Informal Group on Gaseous Fuelled Vehicles (GFV)

Report 68th GRPE January 2014
Meetings GFV Group

- 28th GFV meeting
  - 12 September 2013 Brussels

- 29th GFV meeting
  - 3-4 December 2013 The Hague (The Netherlands)

- 30th GFV meeting
  - 07 January 2014 Geneva
GFV items

Heavy Duty Dual-Fuel (HDDF)

Amendments to rev.5 Regulation 49 (EURO V) with the introduction of Dual Fuel.

- Approved in November 2013 WP29
GFV items

HDDF retrofitted engines and vehicles

- **66th GRPE June 2013 Geneva.**
  - Decision to develop a new UN Regulation for heavy-duty dual-fuel retrofit.
  - Scope of R115 should be changed to only retrofits of LDV.
- **28th 29th and 30th GFV**
  - Structure and basic principles of new Regulation discussed.
  - AEGPL proposal for a new regulation on Dual Fuel retrofit for Heavy Duty
  - OICA suggestions about a framework for a new regulation.
GFV items

HDDF retrofitted engines and vehicles

Timing:
- January 68th GRPE 2014: discussions
- June 69th GRPE 2014: informal document (if available)
- January 70th GRPE 2015: formal document (if available)
- June WP.29 2015: adoption

Organisation:
- GFV mean group will discuss the HDDF activity of fundamentals & principles & process
- Task Force retrofit HDDF activity technical implementation and drafting activity
- Chair Task Force retrofit HDDF: TNO (Henk Dekker)
- Secretariat HDDF TF → NGV global (Jeff Seisler)
- Meetings HDDF TF → to be decided by the TF (or GFV)
Discussed/agreed issues

- **Scope**
  - First Euro stage IV / V
  - Possibly later Euro stage VI, (under discussion)
  - Only type B Dual-Fuel systems (diesel mode + dual-fuel mode) applicability for type 3B (less than 10% Gas Energy Ratio); is under discussion

- **Families**
  - Parent engine: emission test compliant with EL
  - Robust description of family to be developed

- **Approval**
  - Retrofit systems (LPG/CNG/LNG systems for a vehicle and engine type)
  - Discussion ongoing concerning the need for a type approval of a retrofit DF engine (*dual fuel engines approvals exist in R49*)

*(Open Issue List)*
Retrofit principles discussion

A. Retrofit modification \(\rightarrow\) **without** substantially modifying its emission strategies
B. Retrofit modification \(\rightarrow\) **with** substantially modifying its emission strategies

- Discussion if we need other words/definitions A= retrofit and B= conversion.
- The GFV agreed to keep the historical wording ‘retrofit’ system to avoid any confusion.
- Sub-classification of retrofit systems of ‘substantially’ modify emission and operating strategies like intrusive and non-intrusive systems should be considered.

- Discussion once an engine is “retrofitted” about the responsibility or liability of the OEM. OEM vs Retrofit debate is not new and should be avoided.
- Our task is to set well written regulations to ensure that only the best retrofit HDDF systems can come into the market. (there are good and bad retrofits)
- It would be very good if the OEMs would work cooperatively with retrofitters to ensure quality control of vehicles that are fitted with retrofit DF systems.
Retrofit further activity

- The GFV will discuss further the initial principles and find solutions.
- The open issue list will be used.
- The Task Force should start as soon as possible.
- On the 31th GFV meeting (on January 29th) we can develop milestones and the operating procedures for the HDDF.

- This 31th GFV meeting will be used as Kick-Off meeting for the TF.
GFV items

Update on other UN regulatory activities related to safety (Jeff Seisler)

- New amendments on LNG being considered for May 2014 GRSG
- Update on UN WP15 (Carriage of Dangerous Goods) and ADR regulatory issues regarding CNG and LNG safety on ADR-regulated trucks. (Updated from document GFV 29-08, with progress from December 2013 teleconference)
Next steps GFV

Next meetings
- 31\textsuperscript{th} GFV meeting 29 January 2014 Brussels
- Further GFV meetings to be scheduled.
- GFV request GRPE for a ½ day meeting during the 69th GRPE

- HDDF TF kick off meeting on the 29 January 2014, further meetings to be scheduled by the Task Force

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