

Electric Vehicles and the Environment (EVE IWG)

1

REPORT TO GRPE 85TH SESSION

EVE Status

2

- GTR for In-vehicle Battery Durability for Electrified Vehicles was approved by the GRPE on 12 November 2021.
 - AC.3 is expected to vote on the GTR during its March 2022 session.
- A second phase of the durability GTR will be started to expand the applicability of the GTR and consider further development for light-duty vehicles.
- Updates to GTR21 for the Determination of Hybrid Vehicle System Power are becoming more critical and will require focused effort.
- Revised Terms of Reference have been drafted and were also approved in November 2021.

Durability Phase 2

3

- During the development of this GTR, the EVE identified the need for a future revision which could include:
 - Consider heavy-duty vehicles
 - ✦ EVE has already identified technical differences which preclude the direct application of light-duty vehicle requirements
 - Minimum performance requirements for range
 - Data analysis and modification to the performance requirements
 - Refinement of the verification procedures
 - Adopt Normal Usage Indices

Updated Terms of Reference

4

GRPE-85-43

Submitted by the United States of America,
Japan, the European Union and Canada

Informal Document No. EVE-53-03-Rev3

Terms of Reference for Informal Working Group on Electric Vehicles and Environment (EVE)

1. PROCEDURAL BACKGROUND

The executive committee of the 1998 Agreement (AC.3) gave, in November 2011, its general support to a joint proposal by the United States, Japan, and the European Union to establish two working groups to address safety and environmental issues associated with electric vehicles (ECE/TRANS/WP.29/AC.3/32)¹. The proposal (ECE/Trans/WP.29/2012/36, and its Corr1) submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) at its March 2012 session with China joining as a cosponsor with the European Union, Japan and the United States was formally adopted at that time. Current sponsors of the EVE IWG in November 2021 include Canada, the European Union, Korea, Japan and the United States.

The adopted proposal highlights the objectives of the first mandate for the two informal working groups as follows:

- (a) Exchange information on current and future regulatory requirements for EVs in different markets;
- (b) Minimize the differences between these regulatory requirements, with a view toward facilitating the development of vehicles to comply with such requirements; and
- (c) Where possible, develop common requirements in the form of one or more UN global technical regulations (GTR).

The EVE IWG's first terms of reference (GRPE-65-04-Rev.1) was presented at the 65th GRPE session in January 2013. By November 2014, the EVE IWG completed its first mandate which included the development of a reference guide for environmentally-related EV requirements (ECE-TRANS-WP29-2014-81). At this time the EVE IWG proposed a new mandate in two parts, to conduct additional research, and to identify recommendations suitable for the development of GTR(s)(ECE/TRANS/WP.29/2014/88).

By November 2016, the EVE IWG put forth a proposal to develop amendments to GTR No. 15 and to continue research items on environmental requirements for electric vehicles (ECE-TRANS-WP.29-2016-

¹ (European Union, Japan and the USA) Proposal for establishing two Informal Working Groups addressing the safety and environmental requirements for electric vehicles to enhance regulatory cooperation including developing Global Technical Regulations in the framework of the 1998 Agreement

- Revised ToR's for January 2021~ June 2023
- Submitted by USA, Japan, Korea, EU and Canada
- Co-chair: USA and EC
- Vice chair: Japan and China
- Secretary: Canada
- Continue development of durability GTR's
 - Light-duty vehicles durability– continued work
 - Heavy-duty vehicle durability – new work
 - Power determination – continued work
- Collaboration with Group of Experts on Energy Efficiency (GEEE)
- Information sharing

Future EVE Meetings

5

- Next meetings will be virtual – dates are not fixed but most likely the middle of February and middle of April 2022.
 - Plan to kick off the 2nd phase of the durability GTR
 - Continue work on GTR21
- Face-to-face meeting (hopefully) in late spring 2022 or during GRPE