Proposal to develop a new Regulation or Recommendation on Determination of Powertrain Performance of Hybrid Electric Vehicles

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Current Status

✓ Focus on light duty vehicles (M1, N1)
✓ Clear demand from WLTP-SG-EV
   Applications: P-t-M ratio, Downscaling Method, Gear Shift Model
Current Status

Project idea and concept have been presented and discussed at following events:

EVE, during 12th Meeting 28./29.10.14

- Supportive
- JP does not require power determination in their regulation system
- No decision whether or not the work should be carried out under the 98’ or 58’ Agreement.

Documentation: EVE-12-04e, EVE-12-13e

WLTP, during 8th Meeting 17./20.11.14

- SG-EV has no sufficient resources to develop a procedure for the determination of combined power of HEVs within Phase 1b, therefor initiative of EVE is supported
- Proposal to extend the scope from HEV to PEV and conv. Veh.
- Input from WLTP SG EV to EVE will be provided, esp. on which performance criteria are needed for WLTP.
Open Questions – to be discussed & clarified within Part A

1. Besides the demand from WLTP SG-EV, need for further performance criteria for further technical information?

2. Which concept to follow for LD HEVs (M1, N1)?
   a. KATRI
   b. JARI / HEV power WG
   c. SAE /J2908 WG
   d. A new method to be developed from scratch

3. If d.), who takes action and what kind of resources will be needed?

4. New GTR (98’ Agreement) or amendment of UN R85 (58’ Agreement)?

5. If GTR, would it be feasible to use relevant parts from UN R85 that covers for conventional vehicles and PEV?

6. Organizational issues – work plan on the basis of which GRPE is able to identify, whether the future working group for part B acts as subgroup under the umbrella of EVE-IWG or will be organized in a separate IWG under GRPE?
Proposed tentative work plan for Part A

**Part A, Step i**

- Fundamental discussion and decisions on:
  - **strategic political questions:** need for technical information on best/worst case or representative case?
  - **technical questions:** to be answered in detail including information, which resources will be needed therefor

**Deliverables**
- Status Report, recommendations
- Informal Document for GRPE

**Part A, Step ii**

- Development of the Road Map
  - **What? Where? When?**
    - Development of the Road Map by delegates from the Contracting Parties and stakeholders

**Deliverables**
- Agreement of the content of the road map
- Determination of Technical Sponsor,
- Chair and Secretary of the IWG,
- Mandate document for endorsement by AC.3 **(Milestone)**
Draft Timeline Part A (updated version)

- **WP.29**
  - 2015: 165, 166
  - 2016: 167
  - 2017: 170

- **GRPE**
  - 2015: 70, 71
  - 2016: 72
  - 2017: 73

- **EVE**
  - 2015: 13, 14, 15
  - 2016: 16, 17

**Step i:**
- Identification of experts and group meeting about strategic political questions and technical questions

**Step ii:**
- Experts group meeting about development of the road map

**Part B**
- Formal Adoption of mandate by WP.29 / A.C.3

**Pre-agreement among member states, stakeholders**

**Pre-agreement or demand for adaption**

**Presentation of the mandate document and endorsement from GRPE**

Determination of Powertrain Performance of HEVs
Thank you for your attention!

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