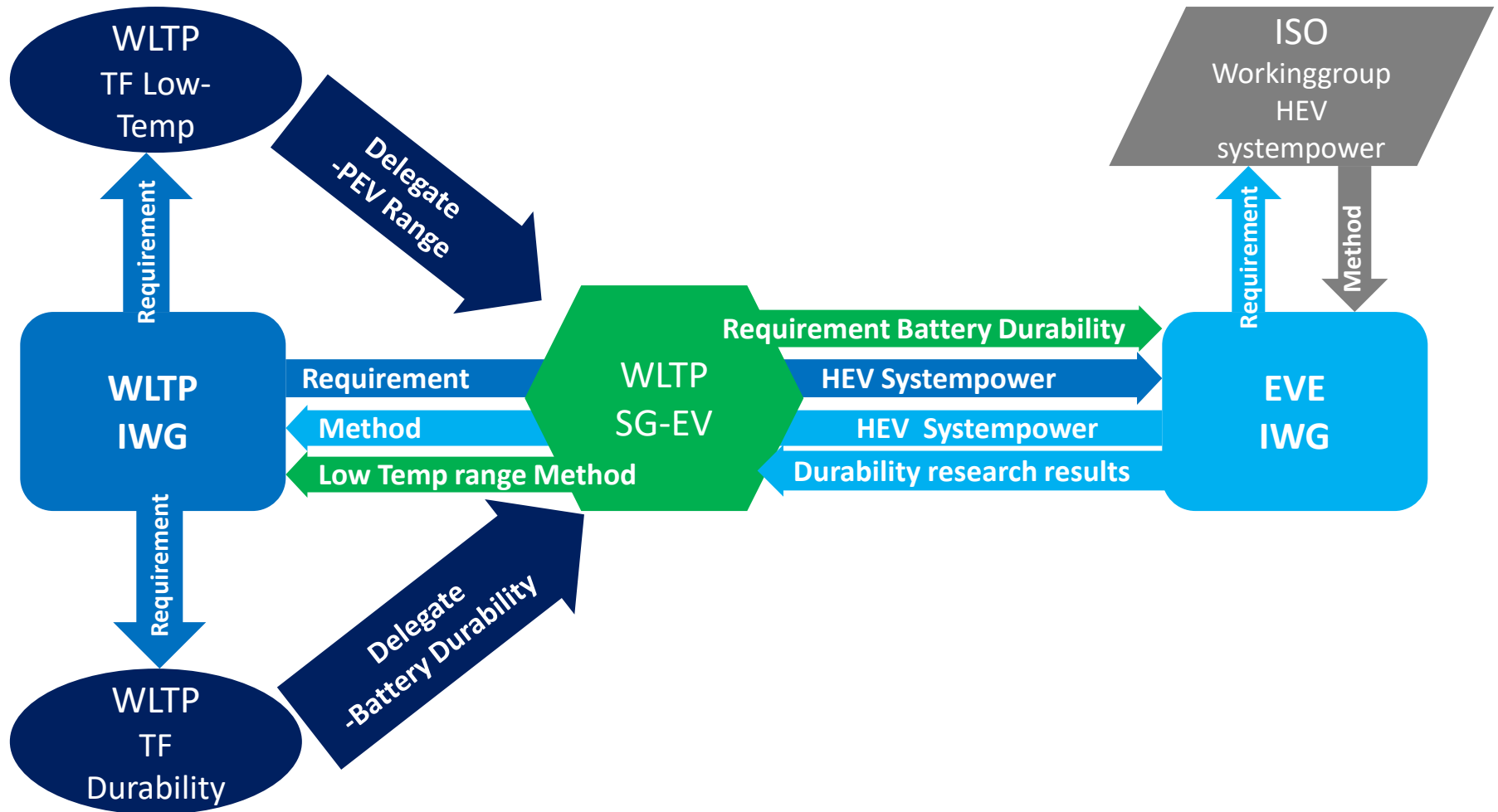


# Report WLTP Subgroup EV to EVE IWG (EVE-26-04e)

26<sup>th</sup> EVE IWG meeting  
Tokyo, 27<sup>th</sup>/28<sup>th</sup> of March 2018

# 1. Collaboration WLTP (Subgroup EV) with IWG EVE

## EV Communication in the UNECE Framework



## 2. Status: Battery performance and durability

### WLTP SG EV feedback to IWG EVE:

- As stated from OICA in the previous IWG EVE meetings, battery durability is a quite complex and challenging area as the aging of the battery is highly depending on the customer driving behaviour, the environment its operated in, the charging technology and infrastructure
  - Manufacturers are putting a lot of effort in the evaluation of battery aging and the understanding of the aging mechanisms in order to compensate and eliminate them; but: that is an ongoing process and cannot be fixed in a legislative text as it is evolving and changing
  - standardized procedure is not able to cover all this aspects in a proper way
- If required, the most appropriate way to check durability is to check it from a whole vehicle perspective as aging of the battery may be covered by the vehicle application itself
- Durability requirements as well as the demand to check these requirements, needs to be provided by contracting parties; requirements have to be clear and have to be justified (e.g. to ensure environmental protection)

## 2. Status: Battery performance and durability

### Discussions in WLTP Subgroup EV:

- During last WLTP Subgroup EV web-audio, JAMA submitted the following comments for discussion

(1) JAMA COMMENTS on Battery Durability to be considered for

1. Test Procedure
2. Market Assurance

**[General]** JAMA realize that battery performance change in real world affects the other parameters such as EV range, EAER and so on. However,

Test Procedure : it's premature to develop the simulation method and/or durability procedure due to lack of fairness and impartiality.

ISC : Oppose due to difficulty to procure the appropriate number\* of vehicles from the relatively small market and because some of CPs are not active on their in-service conformity activities. (\* vary dramatically due to a lot of factor)

**JAMA propose as follows...**

STEP1 : market study. (**JAMA is keen and active to contribute** how to take care of each CP need during STEP1)

STEP2 : reflect to test procedure and ISC based on STEP1 activities.

- ACEA EV group supported the JAMA comments on battery performance and durability concerning the prematurity of a test procedure during type approval
- OICA statement from January EVE meeting: only a deterioration factor approach is considered as reasonable
- ACEA EV group states that durability should always be seen from a vehicles perspective and is at the moment best handled by the customer-manufacturer-relationship (e.g. warranty) and maybe even more by the competitive situation between all manufactures (durability a selling point argument)
- Durability requirements and their clear demand has to be stated by contracting parties

**JAMA comments on EVE group views: please take a look at separate document**

# 3. Status: System Power Determination

## WLTP SG EV feedback to IWG EVE from January SG EV report to IWG EVE:

- Concerning the WLTP requirements for classification and downscaling  
→ Heinz Steven needs to be involved ✓
- Concerning drafting, an exchange with WLTP drafting coordinator recommended  
→ Serge Dubuc needs to be involved ✓
- WLTP Subgroup EV experts will support the work of the EVE drafting group ✓

# 3. Status: System Power Determination

## Discussions in WLTP Subgroup EV (extract of SG EV meeting minutes of March 13<sup>th</sup>):

### Scope:

- Scope should be limited to the requirements of WLTP
- Customer information and taxation not in the scope of GRPE  
→ therefore not in the scope of WTLTP and EVE  
→ this should be stated/written in the scope
- Clarification required if the scope of the system power determination is only limited to HEVs or if – in addition – PEVs/HEVs with more than one electric motor should be considered as well

### Preference where this method shall be inserted in the regulation:

- Question: separate document or including it into GTR15?
- Statement Subgroup EV: SG EV members have a clear preference to incorporate the system power determination procedure as an Annex or similar to GTR15 (scope limited to WLTP). This preference can be seen as an important information for the proceeding in the drafting group.

# 3. Status: System Power Determination

## Discussions in WLTP Subgroup EV (extract of SG EV meeting minutes of March 13<sup>th</sup>):

### Drafting issues:

- By implementing the ISO standard into a regulatory text, all "according to manufacturer's recommendations" have to be checked if some which can be replaced by the requirements of WLTP (e.g. temperature requirements)
- Currently, Annex 8 vehicles apply the worst case approach with respect to the cycle classification (always class 3) and downscaling (no downscaling for HEVs)
  - If manufacturer decides to apply this "worst case", no need to determine the system power
  - This needs to be stated in the regulatory text

## 4. Status: Information about WLTP Phase 2b

### **Information on Prolongation of WLTP Phase 2b**

<https://wiki.unece.org/download/attachments/54429231/WLTP-21-02e.pdf?api=v2>

### **Current Status of WLTP Work Programme**

<https://wiki.unece.org/download/attachments/54429231/WLTP-21-07e.pdf?api=v2>