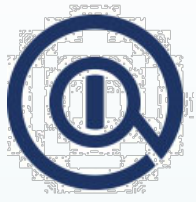


# Supporting Information to GRBP/2025/29 replaced by GRBP-82-08

82<sup>nd</sup> GRBP

3-5 September 2025, Geneva

UN Regulation No. 51  
(Noise of M and N Categories of Vehicles)



# Placing GRBP/2025/29 in Context

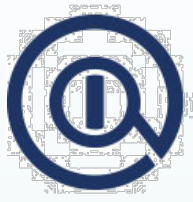
## Close a Regulatory Gap within a Short Period of Time.

- A concern regarding an **existing and non-regulated gap for electric vehicles** led OICA submit the **proposal GRBP/2024/22** last year, that was **capable to close that gap from October 2025 on**. GRBP didn't adopt the proposal and installed a **subgroup to IWG RD-ASEP** for further improvements. OICA supports the work of the subgroup and is still seeking for a consensus.
- Nevertheless, OICA has submitted **a refined proposal for adoption**, to enable the delegates of 82<sup>nd</sup> GRBP to close this regulatory gap within a short period of time (possible **October 2026**). While OICA is still **open for improvements** or could withdraw these documents, when an acceptable alternative approach is available in time.
- OICA sees **this proposal as a fast interim step** that addresses this issue until RD-ASEP will be introduced by a forthcoming new series of amendment and presented in 84<sup>th</sup> GRBP.
- OICA wants to **concentrate on the refinement of the RD-ASEP concept**, in a forthcoming new series of amendments to UN R-51 (expected in 84<sup>th</sup> GRBP in September 2026)

### > GAP in Regulation

In Paragraph 6.2.3 EVs are exempted from ASEP in UN-R 51/03 Annex 7:

*"The Additional Sound Emission Provisions (ASEP) apply only to vehicles of categories M<sub>1</sub> and N<sub>1</sub> equipped with an internal combustion engine."*

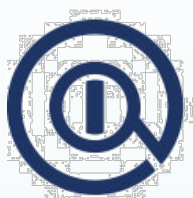


# Placing GRBP/2025/29 in Context

GRBP/2024/22 is replaced by GRBP/2025/20 and GRBP/2025/29

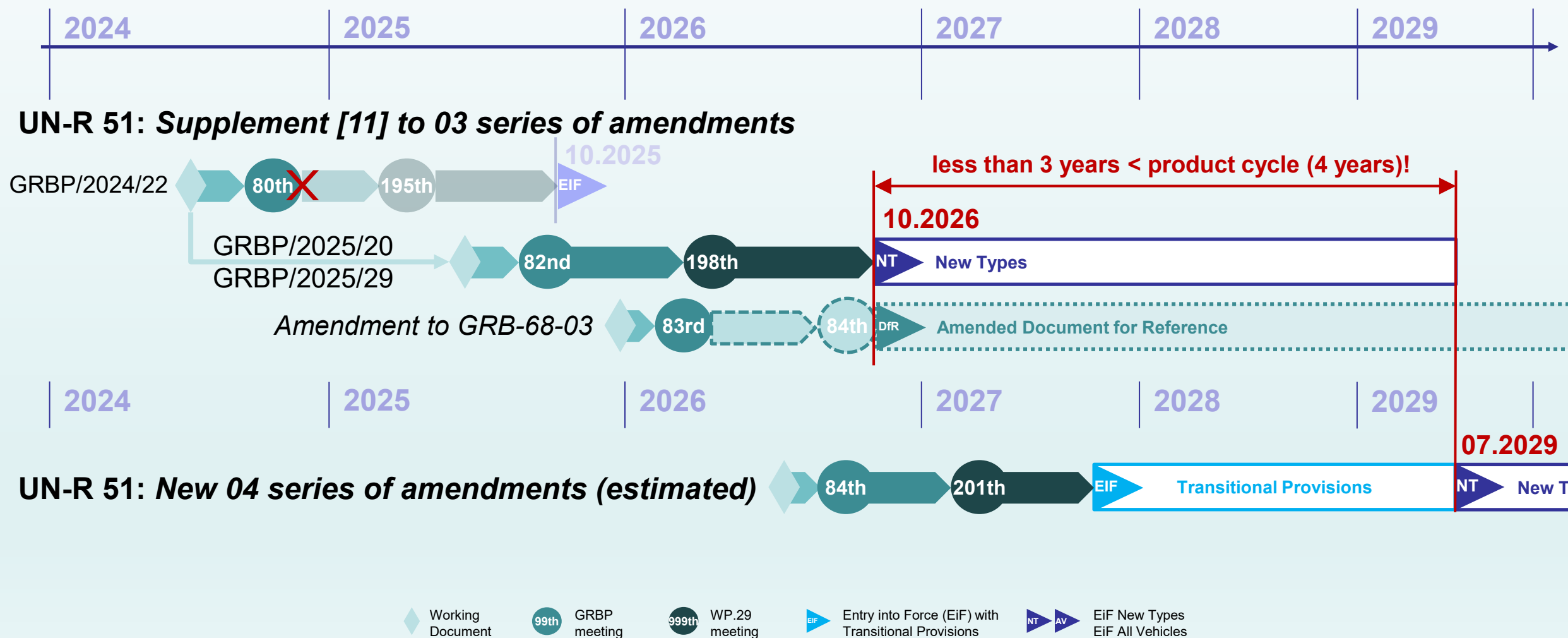
OICA presents now a **refined document GRBP/2025/29** to 82<sup>nd</sup> GRBP as a **replacement** to its proposal **GRBP/2024/22** originally issued for the 80<sup>th</sup> GRBP in September 2024:

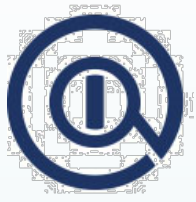
- reiterating our concern regarding an existing and non-regulated gap for electric vehicles.
- using the way of a **simple supplement** without transitional provisions for fast implementation (possible EiF **October 2026**).
- reflecting the findings from our **technical validation work** of the last year.
- considering what we sensed as **feedback from CPs** in the subgroup by informal document **GRBP-82-08** replacing GRBP/2025/29.
- separating the editorial corrections and clarifications of GRBP/2024/22 in an **additional Working Document GRBP/2025/20**.
- starting to work out an **amendment for EVs** in document for reference **GRB-68-03**.
- addressing **new requirements** to a forthcoming **new 04 series of amendments to UN-R 51** (expected EiF **2027**), and if needed to **a new series of amendments to UN-R 138**.



# Placing GRBP/2025/29 in Context

## Estimated Timing of GRBP-Work on UN Regulation No. 51





# GRBP/2025/29: Concept “ASEP<sup>1</sup> for xEVs”

Small changes are needed for getting Annex 7 ready for xEVs.



## ASEP for vehicles with Internal Combustion Engines (ICEs)

**Engine Speed** used as reference for ASEP evaluation in any gear below type approval gears (Annex 3).

Slope of **ASEP limit curve is** based on **gear individual** sound behavior in any gear below gears used for Type Approval (Annex 3).

ASEP is only applicable in **full load condition**, acceleration is adjusted to the control range **by gear selection** with gear dependent limits.



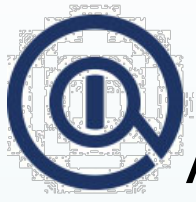
## ASEP for vehicles with Electric Motors (xEVs)



**Vehicle Speed** is introduced as a new reference for ASEP evaluation, since EVs don't have a meaningful engine speed for the purpose of noise.

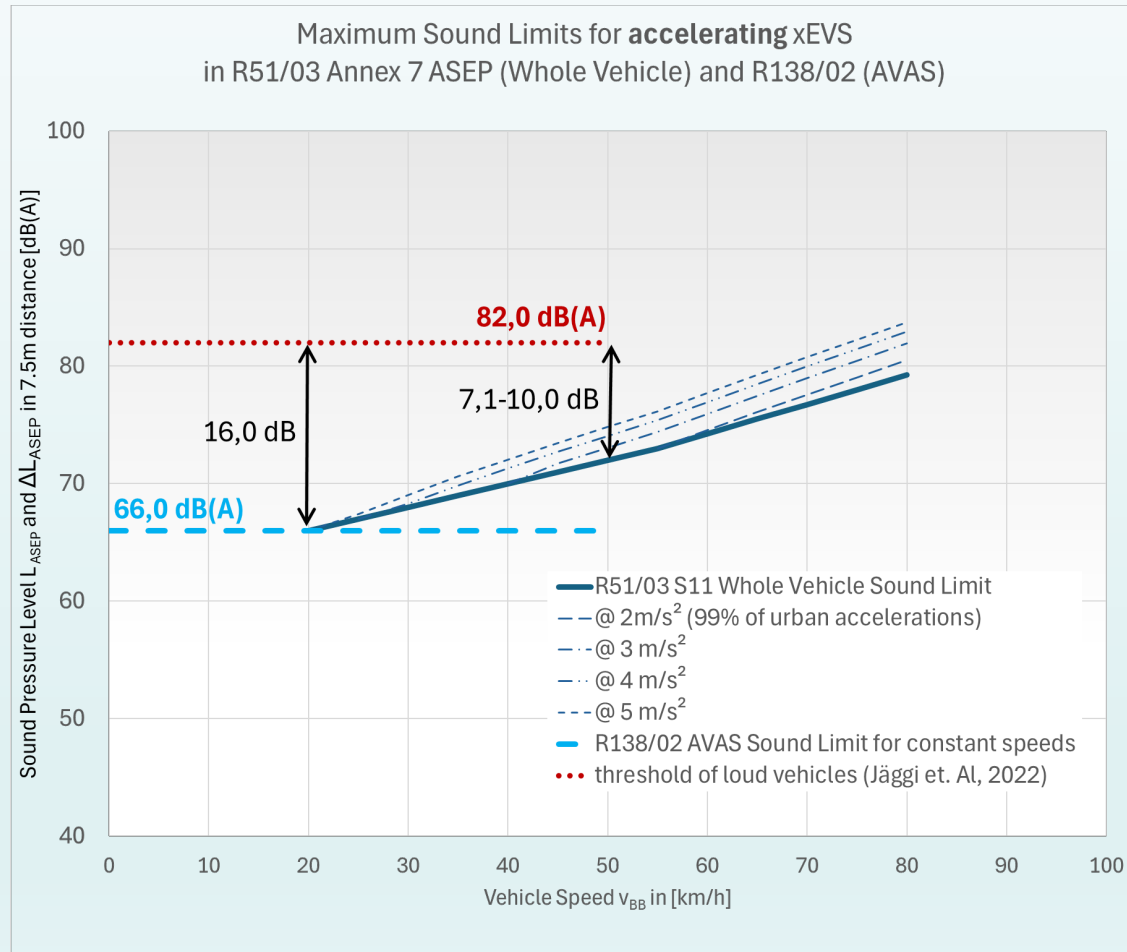
Slope of **ASEP limit curve is fixed** since it is based on speed. It realizes a **handshake to** the maximum sound pressure **limits of UN-R 138**.

ASEP is applicable **as well under partial load** and not only under full acceleration, since there is usually **only one gear** available.  
The limit curve is adjusted to **higher performances** than performed during UN-R 51/03 Annex 3 Type Approval test.



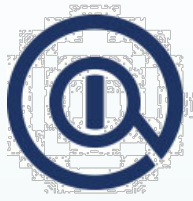
# GRBP/2025/29: Concept “ASEP<sup>1</sup> for xEVs”

ASEP is working with AVAS<sup>2</sup> Requirements while Preserving EV’s Advantages



ASEP-Limits are

- closing an **unregulated gap**,
- preserving the **advantages of low EV’s sound** emission especially in urban traffic,
- making sure that EVs without any additional sound (**only with AVAS**) are **passing** these limits (performance-based approach),
- incorporating **vehicle performances** higher than urban performances (safety benefit),
- handshaking with **UN Regulation No. 138** limits,
- compatible with **01 and 02 series** of amendments of UN Regulation No. 138, and will be
- supported by a future **revision of GRB-68-03** (amendment adopted latest in 84<sup>th</sup> GRBP)



# GRBP/2025/29: Concept “ASEP for xEVs”

## Open Topics and Recommendations

### Topic of Proposals

### Proposed changes and OICA position

### Recommendation

#### New Specifications for Enhanced Exterior Sound (EES)

A system generating EES must have a button for direct driver control. The EES shall fulfill additional requirements for detectability and not masking.

Accepted sounds are described in an additional side document.

*OICA:*

*This is not subject to a (fast) Supplement.*



Mandate the subgroup to revise GRB-68-03 regarding EES of electric vehicles.

If needed, add new requirements to the suitable UN Regulation.

#### Changing ASEP principles

New base for anchor point will create new limit principles. Other treatment of ASEP results for EVs.

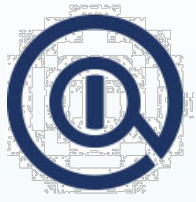
*OICA:*

*Move discussion to new RD-ASEP method.*



Continue discussion in IWG RD-ASEP targeting the new 04 series of amendments to UN Regulation No. 51.





# Summary of Recommended Actions

## Close Topics to Concentrate on Important GRBP Work

- 01** **GRBP/2025/20 replaced by GRBP-82-07**  
**Adoption of the OICA proposal** during the 82<sup>nd</sup> GRBP session to implement necessary **corrections and clarifications** in the short term. ✓

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- 02** **GRBP/2025/29 replaced by GRBP-82-08**  
**Adoption of the OICA proposal** during the 82<sup>nd</sup> GRBP session **to close a regulatory gap in the short term** until the new 04 series of amendments enters into force. ✓

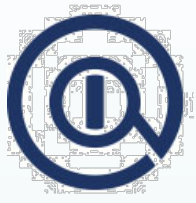
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- 03** **Amendment to GRB-68-03**  
Mandate the Subgroup on R51 & R138 to **prepare an amendment to** document for reference **GRB-68-03**, which could be adopted during the 84<sup>th</sup> GRBP session at the latest. ✓

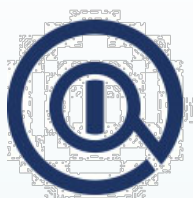
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- 04** **IWG RD-ASEP**  
Focus the GRBP resources on the refinement of the RD-ASEP concept in a new 04 series of amendments to UN Regulation No. 51 in the dedicated IWG on RD-ASEP. ✓





**BACKUP**



# Placing GRBP/2025/29 in Context

## Estimated Timing of GRBP Regulations on Sound Emission

