

DRAFT Minutes of the 8th meeting of the GRPE Informal Group on Environmentally Friendly Vehicles (EFV) held at Geneva on 14th January 2011.

The GRPE informal group on Environmentally Friendly Vehicles (EFV) held its eighth meeting in Room No-VII, Palais des Nations, Geneva on 14th January 2011, under the chairmanship of Mr. Shrikant R. Marathe, Director-Automotive Research Association of India.

I. Welcome address and organizational issues:

1. The Chairman opened the eighth informal group meeting and welcomed all the participants. The Chairman informed that total 6 documents were hosted by India and circulated to all members on 18th November 2010, on which the comments were received from EPA and Switzerland. These comments were incorporated and revised documents were circulated to all members on 31st December 2010 and also uploaded on UNECE website. However, these documents are for discussions and need to be further developed. He thanked everybody for the contribution.

He extended his thanks to Chairman and Secretary GRPE for making the time slot available immediately after coffee break on Friday morning for conducting the meeting which was earlier scheduled after lunch.

II. Adoption of the Agenda

(Document Working Paper No EFV-08-01):

2. There being no comments from any of the members, the agenda (EFV-08-01) was adopted unanimously.

III. Adoption of the minutes of 7th EFV informal group meeting

(Document Working Paper No. EFV-07-07-Rev 1):

3. Comments were received from OICA on the 7th minutes of meeting, expressing that the statements made by the experts from OICA were not reflected clearly in the minutes. So, after incorporating those comments, the minutes were forwarded to all and uploaded on UNECE website.
4. Chairman invited any observations and comments on revised minutes. There being no comments from members and the minutes of meeting were adopted unanimously.

III. Report to 61st GRPE (January 2011)

(Document Working Paper No. GRPE-61-XX)

5. The chairman briefed the GRPE about the progress made by the EFV Informal Group during its 7th meeting held at Geneva on 11th June 2010.

- In 7th Informal Group meeting, India had hosted the four working papers on:

1. CO2 Emissions: EFV 07-02
2. Regulated Pollutants: EFV -07-03
3. Recyclability: EFV -07-04
4. Noise: EFV -07-05

The documents were well appreciated by all the members and expressed that documents prepared were a good starting point where all the relevant information was collected at one place.

- Subsequently OICA hosted the working paper EFV -07-06 expressing their views on the documents hosted by India.
- Expert from USA and OICA suggested to consider overall green house gas emissions rather than CO2 only. Expert from Belgium expressed that while considering CO2 emissions for electric/hybrid vehicles; the comparison with IC engines may be unfair if we consider only Tailpipe CO2 emissions. Experts from Germany commented to consider fuel consumption/energy consumption for comparison.
- For regulated pollutants, expert from Belgium expressed that the proposal should provide the initiative on achievement of emission levels much better than norms either by design or fitment of after treatment devices. OICA expressed to consider the COP procedure for evaluation rather than Type approval.
- For Recyclability, OICA questioned the necessity of specifying this parameter. However, there was a general feeling that this parameter needs to be further explored.
- For Noise, Secretary GRPE informed about the demonstration of noise generated with special road surface given by Construction Company in Geneva during last GRB meeting. He offered to include EFV-07-05 for discussions in the next GRB meetings. He also mentioned that the issue of needs of visually impaired/challenged persons in already before the GRB. Germany requested for reasoning behind specifying 60 dBA for quietest vehicle, on which representative of India clarified that the figure of 60 DBA was suggested keeping in view the Electric vehicles.
- OICA introduced the document EFV-07-06, which summarized that EFV concept development should be customer information only, strong reservation on the idea of single score, deletion of type of fuel parameter in future discussions, assessment of noise and pollutants on existing regulations.
- Chairman requested all the members to provide their thoughts and proposals, if any, to chalk out the path of EFV concept that needs to be developed.

152nd WP 29

(Document Working Paper No. ECE/TRANS/WP.29/1087e dated 3 December 2010)

The representative of India, Chair of the informal group on EFV, recalled the information provided at the June session of WP.29 (ECE/TRANS/WP.29/1085, para. 61). He added that India continued to work in the following five areas (a) CO₂ emissions, (b) Regulated

pollutants, (c) Recyclability, (d) Noise and (e) Type of fuels. He informed the World Forum that the next meeting of the informal group was scheduled to be held in conjunction with the January 2011 session of GRPE. The World Forum noted the intention of GRB to hold an informal group meeting on EFV prior to the next session of GRB in the morning of 15 February 2011, dedicated to discuss noise issues of EFV.

V. EFV Concept

(Document Working Paper No. EFV-08-02, EFV-08-03, EFV-08-04, EFV-08-05, EFV-08-06, EFV-08-07):

6. Chairman mentioned that India had submitted 6 documents for the discussion in this meeting. Comments were received from EPA, Switzerland, VDA, OICA and other contracting parties. He urged the members to give their views for a way forward to achieve our mandate.
7. Representative from India introduced the revised documents and explained the EFV rating criteria along with the possible approaches.
 - **Overview: (Document Working Paper No: EFV-08-02):** Summary of the earlier deliberations and the key decisions taken through EFV development.
 - **CO₂ Emissions: (Document Working Paper No: EFV-08-03):** 100% weightage given to the CO₂ emissions. Only tank to wheel emissions were considered.
 - **Regulated Pollutants: (Document Working Paper No: EFV-08-04):** 100% weightage given. The COP results to be taken into consideration for rating.
 - **Recyclability: (Document Working Paper No: EFV-08-05):** 100% weightage to recyclability.
 - **Noise: (Document Working Paper No: EFV-08-06):** 100% weightage given to noise. The base value is taken as 60 dBA to which 100 % rating is assigned..
 - **Labeling: (Document Working Paper No: EFV-08-07):** Labeling patterns are suggested for EFV as per EFV ratings.
8. **CO₂ Emissions:**
 - Expert from OICA mentioned that the document EFV – 08 – 03 refers to CO₂ and GHG emissions. Hence it should be made clear that this document shall be referring to CO₂ or GHG emissions. He added that, it would be very difficult to consider the GHG emissions at this stage and develop it further. So, OICA suggested that the document shall refer to CO₂ emissions rather than GHG emissions as CO₂ emissions are technology neutral.
 - OICA further mentioned that Well-to-Wheel (WTW) approach and GHG Emissions as discussed earlier couldn't be supported by the data. Hence, it should not be considered hereafter and the document should be based on Tank-to-Wheel (TTW) approach and CO₂ Emissions.
 - OICA further expressed that scoring suggested in document shall be left to contracting parties due to the regional differentiation as the testing procedure; driving cycle and regulations vary from country to country.
 - Comments made by EPA and Switzerland about the 100% scoring to 80 g/km were also discussed.

- Open issues:
 - Lower limit for CO₂ emissions and the incremental steps, whether follow the linear or polynomial equations.
 - Should the scoring be same irrespective of the region and the level of stringency of regulations existing in the specific region or should the score be different depending upon the stringency of prevalent regulations in a particular region.
 - Should the rating for CO₂ emissions be based on the harmonized or regional test procedures?
 - Should we consider TA or COP values?
9. **Regulated Pollutants:**
- Representative from India briefed the approaches from the documents. He added that two approaches are given the document, which were based on present and future emission regulations.
 - Switzerland commented that the 100% scoring should be given to zero emission vehicles instead of vehicle meeting Euro-VI norms.
 - Expert from Belgium also commented that clubbing of different fuels for rating will not be appropriate. He further added that the second approach for the regulated pollutant was irrespective of vehicle reference mass, but it will not be proper that the vehicle with different reference mass meeting Euro-VI regulation will be treated same.
 - Open Issues:
 - 100% scoring to Euro-VI compliant vehicle or Zero emission vehicle
 - While assessment of EFV vehicles should there be any differential treatment for different fuels, viz., diesel, gasoline and gaseous fuels?
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10. **Recyclability:**
- OICA expressed that recycling does not provide much value to the EFV parameter and should not be developed further. Chairman stated that, in Europe, the procedure of recycling, reuse and recovery has been defined clearly by the directive 2000/53/EC and being followed by manufacturer as mandate. However, in other contracting parties, recycling concept is under discussion. For the other contracting parties, which do not have directive on end of life vehicles, the EFV document on recyclability will be helpful. With this remark, he invited observations/comments from members.
 - Switzerland supported this and added that further steps should be taken to develop this document which will eventually help all contracting parties to frame the policy.
 - Open Issues:
 - Concept shall be developed further to assess EFV
 - Worldwide GTR for recycling shall be harmonized
11. **Noise:**
- The lower limit for 60 dBA for noise was again come for the discussion. The representative from India clarified that the figure of 60 dBA was suggested keeping in view the Electric Vehicle and added that these documents were not for present technology but will likely to be adopted after few years where technology will be superior. He also mentioned that present electric and hybrid vehicles are very close to value of 60 dBA.
 - Representative from India also mentioned that a request had been made to Mr. Christian Theis of GRB to discuss the document EFV-07-05: Noise in GRB. It is

agreed that GRB will have a detailed discussion on this in next GRB session in February 2011 which was also mentioned by Chairman and Secretary GRPE.

- Open Issues:
 - Lower limit of Noise to be discussed
 - Harmonized Test procedure
 - GRB review on the document

VI. Way forward and Action Plan:

12. Indian representative mentioned that evaluation of the vehicle for CO2 emissions, Regulated Pollutants, Recycling and Noise will be based on harmonized test procedure, which will give common platform and uniformity to assess vehicle performance and not on regional test procedure and regulations. Applicability of this concept will be on voluntary basis initially.

13. Chairman suggested that if these documents are taken up further for development by one or multiple task forces dealing with each parameter, it may be possible to focus and make good progress. He added that EC, US EPA, Switzerland, Italy, OICA, have shown their willingness to take responsibility of developing this concept further.

OICA suggested that one task force should be formed so that under one-umbrella decisions can be taken effectively.

14. Chairman expressed that he will approach all the contracting parties for their views for finalization.

16. Chairman appealed all IG EFV members for their active support and contribution for this exercise.

VII. Any other business:

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

VIII. Next steps and schedule:

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

Chairman thanked EFV informal group members, Secretary GRPE and translators for their contribution and support.

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