

Minutes of the 2nd meeting of the GRPE informal group on Environmentally Friendly Vehicles

1. The GRPE informal group on Environmentally Friendly Vehicles (EFV) held its second meeting in Bonn (Germany), on 30/31 October 2008, under the chairmanship of Mr. Christoph Albus (Germany).

I. WELCOME AND ORGANISATIONAL ISSUES

2. The Chairman opened the second informal group meeting and welcomed all participants.

II. ADOPTION OF THE AGENDA

Documentation: Working paper EFV-02-02

3. The EFV group noted the agenda (EFV-02-02) and adopted it without an amendment.

III. ADOPTION OF THE MINUTES (1st EFV INFORMAL GROUP MEETING)

Documentation: Working Paper EFV-01-10

4. The EFV group noted the minutes (EFV-01-10) and adopted it without an amendment.

IV. APPROACHES TO AN EFV CONCEPT

Documentation: Working Paper EFV-02-04, EFV-02-05

5. The Chairman introduced the Task of the informal group (ToR) and the anticipated outcome as follows:

The aim is to develop a clear feasibility statement (successful development of a harmonized evaluation method under the framework of WP.29 – yes / no), with justification transmitted to WP.29 (November 2009).

After a discussion about the understanding of a harmonized evaluation method the Chairman underlined that it's at the moment not the aim to develop a concrete EFV scheme, e.g. an EFV definition based on performance limits.

6. The expert from Japan gave a presentation (EFV-02-04) about the Japanese Top Runner approach for fuel efficiency Regulation including an evaluation of Hybrid System and Plug-in Hybrid Systems.

7. The expert from The Netherlands gave a presentation (EFV-02-05) about the TNO concept for an EFV including aspects of tank to wheel energy efficiency and well to whell CO<sub>2</sub> emissions. This presentation was a further development of the presentation given at the 1<sup>st</sup> EFV informal group meeting (EFV-01-06).

## V. DRAFT INFORMAL DOCUMENT TO GRPE (FEASIBILITY STATEMENT)

Documentation: Working Paper EFV-02-03, EFV-02-06

8. The Chairman introduced the draft informal document of the feasibility statement (EFV-02-03) which was submitted by Germany/Industry. He explained the structure of the chapters as follows:

0. Executive summary
1. Introduction
2. Definitions
3. Existing legislation and assessment concepts
4. Aspects for the development of an evaluation concept (holistic approach)
5. Assessment of feasibility to introduce an evaluation concept under the framework of WP.29
6. References

9. The chairman introduced the content of each chapter and the informal group noted the following aspects discussed and agreed amendments of the draft feasibility statement:

10. Referring to chapter 1:

- 1.2. ISO 14021 “Environmental Labels and Declarations” (→ *chapter 3.*)
- 1.5. Work plan and time schedule (*can be deleted*)
- 1.6. Feasibility statement of GRPE (→ *chapter 0. and 5.*)
- The informal group noted the written comments submitted by ENGVA with email.

11. Referring to chapter 2:

Definitions should be introduced in cases where clarification is needed to avoid misunderstandings. System boundaries in figure 2.2-1 should be amended. The informal group considered if WTW (2.3.) only covers CO<sub>2</sub>/GHG-emissions or also other emissions.

12. Referring to chapter 3:

- 3.2.1. Energy efficiency should be discussed and description and reference to existing concepts is needed.
- Vehicle categories / scope of chapter 3. should be explained in the introduction (explanatory note).
- Premise for chapter 3: value-free description – conclusion and summarisation in chapter 4. (text needs to be checked).

13. ACEA introduced the proposal of chapter 4 of the feasibility statement (EFV-02-06).

Chapter 4 contains “Aspects for the development of an evaluation concept (holistic approach)”:

- 4.1. Criteria
- 4.2. SWOT analysis for regulations and standards
- 4.3. SWOT analysis for existing evaluation concepts

14. Concerning chapter 4 the informal group considered following aspects during discussion:

- a) Evaluation context
  - evaluation of a vehicle type related to same/other vehicle categories
  - evaluation of a vehicle type related to same/different technologies
  - evaluation of different vehicle technologies
  - evaluation of vehicles related to other transport methods
- b) Harmonization, taking national/regional differences into account (ACEA proposal chapter 5)
  - weighting factors for environmental criteria
  - energy mix as basis for WTT and LCA

- different measurement methods and test cycles (WHDC and WMTC existing as GTR no. 4 and no. 2)
- different market and references fuels
- c) Scope / vehicle categories
  - Special Resolution no. 1 is basis
  - General options:
    - (1) Limited to M1 vehicles (HDV, bus, motorcycle, lof - are excluded )
    - (2) Two step approach: Start with M1 vehicles, other categories will be included later
    - (3) One step approach: Start with M1 and one or more other categories
  - The informal group agrees to focus on M1 vehicles in the feasibility statement.
- d) Environmental criteria
  - pollutant emissions
  - CO<sub>2</sub> emissions, fuel consumption
  - GHG emissions
  - energy efficiency
  - toxic substances
  - noise
  - EMC
  - biodiversity and sustainability criteria
- e) Aspects concerning LCA
  - data availability
  - system boundaries
- f) Aspects concerning WTW, WTT, TTW
  - data availability (e.g. TTW - CO<sub>2</sub> emissions HDV)
  - system boundaries
  - consider real world emissions (e.g. emission factors), or type approval data ?
  - WTW - GHG related only ?
  - WTW analysis in the case of flexibility of the vehicle owner / driver concerning used fuel or energy source (bivalent fuel, flex fuel, Hybrid vehicle with mode switch).
  - How to evaluate vehicle technologies which are not covered by WTW, e.g. “none engine components” for CO<sub>2</sub> reduction, ITS compatibility or devices supporting the driver concerning environmentally friendly driving behavior.

15. After discussion and revision of the criteria in chapter 4, the table of “4.2. SWOT Analysis for Regulations and Standards” has to be updated. The following empty columns will be filled out concerning the colour decision by the following participants:

The Netherlands:

- CO<sub>2</sub> regulations, fuel economy (MAC, CAFE)
- Fuel directives
- Regulated pollutants

Germany:

- Noise

ACEA:

- Recycling and substance restrictions
- Interior air quality

ACEA - update of:

- Green vehicles (EPA, Australia, China, Sweden)
- Recyclability ISO 22628
- LCA / ISO 14040/44
- WTW
- Vehicle rankings e.g. VCD, Ökotrend

16. ACEA introduced the proposal of chapter 5 of the feasibility statement (EFV-02-06). Chapter 5 contains “Assessment of feasibility to introduce an evaluation concept under the framework of WP.29”.

17. Concerning chapter 5 the informal group considered following aspects during discussion:
- Added value of an EFV evaluation method, taking existing regulations, concepts and measures / incentives into account:
    - summarizing conclusion from chapter 3 concerning regulations, concepts and measures (e.g.: regulations are mandatory minimum requirements, vehicles shall comply with a certain limit value level, or type approval values like CO<sub>2</sub> are measured and recorded)
    - possible harmonization
    - basis for clear guidance for governments, vehicle manufacturers and consumers
    - success proved by application
  - Feasibility statement with justification (general concept).
  - Outlook of an evaluation method developed under the framework of WP.29 as a next step after the 4th EFV Conference in India (detailed concept).
  - At the moment it's not the aim to develop a concrete EFV scheme, e.g. an EFV definition based on performance limits.
  - In the EFV project work already done by other organizations should not be duplicated, e.g. data collection, WTW analysis or LCA studies.

18. The expert from ACEA pointed out, that on the one hand the overview on existing legislation and concepts (chapter 3) and the further discussion on aspects of an evaluation concept (chapter 4) is a worthwhile exercise. On the other hand, in addition, the development of the feasibility statement needs as basis a consideration of political aspects concerning the target groups applying the EFV evaluation methods (governments, industry, consumers) as well as the purposes and measures, finally aiming on the development and market introduction of EFV's.

19. The EFV informal group agreed that due to the outcome of the discussions an updated version of the complete draft feasibility statement will be developed by Germany/Industry and submitted to the EFV informal group until end of November 2008 (remark: Rev.1 and Rev.2 of the draft feasibility statement (EFV-02-03) are available on the GRPE-EFV web site).

## VI. ANY OTHER BUSINESS

20. The EFV group noted that no new information was presented under this agenda item.

## VII. TIME SCHEDULE

Documentation: Working Paper EFV-02-01

21. Referring to EFV-02-01, the Chairman shortly introduced the draft time schedule for the feasibility concept and an outlook of the work to be done by the group in 2008 and 2009. This was agreed by the informal group.

## VIII. NEXT STEPS AND SCHEDULE (NEXT MEETING)

22. The Chairman introduced the following next steps and schedule:

- Minutes 1st EFV informal group meeting on GRPE-EFV website
- Main Documents EFV-02-\* on GRPE-EFV website
- Draft Minutes 2nd EFV Informal Group Meeting – end of November by email (remark: was postponed to April 2009)
- Additional comments concerning draft GRPE document – mid of November
- Rev1 of draft GRPE document – end of November by Germany/Industry
- Comments concerning Rev1 – mid of December
- Rev2 as informal document to GRPE – beginning January

23. The Chairman invited to a further EFV Informal Group meeting in Geneva, on 16 January 2009, in order to continue the preparation of the concept of the feasibility study.

Finally, he thanked the experts for their active participation and also for the excellent presentations.

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