

WLTP Sub Group EV	
Date	17 th of November 2014
Time	10:00 to 18:00 CET
Title	WLTP Sub Group EV Meeting — minutes
Working Paper Number	WLTP-SG-EV-06-13

Agenda

	OIL		
1		Welcome and adaption of agenda	WLTP-SG-EV-06-02-rev1
Agenda adopted.			
2	# 50	RCB correction	WLTP-SG-EV-06-11 WLTP-SG-EV-06-14
<ul style="list-style-type: none"> - Re-opening of the OI after request from ACEA EV group. Christoph Lueginger introduced the ACEA document on behalf of Nico Schütze (member of the ACEA WLTP EV group) and the ACEA WLTP EV group. Main issue for phase specific values. - Current procedure for CS test. - Separate correction coefficient for each phase not working properly. - Cycle correction coefficient gives smaller error. <p>One issue that cycle energy does not take into consideration the effect from cold start only the effect from RLD. Last slide summaries the proposal.</p> <p>According to Japan there are two new concepts, use for CO₂ family and a warm start test to determine correction. This is an important step to reduced test burden.</p> <p>Japan shows test data (WLTP-SG-EV-06-14). Time consuming to determine data from test. Changing unit to Ah/km gives the same slope, almost.</p> <p>ACEA proposal will improve the procedure.</p> <p>India thinks the approach could be used.</p> <p>European Commission (EC) and Japan needs to scrutinize the proposal to confirm at the next WLTP IWG meeting.</p> <p>Sub Group EV needs to prepare short introduction for next WLTP IWG meeting.</p> <p>Conclusion: ACEA proposed a new proposal to obtain RCB correction coefficient of CS with warm condition and this is applicable for vehicles in the same family. JPN will bring this proposal and response until #9 meeting. Then, this issue could be closed in #9 meeting, after the JPN's response.</p>			
3	# 55	Phase Specific range calculation for PEV	WLTP-SG-EV-06-03

ACEA presents the results concerning out a calculation of phase specific range values for PEV. If such values are available, there is no need for WLTC_{city} anymore. Comparison between simulation and calculation shows small deviation for both a vehicle that can follow the cycle and for a vehicle that cannot follow the cycle.

Japan can accept the procedure, but will need to investigate how effect shorten test procedure.

EC is of the opinion that there is a need for more validation from testing. Japan has test data that can be shown until WLTP IWG #9.

Sub group EV agrees on the principal of calculation of phase specific values.

The need for phase specific values is a discussion on political level between EC and Japan. EC does not need phase specific values, but accepts that Japan request them.

Conclusion:

ACEA demonstrates that phase specific range calculation for PEV works well. For HEVs, phase specific value could be obtained by the new proposal from ACEA, as mentioned in open issue #50 this meeting. Then, this issue could be closed in #9 meeting as well, after the JPN's response for the proposal.

4	# 2, #56	CO ₂ family definition and Combined Approach.	WLTP-SG-EV-06-04 WLTP-SG-EV-06-05
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Presentation of ACEA document.
Will present results from further investigation in January.
ACEA means that the combined approach works for complete cycle and phases because the method is based on cycle energy.

EC question regarding phase specific values based on test of complete cycle.

Japan presents their position regarding combined approach.
Proposes to narrow applicable criteria or require additional midpoint test in the CS test.

ACEA proposes that instead of midpoint, the midpoint is TMH in one family and TML in a new family. Divide the nonlinear family in two families.

As a check of linearity the proposed method could work.
The concept needs to be developed further regarding definition of the midpoint.

T&E proposes to combine the two proposals from Japan and ACEA to clarify which parameters that needs to be considered regarding phase specific values in the combined approach.

5	# 51	Mode selectable switch	WLTP-SG-EV-06-06
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Japan presents the document and a position. Japan accepts predominant mode with the opportunity to use options if no predominant mode is available.
Applicable for both CS test and CD test.

In order to reduce test burden Japan proposes to test in worst mode for fuel consumption or energy consumption respectively. Question for who the option is: For the manufacturer.

General remark:
Current text includes inconsistency that opens for different interpretations.
If there is more than one mode the GTR needs to be clear which mode to be tested.

Germany:
Germany means that current text is ok, although needs to be adjusted in the wording.

Japan needs to have their position confirmed.			
After confirmation: this is a drafting issue to amend the text.			
6	# 52	End of test criteria for PEV.	WLTP-SG-EV-06-07
<p>ACEA presentation regarding two proposals for end of test criteria for PEV. Low powered and vehicles with cap speed.</p> <p>The cap speed is declared by the manufacturer and must be reached during the test. Otherwise this is a break of criteria. The cap or maximum speed is the one in the first cycle.</p> <p>Japan will present position until WLTP IWG #9 on the proposal from ACEA.</p> <p>An error in the presentation will be corrected.</p>			
7	# 3	System power determination	WLTP-SG-EV-06-08
<p>EVE IWG has proposed to develop a method to determine system power for EV in a request for prolonged mandate. Thus, this issue is closed in Sub Group EV. Presentation of the document. Development of performance criteria, like system power, from EV under a new mandate for the EVE IWG. Important that WLTP Sub group EV provides input to the EVE group. Regarding what performance criteria which are requested for WLTP. Possible to extend to conventional vehicles.</p>			
8	# 57	Utility factor	WLTP-SG-EV-06-12 WLTP-SG-EV-06-15
<p>Presentation of the EU UF values</p> <p>Japan presents proposal for GTR text that has been submitted to the drafting coordinator. Remark from ACEA: proposal still has to be discussed within Sub group EV.</p> <p>Regional UF from contracting parties will be introduced in the GTR, when they are available. There is a question regarding what regional options that should be introduced in the GTR, limit values, reference fuels, UF etc. OICA request that - if possible - regional UF from other CP should be included in the GTR in phase 1b. There is also a risk of discrepancy between regional legislation and GTR text if UF is changed in a region. Further political discussion regarding the inclusion of regional options in the GTR will take place in GRPE.</p> <p>First proposal for GTR text of regional UF is presented by Japan. Proposal for harmonized procedure to determine UF (methodology) will be presented on coming meeting. The ambition should be to include harmonized methodology to determine UF in phase 1b. Start point to compare existing methodology from different regions, including technical report from EU. This will be done until January meeting. In order to decide if it is possible to include harmonized methodology in phase 1b.</p>			
9	# 58	Shorten test procedures for PEV	WLTP-SG-EV-06-09 WLTP-SG-EV-06-10
<p>Presentation of ACEA document: Simulation results show that it is possible that WLTC complete cycle can be replaced by the shorten test procedure. Since this methodology can calculate phase specific values it would also be possible to skip WLTC_{city}. This would lead in consequence to a reduced test burden.</p>			

EC is of the opinion that the accuracy of the shorten test procedure needs to be demonstrated. Japan can provide data for this on the next meeting. EC means that since HEV provide WLTC_{city} values PEV also needs to do that in order to stay consistent. But if the procedure does not require measuring WLTC_{city} on HEV, this means that it is relevant to calculate WLTC_{city} also for HEV. If this can be done with good accuracy.

ACEA supports shorten test procedure, but some issues still need to be worked on (final ACEA conclusion slide).

Presentation from Japan regarding shorten test procedure:

Japan supports to introduce shorten test procedure as baseline for PEV because of its features.

Next step is more validation of the procedure.

10		AOB	
11		Next Actions	
Tentative next face-to-face meeting in February 2015.			