



UNECE EVE-IWG

In-Vehicle Battery Durability

OICA comments on GTR 22
EVE-IWG #57
13.07.2022

Values to be read from vehicles:

1. On board SOCE value
2. On board SOCR value
3. Odometer (in km)
4. Date of manufacture of the vehicle
5. Total distance (sum of the distance driven and the virtual distance) [km], if applicable
6. Percentage of virtual distance [in per cent], if applicable
7. Worst case certified energy consumption of PART B family [Wh/km], if applicable
8. Total discharge energy in V2X [Wh], if applicable
9. Last charged by more than 50 per cent SOC swing on [Date]
10. Maximum, minimum, average ambient temperature* the vehicle was exposed to during its lifetime

Note: * ambient temperature to be read as daily averages

To be aligned with EU Battery Regulation proposal to add:



- 11. Energy throughput
- 12. Capacity throughput
- Total time of use ?

- OICA discussed internally about the Japan proposals on 9. and 10.
- During the last IWG meeting additional items were proposed to be added by JRC
- **Before OICA can agree on a position on this topics, we need to clarify the purpose of the measured values**
- It was discussed during the last meeting in Geneva, that the data could be used to exclude vehicles for the sample
- The detailed procedure is not yet clear, for example do we have to set thresholds for several points?

Common understanding in IWG EVE:

- SOCE for category 2 as well as SOCR for all categories are in monitoring for Part B and Part A
- GTR text currently makes monitoring clear only for Part B but for Part A monitoring not clear (this means that accuracy requirements for indicators would also apply to SOCR)
- Situation had been discussed with EVE leadership in November 2021 and an amendment was supported

Proposal would be as follows:

<u>Current text in paragraph 5.2. (below Table 1 and Table 2)</u>	<u>Proposed text in paragraph 5.2. (below Table 1 and Table 2)</u>
<p>SOCR and SOCE monitors of vehicles of category 2 and SOCR monitors of category 1-1 and 1-2 vehicles shall be installed and their values monitored in view of setting the values in the tables in a future amendment of this GTR.</p>	<p>SOCR and SOCE monitors of vehicles of category 2 and SOCR monitors of category 1-1 and 1-2 vehicles shall be installed and their values monitored in view of setting the values in the tables for Part B as well as accuracy requirements in paragraph 6.3. for Part A in a future amendment of this GTR.</p>

Paragraph 6.4.1. says:

- If the number of vehicles in the sample is less than 500, ...
- If the number of vehicles is equal to or more than 500, ...

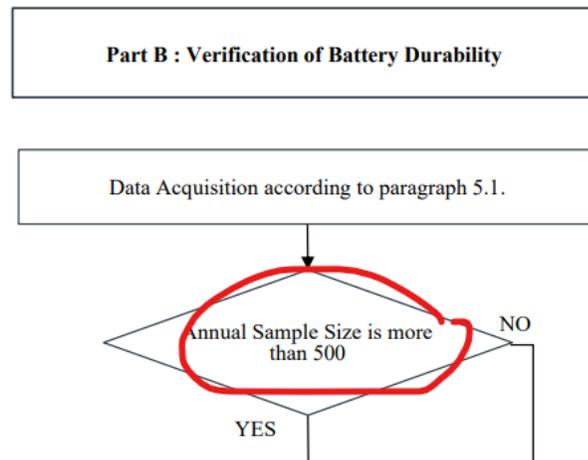
Figure 2 in paragraph 6.5. says:

- Annual sample size is more than 500, ...

If the number of vehicles in the sample is less than 500, then on the request of the manufacturer and with the agreement of the responsible authority, a maximum of 5 per cent of the values may be excluded from the sample. In such a case, the manufacturer needs to provide adequate information on the reason behind the exclusion for each vehicle to the authority.

If the number of vehicles in the sample is equal to or more than 500, then all vehicles shall be included in the sample. The data read shall be those of the SOCR and SOCE monitors (and other relevant data, such as those defined in Annex 2). SOCR and SOCE monitors of vehicles of category 2 and SOCR monitors of category 1-1 and 1-2 vehicles shall be monitored.

Figure 2
Flow chart for Part B : Verification of Battery Durability



→ Figure 2 amended as follows: “Annual sample size is **equal to or more than 500**”