

Informal Group on Gaseous Fuelled Vehicles (GFV)
Informal 'Workshop' on Heavy Duty Dual-Fuel Retrofits
13 December 2012
European Commission
100 Rue Belliard, Room 09/SDR

Purpose of the Workshop

This informational workshop is organized to discuss and help determine what regulatory pathway should be taken in regards to continued work on Heavy Duty Dual-Fuel (HDDF) gaseous fuel vehicles, specifically focused on retrofit systems. The discussion is a result of the work being done by the Heavy Duty Dual-Fuel Task Force (HDDF TF) within the GFV. The results of the workshop will provide input to the HDDF TF, GFV, and the UNECE Group of Experts on Pollution and Energy (GRPE) as to next steps for HDDF regulations.

10.00 Meeting Commences

- Welcome and introduction, André Rijnders (RDW-NL), Chairman of the GFV

10.15 -11.15 Perspectives on HDDF retrofit systems

- Clean Air Power, Steve Whelan
- Prins Autogas, Jasper van Sambeek
- Volvo, Jean-Francois Renaudin
- Other....to be determined

11.15 -11.30 Coffee Break

11.30 - 13.00 National regulatory approaches to retrofit HD dual-fuel systems

- Netherlands, Henk Baarbé (Dutch Ministry of the Environment)
- Germany, Stefan Behrning (TUV Rheinland)
- Sweden, Per Öhlund (Swedish Transport Agency) (presentation provided)
- Italy, Corrado Storchi (Landi Renzo)
- UK, Steve Whelan, Clean Air Power

LUNCH 13.00-14.15.

14.30 - 15.00 U.S. EPA & European Commission regulatory approaches to gaseous fuel retrofits

- US EPA three tier approval scheme for gaseous fuel retrofit systems, Jeffrey Seisler
- DG Enterprise, European Commission view on HDDF regulations, Bernardo Martinez

15.00 – 16.45 Discussion

(including 16.00-16.15 Coffee Break)

How should heavy duty dual-fuel retrofit requirements be handled?

- Internationally (UNECE) or only at the national regulatory level?
- Regulatory framework proposed?
 - R.115 or a new regulation?
 - (Euro V? Euro VI?)
 - Only engine type 2B? Others?

- Technical requirements:
 - Family definition developments (EGR and SCR separate)
 - System approval
 - Vehicle approval
 - Emission limit values
 - OBD & inducement remaining operational
 - Engine testing/PEMS/SEMS testing
 - Durability / in-service (Retrofit Emissions Control (REC) relationship
 - In-service conformity (?)
 - In use compliance (?)
 - Other
- Organizational approach & expertise required to create the regulations
- Timing of the work to be performed
- Other issues of concern

16.45 – 17.00 Conclusions & Closing Remarks,

- André Rijnders, Chairman GFV