

Progress report of  
Sub Group EV, WLTP IWG  
(EVE-19-xxe)

19<sup>th</sup> EVE IWG  
8 June 2016

# 1. Summary

#	items	RESULTS	status	remarks
EV_1	HEV system power	No progress Continue to collaborate with EVE and develop the test procedure.	OPEN	Classification, Downscaling
EV_2	Normalization	Will be discussed the options in <b>SG EV 13<sup>th</sup> meeting</b>	OPEN	Study the applicability to HEV
EV_3	Supplemental Test (low temp./high altitude)	No progress Will be discussed in <b>SG EV 13<sup>th</sup> meeting</b>	OPEN	Handle EV unique portions
EV_4	Supplemental Test (auxiliary device)	No progress Will be discussed in <b>SG EV 13<sup>th</sup> meeting</b>	OPEN	Handle EV unique portions
EV_5	Post processing	No comments on the ACEA proposal	<b>CLOSED</b>	Handle EV unique portions
EV_6	Durability	Will be discussed regarding durability of REESS in 73 <sup>th</sup> GRPE	OPEN	study on battery durability
EV_7	OBD	Questionnaire was distributed Will be discussed based in <b>SG EV 13<sup>th</sup> meeting</b>	OPEN	Handle EV unique portions
EV_8	FCHV	New proposal of test procedure for OVC-FCHVs from ACEA	OPEN	OVC-FCV Flow Method
EV_9	gtr amendment	Errors have been discovered Will be addressed continuously	OPEN	

# EV\_2 : Normalization

## Overview:

WLTP-IWG has made a decision not to apply “Normalization” since no study on EVs has done during Phase1 activities. After completion of EVs study, applicability of “Normalization” should be re-discussed.

## Current status:

- ✓ “Normalization” works same level as ICE vehicles for all parameters under CS conditions on specific model.
- ✓ “Normalization” doesn’t work for all parameters under CD conditions.

	CO2/Fuel Consumption	Range	Electric Consumption
CS conditions	SO-SO	NA	NA
CD conditions	NG	NG	NG

## Next Actions:

- ✓ Asking other parties for additional study.
- ✓ Consider the way (possible options) to proceed **continuously**:
  - No correction algorithm but apply drive trace index with criteria for all type of vehicles
  - Apply correction algorithm on only parameters which are well justified
  - Develop the methodologies to take care of all parameters

# EV\_6 : Durability

## Overview:

Durability performance up to useful life is one of working items during phase2 activities. After confirming the CP needs which parameter need to be evaluated up to useful life, WLTP-IWG takes care of ICE and/or pollutant devices.

At the same time, WLTP SG EV takes care of EV specific requirements on performance and durability.

## Current status:

- ✓ Only EC has requested to consider parameters which have an effect on EV performance and durability
- ✓ Recommendation of IWG EVE: it is premature to develop a procedure for battery and therefore vehicle durability; the topic should be continuously followed and the recommendation could be changed
- ✓ TF durability presents starting note.
  - Development of a procedure to determine REESS durability has been questioned by EVE IWG.
  - TF propose to evaluate if possible to design reliable and feasible procedure.
  - A study shall be carried out until GRPE in January 2017.

## Next Actions:

- ✓ A. Continue collaboration between WLTP and EVE  
(will be discussed during 73th GRPE)
- ✓ B. Asking for feedback of contracting parties
- ✓ C. Consider alternative scenario if development of specific aging procedure has a technical difficulty.

**EV\_7 : OBD**  
**EV\_8 : FCV**  
**EV\_9 : gtr amendment (Phase 1b)**  
**EV\_COP : input for In-Service TF**  
**EVAP. TF : EVAP test procedure for HEVs**

Current status:

- EV\_7 (OBD) : Questionnaire was distributed by the TF.  
Interested SG EV experts will participate in TF discussions with respect to the EV related items.
- EV\_8 (FCHV): New proposal for OVC-FCHV from ACEA.  
- Procedure based on OVC-HEV. The only difference is to measure hydrogen consumption in all phases.  
- Weighing of CD and CS test according to the procedure for OVC-HEV
- EV\_9 (GTR amendments): EC explains that errors and inconsistencies have been discovered during transposition of GTR15 into European legislation → these need to be needed to address
- EV\_COP : - EU approach presented by ACEA WLTP EV group at 11<sup>th</sup> SG EV meeting.  
- Feedback requested from other CP and will be discussed at 13<sup>th</sup> SG EV meeting.
- TF\_EVAP: Proposal from Japan that purge cycle shall be performed under CD condition for OVC-HEV was approved.

Next Actions:

- ✓ EV\_7 will be discussed at 13<sup>th</sup> SG EV meeting
- ✓ EV\_8, EV\_9 and EV\_COP will be further discussed at 13<sup>th</sup> SG EV meeting

# 2. Next Actions

#	items	2016	2017	2018	2019
EV_1	HEV system power	collaborate with EVE	★	consider classification threshold and downscale ratio	★
EV_2	Normalization	additional study	★	"Normalization" or "Indexes" ?	★
EV_3	Supplemental Test (low temp./high altitude)	collaborate with TF	★	Amend_2, if necessary	★
EV_4	Supplemental Test (auxiliary device)	collaborate with TF	★	Amend_2, if necessary	★
EV_5	Post processing	→ ★ complete			
EV_6	Durability	collaborate with EVE	★	decision for next step	★
EV_7	OBD			collaborate with OBD TF takes care of EV unique items	★
EV_8	FCV	OVC-FCHV	★ proposal	★ finalization	
EV_9	gtr amendment	Amend_1	★	Amend_2, if necessary	★