Proposal for Terms of Reference of the Informal Working Group on Real Driving - Additional Sound Emission Provisions (RD-ASEP)

I. Proposal

A. Introduction

- 1. Within the informal group for the future work of GRBP and during the sixty second, sixty third and sixty fourth sessions of GRBP, several concerns about ASEP were presented:
- New test methods would be necessary in UN Regulation No. 51 for serial hybrid vehicles that were excluded from ASEP until 30 June 2019.
- ASEP as part of type approval (not as a manufacturer declaration).
- ASEP as an important element of a "toolbox" (Annexes 3 and 7, periodic technical inspections, manipulations, after market silencers, better conditions for road checks, etc.) deemed to tackle elements of real world sound emissions, to be revised preliminary to future legislative initiatives modifying type approval sound limits.
- More general technical review in cooperation with ISO (improvement of methods).
- The IWG ASEP started in 2016 and cannot finish in 2020 due to Covid 19. Thus, the work of the group is extended to at least GRBP 75 in January/February 2022.
- 2. This proposal establishes the Terms of Reference of a new IWG ASEP (for UN Regulations Nos. 41 and 51 under the 1958 Agreement).
- 3. The aim of the group is to propose improvements to these Regulations.
- 1. RD-ASEP fixed with UN-R51-03.S9 as a 1st step. As a 2nd step, during and after this RD-ASEP monitoring phase, from the collection of data and analysis, an amendment is needed in formal, measurement and/or limits aspects.
- 2. RD-ASEP fixed in UN-R41-05 as a 1st step. Limit curves for different riding situations has to be developed.

B. Objective of Informal Working Group on Additional Sound Emission Provisions

- 4. The scope and objective are based on Informal document GRB-64-16.
- 5. The scope shall cover M_1 and N_1 , and L_3 categories.
- 6. As primary objectives,

IWG RD-ASEP for M1 & N1 categories of vehicle:

- From the work of the monitoring period, the outcome of the group could lead to a new Series of amendment.
- Modify the current regulation to mandate the revised RD-ASEP.
- Update the current Annex 9.

- Delete the current Annex 7 related to the current ASEP and update the relevant paragraphs in the main body and Annex 3 of the UN-R51.
- Consider the relevant transitional provisions.
- The group should develop a handshake between regulations UN-R51 & UN-R138 in taking care not introducing inconsistencies between these 2 regulations.

IWG RD-ASEP for L3 category:

- The outcome of the group could lead to a new Series of amendment.
- Update the current regulation of RD-ASEP limits.
- Consider the relevant transitional provisions.

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- Interpretation of paragraph 6.2.3. in the 03 series of amendments to UN Regulation No.
 51.
- Incorporation of ASEP as Type approval in the UN Regulation No. 41,
- Supplements 3 to 6 to the 03 Series of amendments of the UN Regulation No. 51.

Work is not finished on:

- Data collections for all driving conditions of existing vehicles of categories M₁, N₁ and L₃.
- Correlation of data with existing or new models.
- Revision and improvement of the test procedure for automatic transmission in nonlocked transmission condition.
- Proposal of a test procedure for hybrid vehicles, low PMR vehicles and new technologies of vehicles.
- Proposal of a simplified test procedure and/or alternative test (such as in door testing)
 to save time and to enable direct application of ASEP during type approval which
 delivers a good Real Driving characteristic during measurements.
- In addition, IWG ASEP might also propose a general principle for revision of ASEP regarding:
- Consideration of scope and target to elaborate on sound behaviours that are subject to eriticism.
- Improve the effectiveness of the method regarding off cycle tests, etc.
- Field of application.
- Control range (method to be more representative for urban driving behaviour).
- Consider harmonization with ASEP in the 2nd step of Regulation No. 41.
- 8. IWG ASEP shall report to GRB**P**.

C. Rules of Procedure

- **9.** IWG ASEP shall be open to all participants of GRBP. However, it is recommended that a maximum of two technical experts per country and organization participate in IWG.
- **10.** A drafting group for preparing the documents of IWG ASEP is established with a maximum number of 10 participants to enable face-to-face meetings.
- 11. Meetings other than the drafting group's meetings are organized in that way that others ASEP experts can participate to the meeting in virtual.

- **12.** IWG shall be chaired by Germany [and co-chaired by Japan]. OICA shall act as Secretary for M/N categories of vehicle, & IMMA for L category of vehicle.
- 13. The working language shall be English.
- **14.** All documents and/or proposals shall be submitted to the Secretaries of IWG in a suitable electronic format at least one week before a scheduled meeting.
- **15.** An agenda and the latest draft document shall be circulated to all members of IWG in advance of all scheduled IWG ASEP meetings.
- **16.** All IWG documentation shall be made available on the dedicated UNECE website.

D. Timeline

- 17. The aim of IWG is to present working documents for consideration at the GRBP sessions and a detailed elaborated work plan and timeline. IWG will present progress reports, including already achieved further results, and comprehensive proposals by:
- for motorcycles: Working document for GRBP Jan./Feb.2025
- for vehicles of categories M_1 and N_1 : Working document end of 2025 for discussion in GRBP in Jan./Feb.2026.