

## **Report of the 8<sup>th</sup> Session of the Electric Vehicles and the Environment Informal Working Group (EVE IWG)**

Location: Geneva, Switzerland  
Time / Date: 14:30 - 17:30 (CET), January 7<sup>th</sup>, 2014  
Chair: Mr. Michael Olechiw (USA)  
Co-Chairs: Mr. Kazuyuki Narusawa (Japan)  
Ms. Chen Chunmei (China, participated by phone)  
Secretary: Mr. Stéphane Couroux (Canada)

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### **1. Welcome, Introductions, Agenda**

Mr. Michael Olechiw, Chair of the informal working group, welcomed participants to the meeting. Mr. Olechiw outlined the primary goal for the meeting, which was to continue discussing the recommendations included in draft 3 of the EV Reference Guide (EVE-08-03e). He clarified that the intent was not to finalize the Guide during the 8<sup>th</sup> EVE meeting, but to agree on draft 3 (with some minor revisions) to be submitted as an informal document to the GRPE's 68<sup>th</sup> session (GRPE-68-13e). Contracting parties and industry would then have until February 3<sup>rd</sup>, 2014 to submit comments. The objective is to finalize the Guide during the 9<sup>th</sup> EVE meeting on February 17-18<sup>th</sup> in Ann Arbor, Michigan, USA.

Mr. Olechiw also informed the group that a meeting between the EVE IWG leadership and the Worldwide harmonized Light vehicles Test Procedure (WLTP) secretariat, EV sub-group, WLTP sponsors (European Commission and Japan) and OICA would occur directly after the 8<sup>th</sup> EVE meeting with the primary purpose to further discuss the recommendations of the Guide.

There were approximately 50 participants in the room representing Contracting Parties, vehicle manufacturers and industry organizations from around the world. Mr. Couroux (Secretary), Ms. Marchington and Mr. Narusawa (Co-Chair) were present for the meeting, and Ms. Chunmei (Co-chair) participated from China by teleconference. Mr. Mark Subramaniam of FEV Consulting, the consultant retained by the US Environmental Protection Agency (EPA) to help with drafting the Guide, was also in attendance.

The Agenda for the meeting (EVE-08-02-Rev1e) was reviewed. Upon request from Japan, an additional document (EVE-08-06e) and discussion item ('Japan comments on Guide) was added to agenda item 3, EV Reference Guide. The revised and final Agenda for the meeting is document EVE-08-02-Rev2e.

### **2. Review of EVE IWG #7 Meeting Report**

Mr. Couroux reviewed document EVE-07-17e covering Agenda item 2 with a focus on action items. Mr. Couroux detailed which action items were completed or ongoing, including:

- EVE-7 Action 1, completed: Participants will continue to be invited to present on EV related topics and standardization at EVE IWG meetings.

- EVE-7 Action 2, completed: The EVE Secretariat continues to coordinate input to the VPSD document from EVE IWG membership. More specifically, the Secretariat will request an update on status of next draft of VPSD and the Chair will share the next version of the EV Reference Guide to seek further input from VPSD.
  - The Chair of the VPSD provided input prior to the 8<sup>th</sup> EVE meeting on how the Guide should include EV-related definitions being developed by the VPSD working group, and draft 3 of the Guide will be revised accordingly.
- EVE-7 Action 3, completed: The EVE Secretariat informed EVE of upcoming EV2013 meeting in Ottawa and for which data will be made available as soon as possible.
  - An email containing this information was sent by the EVE Secretariat to the EVE group on January 2<sup>nd</sup>, 2014.
- EVE-7 Action 4, completed: Mr. Olechiw has provided updates on the contracting process for Reference Guide drafting. Mr. Olechiw confirmed the consultant retained by the US EPA (FEV consulting) will continue to assist in the drafting of the Guide until the 9<sup>th</sup> EVE meeting.
- EVE-7 Action 5, completed: The EVE Secretariat will continue to follow-up with Mr. Wiaux concerning cold temperature data and will report back to EVE membership once it is available.
  - Mr. Couroux has contacted Mr. Wiaux for data and will report back to the EVE group once the data is available.
- EVE-7 Action 6, completed: The EVE Secretariat will update Section 5 (draft 1 of Guide) to reflect comments and circulate to EVE membership for review by October 31<sup>st</sup>, 2013.
- EVE-7 Action 7, completed: In parallel to Action 6, contracting parties will provide further input to Section 3 (draft 1 of Guide) to the EVE Secretariat by October 31<sup>st</sup>, 2013.
- EVE-7 Action 8, completed: Contracting parties will review and submit comments to Section 5 to Secretariat one week after it is distributed as per item 1) above (~November 7).
- EVE-7 Action 9, completed: The EVE Secretariat will develop new draft of the Guide (draft 2) and circulate to EVE membership one week after receiving comments on section 5 (~November 14).
  - Draft 2 of the Guide was circulated to the EVE group for comment on December 6<sup>th</sup>, 2013. Comments from various contracting parties, industry, and other GRPE working groups were received and integrated into the Guide to produce draft 3 (EVE-08-03e).
- EVE-7 Action 10, completed: Mr. Olechiw will seek guidance from the GRPE Chair on obtaining input from WLTP IWG on EV Reference Guide and particularly on recommendations included in Section 5.
  - There is a meeting directly after the 8<sup>th</sup> EVE meeting between the EVE leadership and WLTP secretary, EV sub-group, WLTP sponsors (European Commission and Japan) and OICA to discuss how the EVE and WLTP can work together in the future on EV-related issues.
- EVE-7 Action 11, completed: The EVE Secretariat will distribute an invitation and the revised agenda ahead of the EVE-08 meeting.
  - The revised and final Agenda for the 8<sup>th</sup> EVE meeting is document EVE-08-02-Rev2e.
- EVE-7 Action 12, completed: Once finalized, the EVE Secretariat will distribute an invitation noting the location and timing of the EVE-09 meeting to the EVE group. The agenda for the meeting will be circulated by the EVE Secretariat after being finalized at the EVE-08 meeting.

- The EVE-09 meeting invitation is document EVE-09-01e and the draft agenda for the EVE-09 meeting is document EVE-08-04e.

### **3. EV Reference Guide**

Mr. Olechiw initiated the discussion of Agenda item 3 the Guide with the presentation of document EVE-08-05e by Mr. Mark Subramaniam of FEV Consulting. The presentation covered three items: 1) Summary of changes made to the Guide, 2) Current findings, activity levels, and recommendations in draft 3 of the Guide, and, 3) Open discussion items. During this discussion, draft 3 of the Guide (EVE-08-03e) was also presented for discussion. The four main recommendations from Chapter 5 of draft 3 of the Guide were reviewed, including: 1) vehicle range and energy efficiency testing, 2) method of stating energy efficiency, 3) battery performance and durability, and 4) battery recyclability. Both documents elicited many questions and comments, which are briefly summarized below

China clarified that an adjustment to the traffic light chart for market deployment attributes for China should be changed from two green and two red attributes to all green attributes. Also, OICA clarified that there should not be a tick under Driver-user information for the WLTP group in the vehicle attributes traffic light chart.

**ACTION 1:** The EVE Secretariat will make the two minor revisions requested by China and OICA to draft 3 of the Guide prior to the submission of the document to the GRPE.

Concerning recommendation 1 (vehicle range and energy efficiency testing), under Section 5.1, and the second paragraph above the bullets, it was agreed that the wording “the following” and “at minimum” in the first sentence should be deleted.

**ACTION 2:** The EVE Secretariat will adjust wording in Section 5.1, paragraph 2, by deleting “the following” and “at minimum” in the first sentence.

Most discussion concerned recommendation 2 (method of stating energy efficiency). OICA questioned whether pursuing the recommendation was valuable, considering there was no proposal to develop a comparable methodology for conventional vehicles. OICA also emphasized that for vehicle classification, the fuel type does not matter. Mr. Olechiw clarified there are established metrics for CO<sub>2</sub> performance of conventional vehicles in operation, while EVs do not have such a metric; this is misleading because while EVs do not produce emissions during operation, there is still a CO<sub>2</sub> penalty, it is just displaced upstream. China emphasized that the methodology proposed in recommendation 2 would be very useful for governments and decision-making in the future and indicated they have some related research information that could be shared with the EVE group. The GRPE Chair agreed, indicating that work on recommendation 2 would be useful for political decision-making, however he was unsure about three things: 1) Does the work under recommendation 2 fall under the scope of WP.29, 2) Are the experts available within the WP.29 forum to conduct this work? Or, Are there other more appropriate groups at the United Nations who could do this work?, and 3) Where would the boundaries be established for the development of a such a methodology? To resolve these issues, the GRPE Chair recommended that if it is not possible to agree on the complete text, text which is not agreed upon should be indicated with square brackets in the Guide when it is submitted formally to the GRPE in March 2014. Also, with respect to recommendation 2, the WP.29 forum should be consulted concerning the three items listed above.

**ACTION 3:** China will share research information related to recommendation 2 (method of stating energy efficiency) in draft 3 of the Guide with the EVE group via email or during a presentation at the next EVE meeting.

**ACTION 4:** The EVE Secretariat will consult the WP.29 forum for advice on recommendation 2.

Japan also provided comments on the recommendations in draft 3 of the Guide via document EVE-08-06e. Japan's position is that WLTP IWG could take responsibility for recommendation 1 and 3, that recommendation 2 is outside the scope of WP.29 and recommendation 4 needs clarification. Mr. Olechiw clarified that the recommendations in the Guide could be considered by other groups, like WLTP, and that the intention is not to duplicate future work. The GRPE Chair indicated that in the WLTP group, there is a boundary made between energy consumption related to the propulsion of the vehicle and the energy used for auxiliaries; Mr. Olechiw indicated that for EVs, this separation is more difficult.

A general comment from OICA was made concerning Driver-user information and how it is not part of the GRPE mandate. Mr. Olechiw clarified that the mandate of the EVE group was broad, to share information on EVs; Mr. Couroux also clarified that it was not in the interest of the EVE IWG to make recommendations outside the scope of the GRPE, which is outlined in section 1.2.2. of draft 3 of the Guide.

The GRPE Chair made a general comment concerning the need to conduct research and gather information prior to developing a GTR. Following from this, it was suggested that the EVE group look at EV utility factors as a potential area of future work.

**ACTION 5:** The EVE leadership will consider EV utility factors as a potential area of future work.

A brief discussion was held on the EV terminology that should be used in the Guide. The GRPE Chair clarified that the Guide should use VPSD terminology and the FEV consultant agreed to make this change for draft 4 of the Guide.

**ACTION 6:** The FEV consultant will work with the EVE Secretariat to adjust the EV terminology in the Guide to reflect definitions developed by the VPSD working group.

Comments on draft 3 of the Guide can be submitted until February 3<sup>rd</sup>, 2014 to the attention of Erin Marchington ([Erin.Marchington@ec.gc.ca](mailto:Erin.Marchington@ec.gc.ca)). The Guide is targeted to be finalized during the 9<sup>th</sup> EVE meeting on February 17-18<sup>th</sup> in Ann Arbor, Michigan, USA.

**ACTION 7:** All interested parties should submit comments on draft 3 of the Guide by February 3<sup>rd</sup>, 2014 to the attention of Erin Marchington ([Erin.Marchington@ec.gc.ca](mailto:Erin.Marchington@ec.gc.ca)).

#### **4. Roundtable on progress of related WP.29 working groups:**

Mr. Couroux led a roundtable discussion of work related to EVs occurring in three other GRPE IWGs: an update was given by Per Ohlund on the Worldwide harmonized Light duty Test Procedure (WLTP) IWG, an update was given by Petter Asman on the Heavy Duty Hybrid (HDH) IWG, and an update was given by Christoph Albus on the Vehicle Propulsion System Definitions (VPSD) IWG.

#### **5. Discuss potential EVE mandate extension**

Mr. Couroux informed the group that all work will be completed by March 1, 2014 upon submission of the EV Guide as a formal document to the GRPE. Mr. Olechiw recommended that a mandate proposal document could also be submitted on March 1, 2014 for consideration by the GRPE. Mr. Olechiw would then report to WP.29 about the mandate proposal concurrent with submission of report in November 2014. The group was asked to consider providing feedback on a new EVE mandate when submitting comments on the Guide by February 3<sup>rd</sup>, 2014.

**ACTION 8:** All interested parties should submit comments on a new EVE mandate by February 3<sup>rd</sup>, 2014 to the attention of Erin Marchington ([Erin.Marchington@ec.gc.ca](mailto:Erin.Marchington@ec.gc.ca)).

**ACTION 9:** The EVE Secretariat will prepare and submit a mandate proposal document on March 1, 2014 for consideration by the GRPE.

#### **6. Discuss draft EVE-09 meeting agenda**

Mr. Couroux presented the draft EVE-09 meeting agenda (EVE-08-04e) and no comments were made. The group was asked to inform the EVE Secretariat of their attendance to the meeting and willingness to participate in an EV Ride and Drive event, to be held after the EVE-09 meeting on February 19<sup>th</sup>, 2014. A final agenda and all documents for the EVE-09 meeting will be posted on the EVE website closer to the meeting.

**ACTION 10:** The EVE Secretariat will revise the EVE-09 agenda as required and post meeting documents on the EVE website closer to the meeting.

#### **7. Concluding remarks, Closing**

Mr. Olechiw thanked all for attending, reviewed the timeline for submission of comments on draft 3 of the Guide, and closed the meeting.