# UN ECE - INFORMAL GRPE WORKING GROUP HYDROGEN FUEL CELL VEHICLES - GRPE-H<sub>2</sub>FCV SUB-WORKING GROUP ENVIRONEMENT.

# DRAFT MINUTES – 1<sup>st</sup> SGE MEETING

ISPRA, ITALY - THURSDAY, APRIL 28<sup>th</sup> 2005, P.M., FRIDAY, APRIL 29<sup>th</sup> 2005, A.M.

Chairman: Mr. Adolfo Perujo, IES-JRC. Secretariat: Mr. Pierre Laurent, OICA

Attendees: Annex 1

### 1.- ADOPTION OF THE AGENDA – ORGANIZATIONAL INFORMATION

<u>Documents</u>: HFCV-SGE-1

Giovanni De Santi presentation Annex 2

IES-JRC website: <a href="http://ies.jrc.cec.eu.int/The\_Institute.about.0.html">http://ies.jrc.cec.eu.int/The\_Institute.about.0.html</a>

The Chairman welcomed the attendees to the 1<sup>st</sup> Informal GRPE-HFCV Sub Working Group Environment - SGE WG - meeting and reminded some organizational announcements.

The draft agenda of the 1<sup>st</sup> SGE WG meeting was adopted.

Mr. Giovanni De Santi, IES-JRC Emissions and Health Head of Unit, more officially welcomed the attendees, presented JRC and invited the group to later visit the facilities.

In a nutshell: IES-JRC addresses, in close cooperation with the EU, Environmental and Sustainability issues of which Hydrogen is seen as part of the solution to emission control from mobile sources. JRC acts as the Technical Branch of DG ENV, ENTR, TREN, RTD, etc steering & providing scientific information (e.g.: EuroV; PMP; H<sub>2</sub>; PEMS; NRMM; WMTC; PM & Health; Fuel Directive; Bi-Fuel; etc.). In the field of sustainable transport JRC addresses: H<sub>2</sub>, Hybrid, Electrical and Bi-Fuel vehicles; it has its own H<sub>2</sub> test facility. In the future JRC aims providing an Integrated Scientific Approach on Air Quality and Sustainable Transport. JRC represent EU's point of view and is Brussels' information provider.

The Chairman notified JRC also carried out H<sub>2</sub> activities in Petten, NL, facilities, see website: <a href="http://www.jrc.cec.eu.int">http://www.jrc.cec.eu.int</a>. A site where, on July 7<sup>th</sup> 2005, Fuel Cell test facilities will be inaugurated to mainly address Components whereas the JRC-Ispra-site (IT) addresses full systems (vehicles and power trains) and partially Safety considerations.

ISO reminded IES-JRC's original nuclear expertise.

NL further confirmed JRC-Petten, NL, was addressing H2 storage and the component, safety oriented, e.g. HySafe project, see: http://www.jrc.cec.eu.int/default.asp@sidsz=our\_work.htm.

To CLEPA inquiring about JRC's staff and budget; Mr De Santi answered: 70 persons, 40 to 45 dedicated to vehicle; the budget depended on further tasks entrusted to JRC by the EU.

Note from the secretariat: The Emissions and Health Unit website highlights 3 main activities: <a href="http://ies.jrc.cec.eu.int/Emissions">http://ies.jrc.cec.eu.int/Emissions</a> and Health.81.0.html of which, Action 2113 - Emissions Characterisation & Inventories (<a href="http://ies.jrc.cec.eu.int/Action">http://ies.jrc.cec.eu.int/Action</a> 2113 - Emissions.67.0.html) addresses GRPE concerns.

#### 2.- ITEM LIST TO BE ADDRESSED BY THE SUBGROUP: AGREEMENT

Documents: H2-11-Annex 5

TRANS/WP.29/882 and 883

TRANS/WP.29/78/Rev.1/Amend.2

The Chairman suggested proceeding as from Document H2-11-Annex 5 outlining the main tasks entrusted by the 11<sup>th</sup> Informal GRPE-HFCV WG: setting up Sub Working Groups.

ISO reminded WP.29/AC.3 prerequisites of GTR preparations – '98 Agreement documents TRANS/WP.29/882 & 883.

D also suggested considering the Compendium of Candidate Regulations as well as other inputs (e.g.: in development or achieved national legislative or regulatory work. Outcome: The group agreed upon matrixes (Annexes 3 & 4) where the "X" does not mean a Regulation but only "an issue to consider".

Some issues should be addressed by other GR groups (e.g.: GRSG for the Defrosting and the Defogging of the windshield) in cooperation with the ad hoc GRPE-HFCV SWG.

# 3.- DISCUSSION ON THE NEED FOR FURTHER RESEARCH TO ADDRESS SOME/ALL THE POINTS.

A general discussion had already addressed the issue during the 13<sup>th</sup> Informal GRPE-HFCV WG meeting. In fact the group must frame what it expects and investigate if further research is required for HFCV purposes and if it is urgent. Moreover the group intends to make a survey of what is already available (e.g.: Japan has already addressed passenger cars and now intends to proceed with Heavy Duty Busses; the group might wait for the results for later use).

# 4.- GAP ANALYSIS ON REGULATIONS AND STANDARDS: SITUATION IN EUROPE, USA, JAPAN AND NEED FROM INDUSTRY. HOW TO PROCEED?

It appeared only a kick off discussion was needed to focus on the target; the group should survey what is available, the content of what is available, HDVs should be included in the survey and comparisons between EU, J & USA should be achieved.

J suggested waiting for the English version of its new technical standards; it includes all the references that have been checked.

NL warned about the very broad EU legislation and suggested, to avoid confusions, focusing on the vehicles the group wishes to address and then proceed to a comparison EU, J & USA to frame the items that should be addressed.

The Chairman acknowledged the need to first determine the areas of interest and then to pick out the Regulations/Directives/Standards/ etc the group needed to address for harmonization purposes, keeping in mind that everything could not be harmonized.

For practical reasons the group agreed to first address Passenger Cars and later Busses and Coaches; the Technical Report would identify what is available, what must be  $H_2$  amended and the procedure of amendment.

D insisted upon two issues:

- A good understanding about the procedure. As for Safety, there is a need for a structure, benchmark the Japanese experience, consider the outcomes of the research overview and then proceed to the assessments;
- Examine what the other GR WGs are doing and take it into account prior to proceeding, avoid overlapping work and be sure to align activities.

The Chairman stressed the need for a good Technical Report structure and guidelines about how to proceed (e.g.: state a topic for each matrix item).

D suggested aiming for one global report including one chapter per item, all chapters having a similar structure (e.g.: explanation and specification of the issue: overview of the existing Regulations / Standards and explain the links; overview about the research: if finalized state the references, if ongoing also state the references and if still needed specify it; assessment of the harmonization: if it is needed, specify it, if it is foreseeable, explain it; reference list).

#### 5.- TECHNICAL REPORTS

Documents: TRANS/WP.29/882 and 883

TRANS/WP.29/78/Rev.1/Amend.2

## 5.1 STRUCTURE

The group agreed it should take into account the GTR drafting experience of the WMTC, WHDC, WWH-OBD delegates and experts even if the issues are slightly different. It should clearly frame its operating area as basis of its technical report.

## 5.2 METHOD (WHO, HOW)

The group brainstormed: 1. the need of drafting a Technical Report, as a homogenous living document; 2. to possibly raise a budget as it might be required to proceed; 3. the different work options previously framed. The question: "Who does what?" remained unanswered.

Outcome: JRC might be expected to provide an activity structure and a budget plan will be drawn by the participants from the activity structure.

#### 6.- FURTHER ACTIONS: TIME SCHEDULE - NEXT MEETING

The issue has, here above, been addressed.

For obvious travel problems, the next meeting should be convened in Tokyo, Japan, in Autumn 2005, combined with the next Informal GRPE-HFCV WG meeting.

## 7.- ANY OTHER BUSINESS

For practical distribution purposes, two lists should be drafted; a short list encompassing the delegates and or experts attending the Informal GRPE-HFCV / HFCV-SGE WG meetings & a long list encompassing the plenary GRPE attendees.

The Chairman thanked the attendees for their cooperation and closed the meeting.

4