

Electric Vehicles and the Environment (EVE)

Initial Informal Group Meeting
15 May 2012

Agenda

- Introductions
- Explanation of WP.29 Mandate
- Review of Terms of Reference

EVE Organization

- Chair
 - United States – Mr. Michael Olechiw
- Vice-chairs
 - China – Ms. Chen Chunmei
 - Japan – Mr. Kazuyuki NARUSAWA
- Secretary
 - Canada – Mr. Stéphane Couroux

EVE Organization - Support

- Canada
 - Jean-François Ferry (Jean-Francois.Ferry@ec.gc.ca)
- China
 - To be determined
- Japan
 - To be determined
- United States
 - Mr. Jeff Alson (alson.jeff@epa.gov)
 - Mr. David Ganss (ganss.david@epa.gov)
 - Mr. Todd Sherwood (sherwood.todd@epa.gov)

WP.29 Mandate for EVE

2. Informal Working Group on Electric Vehicles and Environment (EVE)¹

17. The informal working group on Electric Vehicles and the Environment would be an open structure which would enable the exchange of information and experience on relevant policies and regulations. Concerning environmental performance, the general consensus is that electric vehicles have superior environmental performance to conventional vehicles, but the exact method of measurement of emissions and energy efficiency is still not defined under the 1998 Agreement (although there is ongoing work on test-cycle for hybrid electric vehicles in WLTP and HDH groups). While this area is less likely to provide grounds for a gtr, it is important to provide a forum for sharing information about developing techniques for such important considerations such as measuring the energy efficiency of future electric vehicles, battery durability, cold start performance, and recharging performance. Furthermore, application of fuel economy standards to electric vehicles and measurement of upstream emissions could be discussed as well.

1. ECE/TRANS/WP.29/2012/36

WP.29 Mandate for EVE

2. Informal Working Group on Electric Vehicles and Environment (EVE)¹

18. Moreover, while investigating the potential for future regulatory action, the informal working group can discuss the related research priorities, current projects and experience in order to foster mutual learning and possibly encourage development of common research projects and definitions. Among the important considerations regarding the environmental aspects of electric vehicles to be examined for potential gtr or other appropriate action might include the methods and procedures necessary to determine the operational, recharging performance of the electric drive system in any given vehicle and end-of-life battery approaches.

1. ECE/TRANS/WP.29/2012/36

WP.29 Mandate for EVE

2. Informal Working Group on Electric Vehicles and Environment (EVE)¹

19. With the continuing efforts to foster the development of electro-mobility, there will also be opportunities to share information on issues such as infrastructure build-up, standards for charging infrastructure, support for battery manufacturing, battery recycling and second-life usage, thus bringing together dispersed competences within the global context of WP.29.
20. All of these considerations regarding environmental performance aspects and other issues should be reviewed in the context of the existing work already being conducted by the WLTP, HDH and EFV informal working groups. This will enable a clear and discrete development of the terms of reference for the new informal working group on environmental performance of EVs.

1. ECE/TRANS/WP.29/2012/36

Terms of Reference

- **INTRODUCTION**

The proposal to establish an informal working group on electric vehicles (EVs) and the Environment comes as part of a broader initiative proposed by the European Commission, DG Enterprise and Industry, the National Highway Traffic Safety Administration and the Environmental Protection Agency in the United States, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) in Japan, and, Ministry of Industry and Information Technology in China. Under this initiative it is proposed to address both safety and environmental issues with the formation of two new informal groups one on Electric Vehicle Safety, and, another on Electric Vehicles and the Environment (EVE) under the GRPE. The term and the work in the groups will cover both battery electric (BEV) and hybrid electric vehicles (HEV) (including plug-in hybrids (PHEV)).

Terms of Reference

- Through this initiative, the co-sponsors aim to:
 - Exchange information on current and future regulatory requirements for electric vehicles in different markets,
 - Minimize the differences between these regulatory requirements, with a view toward facilitating the development of vehicles to comply with such requirements
 - Where possible, develop common requirements in the form of one or more UN Global Technical Regulations (GTR)

Terms of Reference

- **OBJECTIVE OF THE PROPOSAL**

- The informal working group on Electric Vehicles and the Environment would be an open structure which would enable the exchange of information and experience on relevant policies and regulations.
- Concerning environmental performance, the general consensus is that electric vehicles have superior environmental performance to conventional vehicles, but the exact method of measurement of emissions and energy efficiency is still not defined under the 1998 Agreement (although there is ongoing work on test-cycle development for hybrid electric vehicles in the WLTP and HDH groups). The EVE group should look to enhance these discussions where possible.

Terms of Reference

- **OBJECTIVE OF THE PROPOSAL (CONTINUED)**
 - The issues related to Electric Vehicles and the Environment may be less likely to provide grounds for a GTR, but it is important to provide an international forum for sharing information about developing techniques for such important considerations such as measuring the energy efficiency of future electric vehicles, battery durability, cold start performance, and recharging performance. Furthermore, policy approaches for implementation may also be discussed including such issues as measurement of upstream emissions.

Terms of Reference

- **OBJECTIVE OF THE PROPOSAL (CONTINUED)**
 - Moreover, while investigating the potential for future regulatory action, the informal working group can discuss and share information related to research priorities, current projects and experiences in order to foster mutual learning and possibly encourage development of common research projects and definitions. This could also include sharing experiences and information related to the identification of various barriers and challenges to market penetration of these vehicles. Among the important considerations regarding the environmental aspects of electric vehicles to be examined for potential GTR or other appropriate action might include the methods and procedures necessary to determine the operational, recharging performance of the electric drive system in any given vehicle and end-of-life battery approaches.

Terms of Reference

- **OBJECTIVE OF THE PROPOSAL (CONTINUED)**
 - With the continuing efforts to foster the development of electro-mobility, there will also be opportunities to share information on issues such as infrastructure build-up, standards for charging infrastructure, support for battery manufacturing, battery recycling and second-life usage, thus bringing together dispersed competences within the global context of WP29.
 - All of these considerations regarding environmental performance aspects and other issues should be reviewed in the context of the existing work already being conducted by the WLTP, HDH and EFV informal groups. This will enable a clear and discrete development of the terms of reference for the new informal group on environmental performance of EVs

Terms of Reference

ORGANIZATION AND STRUCTURE

THE GROUP SHALL BE OPEN TO ALL INTERESTED PARTIES. THE UNITED STATES WILL SERVE AS CHAIRMAN, CHINA AND JAPAN WILL SERVE AS VICE-CHAIRMEN AND CANADA WILL SERVE AS SECRETARY FOR THE EVE INFORMAL GROUP. SPONSORSHIP WILL BE PROVIDED BY THE EC, CHINA, JAPAN AND THE UNITED STATES.

3.1. THE INFORMAL GROUP WILL INITIALLY DEVELOP THE MEANS AND RESOURCES TO:

- A. UNDERSTAND AND DOCUMENT THE CURRENT CONSIDERATION OF ELECTRIC VEHICLES UNDER THE WORK OF OTHER ESTABLISHED INFORMAL GROUPS: WLTP, EFV, EVS AND HDH.**
- B. ESTABLISH A MECHANISM FOR SHARING ONGOING RESEARCH AND INFORMATION SHARING ON TOPICS RELATED TO ELECTRIC VEHICLES AND THE ENVIRONMENT.**
- C. DEVELOP A REFERENCE GUIDE FOR REGULATORY ACTIVITIES ALREADY ESTABLISHED OR BEING CONSIDERED BY CONTRACTING PARTIES.**

3.2. THE AVAILABLE LITERATURE, INCLUDING STANDARDS AND REGULATIONS, SHOULD THEN BE SCREENED AND ANALYZED FOR POTENTIAL IDENTIFICATION OF FUTURE REGULATORY ACTION.

3.3. THE INFORMAL GROUP WILL MAKE EVERY EFFORT TO STAY ABREAST OF DEVELOPING CONCEPTS AND IMPLEMENTATION STRATEGIES FOR THE INTRODUCTION OF EVS THROUGH REGULAR DIALOGUE AND EXPERT PRESENTATIONS.

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