# **Meeting Minutes PMP Webconference**

27th May 2023, 12:00-14:00 CET

#### - DRAFT -

### 0. Introduction & Welcome

ca. 68 participants were welcomed by Barouch Giechaskiel (BG, JRC, PMP Chairman) and Rainer Vogt (RV, OICA/Ford/Technical Secretary PMP).

## 1. Review Meeting Minutes last PMP meeting 27.04.2023

RV reviewed the meeting minutes of the last PMP Meeting, 27.04.2023 which are available at the UNECE website. Comments may be sent to RV/BG within the next two weeks.

## 2. PMP update (ToR, GRPE)

BG introduced the proposed ToR. The deleted items are considered as completed. New items include the development of the light-duty (LD) GTR Brakes amendment, development of a GTR for heavy-duty (HD) brakes; further to monitor tyre abrasion and particle emissions related projects.

Further details regarding the LD amendment are:, monitoring of the application of Brake GTR procedure; development of method for friction share coefficient, refinement of PMP brake protocol, an ILS-2 with GTR compliant setups will be planned.

A dedicated TF-5 for HD Brakes will be created.

Niels Den Ouden (NDO / RDW): Will health effects be part of PMP? Environmental aspects?

BG: No - not part of PMP. Can be presented, but focus will continue on emissions part.

Theo Grigoratos (TG) - Health Effects is out of scope of PMP. Would need to be discussed at UNECE level.

Christian Hafermeyer (CH / AIP): How to join TF-5?

BG: There will be announcement in PMP.

## 3. TF4 update

Comments received:

- Vehicle weight should be simple and aligned with GTR 15 and
- Safety needs to be considered
- Cost of testing and sensor: two methods are discussed. Also for implementing EU-7 topic is important.

RV updated the group with the OICA work (see presentation)
Jürgen von Wild (JvW, OICA/BMW) presented the status of TF-4 work (see slides).

Raquel CORDEIRO (OICA/Volvo): showed slides supporting a non-changed Table 5.1. and not to increase values as suggested by JRC. The OICA proposal eliminated the potential risk for cherry-picking. A flow for OEM development and homologation was presented. If an OEM is challenged, the chassis dyno friction share is valid. TG: OEM model could underestimate, and in the end the emission could be too high.

Does not want to rely on OEM model. Additionally, JRC wants to be on the safe side regarding the worst performing brakes in the market.

TG: for the original table 5.1. only 5-6 OEMs were included. Table was constructed by using a conversion of x1.2 from WLTP Exhaust to Brake. A second JRC test found x1.36. Recent OICA data show much higher values regarding the correlation.

Maelle Dodu (MD/ UTAC): How many vehicles to be tested?

TG: it is impossible to test vehicle from all OEMs and all vehicle categories. It is obvious that we need to rely on as many tests we have in our hands. Values may be amended in the future when more data will be available.

JvW: Tire abrasion approach is much more appropriate. For Brakes, there is a proposed limit, and the market assessment follows later. This is wrong way around.

TG: JRC understands the latest statement; however, this approach was taken with the aim of introducing Non-friction braking and not penalizing electrified vehicle technologies. No-one could be stopped from changing the table at later stage. The regulator should take care of worst case.

BG presented JRC's view on the ANNEX-C:

Method A and Method B could be reference, Method D could be the only alternative method, as long as there is no clearer proposal for other alternatives (e.g. energy balance). In the future, we may consider more alternative methods; therefore, the text shall be specific enough to mention Method D but also generic enough to leave the door open for future additions.

Documentation is needed. The new OICA proposed criterion to confirm method equivalency (max of a constant and a relative value) could be o.k. – as it can be found in other regulations.

Alternative use of Table 5.1.: JRC introduced their text proposal, including increased values in the default table and introduction of NOVC HEV- Cat 0. PEVs and OVC-HEVs should be tested with the WLTP-Brake Trip #10.

For NOVC-HEVs WLTP exhaust data could be correlation by [x] to WLTP-Brake

BG: Major objections should be sent by Monday May 29. PMP could comment in the next 2 weeks.

JRC will present the update of PMP to UNECE June 1 – agreed no comments.

#### 4. AOB

Next PMP meeting will take place June 29. Topics:

- HD
- Aftermarket
- Brake particle filters and GTR