

# Retrofit Heavy Duty Dual Fuel

GFV, January 29<sup>th</sup> 2014  
Brussels



# Open issues

Several items are still open, but they need to be fixed as soon as possible otherwise the discussion freezes.

AEGPL proposes to discuss and set the following issues:

- STRUCTURE
- SCOPE
- ENGINE FAMILY
- OLD ENGINES (NOT COMPLIANT IN DIESEL MODE)
- DETERIORATION
- RESPONSIBILITY

# Structure (Items 7 and 8 of open list)

We believe that the actual modular structure fits all the needs:

ANNEX 1: Retrofit systems type approval (CASE 1)

ANNEX 2: Reserved for future retrofitted engine type approval (CASE 2)

ANNEX 3: Reserved for future vehicle type approval regarding the installation of an approved retrofitted engine. (CASE 3)

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6. REQUIREMENTS FOR INSTALLING A CERTIFIED ENGINE ON A CONVERTED VEHICLE

6.1. Application for approval

Annex 1  
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**An approved engine can be installed in different vehicles while the retrofit system doesn't change the combination engine-vehicle.**

# Scope (Item 3 of open list)

We agree with the solution 1 regarding DF types: only type B (no distinctions).

The request to exclude type 3B is not consistent because the new regulation shall deal with emission performances and is not related with local incentives.

# Engine family (Item 4 of open list)

AECC raised an issue regarding the possibility to include in the same family engines with pollution control devices if the parent engines doesn't have such devices.

**Proposal: the presence or not of EGR generates a different family**

# Old engine not compliant with the emission levels

GFV 29<sup>th</sup> discussed about the possibility to adopt a wider engine family rather than allowing tests on parent engines not complying with emission levels.

Emission levels no longer in force should allow retrofit system manufacturers to perform tests without excessive difficulty in finding compliant engines:

**Proposal : engine family based only on simplified technical features**

# Deterioration factors (Item 14 of open list)

GFV 29<sup>th</sup> discussed about the possibility to execute emission tests with emission-related gas components aged by endurance test prescribed by the applicable regulation (R67/01 or R110/01).

Proposal:

The emission test on the parent engine shall be done with emission related gas components aged by endurance test according to R67/01 or R110/01 as applicable. If specimens used for R67/01 or R110/01 type approval are not available, a new endurance test shall be done before emission tests.

In addition, the test result shall be corrected with the deterioration factors listed in table X (same as OEM).

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## Thank You

