

Position of Daimler AG concerning the Draft Limit Table for the Tyre Rolling Sound Emission according to ECE R 117 respective 2001/43/EEC Published in the “Public Consultation” of the EU-Commission

Position:

Daimler AG opposes the draft limit table, because some of the conclusions of the FEHRL study, which created the basis for this proposal, are in contradiction to the experience of the tyre and vehicle development. A limit enforcement of such a severity would mean a strong restriction of the range of original equipment tyres for vehicle manufacturers. This would lead to an unfair competition among the tyre manufacturers.

The proposed limit for class C3 M+S is of special concern as this class covers those tyres which are known as “traction tyres”. While it is known that these tyres can hardly pass even the actual limit values, they were not investigated at all in the FEHRL study.

Proposal for the further proceeding:

Daimler AG as a vehicle manufacturer sees a potential for lower limit values in an interim step, however they shall be realistic and be introduced with enough lead time. Therefore Daimler AG proposes to further investigate the feasibility and time frame of FEHRL proposal for stage B in the directive. In addition a review of the classification for the tyre width is important.

It is pointed out, that an efficient reduction of the noise burden for the society can only be achieved in an integrated approach. As the FEHRL study emphasizes rolling noise reduction is strongly related to improvements and proper maintenance of roads.

Further and more severe steps must be prepared by a joint research program, e.g. as an EU research project, involving all parties to clarify the relationship of various tyre development parameters. This will then create a common basis for further discussion.

Justification:

The draft proposal of the EU is based on the results of the EU research program SI2.408210, called FEHRL study, where it is concluded that such a reduction would provide a remarkable effect in real traffic, without degrading any other important parameters of safety and environment for the tyre. The cost benefit ratio is estimated to be extremely valuable for the society.

Comments of Daimler AG regarding important elements of the FEHRL study:

1. Older study concerning tyres must be questioned, because those tyres are no longer used in production and for actual tyres the optimization strategies have been changed.
2. The FEHRL conclusion that a limit reduction in a range of 5 dB to 6 dB would not jeopardize safety and environmental issues cannot be agreed and is in contradiction to the experiences of vehicle and tyre industry.

An OE-tyre is always a carefully designed component for one specific vehicle. The focus for optimization follows the marketing aspects of the whole vehicle and the individual overall

performance will differ from tyre to tyre. A random selection of tyre for research as is typically done by institutes will always cover a wide variety of tyre development strategies. Consequently those studies will hardly be able to elaborate any correlation between the various parameters.

A further drawback is seen in the circumstance that most studies consider only few performance parameters. Aspects as tyre wear, price and comfort are of high importance for customers and should not be neglected.

3. For the vehicle industry it is an additional burden that the rolling sound results from the tyre type approval has no meaning for the vehicle development. While the tyre alone is tested under rolling condition at a speed of 80 km/h, the overall vehicle has to fulfil its requirements at 50 km/h under high acceleration condition. This are conflicting development goals and it is not granted that a tyre with low rolling noise according to the tyre directive will automatically be a low noise tyre for the vehicle type approval.
4. The estimation of FEHRL for the effect of the limit reduction in real traffic seems to be too optimistic. Many parameters were not considered at all. Some assumptions are unclear and should be revised.
5. The monetary value for the society was given with 27€/dB/a/household. This can be accepted, however according to the source for this information [WG-HSEA; 2003] this value is only valid for households with a noise exposure higher than 50/55 dB Leq. Following the information of an EEA publication in 2001, this is the case for approx. 33% of all European households. It must be concluded that the estimated benefit is far too high.
6. Daimler AG opposes strongly the conclusion, that vehicle industry is gaining the benefit of the proposed limit reduction. As a consequence of a severe reduction of tyre selection and the negative impact for product optimization, industry has to expect increased product and development costs.

In the opinion of Daimler AG a limit reduction in the proposed range is not justified.

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