(50th GRB, 1-3 September, 2009, agenda item 3.c))

NL Proposal for Amending Reg 51-3 Annex 3

Clarification

issued by the Netherlands GRB 50; September 2009

ref: ECE/TRANS/WP.29/GRB/2009/4



To avoid confusion

Our intention is to amend the coming new annex 3 of R51.03

This method is currently in force as method B in annex 10 of R51.02

After consultation of the ECE secretariat, this proposal has been forwarded as amendment based on the text of R51.02 method B

It is certainly not our intention to interfere with the running double testing period for monitoring



Background of this proposal?

Following the analysis of the GRBIG ASEP expert group Following the advice of the GRB informal group ASEP Following the discussion in GRB 49



ASEP WG: analysis stringency

Stringency in this issue means: effectiveness and more specific

- Accuracy of the prediction model
- Capability to set meaningful demands

Outcome analysis of ASEP WG:

Recommendation to GRB: skip border 2 m/ss in Annex 3



Why skipping?

2 m/s² boundary forces vehicles to higher gears and so to low(-er) revs in the Annex 3 test situation.

Test result Annex 3 is anchor point for ASEP (revs, Lwot).

Anchor point ASEP not in balance in the middle of the map, but in the low rev area.

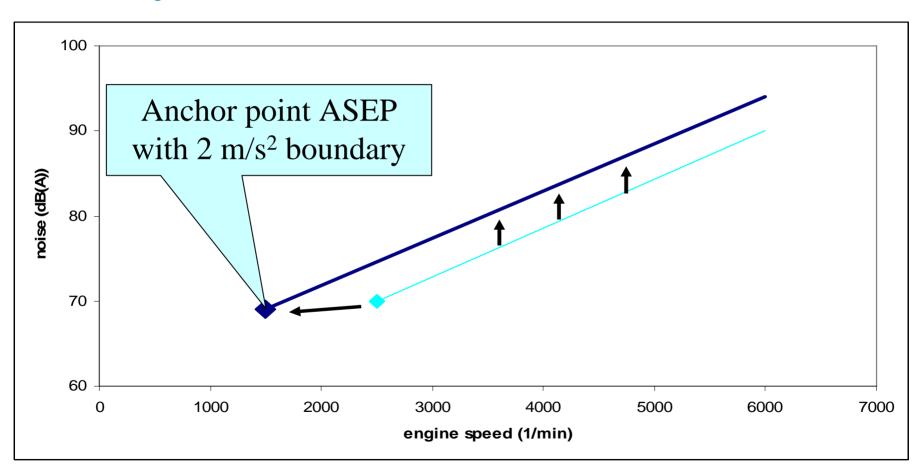
'Higher area' bigger → prediction less accurate

Prediction less accurate → ASEP less accurate

(ASEP based on a prediction model)

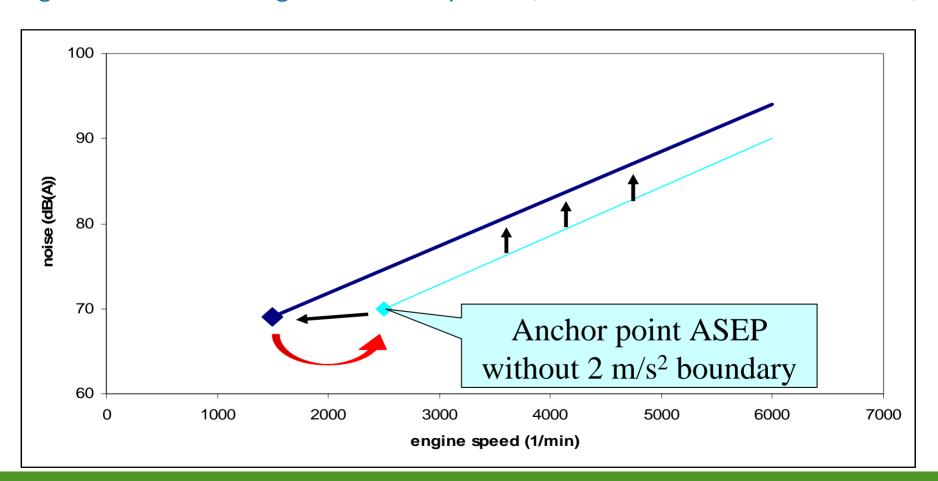


Boundary of 2 m/s2 forces the ASEP limit line to the left





Intention of this proposal: go back to the original anchor point (as based on urban statistics)





Effect of skipping the 2 m/s² boundary

Marginal effect on Annex 3 nor on limitation annex 3 (because of Kp factor)

Positive effect for quality Annex10:

Anchor Point more in balance: moving towards the middle of the engine map

And: prediction capability more accurate



Examples:

Effect of removing 2 m/s² boundary

vehicle	PMR (kW/t)	Test result Annex 3	Limit ASEP @ R51.02
200-14	166	- 0,3	- 5,6
200-09	159	- 0,6	- 3,3
200-06	141	+ 0,5	- 3,7
200-02	105	- 0,1	- 0,4
Most vehicles in the dBase (Since they do not reach > 2 m/s2 in gear i)		0	0



END of presentation