



Diesel efficiency improvement with Particulates and emission Reduction

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Project partners:

- 1 - AVL - AVL List GmbH - AT
- 2 - REN - Renault SAS - FR
- 3 – IFP – Energies nouvelles – IFPEN – FR
- 4 - CMT - Universitat Politecnica de Valencia – ES
- 5 - JM - Johnson Matthey Plc - UK
- 6 – CONTI – Continental Automotive France SAS – FR
- 7 – BOSCH – Robert Bosch GmbH - DE
- 8 - CNR - Consiglio Nazionale delle Ricerche – IT
- 9 – FMF - FPT Motorenforschung AG – CH
- 10 – IVECO – IVECO S.p.A. - IT
- 11 - RCD - Ricardo Plc – UK
- 12 – ECN – ECOLE CENTRALE DE NANTES – FR
- 13 – SIE - SIEMENS INDUSTRY SOFTWARE SAS – FR
- 14 - VIF – Kompetenzzentrum – Das Virtuelle Fahrzeug, Forschungsgesellschaft mbH - AT**
- 15 - UNR - Uniresearch BV - NL
- 16 - CRF – Centro Ricerche SCPA - IT

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Executive summary

In the first 13 months of dieper the measurement procedures were defined in D7.1 and the baseline vehicles measurements were reported in D7.2. This interim mid-term report should reanalyse the previous work and give an update to it.

Firstly, the baseline results for the Renault Espace and the Iveco Daily were compared either to reference tests or to the European CO₂-limits for fleets. The baseline measurements meet the expectations from FPT (for Iveco) and Renault in terms of CO₂.

Secondly, the measurement procedures were reassessed together with the partners and updates according to the EU legislation were included. The 3rd RDE package entered into force which comes with a CF of 1.5 for PN, further, beside of the total RDE trip evaluation the urban part must be evaluated in parallel. The 4th RDE package is expected to enter into force in August 2018. Currently it is planned to introduce a new CO₂-based post processing which would substitute MAW as well as CLEAR. Additional, the normality check of MAW should be also used in future to exclude abnormal driving.

A new test cycle overview picture was presented which clarifies that the emissions will be measured in the on-road RDE and the WLTC on chassis dyno but not in the RWC (30 min short RDE cycle on chassis dynamometer). The RWC serves primarily for the comparison of fuel consumption.

A new RDE route was presented which shows the major urban part in the beginning of the drive. Finally a list of channels to be recorded during an RDE-drive is illustrated.