Some tentative calculations on the potential difference due to correction of tyre noise contribution in ASEP

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Calculation method

- Tyre noise conform 2001/43 (80 km/h)
- Tyre noise in Annex 3 @ 54 km/h
- Propulsion noise in 3rd gear in Annex 3
- ASEP limit+margin = 74 dB(A)
- Propulsion noise in 2nd gear in ASEP (6 dB/1000 rpm)
- Total noise in 2nd gear
 - With correction for tyre noise contribution
 - Without correction for tyre noise contribution

Tyres

current max tyre limit

FEHRL proposal max tyre limit

FEHRL proposal <245 mm

high noise PC tyre

typical PC tyre

low noise PC tyre

Average effect of separation of tyre noise in Annex 10

		max level	
	max	@ 80 incl	
	limit	COP	difference
current max tyre limit	76	78,9	4,3
EU proposal max tyre limit	75	76,5	1,9
EU proposal <245 mm	72	73,5	0,9
high noise PC tyre		76	1,7
typical PC tyre		72	0,6
low noise PC tyre		68	0,2

 Conclusion: for typical tyres the effect of separation of tyre noise is < 1 dB(A)