

MINUTES
12th Meeting
Informal Group on Gaseous Fuelled Vehicles (GFV)
11 January 2011
Palais des Nations, Geneva, Switzerland

The GRPE informal group on Gaseous Fuelled Vehicles (GFV) held its 12th meeting in Geneva, on 11 January 2011, under the chairmanship of Mr. André Rijnders (Netherlands). All working papers of the informal group are publicly available at the GRPE website at:<http://www.unece.org/trans/main/wp29/wp29wgs/wp29grpe/gfv12.html>.

I. Welcome & Introductions

1. Chairman Rijnders welcomed everyone and wished the group a happy New Year.

II. Approval of the Minutes of the 11th GFV meeting held on 11 November 2009.

Documentation: GFV-11-05

2. Chairman Rijnders asks if there are any comments or changes to the minutes of the previous meeting (document GFV 11-05). No questions or comments are raised and the minutes are accepted.

III. Review of today's agenda items

Documentation: GFV-12-01

3. The chairman proposed to add the informal paper from the AEGPL GFV-02-02 under a new agenda item IV and to have the former agenda items IV and V shifted into V and VI respectively.

IV. Alignments of R.115 and R.83.

Documentation: GFV-12-02

4. Mr. Hubert, secretary of the GRPE, summarized the current situation concerning the 6th series of amendments to Regulation 83. He explained that this series of amendments entered into force on 9th December 2010. However, due to translation delay, it will take another month or so to be available on the website. Amendments to this series of amendments will be approved at the next WP29 sessions and must be taken into account.
5. Mr. Rijnders indicates that alignment of R115 with R83 will take place once the official text is available.
6. Mr. Duvielguerbigny (AEGPL) introduces document GFV-12-02. Some parts of Regulation 115 need to be amended in order to have a dynamic reference to R83. In the current state, for some test methods reference is made to the 5th series of amendments of R83 (reflecting Euro 4 requirements) even for engine type-approved according to the 6th series of amendments (reflecting Euro 5 requirements) for which new test methods have been introduced.
7. Practically, the proposed corrigendum deletes any reference to the 5th series of amendments and introduces the footnote 4: "*According to Regulation No. 83, the series of amendments in force during the initial type approval of the engine.*" The amendment also deletes reference to annexes 5 & 11. Mr. Rijnders stresses the need for a

corrigendum to be adopted by GRPE as an informal document and brought to WP29 as soon as possible to correct the existing incorrect reference.

8. Mr. Radzimirski summarizes his understanding that the current regulation is applicable to Euro 5 vehicles but only the test procedure reference is incorrect. He strongly advocates that this be corrected as quickly as possible.
9. Mr. Ramos, secretary of the WP29, explains that it is possible to streamline the process to adopt the corrigendum, subject to an agreement by the contracting parties, the chairman of GRPE, and by WP29. With such a consensus, the corrigendum could be adopted by the GRPE this week and then by WP29 in June.
10. Mr. Rijnders asks the group if the AEGPL informal document GFV-12-02 can be brought to the GRPE for adoption. No one disagrees. Mr. Rijnders will, on behalf of the GFV group, table this informal document for approval at the GRPE later this week.

V. Regulations 115 & 83: Retrofit systems for direct injection engines

11. Mr. Duvielguerbigny indicates the work still is on-going to make a proposal for R.115 and R.83. Mr. Piccolo supports this and indicates that the proposal is not ready for discussion but that a formal proposal will be made.
12. Mr. Rijnders hopes that the document can be provided in a timely fashion to allow delegates to review the proposal and be prepared for a discussion of direct injection engines retrofitted to gaseous fuels.

VI. Dual Fuel Task Force report (GFV-12-03)

Documentation: GFV-12-03

13. Mr. Renaudin, co-chairman of the Dual Fuel Task Force describes the progress of the Task Force with document GFV-12-03.
14. The priority is to first adapt Euro VI legislation and procedures for heavy duty engines and to amend the Euro VI legislation and procedures to enable type approval for *new* dual-fuel engines. In the second phase it would be possible to adopt procedures for retrofit vehicles using the newly amended Euro VI procedures. If new requirements and amendments are agreed within the group and GRPE as scheduled, the Task Force hopes to have the legislative framework for HDDF adopted by WP29 in November 2012, which would be on time for adoption of Euro VI.
15. A series of explanatory slides were presented by Mr. Renaudin. These are available in the GFV-12-03 document.
 - Definitions
 - Euro VI HD D-F- Laboratory Tests
 - HDDF – applicable limits
 - HDDF Type 2 engines-GFV recommended limits
 - ADDF additional requirements (off cycle, OBD and NOx control measures)
 - Euro VI HDDF-ISC tests
 - Limp home modes (HDDF operating as a diesel engine)
 - HDDF- LNG and bio-methane will be used (to introduce G20 (high caloric reference gas): goal not to require double testing on two fuels.
 - HDDF fuels- GFV priorities for testing engines on LPG and natural gas.
16. Mr. Rijnders thanks the D-F Task Force leaders for their excellent work and asks if there are questions or comments.
17. The next meeting of the Task Force will be in Brussels on 17th January at the Brey Building (DG Enterprise).
18. Mr. Rijnders indicates that by June 2011 the DF Task Force will bring a complete proposal.

19. Mr. Cagnolati (Landi Renzo) agrees about the approach to the GRPE but is concerned about the length of time to introduce something in R.115 (for retrofit). He asks that the D-F Task Force work in parallel to develop retrofit procedures to put in the proper references to R.49 and, thereby, save time.
20. Mr. Rijnders understands the pressure in the retrofit business to come up with these proposals quickly, but that it is important first to deal with R.49 changes.
21. In respect to Mr. Cagnolati's concerns, Mr. Rijnders indicates that we will take up the debate on retrofit as soon as possible based on the current work described by Mr. Renaudin.
22. Mr. Martinez (European Commission) indicates that some of the proposed changes in R49 must be treated carefully since they also apply to vehicles other than dual-fuel vehicles.
23. Mr. Dekker (TNO) asks if the discussion about correlation factors between positive ignition and compression ignition methodologies should be discussed today. Mr. Rijnders suggests that the discussion is better clarified within the DF Task Force and presented to the GFV in June 2011.
24. Mr. Renaudin clarifies Mr. Dekker's comments on the correlation factors regarding the ETC and ESC test cycles for diesel. The correlations might be slightly amended for gas engines, but is not specifically for dual fuel engines. As such, it might be the responsibility for the GFV group to make a recommendation for a correlation for gas (that currently is for diesel). Whether it should be dealt within GFV or within comitology for Euro VI will have to be answered by the Commission for their opinion.
25. Mr Renaudin will present a summary of the GFV-12-03 during the GRPE session this week.

VII. Closing and next meetings:

26. The next meetings will be as follow:
HDDF-TF: Monday 17 January at the European Commission offices HDDF-TF:
Monday 21 February in Brussels, venue to be determined.
GFV meeting: We will come with a proposal in for the next meeting in April, possibly sometime during the 11th, the week before Easter.
27. Mr. Rijnders closes the session and thanked the participants.

Attendees

Fix list

André Rijnders, (RDW, Netherlands)
H.J.Dekker, (TNO)
Jeffrey Seisler, (Clean Fuels Consulting/NGV Global)
Arnaud Duvielguerbigny (AEGPL)
John Crawford (Westport)
Jean-Francois Renaudin (Volvo)
Bernardo Martinez de Miguel (DG Enterprise)
Jaime del Alamo (NGVA Europe)
John May (AECC)
Dirk Bosteels (AEEC)
Alberto Castagnini (AEB Technologies)
Francesco Cagnolati (Landi/Renzo)
Pierre Laurent (CLEPA)
Marc Kwanten (Ministry of Mobility & Transport, Belgium)

Leif-Erik Schulte (TUEV Nord-Germany)
Winfried Matatko (TUEV Nord-Germany)
Giovanni Margaria (OICA)
Magnus Lindgren (Swedish Transport Administration)
Mark Vaysblyum (NHMI, Russia)
A. Richters, T&E
I.J.Riemersma (T&E)
Stanislaw Radzimirski, (Motor Transport Institute, Poland)
Ivan POLLAK, (KTI)
M.K. Chaudhari, (Automotive Research Association of India)
K.K. Gandhi, (SIAM, India)
Werner K. Tober, (Vienna University of Technology)
Peter Mock (International Council on Clean Transportation)
Y. Souchet, (D.G.E.C., France)
Susanne Meseth (Federal Environmental Ministry, Germany)
Ann Vereecken, (FPS Mobility and Transport, Belgium)
M. Dabrowicz, (Technical Transportation Supervision, Poland)
T.Sakai (OICA/Isuzu Motors)
R.Valgaeren (CLEPA/Bosal)
Michael Hybrell, (AECC)
Yuki Toba (JASIC)
Takahiro Haniu (JASIC)
Masato Okutsu (JASIC)
Kazuyuki Narusawa (JASIC)
Seiji Takai (Ministry of Environment, Japan)
Bernardo Martinez, (European Commission)
Junhong Park (Ministry of Environment, Korea)