

FIRST MEETING OF THE GRPE INFORMAL GROUP ON HEAVY DUTY HYBRIDS (HDH)

Brussels, 19 May 2010

MINUTES OF THE MEETING

Venue: DG Enterprise Building, Av. D'Auderghem 45, Brussels, Belgium

Chairman: Petter Åsman (European Community)

1.- INTRODUCTION

- The Chairman welcomed the participants and gave a short background information about the work item. Upon the OICA proposal, GRPE agreed to set up an informal group on Heavy Duty hybrids. The European Community agreed to be the sponsor and to take over the chair.
- The participants introduced themselves. The secretary noted that a member list will be established after the next HDH meeting.
- The draft agenda HDH-01-01 was adopted as circulated.

2.- PRESENTATIONS

2.1 OICA

(Working paper HDH-01-04)

On behalf of OICA, Mr. Signer gave an overview of the OICA proposal on HILS. He indicated that combustion engines in hybrids behave under different operating conditions compared to conventional powertrain and vehicles. He showed some results by OICA members from HILS application to a parallel and a serial hybrid. The proposal is that the basis for the HILS application should be the WHVC (World harmonized vehicle cycle), and development of the hybrid engine cycle would be similar in principle to the development of the WHTC from the WHVC. However, the individual hybrid powertrain would be used instead of the standard powertrain model used for the WHTC. He then gave an overview of the Japanese HILS methodology. Finally, he emphasized that the HILS models can principally be applied to both pollutant emissions and CO₂. However, in OICA's view pollutant emissions certification should be based on standardized vehicles and the WHVC, CO₂ certification on individual vehicles and operating cycles.

During the discussion, the following issues were raised.

- Mr. Schulte (TÜV Nord): accuracy of the data that go into the models and the simulation must be carefully determined.
- Mr. Burke (Tata): where will the test and simulation information be stored?
- Mr. Berg (Scania): how should the load in the WHVC be dealt with? It was then agreed to only use the vehicle speed pattern of the WHVC.

- Mr. Rijnders (RDW): indicated concerns if the basis for brake specific emissions is not engine cycle work, but powertrain cycle work. This concern was shared by Mr. Schulte. OICA responded that it should be powertrain cycle work (like in Japanese regulation), but SOC (state of charge) must be neutral over cycle. The chair said that this is an important issue where apparently there are different views at the moment and that needs to be further discussed in a future meeting.
- Mr. Jackson (EPA): indicated concerns with a simulation based methodology. He further asked how PTO operation will be dealt with. For a system or methodology that would be used for certification, it is important that the following be considered:
 - A system that results in outputs that are quantifiable, verifiable, and reproducible;
 - A system that results in outputs that provide a method for assessing real world compliance broadly and on a case by case basis;
 - A system that is capable of incorporating updated information and new data to produce the most accurate outputs;
 - A system that is appropriately transparent as to allow governmental entities the latitude to easily assess its performance and ensure accuracy and a level playing field.

2.2 Others

None.

3.- DRAFT PROPOSAL FOR WP.29

(Working paper HDH-01-03)

For getting the final WP.29 mandate, the sponsor (EU Community) must present to WP.29/AC.3 a proposal of the planned work program. It is intended to submit the proposal to AC.3 in June 2010.

The Secretary introduced working paper HDH-01-03 as the first draft proposal for discussion. The draft includes the major elements of the OICA proposal to GRPE (Informal document GRPE-59-02). Based on the previous discussion, the following changes were agreed.

- Replace "mission related" with "operation related"
- Clarify that the scope should cover test procedures and technical requirements for pollutant emissions and CO₂ as basis for certification
- Mr. Jackson will provide a proposal on how to incorporate PTO operation
- On top of page 3, replace "models" with "elements" and include the missing elements into the listing (e.g. driver model, component testing)
- Mr. Khile (Tata) asked to add Kokujikan 280 (chassis based emissions test) to the list of existing regulations. The Secretary responded that Kokujikan 280 does not relate to hybrids, but to conventiona vehicles. Further discussion at next meeting.

The secretary will provide an updated document for the next meeting.

4.- DRAFT PROPOSAL FOR TERMS OF REFERENCE AND RULES OF PROCEDURE

(Working paper HDH-01-02)

Every GRPE informal group needs define its terms of reference and rules of procedure. The secretary introduced working paper HDH-01-02. The content largely follows working paper HDH-01-03.

It was agreed to amend the document in line with the amendments agreed on working paper HDH-01-03. The secretary will provide an updated document for the next meeting.

5.- NEXT STEPS

5.1 Roadmap and project planning

The secretary introduced the roadmap and project planning in line with the timetable in working paper HDH-01-03. No objections were raised. An updated roadmap will be presented at the next HDH meeting for final approval.

5.2 Contributions from contracting parties

None.

5.3 Meetings

- 2nd HDH meeting: 07/06/2010, 4 pm to 5:30 pm, room C.529, Palais des Nations, Geneva
- 3rd HDH meeting provisionally scheduled for October 2010, most likely in Europe
- Contracting parties are kindly invited to offer premises for further meetings

6.- OTHER BUSINESS

None.
