

PM EMISSIONS FROM TYRES AND BRAKES PMP WORKING ITEMS

T. Grigoratos and G. Martini

Sustainable Transport Unit
Institute for Energy and Transport
Joint Research Centre

01 October 2014



WORKING ITEMS

Based on the GRPE decision (GRPE document 69-23, 06-2014), the PMP will have to prepare a more concrete and detailed working program on the following working items:

- ✓ Investigation of typical driving patterns and in particular of typical accelerations/decelerations
- ✓ Compilation and monitoring of on-going research projects
- ✓ Networking and exchange of information with experts in the field
- ✓ Development of a set of recommended measurement techniques and sampling procedures



WI 1: INVESTIGATION OF TYPICAL DRIVING PATTERNS AND IN PARTICULAR OF TYPICAL ACCELERATIONS/DECELERATIONS

Presentation on the WLTP driving database by Mr. Heinz Steven (HS Data Analysis and Consultancy)

Open questions - Possible actions

- ✓ Discussion on which data set(s) shall be considered. Shall it be only data coming from the WLTP project? Are there any other databases which could be considered?
- ✓ Would a single "harmonized" approach be appropriate or different several definitions depending on the region are necessary?
- ✓ Statistical analysis of driving data in order to derive typical driving patterns



WI 2: COMPILATION AND MONITORING OF ON-GOING RESEARCH PROJECTS ON NON-EXHAUST TRAFFIC RELATED PM EMISSIONS

Presentation of the "REBRAKE" project by Mattia Alemani (BREMBO S.p.A.)

Presentation on the "TIP PM_{2.5} Global Sampling Project" by Mrs. Julie Panko (Cardno ChemRisk)

<u>Open questions – Possible actions</u>

- ✓ Are there any other on-going related projects that PMP members are aware of?
- ✓ Preparation of a "living document", which will include on-going related projects and which will be available on PMP website



WI 3: NETWORKING & EXCHANGE OF INFORMATION WITH EXPERTS IN THE FIELD OF NON-EXHAUST PM EMISSIONS

Recent developments

- ✓ Dr. Ulf Olofsson (Royal Institute of Technology KTH, Stockholm)
- ✓ Dr. Jana Kukutschova (Technical University of Ostrava)

<u>Open questions – Possible actions</u>

- ✓ Recommendations for inviting experts at the following PMP
 meetings or include them at the PMP's mailing list
- ✓ Preparation of a "living document" with experts on the field. This document will also be subject of continuous update



WI 4: DEVELOPMENT OF A SET OF RECOMMENDED MEASUREMENT TECHNIQUES & SAMPLING PROCEDURES

Open questions – Possible actions

- □ Recommendations on the metrics that should be considered.

 Should it be particle mass, particle number or both?
- □ Should the chemical characterization of wear particles taken into account?
- □ Should only laboratory based methodologies and techniques be developed or also on-road measurements shall be taken into account?