

**DRAFT Minutes**  
**PMP session (online meeting)**  
**11<sup>th</sup> Mar 2025, 12:00-14:30 CET**

0. Introduction & Welcome

Barouch Giechaskiel (BG, JRC, PMP Chairman) welcomed about approx. 80 participants.

1. Review Meeting Minutes last PMP meeting 27. Jan. 2025

Sebastian Gramstat (SG) reviewed the meeting minutes of the last PMP Meeting, 27. Mar. 2024 which are available at the UNECE website. MoM were accepted unmodified.

2. Revision of Terms of Reference

BG introduced a proposal for amended ToR, uploaded to UNECE website. Any comments are appreciated, further discussions will take place during GRPE meeting (25.03.2025).

3. ILS intermediate results

Ravi Vedula (RV) started introducing recent analyses results. Phase 2 (FORD and JLR brake), PM EFs is completed. Pre-analysis as data validity checks was introduced.

For brake threshold pressure, a proposal was developed and explained for disc brakes. Proposal of brake event timestamps was discussed by Katharina Kolbeck (KK), Carlos Agudelo (CA) and Christian Hafenmayer (CH). Feedback is appreciated, in case of not accepting, counter-proposals are requested.

In terms of friction work calculation are ongoing with 250 Hz datasets, same for brake torque quality metrics.

A clarification for PM reference filter rolling weights was shared.

Conclusions: phase 2 showed improved quality of reports and results compared to phase 1. However, issues are observed for almost all labs. Standard deviation is similar for the two brakes, lower emission levels lead to increased CoV. PN Background levels are very well controlled.

Several remaining work items were identified, proposals will follow soon.

Marcel Mathissen (MM) asked about brake torque and speed. KK replied that it is nominal speed shown and not actual speed.

Agusti Sin (AS) asked for reasons of the lower EF of FORD and JLR brakes. RV replied, that friction material could be the reason. AS asked further, if the error margin is comparable to exhaust emissions. Heinz Bacher (HB) stated, that more data and experience is required to prepare robust comparisons.

**Additional remark after the meeting:**

ILS3 team found a small error (but important for the involved labs) and they revised two slides (the names of the labs)

A disclaimer is added at the two slides that changed (6 and 16).

Statement from ILS3 team:

“After correcting the IBT and FBT limits per Table 10.2 for the JLR brake, Labs A and O have FBT above upper limit. Labs J and L do not have any violations.”



### 3. Overview of amendments to Brakes GTR 24

a) OICA presented another set of slides.

Filippo Lachina (FL) shared items from OICA TF3 and TF4.

Jürgen von Wild (JvW) continued with an overview of quality criteria. Data of different labs was shared, IPDR = 45% and IPDW = 30 J/kg were proposed as limit values. Those will be reflected by JRC, BG proposed to discuss bilaterally between JRC and OICA. BG asked about the used cycle. JvW replied, that both versions (Trip 10 and entire WLTP Brake) were considered.

JvW continued with the introduction of the threshold pressure calculation method. Discussions with RV and CA followed, which proposal (JRC vs. OICA) might be more appropriate. For this amendment the fixed value is more appropriate

FL explained C-factor declaration, brake torque & pressure zero level (CA added via chat: threshold pressure, we can reference ISO 11843-3 for the level of detection), friction material edge code, definition for material formulation, vehicle type meaning plus additional items from JRC xls table.

b) Update (JRC)

BG shared the feedback from PMP, adjusted during the meeting based on the previous presentations. The related document was shared after the meeting (12.03.2025).

Deadline for comments is 20<sup>th</sup> March 2025.

Some key conclusions

Topics to be considered for a future amendment and not this 2md: 3-probe sampling to be deleted, decimals, 5 s additional reporting

Cooling air supply flow rate proposal accepted

Brake control values need to be added

New definitions to be checked (vehicle electrification type, material formulation)

### 4. Any other business

TF5 subgroups have been formed.

### 5. Next Meeting

Hybrid PMP in Geneva, Switzerland (room S.225-4): 25 March 2025 (10:30-12:30) before GRPE 92nd (26-28 March)

Connection details will be sent one week before the meeting.

Only those attending in person need to register:

<https://unece.org/transport/events/wp29grpe-working-party-pollution-and-energy-92nd-session>

Due to limited room capacity priority have participants linked to an ECOSOC accredited NGO (CLEPA, OICA, ...) or country.

Topics will also include (send email to [barouch.giechaskiel@ec.europa.eu](mailto:barouch.giechaskiel@ec.europa.eu) for presentation of other projects):

- Health effects of non-exhaust particles
- Parempi project

Tyre abrasion and cost benefit framework (Leon-T)

BG thanked everybody and closed the meeting.