Submitted by the EVE informal working group

Informal document **GRPE-86-37** 86th GRPE, 30 May ~ 2 June 2022

Agenda item 9

Electric Vehicles and the Environment (EVE IWG)

1))

REPORT TO GRPE 86TH SESSION

2022 CY EVE Meetings

2

- 54th: 16 February 2022: Virtual meeting
- 55th: 26~27 April 2022: Virtual meeting
- 56th: 30 May 2022: Hybrid meeting

Current Work



- Hybrid power determination (GTR-21)
 - The EVE IWG will continue to consider the need for additions and revisions
 - o For example, addition of family concept and candidate method
 - Stakeholder feedback on the current version of the GTR.
- In-vehicle battery durability (GTR-22)
 - Consider further development and refinement of GTR 22
 - Address heavy-duty electrified vehicle durability

GTR 22 Published on 19 April 2022

4

- Congratulations to the GRPE and EVE
- https://unece.org/transport/standards/transport/vehicle-regulations-wp29/global-technical-regulations-gtrs

Heavy-duty Durability

- 5
- Currently in the process of determining the requirements for durability
- Heavy-duty electrified vehicle durability may require a solution that is different from light-duty
 - For example, determination of Useable Battery Energy is substantially different from LDVs.
- Heavy-duty vehicle activity can vary greatly from product to product and application.
- Power fade will need to be considered in addition to the capacity fade
- Different group of technical experts

Current Timeline

6

• January 2022:

a. EVE IWG begins evaluation of HDV consideration for in-vehicle battery durability requirements and subsequent steps of the GTR development

b. January 2023: EVE IWG informs GRPE of next steps for the development of battery durability requirements for HDV and other subsequent steps of the GTR development.

June 2021-January 2024:

a. IWG on EVE continues information gathering on possible modifications to the in-vehicle battery durability UN GTR and develops amendments to the UN GTR for consideration by WP.29 and AC.3, as deemed appropriate.

May 2021 - June 2023:

a. EVE IWG supports the Group of Experts on Energy Efficiency on the method for stating energy consumption from upstream emissions of electrified vehicles.

November 2021 – June 2023

- a. Consideration of a candidate test method and further validation testing for UN GTR No. 21
- b. Consideration of family concept
- c. Consideration of other GTR amendments as necessary

Future EVE Meetings

- 7
- 57th: July 2022: Virtual meeting
- 58th: 21~22 September: Hybrid meeting Brussels EC Host
- 59th: Late fall meeting: TBD most likely virtual
- 60th: January 2023 GRPE

8

Thank you!

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