Open issues discussed on 19-11-2019

From the author: This document is a follow-up on the open issues and text in brackets after the final input from the CoP TF was delivered to the drafting coordinator, refer to document [Open issues after 17-10-2019.docx](https://wiki.unece.org/download/attachments/92013203/Open%20issues%20after%2017-10-2019.docx?api=v2). That document was discussed during the 13th TF meeting on 19 November, and the outcome of these discussions is noted here below each item. For those items where a proposed draft text was discussed and agreed, this can be found as tracked change in document 191119 - UNR WLTP CoP requirements.docx.
Note that the drafting coordinator had identified a few additional open issues, they are addressed in this document as well.

Par. 8.1.2.
Bill to propose a change to make the table include the exception for mono-fuel vehicles in Level 1A.

* Closed, Bill Coleman had already provided a text proposal to reflect this.

Par. 8.1.3.
All to consider if it also be a requirement to split IP families for different manufacturers, or to leave that up to the decision of the responsible authority.

* Annette volunteered to review this issue and make a proposal if necessary
* A text change was proposed and agreed to clarify this requirement.
* Japan to check the last sentence regarding the interpretation of ‘any’
* For Level 2: a merge of CoP families is allowed if planned production <1000 vehicles AND on the basis of evidence by the manufacturer whether such a merge is justified

Par. 8.1.3.3.
No conclusion was made on the OBD family criteria. For now we only have a placeholder.

* The text proposed by Rob and Alessandro is adopted.

Par. 8.1.4.4.
All: There is agreement on what is meant by ‘evenly distributed’ but it was not possible to find appropriate wording to reflect this. If we can come up with a better suggestion that can be amended later.

* Iddo remarked that this issue could be resolved by making reference to product verifications rather than vehicle tests, as it is not known beforehand how many vehicles have to be tested to arrive at a pass decision. Text suggestion: “The product verifications shall be evenly distributed over the period of 12 months.” This proposal was adopted
* Alessandro made a suggestion to add a requirement for the case that the production period is shorter than 12 months. A proposal was agreed and added to the text.

Par. 8.1.6.
… with a minimum frequency of [one audit per 12 months].

* This issue still needs to be considered in Japan and also the EC will discuss it with Member States. This issue will be revisited at the next meeting

Par. 8.1.8.
The responsible authority shall report the results of all audit checks and physical tests performed on verifying conformity of the manufacturers [and file it for a period of a minim­um of 10 years].

* Bart has asked the UN for guidance on this but has not received an answer yet from UN side (Francois Cuenot)

Par. 8.2.6.
… For the WLTC driven for vehicle warm up as described in paragraph 7.3.4. of Annex B4, in place of the 1 second allowance specified in paragraph 2.6.8.3.1.(i) a [5 second] allowance shall apply.

* This was proposed by VW as the CoP vehicle is driven for the first time and this makes it more difficult to keep it within the tight drive trace limits. The 5 second proposal was accepted by the group and in particular be the present representatives of type approval authorities (Elodie and Arjan), so it was adopted.
* Nick informed that for Level 1B Japan has agreed to accept an RMSSE limit of 1.3 (only for the purpose of CoP testing)

Par. 8.3.1.2.
The EC has a scrutiny reservation on the minimum mileage of 20,000 km for the Type 4 test

* This was already adopted for the UNR WLTP Working Document.

Par. 8.3.1.4.
Elodie to prepare a proposal on the maximum time allowed to reach a decision for the Type 4 CoP test

* Proposal: A decision shall be reached within 24 months. Elodie will prepare a text proposal and check the opinion of the EVAP TF by mail

Par. 8.4
All to check if the OBD procedure is appropriate (current text is based on EU-WLTP/UN R83)

* There were no remarks, so the procedure was adopted

Appendix 2, par. 3.3.
Japan to develop a more detailed text for the Level 1B pass/fail criteria on FE and EC

* Text is nearly finished and will be discussed on December 4th internally in Japan. The text proposal will be circulated afterwards.

Appendix 3, par 1.
Japan to develop a more detailed text on the validation method, which should then be considered by the EC

* Text is nearly finished and will be discussed on December 4th internally in Japan. The text proposal will be circulated afterwards.

Appendix 3, par. 1.2
Japan to consider the text in brackets
[If the CoP family has multiple interpolation families, the test vehicle shall be configured as vehicle H of the interpolation family with the highest expected production volume within the CoP family. At the request of the manufacturer, and with approval of the responsible authority a different test vehicle may be selected. ]

* Not yet decided, will be discussed on December 4th internally in Japan

Appendix 3, par. 1.5.1.
All to consider the proposal by the drafting group:
[For the tests before the mileage accumulation, at the option of the manufacturer it is allowed to set the dynamometer directly after each test.]

* Frank will take this up with Bill to clarify if the intention was to only eliminate the warm-up, or both the warm-up and the preconditioning cycle for the initial tests of the run in vehicle.

Appendix 3, par. 1.9
All to review the statistical correction proposed for the run-in factor on CO2 and FE
[Based on the deviation of the measurements from the fit, the slope CRI should be corrected downward with the standard deviation of the errors in the fit:

 $σ\_{fit}= \sqrt{\frac{\sum\_{}^{}\left(M\_{CO2,i}-M\_{CO2,i-fit}\right)^{2}}{N-2}}$

where:

MCO2,i-fit is the result of the applying the equation for each of the distances Di.

The slope CRI shall be corrected for the uncertainty in the fit by:

CRI 🡪 CRI - sfit]

* Annette shared a concern on the correction sigma being based on very limited data, and the effect of the test to test variation. This concern was supported by Olle. Annette and Olle will review this with data and come back with a possible counter proposal. A suggestion was made by Iddo to involve Norbert as soon as there are any results.

Appendix 3, par. 1.11 and 1.12
Norbert to consider an alternative statistical criterion for criteria emissions, if needed.

* A general discussion on the issue if run-in factors for criteria emissions should be allowed led to the conclusion that we will keep this in.
* The run-in factors for criteria emissions should not have the logarithmic scale as used for the CO2 and FC, but a linear scale. A check after the meeting proved that this change was already taken into consideration earlier.
* No statistical criterion could be defined for criteria emissions, but a sentence was agreed to be included which states that the uncertainty margin needs to be taken into account to avoid an overestimation of the run-in effect.