

**DRAFT TERMS OF REFERENCE FOR THE ESTABLISHMENT OF AN INFORMAL  
GROUP TO DEVELOP AN EVALUATION CONCEPT FOR ENVIRONMENTALLY  
FRIENDLY VEHICLES (EFV)**

**1. INTRODUCTION**

Tackling climate change and improving energy efficiency are two of the major challenges currently facing transport policymakers around the world. In this context, the development and introduction of EFV's as well as renewable fuels are the main fields of action. This issue concerns us all: the government, the industry, the research community and the consumers. Nobody can and must shirk from the responsibility for protecting health and tackling climate change especially with regard to safeguarding the life support systems for future generations.

The presentations and discussions at the 3<sup>rd</sup> EFV Conference in Dresden as well and at previous conferences in Tokyo (2003) and Birmingham (2005) as well as in WP.29 have shown that we can only jointly meet the current challenges. The presentations and the conclusion paper of the Dresden conference are available on the website of Federal Ministry of Transport, Building and Urban Affairs ([www.bmvbs.de](http://www.bmvbs.de)) The essential results of the 3<sup>rd</sup> EFV Conference are the following:

- The United Nations expect that between 2000 and 2030 the global vehicle population will double from 800m to 1.6 billion vehicles. Given this growth it is essential to take action now to achieve a greater use of EFV's and advanced technologies.
- In an integrated approach, all road transport players have to be involved in the reduction of CO<sub>2</sub> and pollutant emissions. Increasing the use of environmentally friendly alternative energy sources like for example biodiesel, bioethanol, biogas, synthetic biofuels or hydrogen is one of the essential fields of action.
- Measures to support the introduction of EFV's should be based on a common understanding. This means that we jointly should develop a globally harmonised method for evaluating the environmental friendliness of a vehicle.
- In developing an evaluation method, focussing solely on the vehicle will not yield the required results. Rather, the development has to be based on a holistic approach. Energy consumption and the emission of greenhouse gases have to be evaluated on the basis of an integrated "well-to-wheels" approach which comprises both the preceding fuel provision chain ("well-to-tank") and the fuel use in the vehicles ("tank-to-wheels"). In the long run, the possibility of an extensive lifecycle evaluation, which also takes into account the fields development - production - use - disposal of vehicles, should be examined as well.
- It is recommended to have a close cooperation with the World Forum for Harmonisation of Vehicle Regulations (WP.29) of the United Nations in Geneva (UN-ECE).
- Future EFV Conferences is to be held every two years and should focus on the following issues:
  - status report regarding the set goals,
  - exchange of experiences with regard to ongoing measures for promoting / introducing EFV's,
  - exchange of experiences and problem analysis regarding the legal and economic framework,
  - regular status report to the G8-Leaders (according to the decision at Heiligendamm).

## **2. OBJECTIVE OF THE PROPOSAL**

To continue a fruitful cooperation between WP.29 and the future EFV conferences, it is proposed to establish an informal group under GRPE as a parallel activity. In a first step the informal group shall prepare a review of the feasibility of the proposed EFV concept (evaluation method, holistic approach). Taking the idea of world wide harmonisation into account, the applicability of the EFV concept needs to be considered for all regions of the world. Therefore following work packages are foreseen:

- 2.1 The available literature and concepts, including regulations and standards, shall be screened and analysed.
- 2.2 In a first step energy efficiency and CO<sub>2</sub> emissions will be considered and assessed on the basis of an integrated „well-to-wheels“ approach.
- 2.3 The feasibility of the successful development of a harmonised evaluation method should be examined and assessed.

## **3. ORGANISATIONAL STRUCTURE**

The EFV concept requires an involvement of the two environmental GR groups of WP.29: GRPE (pollutant emissions, fuel consumption/CO<sub>2</sub>) and GRB (noise). In addition assistance is needed from further experts i.e. those dealing with well to wheel aspects. The following organisational structure is proposed:

- Establishment of an informal group under GRPE, in cooperation with GRB
- Report to GRPE and GRB

The chair/co-chair of the informal group should rotate, in relationship to the country organising the EFV conference.

## **4. WORK PLAN AND TIME SCHEDULE**

January 2008	ToR to GRPE (informal document)
February 2008	ToR to GRB (informal document)
March 2008	Request for a mandate by WP.29
April 2008	Initiation of work of informal group
2009	Documents to GRPE / GRB / WP.29 (review of the feasibility of the EFV evaluation concept)
November 2009	Conclusion by WP.29
November 2009	Presentation at 4th EFV conference in India

-----