



**TWENTY FOURTH MEETING OF THE GRPE WORKING GROUP ON THE  
WORLDWIDE HEAVY DUTY CERTIFICATION PROCEDURE (WHDC)**

**Geneva, 03 June 2008**

**MINUTES OF THE MEETING**

Venue: Palais des Nations, Geneva

Chairman: J.P. LAGUNA-GOMEZ (European Commission)

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**1.- ADOPTION OF THE AGENDA**

The provisional agenda GRPE/WHDC/A24 was adopted as circulated.

**2.- APPROVAL OF THE MINUTES OF THE 23<sup>rd</sup> WHDC MEETING**  
(GRPE/WHDC/23 - Tokyo, 10/11 April 2008)

The minutes of the 23<sup>rd</sup> meeting were approved.

**3.- UPDATE FROM 23<sup>rd</sup> WHDC MEETING**

The Secretary summarized the major achievements of the 23<sup>rd</sup> WHDC meeting. It was agreed to delete reference to power regulations and to add a list of auxiliaries to the gtr. The work programs on options 2 and 5 were agreed. EPA presented a proposal for work program on option 3, Japan presented data on option 4. Russia presented test results on gasoline engines. Overall, the work program is slightly behind schedule.

**4.- DISCUSSION OF WHDC OPTIONS**

Documents: Inf. Doc. No. GRPE-56-07

**4.1 Power determination**

The group confirmed the decision taken at the 23<sup>rd</sup> meeting to delete reference to power regulations and to add to the gtr a list of auxiliaries.

## 4.2 Single reference fuel

Dr. Hummel from European Commission DG-JRC Ispra confirmed that test cell preparation is underway and testing can start around end of June. Mr. Signer from OICA reported that the test fuels have been ordered and will be shipped to the test sites, soon. The Euro IV SCR engine will be delivered by MAN. Cummins agreed to submit a US07 engine, which will be available by mid September.

EMA confirmed to conduct an add-in program to their low NOx measurement study with a Caterpillar C13 engine. This program is scheduled for August 2008. The engine will be tuned for US2010 emissions level.

Japan confirmed to conduct the test program around September/October 2008 before the PMP round robin. Engine will be the same as in the March 2008 test program.

## 4.3 Soak time

Mr. Sherwood from EPA presented again the proposal for a test program (GRPE/WHDC/FE13), already introduced at the 23<sup>rd</sup> meeting, to the broader audience of this WHDC meeting. OICA commented that the proposal goes beyond soak time elaboration, but OICA would be willing to investigate into the issues raised by EPA. However, such a program would be very difficult to be conducted within the current WHDC time line. Also clear signals for WHDC support would be needed from EPA. Mr. Sherwood responded that there was no urgency for EPA with the test program, but it was still their intention to move forward with the WHDC gtr, at least as an option to the FTP.

The chairman confirmed that the EU Commission intended to introduce the WHDC gtr for Euro VI (ca. 2013). It is therefore essential to stick to the WHDC time line of November 2009. To accommodate this situation, Mr. Sherwood indicated that an early WHDC introduction might be permitted as an option under the premises of no backsliding from current FTP provisions. Mr. Signer reiterated that the agreed time line was also important for industry and that a new test procedure should be based on sound technical arguments and not carry on historic procedures.

Mr. Kokrda from EMA indicated that EMA members did not consider the proposed EPA test program to be solely focused to US manufacturers. In any case, stability and leadtime requirements need to be respected before introducing the WHDC in the USA.

In order to progress with this option, input from all manufacturers (OICA, JAMA, EMA) is requested by the end of September, whether they can contribute to the test program within the WHDC time line. Discussion of this topic will be resumed at the 25<sup>th</sup> WHDC meeting.

## 4.4 Cold start weighting

The secretary reported about the discussions of the 23<sup>rd</sup> meeting. The topic will be on the agenda of the 25<sup>th</sup> meeting.

## 4.5 PM filter specification

Mr. Schulte from TÜV Nord confirmed that the test program is now scheduled to start in late July 2008 due to some delay with the PMP round robin.

## **5.- OTHER WHDC ELEMENTS**

Document: Inf. Doc. No. GRPE-56-01

### **5.1 Gasoline engines**

Mr. Vaysblyum from Russian Federation presented test results with gasoline fuelled commercial vehicle engines (see Inf. Doc. No. GRPE-56-01) that were tested on WHTC, WHSC, ETC and ESC test cycles. The engines did not meet the cycle statistics, but generally WHTC results were better than with ETC. Mr. Vaysblyum mentioned that the engines were not designed for transient operation. The WHTC covers a wider engine speed range than the ETC and is therefore better suited as a type approval procedure. In general, use of the WHDC gtr for gasoline engines is acceptable to the Russian Federation.

Mrs. Yuan from China confirmed to conduct the test program with the WHDC test cycles at CATARC around July/August 2008.

Mr. Sherwood indicated that heavy duty gasoline engines are local rather than global products. Therefore, extension of the scope is not a priority issue for EPA. Besides, some correlation data are requested by EPA similar to the proposed diesel program. Mr. Kokrda confirmed that GM and Ford cannot conduct a correlation program, but are willing to do an engineering analysis.

### **5.2 Alignment with NRMM gtr**

No discussion took place.

## **6.- REVIEW OF WHDC TIME LINE**

The next meetings will take place as follows:

- 25<sup>th</sup> WHDC meeting from 15<sup>th</sup> to 17<sup>th</sup> October 2008, Beijing, PR China
- 26<sup>th</sup> WHDC meeting on 13<sup>th</sup> January 2009, Geneva
- 27<sup>th</sup> WHDC meeting in March 2009 (Budapest, Hungary offered to host)

## **7.- SUMMARY AND CONCLUSIONS**

The secretary summarized the results of the meeting as follows:

- Reference fuel test programs (option 2) will start between July and September 2008.
- Input from OICA, JAMA and EMA is requested to EPA proposal on soaktime (option 3).
- TÜV Nord will start test program on PM filter specification (option 5) in July 2008.
- Russia presented test results with HD gasoline engines and could accept extension of the scope; China confirmed to run validation program; EMA/EPA will check US industry position by the next meeting.
- WP.29 adoption of WHDC gtr in November 2009 is needed for timely Euro VI WHDC introduction. Therefore, WHDC time line need to be adhered to.

## **8.- OTHER BUSINESS**

None.