## **GRBP New TF-QRTV (UN-R138-02)-02-02**

(2<sup>nd</sup> Session of the GRBP Task Force Quiet Road Transport Vehicle New TF-QRTV)
August 23th, 2022

#### **ECONOMIC COMMISSION FOR EUROPE**

INLAND TRANSPORT COMMITTEE
World Forum for Harmonization of Vehicle Regulations (WP.29)
Working Party on Noise and Tyres (GRBP)
Task Force for Quiet Road Transport Vehicles - New TF-QRTV

# Meeting minutes of the 02<sup>nd</sup> session of the Task Force – Quiet Road Traffic Vehicles – New TF-QRTV Monday 11<sup>th</sup> July, 2022 from 10:00 to 16:00 (CET)

hybrid session

# OICA office - 4 rue de Berri - 75008 Paris, and by Teams

Welcome and opening remarks  Due to absence of Mr. Ficheux Mr. Volkenborn welcomed the participants to this 2 <sup>nd</sup> session. Mr. Schüttler took over the intermediate chair position for this meeting when he arrived.  Introduction of participants and organizations  Attendees of the 2 <sup>nd</sup> meeting TF-QRTV agreed for sharing with the group:  - Any documents used and or presented during the session - Publication on the UNECE webside - The attendance list as proposed under document TF-QRTV-02-02 - Attendees in person are highlighted in the attendance list  3. Adoption of the agenda The drafted agenda has been adopted  Summary of uncertainty work Doug Moore from ISO presented an evaluation of uncertainty for noise measurements done under ISO16254 conditions. Basis of these investigation are practical test and theory on physical relations. Key findings: - A single microphone is high sensitive to atmospheric and distance related quantities - Multipoint receivers reduce or eliminate the atmospheric uncertainty - Multipoint receivers reduce but don't eliminate the distance related effects (cancellation)			Working Documents
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single microphone test procedure	4.	Doug Moore from ISO presented an evaluation of uncertainty for noise measurements done under ISO16254 conditions.  Basis of these investigation are practical test and theory on physical relations.  Key findings:  - A single microphone is high sensitive to atmospheric and distance related quantities  - Multipoint receivers reduce or eliminate the atmospheric uncertainty  - Multipoint receivers reduce but don't eliminate the distance related effects (cancellation)  - "5 microphone array" has an 50 % improvement compared to a	TF-QRTV-02-0

### 5. **2 steps-approach:** Priorities & organization Discussion about mid and short term topics The objectives coming from Document TF-QRTV 01-03 Rev.1 have been reviewed and topic "f" "Structure" for component approval and "after market management" has been skipped. "Specifications" Structure is a measure, how to achieve targets, but not target itselve. "After market management" Safety topic, sensitive for OEM knowledge (knowledge about the internal vehicle communication system, e.g. CAN/BUS system, needed. Forecast to the impact from new future systems is not possible. Aftermarket AVAS and R156 (cyber security) seems not to work due to safety aspect and sound manipulation, in addition if consumers wants to have "much more sound" (more annoyance) or less sounds (less safety). During the first meeting in May 20<sup>th</sup> 2022 has been decided to split the work into topics to be solved in a short and mid term time frame. Principle tasks of the new TF-QRTV (UN-R138-02) regarding the UN Regulation No.138 to be considered: Taken from TF-QRTV01-03 Rev.1 Relationship between different regulations/standards at international levels FMVSS141, R138, GB/T 37153... mid Safety effectiveness mid Review studies, if available c. Interaction with other UN Regulations No.51 (Noise Emissions; RD-ASEP), short No.28 (Audible warning device), mid No.[16x] (Reverse Warning Sound), ... mid No. 117 currently not in focus d. Review/clarification of technical specifications GRBP-74-02e Review different proposals done at the 74<sup>th</sup> and 75<sup>th</sup> Sessions of GRBP (proposal from France see 2a and Switzerland see 2b) short mid if needed GRBP-74-05e ii. Others e. Measurement Uncertainties short i. Work of ISO ii. Review test procedures iii. Interchangeability of the various options on test procedures (indoor versus outdoor, ...) iv. Apply principle of IWG MU Structure of UN Regulation No.138 i. Specifications for component approval (as in UN Regulation No.28) Aftermarket management ((seems to be not necessary) g. Stringency of AVAS/Grey zone (outside test criteria) Review minimum and maximum sound levels on all driving situations Operation range of AVAS h. Organisation of the transitional period for international purposes mid

5.	Any Other Business No any other business	
6.	Next meeting(s) The next meeting will take place in Geneva 2022 September 8 <sup>th</sup> From 10:00 to 16:00 CEST at CASIC (Geneva) Office (because of bank holiday in CH) Boulevard Helvétique 36 (Rue Petit-Senn 2 Entrée), 1207 Genève	

	Due to limited space in the office the meeting is a hybrid meeting again	
7.	Adjourn	

All documents of this TF-QRTV are/will be available via the

New TF-QRTV (UN-R138-02) - Transport - Vehicle Regulations - UNECE Wiki