

**Meeting Minutes**  
**34<sup>th</sup> Meeting of the Informal Group on Gaseous Fuelled Vehicles (GFV)**  
**3<sup>rd</sup> June 2014**  
**Palais des Nations**  
**Room V**  
**Geneva**  
**14.00-16.00**

**I. Welcome and Introduction**

1. Mr. Rijnders welcomed the group and indicated this should be a short meeting since the GFV had a recent meeting in Lyon on 22-23<sup>rd</sup> May 2014.

**II. Agenda for today (changes/additions)**

2. There were no suggested changes to the agenda.

**III. Adoption of minutes of the 33<sup>rd</sup> GFV on 22-23 May 2014**

3. The minutes from GFV-33 still are in preparation and will be finalized shortly. They will be available for approval at the next GFV meeting.

**IV. Gaseous fuel issues at GRPE**

4. There was a new document for GRPE from OICA (69-7e, amendment language and PowerPoint version 69-8, slide 7) on LNG trucks. Mr. Renaudin presented the summary of the document.
5. Alternative service mode for LNG dual-fuel vehicles currently states that the vehicle speed of a D-F truck should be limited to 20 km per hour when there is no longer gas in the LNG tank. The new proposal indicates to 'Limit the power of the engine to 20% of the declared maximum power in D-F mode. It would apply only in the case when the gas has been drained out for repair reasons and would apply only to Type A dual-fuel engines (no diesel mode allowed). The rationale was that there is very poor density of LNG filling stations in some areas that would require a truck to be either towed or to operate over a long distance at 20km/h; both situations being undesirable.
6. There were no further comments and Mr. Rijnders concluded that there was consensus in the GFV regarding this amendment. He indicated it will be appropriate for OICA to mention this in their presentation at this week's GRPE.

**V. Information on the state-of-play of drafting a new UNECE Regulation on the type approval of Retrofit Heavy Duty Dual Fuel (HDDF) systems.**

7. Regulation 49 now includes dual-fuel regulations for Euro VI and Euro V. The task now is to work on the retrofit applications and this will be a completely new regulation and not an amendment to another existing regulation.
8. Mr. Rijnders in his presentation on the 'Process of the GFV HDDF Retrofit Activity' (GFV 34-02) referenced document GFV 29-03 to identify the fundamentals and principals of HDDF-retrofit that has been discussed at earlier GFV meetings. Since many participants in this meeting generally are not involved in HDDF this information supplied good background to the meeting.
9. The concept of 'retrofit' was maintained and OICA proposed that there would be certifications for a conversion system; for a converted vehicle; and requirements for installing a certified engine on a converted vehicle.

10. AEGPL proposed a harmonized method for the classification, evaluation and approval of retrofit systems fit in a HD road vehicle. Methods to certify engines retrofitted into a vehicle and application of a certified engine into a vehicle will be lower on the priority list to address.
11. The family definition was discussed on 3rd April 2014 and is a difficult topic for dual-fuel retrofits. OICA will forward some optional language to address application of the family concept to D-F retrofitters.
12. Concepts on in-service conformity (ISC) need to be more fully addressed.
13. Other elements in detail can be seen in Mr. Rijnders' document GFV-34-02.
14. Mr. Dekker, HDDF TF Chairman explained the forward progress from the on-going Open Issues List (OIL).
15. Mr. Renaudin noted that this was not a fully vetted document by OICA and should not be misinterpreted as an official position of the association.
16. Mr. Rijnders referred to document GFV 33-06 to discuss the list of open issues and the current status of the language being proposed for the new regulation.

**VI. Retrofit HDDF open issues list**

17. This is a 'living document' that is updated at every meeting. It provides an on-going record of the major issues and how they are being addressed.

**VII. Any Other Business**

18. In the GFV group there was an LNG Task Force created to introduce LNG into R.110. This TF from the GFV which is an informal group of the GRPE delivered their output directly to the GRSG. The work on amendments to R.110 adding LNG components was completed and adopted by GRSG in November 2013, approved by WP29 and will come into force in July 2014. There still are some correcting amendments being made to this large package of R.110 issues.
19. Another discussion has occurred about doing a complete review of R.110 and it was discussed between Chairman Rijnders and Mr. Erario, Chairman of GRSG. If such an effort is undertaken it will happen formally under the GRSG.
20. There were other issues associated with the WLTP that affect light duty vehicles for gaseous fuels and these are being monitored in case there are specific things that must be considered by GFV.
21. No other issues were raised by the group.
22. Mr. Rijnders suggested that HDDF work was not done at this meeting but invited any interested parties to join in the activities.

**VIII. Review of Planned Meetings of GFV & HDDF TF (through December 2014)**

23. Upcoming meetings will be:
  - 2 September 2014 HDDF (Brussels-Eurogas/NGVA Europe office)
  - 24 September 2014 HDDF (Brussels, DG Enterprise)
  - 28-29 October 2014 GFV-35/HDDF TF (Rome, hosted by AEGPL)
  - 3 December 2014 GFV-36 (Brussels, DG Enterprise)

**IX. Closing**

Mr. Rijnders closed the meeting and thanked the participants for their attention.

**(Please see next page)**

## **Attendees**

Andre Rijnders, Chairman (RD-NL)  
Jeff Seisler, (co-secretariat) NGV Global/Clean Fuels Consulting  
Salvatore Piccolo (co-secretariat) (AEGPL)  
Henk Dekker (TNO)  
Henrick Berg (OICA/Scania)  
Simon Davies (Department of Transport UK)  
Gaetano Valicenti (NGVA Europe)  
Hua Lu Karlsson (OICA/Scania)  
Michael Hygrell (OICA/Volvo)  
Torsten Rimkus (OICA/Volvo)  
Helmut Kraft (BMW-Germany)  
Martin Lange (UBA-Germany)  
Leif-Erik Schulte (TUV Nord)  
Krisztian Uhlik (KTI)  
Maciej Szymanski (European Commission DG Enterprise)  
Adolfo Perugo (European Commission JRC)  
Pierre Laurent (CLEPA)  
Cécile Favre (AECC)  
Rashmi Urdhwareshe (ARAI, India)  
Shrikant Raghunath Marathe (ARAI, India)  
Husein Nakhawa (ARAI, India)  
Dirk Bosteels (AECC)  
Dimitris Vartholomaios (DENSO)  
Alexander Bergmann (EGEA)  
Werner Hofepper (EGEA)  
Kazuyuki Narusawa (JASIC/Japan)  
Yuki Toba (JASIC/Japan)  
Masahito Yamashita (JASIC/Japan)  
Shoto Ohashi (JASIC/Japan)  
Yunshan Ge (MIIT/China)  
Yuh Jia (MIIT/China)  
Guogang Ginn (MIIT/China)