

(JAPAN) GENERAL OVERVIEW OF VEHICLE NOISE IN JAPAN

NORESS&MANIPULATION
SINGLE EVENT
PREDICTION MODEL
SOUND LIMITS
ENFORCEMENT

MAIN MESSAGES FROM THE PRESENTATION(S)

- Both in-use vehicle with modified muffler and achievement of EQSs (Environmental Quality Standards) are allocated for noise issues.
- To improving noise issues, a holistic approach is necessary as well as reducing noise limits.
- The technical review to check the effect of the introduction of the Phase 3 from the UN Regulation No.51-03 in Japan should be useful to share such technical information at the TF-VS for next step (beyond phase3) discussion.
 - o The effectiveness of Phase3 introduction in Japan will be done → See [TFSL-03-06](#) & [TFVS-08-04 Rev.1](#)).

SUMMARY

- Current situation of vehicle noise in Japan
 - o The achievement status of the EQSs (Environmental Quality Standards) of road traffic noise has gradually improved, but has not reached 100% yet.
 - o The number of complaints of vehicle noise has increased or decreased depending on the year, but has not been decreasing in recent years.
 - o In order to achieve the targets such as 100% in EQSs and reducing the number of complaints related to vehicle noise, holistic approach is necessary.
- Technical review of the UN Regulation No.51-03 phase 3
 - o Japan have conducted the technical assessment before introduction of each phase of R51-03, and assessed its effectiveness by using a prediction model (JARI (Japanese Automobile Research Institute) model) detailed in the presentations.
 - o Japan is planning for studies with effectiveness of the Phase 3 introduction including a survey regarding its impact in real life. Such study should be included in this TF-VS.
- Noise detection system
 - o Modified muffler issue in Japan cannot be negligible.
 - o NTSEL (National Traffic Safety and Environment Laboratory) is now doing research and development of noise detection device as described in the presentation in order to solve in-use noise issues.

ADDITIONAL POINTS FROM DISCUSSIONS IN THE UN TF-VS

- Future worldwide automotive electrification including the AVAS (Acoustic Vehicle Alerting System) has to be considered for the future works of the group because this should have an impact on the environmental noise.
 - Works of the group not limited to M1/N1 only but to all M & N. Data needed for all vehicle categories. To be able to identify where the noise issues lie, to build a kind of cross-matrix between traffic noise situations, contributing factors and major complaints as shown as an example in doc. TFSL-01-05 Rev.1
- Page 9.

Category(ies) of vehicle: M & N

REFERENCES

- [TFSL-01-06](#) (JAPAN): General overview of vehicle noise in Japan
- [TFSL-02-09](#) (JAPAN): Further details of vehicle noise issue and reviewing process in Japan
- [TFSL-01-05 Rev.1](#) (Germany): General ideas about the work of the TF