WG NOISE



Remark on the temperature correction for R51 13.07.2021

Remark on the temperature correction for R51



- Based on the analysis done by ETRTO so far, the OICA correction model provides an acceptable compensation for the final L_{urban} value within R51. Based on that, as of today ETRTO has no reservations regarding the proposal in IWGMU-11-02
- However, ETRTO WGNO has one remark:
 - The calculated value of L_{tr,acc} does provide only an estimation of tyre sound emission under acceleration and shall not be used outside the proposed temperature correction model, especially for 3PMSF tyres, test conditions with extreme high torque (EV's) and/or testing under extreme low temperature

Calculate per gear the temperature and test track adjusted constant speed test result $L_{CRS,REP,\vartheta REF}$ = $10 \times log(10^{0.1 \times L_{PT,CRS,j}} + 10^{0.1 \times L_{TR,DB,\vartheta REF}})$

For each gear and run, adjust the tyre rolling sound $L_{TR,DB,9TEST}$ to the speed condition of the acceleration test.

$$L_{TR,ACC,j,\vartheta REF} = L_{TR,DB,\vartheta REF} + slp_{DB,REF} \times log(0.5 \times (v_{BB',TEST} + v_{PP',TEST})/v_{test})$$

Calculate per gear the temperature and test track adjusted acceleration test result $L_{ACC,REP,\theta REF}$ $L_{ACC,j,\theta REF} = 10 \times \log(10^{0.1 \times L_{PT,ACC,j}} + 10^{0.1 \times L_{TR,ACC,j,\theta REF}})$



Thank you very much

WG NOISE – 13th July 2021