

(GERMANY) KRAFTFAHRT-BUNDESAMT CAMPAIGN ON NOISE EMISSIONS 2021

**SOUND LIMITS
NORESS & MANIPULATION
ASEP**

Measurements
Tests

MAIN MESSAGES FROM THE PRESENTATION [DONE AT GRBP-76](#)

A market surveillance campaign in Germany showed that (the tested) vehicles in original condition comply to the regulations, but the majority of (approved) aftermarket mufflers did not comply with the permissible limits.

SUMMARY

A 2021 KBA/Germany Market Surveillance study on passenger cars (M1) and motorcycles (L3e) with regards to noise emissions, in both original condition as well as with replacement silencing systems available on the market.

Main findings:

- Passenger cars (M1):
 - All vehicles in original condition comply with the regulations (including ASEP)
 - The majority of the tested (approved) aftermarket silencing systems did not comply with the permissible sound levels
- Motorcycles (L3e):
 - All motorcycles in original condition comply with the regulations (except for one older bike which was $\approx 0.5 \text{ dB(A)} > \text{limit}$; not 100% maintained after 16 000 km).
 - The majority of the tested (approved) aftermarket silencing systems did not comply, with results of 4 to 9dB(A) above the permissible L_{Urban} sound levels.
- KBA/Germany calls for the EU Commission to include silencing systems in their noise emissions market surveillance planning (a minimum number of physical tests has to be required).
- KBA/Germany notices still high permissible limits for the UN Regulation No.41, 05 Series ASEP (Additional Sound Emission Provisions) and calls to address this in RD-ASEP (Real Driving-ASEP) step 2.

Next steps:

- Testing will be extended in 2022/2023 with different vehicles.
- Future work is to investigate if the (approved) aftermarket mufflers failed due to wrong testing at Technical Service/Type Approval Authority or due to differences between the approved muffler and production mufflers.

ADDITIONAL POINTS FROM DISCUSSIONS IN THE UN TF-VS

Not yet presented at the TF-VS – should be done at the 12th session in 2023 – to be followed.

REFERENCES

- [GRBP-76-27](#) (Germany): Campaign on noise emissions 2021.