

WLTP Sub Group EV Phase 2, 11th Meeting	
Date	25 th of April 2016
Time	11:00 to 17:30 CET
Location	LA DEFENSE, Tour Pascal B, Place des Degrés, 92800 Puteaux Paris
Title	WLTP Sub Group EV 11 th Meeting — Meeting minutes

	OIL			
1		Welcome and adaption of agenda		WLTP-SG-EV-11-02
TF Evap will present introduction to the work connected to EV under AOB. Agenda is adopted.				
2		Report from the EVE meeting - System Power - Durability	OICA	WLTP-SG-EV-11-10
<p>Presentation of report from EVE 18 meeting in Shanghai.</p> <ul style="list-style-type: none"> - Determination of system power on request from WLTP. - Follow development in SAE and ISO regarding method for determination of system power from EV. <p>Next step in EVE regarding system power TF.</p> <ul style="list-style-type: none"> - First focus on WLTP request and in second step regarding customer information. - Input needed from WLTP regarding use in different HEV configurations etc. - System power for WLTP and customer information should be the same parameters and comparable. <p>Regarding battery performance and durability. EVE recommendation is that is premature to develop a test procedure for determining the battery performance and durability since technology is in the beginning of the development and yet not ready for a detailed and representative test procedure for all possible technologies coming up in the future. Battery technology is very complex and therefore not possible to develop a representative procedure. EVE says that this decision needs to be revised at a later stage when there is more knowledge and in-depth experience available. At the moment, there is a high risk that promising technologies could be banned from further development.</p> <p>The FEV report presented in EVE summaries current state regarding existing technology.</p> <p>EC (European Commission) explains that the understanding from GRPE in January was that a procedure for durability should be developed, and that the recommendation from the EVE group states that this is not the case any longer.</p> <p>This topic is discussed further under point 5.</p>				
3		Normalization	JAMA	WLTP-SG-EV-11-09
JP presentation of performed study. Normalization procedure already evaluated for ICE. Driving style has big impact on CO ₂ mass emission, range and electric consumption.				

Normalization method works well for the tested HEV system in CS condition but needs to be further evaluated for other HEV system before final decision of the method.

Driving style has large impact on values in CD condition. There is either a new methodology needed or the idea of developing a driving index shall be further evaluated and being followed.

Three options for further proceeding:

- Option 1: Not apply normalization, apply drive trace index,
- Option 2: apply normalization only on parameters that are well justified, or
- Option 3: develop normalization for all parameters.

JAMA of opinion that for CD conditions it will be difficult to apply normalization method. T&E agrees on the conclusion by JAMA and states that also for CS condition, a deviation of up to 10 percent is not acceptable.

ACEA supports the conclusion made by T&E and states that for CD conditions, there is a need to develop a new method.

Discussed way forward:

Try to develop option 3. If is not possible to follow option 3, it has to be considered if option 1 or option 2 should be followed.

The implementation of WLTP in EU will consider the normalization procedure for ICE in the second package.

Conclusion/tasks:

JAMA support to focus on development of driving index.
ACEA EV will also continue development of the method.

4		Post processing	ACEA	WLTP-SG-EV-11-04-rev1 WLTP-SG-EV-11-05 WLTP-SG-EV-11-06 WLTP-SG-EV-11-07
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Presentation by ACEA WLTP EV group.

- Post processing already included in GTR15 for ICE vehicles as well as the charge-sustaining values of HEVs
- The presented proposal includes a visualization of the post processing proposal as well as the GTR text draft for PEV, OVC-HEV and NOVC-HEV.

Feedback from SG EV:

- In Step 6 should be added that is for each cycle. This is already amended in revision 1 of the document.

Question from CLEPA:

Will there be an example with numbers in the proposal?

Cannot be promised but ACEA WLTP EV group can provide example in Excel sheet (but not sure when this will be possible).

JAMA will investigate the possibility to share data from normalization exercise.

For PEV includes both STP and CCP.

Phase 2 issues might require changes to this proposal.

Detailed procedure in word document with proposed GTR text.

Adoption:

SG EV adopts to include post processing procedure for EV in the GTR.

Encourage the members to scrutinize the text proposals.

5		Status Phase 2 issues	all	WLTP-SG-EV-11-11
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COP for EV:

Presentation of proposal from ACEA EV which was made for the EU implementation of WLTP.

- Included in EU proposal for legislation of WLTP phase 1.
- Reason is that for COP normal procedure results in high mileage on the vehicle.

		<ul style="list-style-type: none"> - Proposed method does not requiring to drive complete test. - The text from EU implementation is also provided. - Presentation is starting note for EV discussion on this topic during Phase 2 		
<p>Durability procedure for the vehicle:</p>				
<p>EC presents the need to focus on complete vehicle where battery is an important part that should be considered. The issue will be discussed further in GRPE in June.</p>				
<p>Timeframe for other issues for phase 2., for example: supplemental test, OBD etc. where there are TF under WLTP IWG (the way to handle EV specific issues in TF – Maybe also as part of report to WLTP IWG):</p>				
<p>EV specific issues will be discussed within SG EV, but the responsibility of this topic is in the respective TF and SG EV will deliver EV specific input to these task forces.</p>				
<p>To avoid double work, there has to be a close collaboration between the different task forces and the SG EV as there are lot of overlapping topics in WLTP phase 2.</p>				
<p>SG EV members should be encouraged to attend and follow TF meetings in order to develop EV specific issues.</p>				
6		Discussion of amendments to GTR15 Phase1b	all	WLTP-SG-EV-11-08
<p>Presentation of amendment based on errors discovered in phase 1b text. JAMA proposes to delete sentence regarding fuel consumption in x.3.1.</p>				
<p>It should be considered to make amendments to phase 1b in one package. Together with JP proposal.</p>				
<p>An additional point was raised that the GTR text could be more clear regarding AC/DC charging procedure. This is an identified issue, but with no proposal at the moment.</p>				
<p>ACEA WLTP EV group will make a proposal regarding charging methods for next meeting.</p>				
7		<p>Discussion of next face-2-face meeting</p> <ul style="list-style-type: none"> - Date - Location - Topics 		
<p>Proposal to hold next SG EV face-2-face meeting in conjunction with the next TF Evap face-2-face meeting.</p>				
<p>As such a face-2-face meeting will be earliest in fall 2016, there was the proposal made to hd a meeting in Geneva Wednesday morning GRPE week (June 8th).</p>				
<p>EC will check for the possibility of hosting the room at the EC offices in Geneva..</p>				
<p>Preliminary agenda is:</p>				
<ul style="list-style-type: none"> • Post processing, • COP • DC charging • Update on other Phase 2 topics 				
<p>Preparatory web conference Tuesday 31 may 09:00 CET.</p>				
<p>Invitation will be sent in due time.</p>				
8		AOB	all	
<p>Report from TF Evap.</p>				
<p>Interested in response from SG EV regarding Evap issues connected to EV.</p>				
<p>Have already proposal regarding preconditioning cycle and purge cycle. Proposal available for sealed tank system but proposal also applicable to conventional tank system.</p>				
<p>Will be discussed in Evap TF the day after the SG EV meeting in Paris.</p>				
<p>For OVC-HEV, proposal of pre-conditioning cycle is applicable WLTP cycle in CS mode and purge cycle should be driven in CD mode with same cycle phase configuration as for ICE. The configuration is not decided in TF yet.</p>				
<p>It will be difficult to purge the canister during purge cycle in CD mode as the REESS will be fully charged..</p>				
<p>This means that during Evap test the canister will be more loaded than for ICE therefore more difficult to pass the test.</p>				
<p>According to JP this is reflecting normal use. US requirement is the same. It was suggested that</p>				

pre-conditioning cycle should be the same as the purge cycle since applicable WLTP cycle is regionally different.