

The European Commission's science and knowledge service

Joint Research Centre



Hub-dynos evaluation

- Hub-dynos are used by OEMs
- Objective: To assess hub-dynos whether can be introduced (permitted) in the regulation



Technical specifications

- Regulation technical specifications can be fulfilled (except roller)
- Needs to be understood how some definitions or requirements will be “translated” e.g. 3% wheel rotational inertia
- It has to be ensured that the vehicle behaves the same way with the two dyno concepts
- It has to be ensured that the emissions are the same at the two dyno concepts

Proposal for testing plan

- Tests at JRC: In the same chassis dynamometer (to have identical ambient conditions and measurement equipment)
- Vehicles to be covered: Small-large hybrid, manual-automatic, 2WD or 4WD etc.
 - Proposal: Small gasoline manual 2WD, Large diesel automatic 4WD
 - WLTC cold, hot, steady, dynamic cycles x 3 repetitions
 - Temperature 23°C, low temperature -7°C

Proposal for testing plan

- Testing plan:
 - Chassis: Car A, Car B
 - Hub: Car B, Car A
 - Chassis: Car A, Car B
- Emissions + ECU data
 - Involvement of OEM important



Any questions?