



Informal document No. GRB-50-06  
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# 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/s<sup>2</sup> 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.

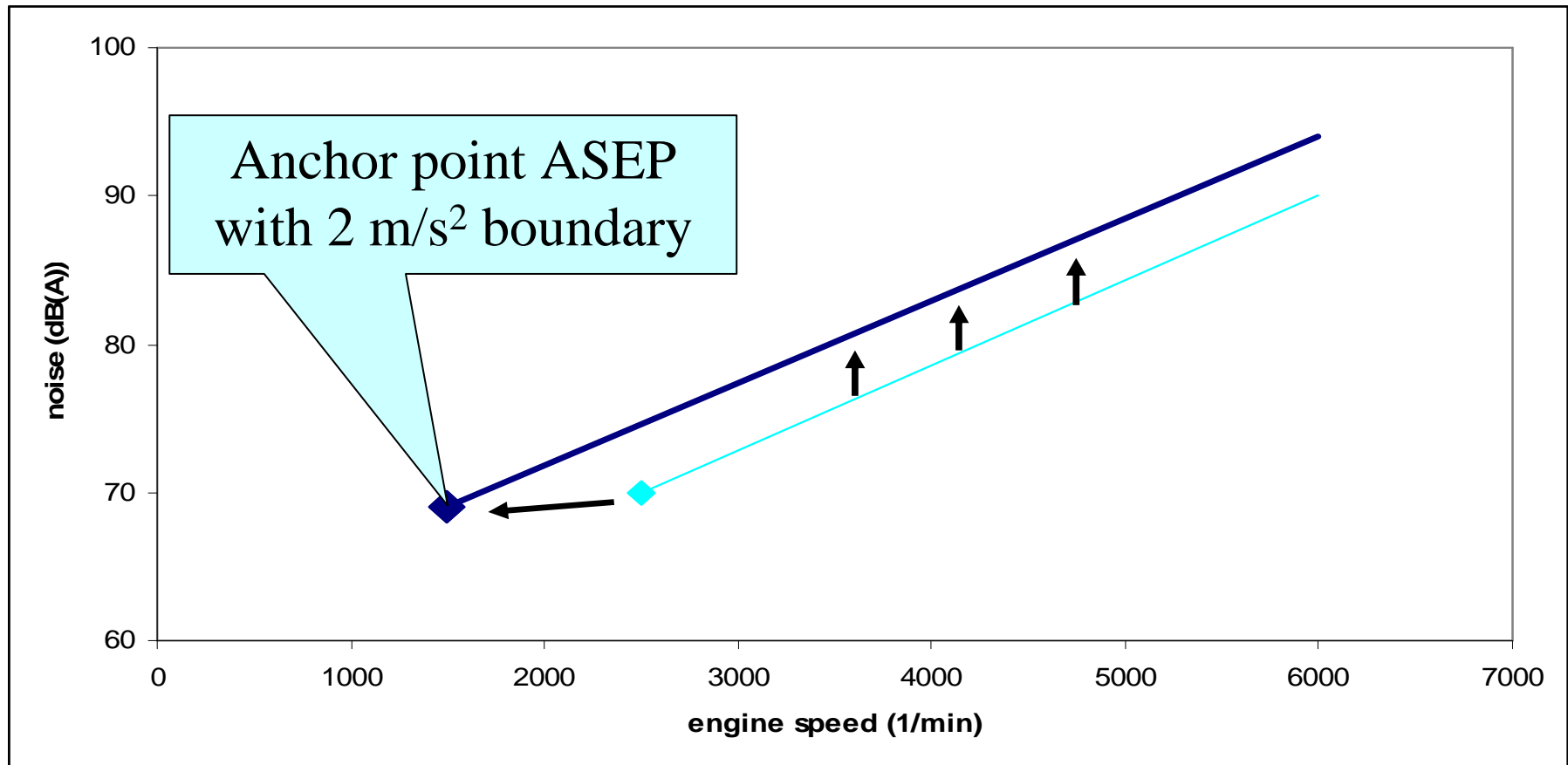
'Higher area' bigger → prediction less accurate

Prediction less accurate → ASEP less accurate

(ASEP based on a prediction model)

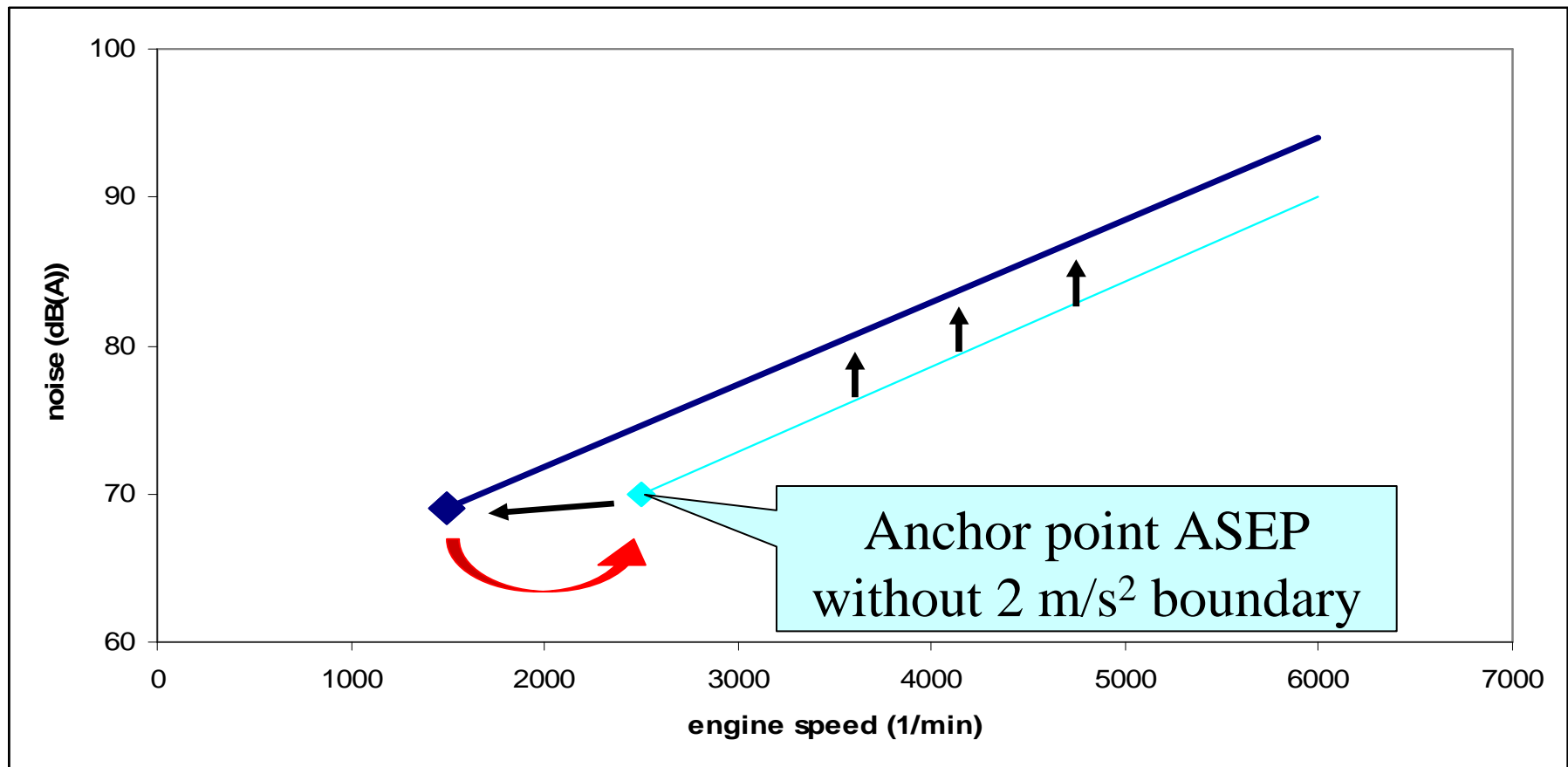


## Boundary of 2 m/s<sup>2</sup> forces the ASEP limit line to the left





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





## Effect of skipping the $2 \text{ m/s}^2$ boundary

Marginal effect on Annex 3 nor on limitation annex 3  
(because of  $K_p$  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/s<sup>2</sup> 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/s <sup>2</sup> in gear i)		0	0



END of presentation