57th EVE IWG Meeting

Via WebEx, September 21st – 22nd, 2022

Key Meeting Outcomes from 57 EVE IWG

- A plan developed for in-vehicle battery durability provisions for heavy-duty vehicles with a focus on in-situ testing of the battery at beginning of life and during use
 - EVE IWG will consider future ways to assess power fade of heavy-duty vehicle batteries
 - JRC presented new data on commercial vehicles which may provide a useful outline for the new HDV GTR being developed
- Japan made a proposal for an open issue with integrated power systems for GTR No. 21
- Japan made a proposal on family definitions for GTR No. 21 that will be drafted into the GTR for changes
- All other proposals remain under discussion to be further discussed today and tomorrow (Ex: swappable batteries, annex 2, category 2 MPR)

Discussion points from EVE IWG 57th meeting

- Japan and OICA made proposals for amendments to GTR No. 22
- GRPE secretariat asked for comments on the WP.5 paper, specifically on storing vehicle power data with the grid
- JRC presented some new data on commercial vehicles
- SAE provided updates on their work with diagnostic repair for EVS
- China opened discussion on swappable batteries

Action Items

- 1. Volunteers and a drafting coordinator for HDV GTR drafting group (complete)
- 2. China to present more information on swappable batteries
- 3. SAE to follow up with CEN to ensure there is no duplication of efforts on batteries/battery replacements and monitors
- 4. Japan to confirm how to establish the ratio for power determination (technical)
- 5. GTR No.21 drafting coordinator to begin adding text regarding family definitions and draft text regarding Japan's distribution ratio concepts with torque and current for integrated systems
- 6. Mr. Mike Safoutin to keep a running draft of proposed changes to GTR No 21

Action Items Continued

- 7. Japan to reconcile comments and see if families for GTR No. 22 can harmonize with GTR No. 21
- 8. EC to present more details on Europe's battery regulation
- 9. EVE IWG to comment on WP.5 paper regarding LCA
- 10. Secretary to draft proposal for HDV GTR in time for GRPE formal submission
- 11. Ms. Penny Dilara to draft language to reflect Japan's recommendations for #9 and #10 in GTR No. 22 and to add new draft with current amendments proposed so far

Action Items Continued

- 12. U.S. EPA to look into being able to provide energy consumption values for JRC modelling
- 13. EVE IWG to map out categories for MPR to see how they apply for durability GTR No. 22.
- 14. All drafting parties to report back on HDV segmentation
- 15. Leading team to plan future meetings and geographic rotation
- 16. EVE IWG to further consider how to approach replacement batteries
- 17. Japan to have further comments on JRC presentation
- 18. EVE IWG to suggest classes where power fade could be an issue

Timeline from the current Terms of Reference

8. January 2022:

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

EVE IWG currently on track for HDV timeline in terms of reference

HD vehicle battery durability timelines from proposal submission

- The timelines proposed below for the new mandate are target timelines. The plan will be regularly reviewed and updated to reflect progress and feasibility of the timeline
 - a) January 2023: Request for authorization submitted to GRPE
 - b) March 2023: Request for authorization considered by WP. 29
 - c) January 2024: EVE IWG provides a status update and draft copy of the development of the durability GTR on heavy-duty vehicles as an informal document for further discussion and recommendation. EVE IWG provides updates on future framework for future heavy duty vehicle related durability GTR decisions.
 - **d)** June 2024: IWG on EVE provides a draft GTR to the June 2024 meeting of GRPE as a working document.

Next EVE Meeting Rotation Schedule

- Next EVE IWG meetings:
 - January 10, 2023 -> Geneva (hybrid session)
 - Spring 2023 -> U.S (Ann Arbor)
 - Summer 2023 -> Geneva (hybrid session)
 - Fall 2023 -> Canada (Ottawa)
 - Spring 2024 -> Japan ?? (Suggestion)
 - Fall 2024 -> Europe
- The next **in-person** EVE IWG meeting is in conjunction with GRPE in January on Tue 10 Jan 2023 9.30 12.30 CET.