



UNECE EVE-IWG

In-Vehicle Battery Durability

Comments on Battery Durability GTR

EVE #40 meeting 24. November 2020





Proposed decisions for EVE#40 meeting

- 1. Confirmed Adopt (2) SOH monitors
 - a. SOCC State of Certified Capacity
 - i. Available to the customer and regulatory authorities
 - b. SOCR State of Certified Range
 - i. Available to regulatory authorities
- 2. Confirmed Adopt a Minimum Performance Requirement (MPR) (or DPR) in Phase 1
 - a. Decision: MPR based on SOCC or SOCR or both?
 - b. Decision: Value of the MPR
 - i. Decision: Japanese MPR Matrix Proposal (EVE-38-03e)
 - ii. Decision: Base MPR on TEMA model results
 - iii. Is there other data on which to base the MPR?
 - c. Confirmed: DPR may be established in Phase 1
 - Decision: If the MPR is based on SOCC, how to monitor SOCR
- Confirmed a Part A and Part B of the GTR
 - a. Confirmed: Part A will validate the SOH
 - i. Decision: Validate both SOCC and SOCR?
 - b. Confirmed: Part B will validate the MPR
 - i. Decision: Statistical analysis of pass/fail and consideration of tolerances
 - ii. Decision: Family Definitions
 - 1. Decision: Japanese IP and SOH family proposal
 - 2. Decision: Or Proposal currently in the draft GTR text

The industry is requesting more discussion on the marked topics in order to avoid immature decisions





ALLIANCE / ACEA comments to the indicated decision points

| 2. Adopt a MPR (orDPR) | Industry comments |
|---------------------------------------|---|
| a. MPR based on SOCC or SOCR or both? | Industry supports MPR based on SOCC (UBE) for phase 1 Industry support SOCR going into monitoring in phase 1 |
| b. Value of the MPR? | Industry needs more discussion on this important issue Industry still had no chance to validate the TEMA model (TEMA model cannot be used as main input for Phase 1 MPR) More discussion required on the level of MPR for the different vehicle types (PHEV vs. BEV, M1 vs. N1) |
| d. If SOCC MPR, how to monitor SOCR? | SOCR is determined in the same test as SOCC but SOCR is not challenged against the tolerance and against the MPR The results and findings on SOCR shall be collected and analyzed |

| 3. Confirmed Part A and B for ISC in GTR | Industry comments |
|--|--|
| b. Statistical analysis of pass / fail? | Needs more discussion and cannot be decided without a family concept |
| Determination of tolerances? | Needs more discussion and depends on the MPR level |
| | Needs more discussion. Japan proposal was introduces just 2 weeks ago The proposal in the draft is just copied from a different regulation with different purpose ACEA is preparing another proposal that needs more discussion in OICA The Japan concept of different Families for Part A and Part B is supported by OICA |

- The decisions in the GTR on Battery Durability will have a high impact on mobility.
- The electrification of mobility should not be slowed down by immature decisions.
- → With more time for discussion, EVE-IWG should be able to define appropriate requirements.