Transmitted by the experts of the European Tyre and Rim Technical Organisation

Informal document **GRBP-76-35**
(76th GRBP, 5-7 September 2022,
agenda item 4 (c))

Proposal to amend document ECE/TRANS/WP.29/GRBP/2022/14

The changes are marked in **bold** for added text and strike through for deleted text, all in red font.

I. Proposal

Paragraph 12., add a new subparagraph 12.13. to read:

"12.13. ~~**From the entry into force of Supplement 14, ISO 10844:2021 shall be accepted for all approvals granted under this Regulation. Until five years from the entry into force of Supplement 14, ISO 10844:2014 shall be accepted for all approvals granted under this Regulation.**~~**Until 60 months from the entry into force of Supplement 15 to the 02 series of amendments, Contracting Parties applying this Regulation shall continue to grant type approvals and extension to existing type approvals according to the Supplement 14 to the 02 series of amendments to this Regulation, based on tyre-rolling sound emissions tests performed on test sites the surface and the dimensions of which are in accordance with ISO 10844:2014."**

Annex 3, paragraph 2.1., replace "ISO 10844:2014" by "ISO 10844:2021".

II. Justification

ISO has updated the 10844 standard to improve clarity. The primary objective is to reduce track-to-track variability caused by differing interpretations and implementations of the technical requirements. The following table includes other improvements that have been made.

Third edition ISO 10844:2014 technical method	*Improvements in ISO 10844:2021*	*Effect of improvements*
Measurement of irregularity	Permit more modern and accurate methods of measurement (e.g. laser methods) in addition to straightedge	Improved practicality and accuracy of irregularity measurement
Periodic check criteria for irregularity of tracks exclusively for testing heavy vehicles	Irregularity requirement changed to 10 mm in consideration of permanent deformation caused by heavy vehicles, and through acoustical analysis of potential shielding found negligible impact	Improved durability of tracks used exclusively for heavy vehicles without impacting acoustical measurement
Step requirement	Implement a step requirement that includes allowance for a step-up of maximum 5 mm to harmonize with irregularity requirement	Improved constructability while maintaining same surface geometric tolerances
Sieving curve	Replace sieving curve figure with equivalent tabulation of sieve values defining an aggregate grading envelope	Reduced track-to-track variability caused by subjective interpretation of sieving curve figure
Expected Noise Due to Texture (ENDt) method	Replace optional calculation of ENDt with optional calculation of texture skewness, shape factor (g-factor), and texture spectrum	Skewness, shape factor (g-factor), and texture spectrum reported to correlate with measured pass-by noise, and are proposed for track correlation methods

Sampling for aggregate grading	Sampling of loose asphalt mixture as alternative to coring for evaluating aggregate grading	Sampling of loose asphalt mixture is more practical and representative compared to the small sample extracted from four cores
Examples of track construction	Examples have been removed	Avoided conflicts and confusion in interpretation of the technical requirements in the standard