover a wider range of engine operation to individual countries or regions
  - option 3 – develop a revised gtr framework that would address certification and type approval requirements and in-use testing, with provisions that would cover a wider range of engine operation
- Following the Plenary group meeting the Editorial Committee met for 2 hours, working through the gtr and making editorial improvements.

#### **Item (3): Schedule for the next 12 months**

- We will hold our next meeting at the U.S. EPA facilities in San Francisco, California. We are tentatively planning on holding a 2 day meeting on October 16 and 17. I would expect that the first half day will be a plenary discussion, with the remaining day and a half dedicated to the Editorial Committee. These details will be confirmed soon by e-mail to all the members of the OCE Plenary Group.
- We hope to be in a position to present an informal version of the draft GTR at the 56th session of GRPE to be held in June 2008.
- That concludes my report regarding the work of the Off-cycle Emissions Working Group