

IWG FOR ASEP

STATUS REPORT TO GRBP-75 (*FEBRUARY 2022*) AFTER THE 16TH SESSION ON JUNE 2020 & LAST MEETING OF DRAFTING GROUP ON NOV. 2021

FOLLOW-UP OF THE MEETINGS

- 1st Official Session : 2016, November – Tianjin
- [...]
- 16th Official Session: Confcall only, June 04-05, 2020
- Virtual Drafting group meeting on Sep. 01, 2020
- Virtual Drafting group meeting on January 28, March 01, April 12, June 6, July 5, Sept.01, Sept.21, Oct.21, Nov.05, Nov.15, 2021
- **17th Official Session: Hybrid meeting on February 08, 2022 at the Palais des Nations in Geneva**

PARTICIPATION

▪ Participants to Drafting Group meetings in 2021:

✓ Contracting Parties:

- China, Germany, Japan

✓ NGOs:

- OICA, IMMA, ISO

STATE OF PROGRESS AFTER 17TH SESSION OF IWG ASEP

▪ L CATEGORY

- ✓ 2-steps approach (1st modification on existing ASEP, 2nd new RD-ASEP), or 1-step approach (RD-ASEP with modified OICA model)
 - Decision of CPs = 2-steps approach
- ✓ 1st Step of RD-ASEP was proposed by IWG ASEP (**UN-R 41.05**)
- ✓ Working Doc. 1st Step accepted at 72nd GRBP (**UN-R 41.05**)
- ✓ GRBP-Accepted proposal was accepted at the March Session of WP.29 (**UN-R 41.05**)
- ✓ **UN-R 41.05**: Expected to enter into force in October 2021

- ✓ 2nd Step under consideration in (near) future

STATE OF PROGRESS AFTER 17TH SESSION OF IWG ASEP

▪ **M CATEGORY - Revision of Regulation UN-R51-03:**

✓ Revision of Regulation UN-R51-03:

- Initial proposal from the IWG-ASEP was to introduce RD-ASEP through a new 04 Series
→ Last document presented at GRBP-74 = [GRBP-74-22](#)
- Today the group proposes
 - To introduce RD-ASEP through a **Supplement 9** of UN-R51-03 ([GRBP/2022/04](#)) with an one-year monitoring period from July 2023 due to:
 - A one-year monitoring period is proposed from January 2023 (as in the past with methods A & B to go from UN-R51-02 to UN-R51-03) 'out of the Type-Approval process',
 - To be able to confirm what has been proposed, avoid misunderstanding and then to have the 04 Series with deletion of the current Annex 7 ASEP.
 - To improve the Current UN-R51-03.S6 through a **Supplement 10** ([GRBP/2022/03](#))

STATE OF PROGRESS AFTER 17TH SESSION OF IWG ASEP

▪ **M CATEGORY - Revision of Regulation UN-R51-03:**

✓ **Introduction of RD-ASEP through a Supplement 9** of UN-R51-03 (**GRBP/2022/04**) with an one-year monitoring period from July 2023 :

- 1.Scope: footnote for explanation from current ASEP linked to Annex 7 to RD-ASEP linked to new Annex 9
- 5.Approval:
 - introduction of a one-year monitoring period starting in July 2023,
 - perform the test in line with the new test procedure as proposed in Annex 9 is mandatory except for vehicles with PMR<60
 - the compliance to RD-ASEP is not mandatory during this monitoring period to grant type-approval
 - RD-ASEP not applicable to extension of current approvals
 - RD-ASEP not mandatory when tests are performed indoor
- NEW Annex 9: new measurement method for RD-ASEP including the scope, the definitions, facilities, measurement method, the compliance assessment
 - Appendix 1: Sound expectation model according to the type of propulsion of the vehicle during the tests
 - Appendix 2: Parameter table for sound expectation model
 - Appendix 3: Symbols, Abbreviations and Acronyms
 - Appendix 4: Formulas
 - Appendix 5: Test report sheet

STATE OF PROGRESS AFTER 17TH SESSION OF IWG ASEP

▪ **M CATEGORY - Revision of Regulation UN-R51-03:**

- ✓ **Introduction of RD-ASEP through a *Supplement 9*** of UN-R51-03 (**GRBP/2022/04**) with an one-year monitoring period from July 2023 :
 - Still to be prepared to support the understanding and the interpretation of this new Annex 9
 - Flowcharts → to be prepared for GRBP-76
 - Calculation sheet → **to be provided as ‘Document for reference only’ in Excel format**
 - Proposal Management of the monitoring period ??

STATE OF PROGRESS AFTER 17TH SESSION OF IWG ASEP

▪ M CATEGORY - Revision of Regulation UN-R51-03:

✓ Improve the Current UN-R51-03.S6 through a Supplement 10 (GRBP/2022/03)

- The **definition of the " Maximum net power, P_n"**, for better clarity, the definition has been adjusted to each propulsion technology (ICE, BEV, HEV, FCEV).
- Addition in the "Table of symbols" of the **symbol n_{MAX}** for maximum engine rotational speed permitted for M1, N1, and M2 less than 3500 kg used for simplification in Annex 3 as 80 per cent of S.
- Clarification that the sound reduction system shall be designed also **against manipulation**.
- The amendment of Supplement 6 to the 03 series of amendments to UN Regulation No. 51 introducing 20 m behind the line BB' is not yet taken into account in the current standard ISO 362-3:2016. It is proposed to amend the reference to this standard as "**ISO362-3:2016 or later**" to make possible using the standard as soon as it is updated.
- Clarification that the **two microphones** have to be installed on the test track in line PP' instead of one microphone as allowed in the past, for measurements in one run of both sides left/right. This change will increase accuracy.
- n_{MAX} for simplification in Annex 3 as 80 per cent of S has been added.
- Rewording for clarification of the non-locked gear ratio.
- Update of the numbering when needed.
- Clarification added for the result of vehicles with the power-to-mass ration (PMR) less of 25.
- Figures 4b to 4f updated according to the introduction of nMAX mentioned above.

NEXT STEPS

- **GRBP-76 Flowcharts & Calculation sheet**
- **Monitoring period from July 2023 to June 2024:**
 - ✓ Collection of data?
 - ✓ Management?
- **Presentations for approval by GRBP-75 and submission to WP.29 June 2022:**
 - ✓ Working Document to introduce RD-ASEP through UN-R 51-03.S9 ([GRBP/2022/04](#)) with an one-year monitoring period amended by GRBP-75-xx
 - ✓ Working Document to improve current UN-R51-03.S6 through UN-R51-03.S10 ([GRBP/2022/03](#)) amended by GRBP-75-xx

Thank you