## 16th Meeting of IG ASEP, 8-10 December 2009, OICA-Office Paris

## German Remarks on ASEP

1. Germany supports the exclusion of heavier N1 Vehicles from ASEP, because these are no vehicles of concern for ASEP and will not be tested in low revs in Annex 3. The definition of a bigger N1 could be as follows (with reference to Pedestrian Protection EC 78/2009):
6.2.3. $\quad$ Additional sound emission provisions

The additional sound emission provisions apply only to vehicles of categories M1 and N1 equipped with an internal combustion engine. They shall not apply to vehicles of category N1 and M1 derived from N1 where the driver position 'R-point' is either forward of the front axle or longitudinally rearwards of the front axle transverse centreline by a maximum of 1100 mm and the maximum mass exceeds $2500 \mathrm{~kg}^{*}$.

*vehicle types typically known as 'light duty trucks' or 'flat front vehicles' in accordance with Draft ECE Regulation for Pedestrian Safety ECE/TRANS/WP.29/GRSP/2009/10 and EC regulation 78/2009

For Definition of R-Point refer to (for example) Annex IV of 74/60/EWG.
2. While developing the ASEP-Proposal as outcome of the 15th meeting of the IG ASEP in May 2009, there have been some discussions about the possibility for vehicles that are tested in low revs for the new Annex 3 method (method $B$ ) to become more noisy in that area that has to be tested today (method A). In Germany we discussed this item under the name "Besitzstandswahrung". The Federal Ministry for Transport, Buildings and Urban Affairs (BMVBS) together with the Type-Approval Authority (KBA) developed a possible solution for that problem. That means to define an easy to calculate reference value, that is comparable with the noise level that can be measured with the existing Regulation. This reference value can be calculated out of the ASEP regression line. This method is supported by the Federal Ministry of Economy and Technology (BMWi).

Therefore BMVBS/ BMWi and KBA would like to propose the following changes to Annex 10:
add a new no 5.
To avoid the possibility for vehicles to become significantly more noisy under the conditions regulated in the former ECE-R 51, a reference value $L_{\text {ref }}$ shall be determined out of the calculated regression line as follows:

1. The determination of gear $k$ with $k=3$ for manual transmission and lockable automatic transmission with up to 5 gears and $k=4$ for lockable automatic transmission with 6 or more gears. In the case of an non lockable automatic gear box the gear $k$ shall be chosen by the ASEP-Testdiagram in the way, that $V_{B B}$ is nearest to $61 \mathrm{~km} / \mathrm{h}$.
2. Calculation of $n_{r e f} k$ in accordance to vehicle speed $V_{\text {ref }}$ at the respective gear ratio $k$ with

$$
V_{\text {ref }}=V_{B B}=61 \mathrm{~km} / \mathrm{h}
$$

3. Calculaton of $L_{\text {ref }}$ with

$$
L_{\text {ref }}=L_{\text {anchor_k }}+\text { Slope }_{k}^{*} *\left(n_{\text {ref }-k}-n_{\text {anchor_k }}\right) / 1000
$$

The Limit for $L_{\text {ref }}$ shall be $76 d B(A)$.
For vehicles fitted with a manual gear box having more than four forward gears and equipped with an engine developing a maximum power greater than 140 kW (ECE) and having a maximum-power/maximum-mass ratio greater than $75 \mathrm{~kW} / t, L_{\text {ref }}$ shall be increased by $3 d B(A)$.

For vehicles fitted with an automatic gear box having more than four forward gears and equipped with an engine developing a maximum power greater than 140 kW (ECE) and
having a maximum-power/maximum-mass ratio greater than $75 \mathrm{~kW} / t, L_{\text {ref }}$ shall be increased by $2 d B(A)$.

