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5 Years ASEP Informal Working Group ECE Regulation No. 51/rev 3

Introduction

At the 53rd session of GRB it was noted that the ASEP informal group took a long time and the result was not finalized: (Five years to bring forward two alternatives for a draft method for the ASEP in ANNEX 10 of Regulation 51). This statement serves to give account by the chairman of the group and to put this development process in proper context.

Historical background

The need for ASEP was established in the informal working group R51-3, under the chairmanship of Mr Theis (Germany). When data was shown from vehicles tested according to the new Annex 3 test method, the conclusion of members was that there was insufficient relevance to urban driving behavior (a normal powered mid class vehicle was tested in Annex 3 in 4th gear, 1400 revs).

GRB made the decision to have additional sound emission provisions to cover higher acceleration and higher engine speeds.

The process in the informal group

The group got off to a slow start at the first meeting, in Amsterdam (November 2005), as OICA, repeatedly questioned the necessity of ASEP, despite the clear mandate of the informal group from GRB.

Swift progress however followed. France and Germany, joined by Japan, developed a proposal for a limitation system based on engine speed with an anchor point, a margin and a slope within a control area. This proposal as developed was very similar to the "slope method" of the Chairman's proposal to the 53rd session of GRB (ECE/TRANS/WP.29/GRB/2011/2 Annex 10 par 3)

The French-German-Japanese proposal was close to being finalized, with widespread support within the group, when the German delegation suddenly withdrew support, on the insistence of the German Ministry of Transport. Withdrawal of support for this proposal was understood to be supported by OICA. As a result, the group was obliged to start afresh with development work for an alternative proposal.

As a result, two alternative proposals were discussed:

- OICA proposal: with no limitation as such, but designed to detect irregularities (jumps). Comparison with the database shows that this method has different stringency levels: it is seen to be severe for normal and silent vehicles but considerably less severe for the louder ones.
- Netherlands proposal: with a limitation based on acceleration and vehicle speed. This proposal is quite similar to the "Lurban-ASEP method" of the Chairman's proposal to GRB 53 (ECE/TRANS/WP.29/GRB/2011/2 Annex 10 par 6) .

The Dutch proposal for an acceleration based method was voted out by a majority (including OICA) because of measurement uncertainty.

Note: This uncertainty is also not addressed in the Lurban-ASEP method.

As a result, only the OICA proposal remained, which was developed further by OICA incrementally. Slow progress and lack of information transmitted in advance of meetings, hindered the progress of the group.

In the meantime a measurement database was developed, thanks to delegates from OICA, Japan, France, Germany and the Netherlands. The development of the OICA proposal became similar to the original French-German-Japanese proposal. Checking against the database however revealed that the OICA method allows high sound levels in the control area if the slope and margin are not carefully controlled.

The serious concern that the OICA proposal, if adopted, would serve to 'legalise' levels far in excess of 100dB(A) – rather than allowing such vehicles to operate in the 'grey area' as is currently the case – and thus may stimulate the development of noisier vehicles, was the reason for the Netherlands to make an alternative proposal, which was later condensed in a formal document to GRB 53. (ECE/TRANS/WP.29/GRB/2011/8)

At the final ASEP meeting in Paris (December 2009), both proposals were discussed. The voting showed the group was divided. Both proposals received the same number of votes in favor.

The acceleration method - which is now the Lurban-ASEP method in the chairman's formal document (ECE/TRANS/WP.29/GRB/2011/2 Annex 10 par 6) - was also presented (by phone) to the Paris meeting by Mr Moore. A paper was not submitted in advance. Limitation options were not presented, the method was not compared with the database, so it was not possible to reach formal conclusions from the limited discussion.

Therefore, neither proposal could be presented as a consensus decision of the informal group in the chair's report to the 51st session of GRB in February 2010.

Further progress in GRB main

At the 53rd session of the GRB the Lurban-ASEP method was evaluated by The Netherlands with only one vehicle out of the database, which showed that a vehicle with a noise emission well over 100 dB(A) was not rejected by this method. A decision was made to accept the proposal in the chairman's formal document.

Conclusions

- The ASEP informal group was criticized to be slow and with insufficient result. Various reasons have been identified for this:
 - Disputes raised by OICA over the mandate of the group cost one year;
 - Had the French-German-Japanese proposal been accepted, which appeared likely (very similar to slope method of the GRB-chairman), the group would have reached a consensus proposal within two years of the first meeting;
 - Had the Netherlands proposal based on acceleration been accepted, (very similar to Lurban-ASEP method of the GRB-chairman), a conclusion would have been reached within 2-3 years.
- GRB members should be fully informed of likely outcomes of proposed Lurban-ASEP method, with reference to the database, to demonstrate whether the proposal is fit for the intended purpose.
 - The Lurban ASEP method is currently only evaluated for one vehicle (see informal doc 53-26).
 - The proposed limit setting for Lurban ASEP suggests significant room to increase the noise emission of this vehicle.
 - Evaluation of a limitation proposal using one vehicle is not too much for a solid policy proposal.

