

**Minutes of the 9<sup>th</sup> meeting of the GRPE Informal Group on Environmentally Friendly Vehicles (EFV) held at Geneva on 15<sup>th</sup> February 2011.**

The GRPE informal group on Environmentally Friendly Vehicles (EFV) on Noise held its ninth meeting in Room No-VII, Palais des Nations, Geneva on 15<sup>th</sup> February 2011, under the chairmanship of Mr. Shrikant R. Marathe, Director-Automotive Research Association of India. This meeting was held in the morning session between 09.30 hrs. to 12.30 hrs. prior to 53<sup>rd</sup> Session of GRB meeting in order to enable the GRB members to attend and contribute to EFV concept on Noise.

**I. Welcome address and organizational issues:**

The Chairman opened the ninth informal group meeting and welcomed all the participants. The Secretary informed that total ten documents were hosted out of which seven were the comments from OICA for the working papers during eighth session. Three comments, one on Noise and other two from recyclability were only taken up for discussion as rest of the comments were on other parameters of such as CO<sub>2</sub>/ CHG emission, regulated pollutants, Environmental Labeling, EFV overview which has to be taken up by EFV- GRPE.

**II. Adoption of the Agenda**

**(Document Working Paper No EFV-09-01):**

Chairman suggested some modifications in the agenda as enclosed. Since there were no further comments from any of the members, the modified agenda (EFV-09-01) was adopted unanimously.

**III. Adoption of the minutes of 8<sup>th</sup> EFV informal group meeting**

There were no comments received from members on the minutes. However, Chairman mentioned that since the minutes were hosted on the website recently, there would not have been adequate time for the members to study the same. Hence he suggested that these minutes could be adopted in the 10<sup>th</sup> EFV Informal Group meeting in June 2011 along with the minutes of the 9<sup>th</sup> EFV Informal Group meeting.

**IV Document Working Paper No. EFV-09-09 & EFV-09-10**

The Chairman gave a presentation covering the background of EFV along with the basic factors/guidelines that need to be kept in view while deliberating on the subject. He felt that since this is the first Informal Group meeting with participation from GRB group members, it was essential for the members to have adequate background information for their effective participation.

**Copy of the presentation is enclosed with the minutes.**

**V. Subsequent to the presentation given by the Chairman, the GRB India expert presented (Informal Doc EFV-09-xx) the summary of GRPE – EFV informal group working paper no. EFV-07-05 and EFV-08-06 to the GRB group for inputs from noise experts. It covered the purpose and method of evaluation – pass by noise, presentation of pass by noise data and**

other factors like Road surface, tyres, traffic management, driving behavior and infrastructure (Noise barriers, City planning, etc.) contributing to environmental noise.

The following open questions were discussed.

### **Should Vehicle interior noise be considered for Noise assessment?**

Expert from Poland expressed that the internal noise can be an important factor in case of public transport vehicle like bus. While agreeing to the point raised by the Polish Expert, it was expressed by GRB Chairman, Germany, Switzerland, and OICA that it is not necessary to consider the interior noise since the EFV INFORMAL GROUP is working on the M1 class passenger cars. Also, it was pointed out that the interior noise signatures like sporty, quiet, etc. is the choice and preference of the customers in case of cars and hence cannot be regulated.

It was concluded that interior noise should not to be considered for EFV noise assessment as in case of M1 vehicles, it does not have a direct impact on the environment.

### **What test method can be adopted for Noise assessment?**

GRB Chairman mentioned that newly modified ECE R51 regulation can be used for EFV assessment related to noise. OICA also agreed. GRB Chairman also pointed out that, with the new assessment method, it is possible to have an understanding of the contribution of the power plant and the tyres independently. All the test conditions naturally need to be as specified in the ECE R51 standard.

### **How to present the pass by noise data for consumer information?**

Two Options were presented – Option-1: **Single value**; with indication between minimum value and maximum noise limit value (currently 74 dBA). Minimum value could be of quiet vehicle expected through future technology. This can give a clear idea to the customer the relative position of a particular vehicle model over the entire band.

Option -2 : Ranking; where the vehicles are classified into 2dB bands over the entire range. It was however highlighted that in case such a method is adopted almost 40% vehicles in the market will fall just under 2 bands making it difficult for the customers to compare the performance between different models.

Though it was not concluded, suggestions from Switzerland, Germany and Netherland were to follow Option -1.

One of the major issues is to have proper communication channels to pass on this information to the customer since customer information is the basic purpose of the exercise. There could be several channels like

- Publication of such information by the Transport Ministries of the country in the general public interest.
- Display of such information at vehicle manufacturers dealer points and owner's manuals.
- Publication in auto magazines and other media instruments.

## **1. How to consider other factors contributing to noise while assessment?**

It is obvious that there are several other factors, which contribute to vehicle noise than the vehicle itself. These include Road surface, traffic management, driving behavior, infrastructure (noise barrier, city planning) Due to these factors even a good vehicle can be termed as bad, which is not in the control of vehicle designer. It was expressed by ISO that the driver behavior is important to be considered. It was felt that while the focus of the group will be on the vehicle and tyre noise, other factors need to be covered in the preamble in not only qualitative but also in the quantitative terms as much as possible. Such information also could be passed on to the customers through the communication channels elaborated above.

OICA Presented the informal document no. EFV-09-06 highlighting the contribution of Powertrain noise and also tyre noise over vehicle speed ranges. In case of Electric vehicle even though it is considered quiet, the tyre noise is predominant at higher speed. This needs to be considered while considering the minimum limit for EFV.

OICA presented EFV-09-08 indicating their position on the recyclability. It also indicated higher recyclability does not necessarily mean higher environmental friendly. OICA expressed that recyclability need not be considered for EFV assessment.

It was decided that recyclability issue has to be discussed in the GRPE group meeting since it is linked with CO<sub>2</sub> Emission.

Regarding the environmental labeling OICA expressed, it is easy to put up noise level. Region wise labeling is recommended. Chairman EFV expressed this needs discussion in GRPE.

Chairman EFV also expressed that OICA comments for CO<sub>2</sub> Emission needs to be discussed in GRPE.

## **VI. Way forward and Action Plan:**

Chairman – EFV recommended having a task force to come out with an Informal document on EFV Noise before end of 2011. Proposed first meeting of the Task Force can be along with the March session of WP29, possibly on Friday, 11<sup>th</sup> March morning.

GRB Secretary Mr. Romain Hubert volunteered to arrange the reservation of an appropriate room for that task force meeting. He announced his intention to participate in that meeting.

GRB Chairman asked India to present (Informal doc no. GRB-53-23) the outcome of the meeting on environmentally friendly vehicles–noise to GRB members and requested every member to participate in developing Informal document on EFV noise. It is also suggested to send their comments / suggestions by mail.

## **VII. Any other business:**

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

## **VIII. Next steps and schedule:**

It was discussed and informed that the next IG EFV meeting will be held in June 2011 along with GRPE meeting.

Chairman thanked GRB Chairman & members and EFV informal group members, GRPE Secretary for their valuable contribution.

The meeting ended with a vote of thanks to the Chair.

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