

The **Norwegian Pollution Control Authority** supports the labelling of tyres with the ranking of rolling resistance. To include a ranking on wet grip also may be useful, although we understand that the present measuring method has deficiencies and may need to be improved on. **We very strongly advise that exterior noise should be included in the tyre labelling.**

Answers to your question Q5 - Technical feasibility:

(Your question is whether it would be technically feasible to indicate the rolling noise measured value of a given tyre family in a labelling scheme, with sufficient differentiation so as to be convincing for consumers.)

The report

Consumer Label for Tyres in Europe

By Ulf Sandberg

Swedish National Road and Transport Research Institute (VTI)

provides important information:

From page 88:

The car tyre data show a statistical nearly perfect normal distribution with a standard deviation of 1.6 and an average value 3.6 dB below the limit value [de Graaff & van Blokland, 2007]. The Dutch researchers also compared their results (in this case tagged "IPG" but these values are also part of the database in Table 10) of similar measurements as reported in the FEHRL report [FEHRL, 2006-1] and in an ETRTO study [ETRTO, 2007]. The results are presented in Figs. 43-44. Note that the data set for ETRTO in these two figures is composed differently from the FEHRL and Dutch sets, since ETRTO presents type approval values, which according to the family principle represents the worst case of a tyre family, whereas both the Dutch and the FEHRL data present tyres randomly selected from the population. This is probably the reason why the ETRTO data set is about 0.5 dB higher than the other two.

The data sets are surprisingly similar and consistently show that the majority of tyres are well below the present tyre noise limits.

Fig. 43 of the report is reproduced on the next page.

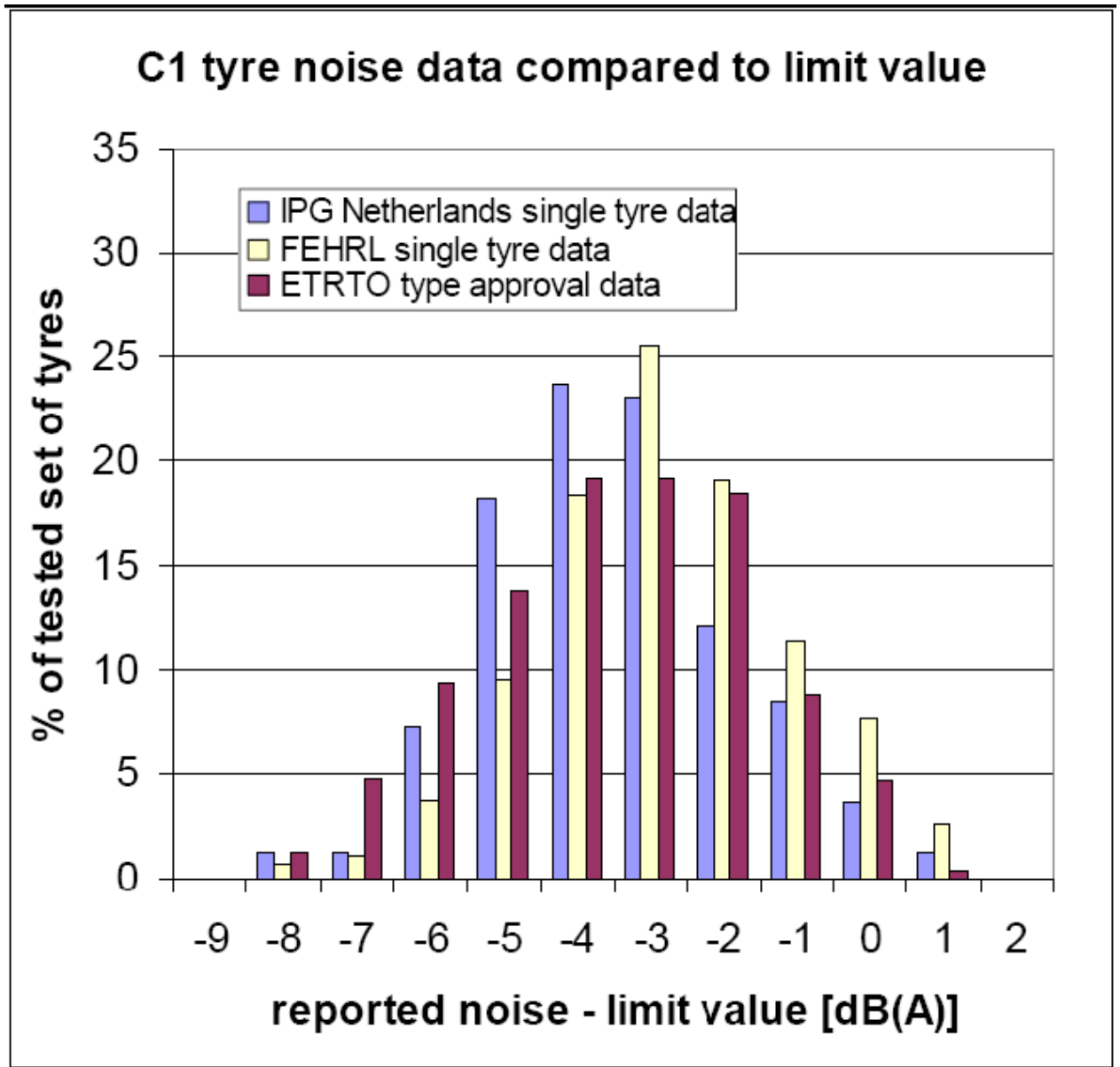


Fig. 43. Results of noise measurements on car tyres, from three different sources: (1) The IPG Netherlands with measurements on 165 single tyre sets as bought from the tyre shop, (2) FEHRL with measurements on 262 single tyre sets as bought from the tyre shop and (3) ETRTO with type approval data representing 536 tyre families. Figure from [de Graaff & van Blokland, 2007].

Based on these data, our answer to your question is YES, it is feasible to indicate the rolling noise measured value of a given tyre family in a labelling scheme, with sufficient differentiation so as to be convincing for consumers.