

Report of the 91st session
Electric Vehicles and the Environment Informal Working Group (EVE IWG)

Location: Virtual – Webex
Date: November 19, 2025
Time: 05:30 – 08:00 EST

Chair: Ms. Elena Paffumi (European Commission)

Vice-chairs: Ms. Chen Chunmei (China)
Mr. Nobunori Okui (Japan)

Secretariat: Mr. Leeson Guay (Canada)

Day 1 – November 19, 2025, 05:30 EST

1. Introduction, review of agenda, and meeting recap

Documentation

- EVE-90-08e
- EVE-91-01e

Context

The EVE IWG chair addressed members and welcomed everyone to the virtual meeting.

The chair presented the meeting agenda to EVE IWG members, which can be seen below. The agenda was reviewed and adopted by the EVE IWG prior to beginning discussions.

Day 1 – November 19, 2025, 05:30 EST

- Introduction, review of agenda, meeting recap
- UN GTR 22 – Part C verification
- UN GTR 22 – Proposal of new OBD ID "Part B family identifier" (SAE J1979-DA)
- UN GTR 22 – Discussion of open items
- UN GTR 25 – Discussion of open items
- UN GTR 21 – Dyno force tolerance and FCEV test procedure
- UN GTR 21 – Discussion of open items
- Closing remarks

The EVE IWG Secretary briefly reviewed the *Report of the 90th EVE IWG session*, highlighting action items and key decisions from the discussions, held virtually, on November 04-05, 2025.

Discussion

The Organisation Internationale des Constructeurs d'Automobiles (OICA) communicated that they are currently in discussions with regard to the onboard diagnostic (OBD) identification (ID) proposal which will be presented by the Japanese delegation in item 3.

2. UN GTR 22 – Part C verification

Documentation

- EVE-91-02e

Context

OICA gave a presentation outlining their reasoning for a 5 % tolerance on the virtual distance accuracy from the discharge power subparagraph of the *Part C: Verification of reported virtual distance* subsection. The proposal outlined that 3 % tolerance is needed for the current and voltage measurement, 1.5 % for variation in discharge power, and 1 % for losses and rounding.

Discussion

The drafting coordinator indicated that the proposal will be added to the draft text for consideration.

Action items

- Drafting coordinator to add 5 % virtual distance tolerance for *Part C: Verification of reported virtual distance* into the draft text for further consideration.

3. UN GTR 22 – Proposal of new OBD ID "Part B family identifier" (SAE J1979-DA)

Documentation

- EVE-91-06e

Context

The Japanese delegation offered a presentation highlighting their proposal to consider a Part B family identifier as part of the parameters to be read from the vehicle, in accordance with text in United Nations (UN) Regulation No. 154.

Discussion

The drafting coordinator clarified if the members feel there is a need for the inclusion of this parameter in UN Global Technical Regulation (GTR) No. 22 Annex 2. The Japanese delegation indicated that they feel it should be included, in addition to the other adopted parameters that have been approved at previous sessions. The drafting coordinator offered to include this in the draft text as a comment so that the group can take it step-by-step. OICA agreed with this and stated that they have had discussions about this in the past. Harmonizing now may be a good idea if going item-by-item.

Action items

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Decisions

4. UN GTR 22 – Discussion of open items

Documentation

- EVE-91-04e

Context

This item was set with the objective of reviewing the working draft of UN GTR No. 22 and discussing open items. The drafting coordinator opened the working document draft text for discussion, with a focus on *Part C: Verification of reported virtual distance*.

Discussion

Part C: Verification of reported virtual distance

With regard to the *Part C Initial setting of the State of Charge of the battery*, the Japanese delegation suggested that they do not feel a fully charged battery is required to achieve the desired outcome. OICA indicated that it depends on the procedure. When the proposal was made we had in mind that we are in the process of doing one test and then having to charge the vehicle and continue with the test for Part C verification. But when we do the test now, the conditions may change for a retest. Regardless we would like to stick with the language of fully charging the battery. The Japanese delegation stated that there appears to be flexibility with the state of charge (SOC) with the approval authority so we do not need to change the language, we can keep the language “fully charged” with the option for lower SOC.

With regard to the discharging power for the Part C test, the drafting coordinator questioned if the group was willing to accept the language around having more than one V2X or non-traction function operational during the test. The Japanese delegation asked if there is a need to verify if more than one V2X function is enabled during the test. The drafting coordinator communicated that all of the functions need to be checked but this specific item is referring to a case where they cannot be operated individually. In such a case, there is a need for additional language that states that there is a need to identify and report if more than one of the V2X functions were operational during the testing. OICA commented that the paragraph should use the language virtual distance and not virtual mileage for consistency. The Japanese delegation suggested that there is no need for a 3 % accuracy on the virtual distance tolerance of this subparagraph and 5 % would be acceptable. OICA commented that there is a new standard for China where the 3 % tolerance is a requirement, so it is unlikely that China will change their position on this value. The drafting coordinator indicated that they will reach out directly to the Chinese delegation to determine their position.

With regard to the subparagraph on termination of the Part C test, OICA indicated that they are in agreement with the proposed modifications. The Japanese delegation was unclear whether the language “shall” is necessary when describing in the termination of the test if there are options presented. The European Commission indicated that shall makes sense in this context.

With regard to the verification procedure of Part C, the drafting coordinator highlighted added text that total discharge energy needs to be measured at the battery. OICA commented that leaving out

where the total discharge energy is measured is technology neutral especially when considering wireless charging and direct current (DC) versus alternating current (AC) systems. We would like to minimize the impact on the battery so maybe specifying using the AC output to measure is appropriate and leaving the battery location. If this is the case then perhaps the definitions for V2X and non-traction should be reviewed.

Part A Verification of SOCE/SOCR monitors

OICA recalled that in 88th EVE IWG session, they had raised a point about how verification data will be shared amongst the contracting parties for Part A verification. The drafting coordinator asked if OICA would like this to be included in the working document directly or if a comment in the document will suffice. OICA agreed that a comment is sufficient at this time.

The Drafting coordinator request that members take time to review the square brackets in the latest UN GTR No. 22 working document that will be posted following the 91st EVE IWG session on the 91st session wiki page.

Action items

- EVE IWG members to review all square brackets of the UN GTR No. 22 draft text for the next EVE IWG session and come prepared to decide on the text.
- Drafting coordinator to revise draft text to reflect discussion and comments made during the session and post a revised version for finalization at the next EVE IWG session.
- Drafting coordinator to reach out to the Chinese delegation about their position on Part C virtual distance accuracy of 3 % to see if it can be shifted to 5 %.

Decisions

- It was decided to keep the requirement for a fully charged battery as the initial setting of the SOC of the battery as part of the *Part C: Verification of reported virtual distance* boundary conditions.

5. UN GTR 25 – Discussion of open items

Documentation

- EVE-91-05e
- EVE-91-07e

Context

This item was set with the objective of reviewing the working draft of UN GTR No. 25 and discussing open items. The drafting coordinator first went through a status update of the GTR prior to opening the working document draft text for discussion, particularly focusing on vehicle selection provisions.

Discussion

Vehicle selection

The drafting coordinator showed revised language for the vehicle selection criteria. The technical services representative communicated that they do not feel the new proposal will work since, as previously raised, a vehicle with the highest usable battery energy (UBE) is not necessarily representative because the c-rate and deterioration of the battery may be more impactful on another vehicle with a different UBE. OICA understood that there is a declaration for all Part B families but to make sure the declaration is done correctly, the vehicle with the highest UBE within the Part A family will be selected to testing. The technical services representative still expressed confusion because the highest UBE does not necessarily lead to the highest deterioration. The EC communicated that they have had internal discussions about whether it should be the worst case and from our side this new proposal is what we are thinking would be an appropriate compromise. So we are doing a test for the highest UBE certified vehicles and a representative family member. In the European Union, we would also have a declaration for the UBE. The Japanese delegation indicated that they do not have the same regulations so they cannot agree. UBE certified is automatically derived in the Japanese regulations. The EC stated that to avoid a tremendous testing burden, they are proposing to compromise by selecting a representative vehicle of the family, not the absolute. The Japanese indicated that they would continue to discuss internally.

Action items

- Japanese delegation to discuss vehicle selection internally for a decision at the next EVE IWG session.

6. UN GTR 21 – Dyno force tolerance and FCEV test procedure

Documentation

- EVE-91-02e

Context

OICA gave a presentation regarding the fuel cell electric vehicles (FCEV) test procedure and system bench testing dynamometer tolerances. FCEV comments proposed to shift the methodology of the FCEV testing to the next phase of UN GTR No. 21 development while system bench dynamometer tolerances were proposed to be +/- 0.1 %.

Discussion

The Japanese delegation indicated that they would discuss this internally first prior to offering a position. OICA asked if and justifications were needed and the Japanese delegation responded that they do not need anything further at this time.

Action items

- Japanese delegation to internally discuss the proposal from OICA before presenting their position at the next EVE IWG session.

7. UN GTR 21 – Discussion of open items

Documentation

- EVE-91-03e

Context

This item was set with the objective of reviewing the working draft of UN GTR No. 21 and discussing open items. The drafting coordinator opened the draft text and went through the open items and modifications made to date.

Discussion

The drafting coordinator presented paragraph 5.2.1. and the removal of text from Table 2 stating “of hub dynamometer or system bench” No comments were received so the text was accepted.

The drafting coordinator highlighted text at the end of subsection 6.1. and the inclusion of “or system bench” and other language describing the eligibility of the use of a system bench. No comments were received so the text was accepted.

The EC commented that there appears to be some missing information in this version of the draft text, specifically regarding thermal requirements, which would be paragraph 5.1.5. in the GTR. In addition, there are other excerpts from paragraph 5.1.2. in UN Regulation No. 177 regarding test room conditions which are outlined in ECE-TRANS/WP.29/2025/25 that will need to be incorporated.

The drafting coordinator showed added text at the end of subparagraph 6.9.2.1. regarding ISO requirements for engine speed measurement, aligning with the Japanese delegation proposal. No comments were received so the text was accepted.

The drafting coordinator indicated a new added subsection 6.11 to align with UN Regulation No. 177. The EC commented that the text for this subsection seems to be incorrectly numbered in reference to UN Regulation No. 177. No further comments and the text was accepted with the understanding that the numbering format will need to be adjusted.

The drafting coordinator showed added text, “of force” in Annex 2 and the removal of item 6 from the list. The EC communicated that there may be further misalignment here as paragraph 6 has not been deleted and the “or force” text is arranged differently within the sentence of item 5. The drafting coordinator stated that they would go back and realign the text with the GRPE 93-50e document. OICA offered to provide text alignment assistance, as needed.

Action items

- Drafting coordinator to align UN GTR No. 21 with the GRPE-93-50e document.

Decisions

- Paragraph 5.2.1, the removal of text from Table 2 stating “of hub dynamometer or system bench” was accepted.
- Text in subsection 6.1, the inclusion of “or system bench” and other language describing the eligibility of the use of a system bench, was accepted
- Text at the end of subparagraph 6.9.2.1. regarding ISO requirements for engine speed measurement, aligning with the Japanese delegation proposal, was accepted

- A new added subsection 6.11 *Interpretation of results*, to align with UN Regulation No. 177, was accepted with the understanding that the numbering format will need to be adjusted.

8. Closing remarks

Context

This item was set with the objective of closing the meeting and looking forward to the next, addressing logistical, administrative and miscellaneous topics.

Discussion

The EVE IWG chair communicated that the meeting was running later than expected and that items covered in the closing remarks would be addressed at the next EVE IWG session.

The EVE IWG chair reminded participants that the next meeting will be the final session prior to the submission deadline of the March session of the 94th Working Party on Pollution and Energy (GRPE).

Action items

- EVE IWG Secretary to include these topics from the closing remarks into the next EVE IWG session agenda.