

Discussion paper for 3rd VPSD meeting

Geneva – 8th January 2014

1. State of play and documentation

2. Open issues, discussion items

3. Next steps

1. State of play and documentation

- Status report to 66th GRPE – infdoc GRPE-66-29
- Draft VPSD document
VPSD-02-03 (with track changes and comments)
VPSD-02-04 (additional comments & proposals from EC)
- WLTP – draft GTR – ECE/TRANS/WP.29/2014/27
- HDH – draft amendment to GTR 4 – GRPE-68-12
- EVE – Reference Guide – GRPE-68-XY

B. 1 Powertrain

Approach with ancillary and peripheral devices is agreed in principle. Definitions to be further developed.

B. 2 Rechargeable Energy Storage System

(no acronym)

REESS - Rechargeable Electric Energy Storage System
(already used in WLTP draft GTR)

RMESS - Rechargeable Mechanical Energy Storage System

RHESS - Rechargeable Hydraulic Energy Storage System

RPESS - Rechargeable Pneumatic Energy Storage System

→ Needs to be amended in HDH document

B. 3.1. Internal Combustion Engine (ICE) / External Combustion Engine (ECE) / Combustion Engine (CE)

Option 1: To start with ICE (EC and ECE can be added later, if needed in regulations).

Option 2: Directly introduce CE / ICE / ECE

→ Definition difficult

B.4. Drivetrain

Under discussion: Definition and terminology

„Drivetrain“ or „Power transmission system“

B. 7.1.-7.4. Mono-, Bi-, Flex-, Dual-Fuel Vehicle

Existing UN-Regulations (49, 83, 101) includes already definitions, which are very fuel- and design specific (gaseous, LPG/Diesel, 15 liter petrol tank, etc.). Would it be beneficial to introduce more general definitions here (not fuel and design specific), while regulations can use more specified terminology (but based on the general definitions) and define related tests or exemptions.

1. → to be discussed with GFV iwg

B. 9.2. Hybrid Electric Vehicle (HEV)

Currently different definitions existing worldwide (e.g. HEV is novc and PHEV is ovc)

Option 1: HEV covers all HV applications with a powertrain containing at least one electric machine as energy converter (VPSD proposal, used by HDH).

Option 2: HEV means a vehicle using at least one fuel consuming machine and one electric machine for the purpose of vehicle propulsion (current WLTP draft GTR).

B. 10. Characteristics of vehicle powertrains

Currently about 20 terms and definitions are under discussion. This can be further developed at a later stage. This chapter isn't considered as very important. However, the use of harmonised terminology in different regulations might be beneficial.

3. Next steps

- Status report to 68th GRPE – infdoc GRPE-68-XY (this presentation, amended)
 - Consolidated VPSD document, prepared by secretariate (Daniela Leveratto) and chairman (Christoph Albus), distributed by email
- as basis for further discussion

3. Next steps

How to proceed ???

- Option 1: Quick introduction of an annex into R.E.3 / S.R.1, as a first step and basis, with a continuation of work in a second step (with or without VPSD iwg).
- Option 2: Request WP.29 to extend the mandate of VPSD iwg (end of 2016).