WLTP UNR Development (based on WLTP-28-09e)

Postponed topics

Postponed, may be introduced by informal document if further evidence given

Proposals for amendment

Update/amendment to include extrapolation for OVC-HEVs

Intention of the proposal:

- Extrapolation is defined for OVC-HEVs but to avoid mistakes in the extrapolation two additional aspects need to be considered, to ensure that the extrapolation is right and correct
  - By extrapolation below VL, the amount of CD-cycles need to be identical between VL and the extrapolated vehicle below VL; if VL was not able to drive CD in pure electric operation, also no pure electric operation for the extrapolated vehicle below VL allowed
  - By extrapolation above VH, the amount of CD-cycles need to be identical between VH and the extrapolated vehicle above VH; if VH was able to drive CD in pure electric operation until SoC_{min}, also pure electric operation for the extrapolated vehicle above VH required

Decision during meeting on October 16th 2019:

- JPN and EC stated that not necessary to include it now, can be done later
- Topic put on hold for the moment, will be deleted from the document, but can be added via informal document for January GRPE

Latest version: 190930_WLTP-GTR-Proposals_EV_extrapolation_OVC-HEVs.pdf

Conclusion with WLTP SG EV after web-audio on October 16th, 2019:

- [ ] Supported and shall go into UNR WLTP first edition
- [ ] Shall go into UNR WLTP first edition, but in square brackets ("[...]")
- [ ] For the moment, proposal in Square brackets; active feedback until October 21st required to remove "[...]"
- [X] Not supported at the current stage, put on hold for a later stage

Postponed

Proposals for amendment

Update/amendment of the wording of nominal voltage

Intention of proposal:

- Nominal voltage is a fixed voltage value which is not taking care of the voltage decrease of a REESS
- For PEV test procedures, nominal voltage is not allowed at all; but still for the CD-test of an OVC-HEV
- Proposal limits the application of nominal voltage to the CS-conditions of an OVC-HEV and to the low voltage REESSs of PEVs and OVC-HEVs under CD conditions
- For low voltage REESS, nominal voltage application should be allowed in any case as these REESS are small and the voltage decrease over SoC is small

Feedback during meeting on October 16th :

- EC supports the proposal
- JPN understand the proposal but cannot support the integration of the proposal into UNR WLTP first edition
- Topic will be discussed again at a later stage

Latest version: 190903_ACEA TF EV proposal nominal voltage_with_comment_and_changes.docx

Conclusion with WLTP SG EV after web-audio on October 16th, 2019:

- ☐ Supported and shall go into UNR WLTP first edition
- ☐ Shall go into UNR WLTP first edition, but in square brackets (“[...]”)
- ☐ For the moment, proposal in Square brackets; active feedback until October 21st required to remove “[...]”
- ☒ Not supported at the current stage, put on hold for a later stage

Postponed

Proposals for amendment

Alternative option for COP testing of PEVs

Intention of proposal:

- JAMA is proposing an alternative method (option) to the existing COP procedure (first cycle of the PEV test procedure for DC energy consumption confirmation) as in current procedure, vehicle is coming out of the test with a high SoC because procedure is starting with a fully charged battery and only one cycle is being driven
- If vehicle is shipped by plane, there is a requirement to have a maximum SoC of 30% which means that for those vehicles, the manufacturer needs to discharge the REESS down to this level
- Alternative procedure is following the same methodology like the existing procedure but starting with lower SoC and therefore avoiding this discharge of the REESS after the first cycle

Feedback during meeting on October 16th :

- General concern on timeline
- Decision to postpone discussion to a later stage

Presentation describing proposal: PEV Test Procedure for COP_JAMA.pdf

Conclusion with WLTP SG EV after web-audio on October 16th, 2019:

- [ ] Supported and shall go into UNR WLTP first edition
- [ ] Shall go into UNR WLTP first edition, but in square brackets (“[...]”)
- [ ] For the moment, proposal in Square brackets; active feedback until October 21st required to remove “[...]”
- [X] Not supported at the current stage, put on hold for a later stage

Postponed, may be introduced by informal document if further evidence given

Proposals for amendment

CO2 correction factor determination (Annex 8) – Drafting issue in §4.1.1.3.

Intention of the proposal:

- Removing redundant text in paragraph 4.1.1.3., no content change
- KCO2 is mentioned in the formula and in the legend below the formula
- Text see next slide
- Task for the drafting coordinator?

Feedback:

- New proposal
- Not discussed yet
- No feedback available yet

Conclusion with WLTP SG EV after web-audio on October 16th, 2019:

- ☐ Supported and shall go into UNR WLTP first edition
- ☐ Shall go into UNR WLTP first edition, but in square brackets (“[…]”)
- ☐ For the moment, proposal in Square brackets; active feedback until October 21st required to remove “[…]”
- ☒ Not supported at the current stage, put on hold for a later stage

Postponed, may be introduced by informal document if further evidence given

Proposals for amendment

CO2 correction factor determination (Annex 8 App. 2) – Drafting issue in §4.1.1.3.

4.1.1.3. If the correction of the charge-sustaining CO_2 mass emission is required according to paragraph 1.1.3. of Appendix 2 to this annex or in the case that the correction according to paragraph 1.1.4. of Appendix 2 to this annex was applied, the CO_2 mass emission correction coefficient shall be determined according to paragraph 2. of Appendix 2 to this annex. The corrected charge-sustaining CO_2 mass emission shall be determined using the following equation:

$$M_{CO2,CS} = M_{CO2,CS,nb} - K_{CO2} \times EC_{DC,CS}$$

where:

$M_{CO2,CS}$ is the charge-sustaining CO_2 mass emission of the charge-sustaining Type 1 test according to Table A8/5, step No. 3, g/km;

$M_{CO2,CS,nb}$ is the non-balanced CO_2 mass emission of the charge-sustaining Type 1 test, not corrected for the energy balance, determined according to Table A8/5, step No. 2, g/km;

$EC_{DC,CS}$ is the electric energy consumption of the charge-sustaining Type 1 test according to paragraph 4.3. of this annex, Wh/km;

K_{CO2} is the CO_2 mass emission correction coefficient according to paragraph 2.3.2. of Appendix 2 to this annex, (g/km)/(Wh/km).