

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 on Vehicles' Sound (TF-VS)

Draft Report of the 06th Session of the Task Force on Vehicles Sound TF-VS
December 17, 2021 from 09:00 to 11:00 (CET)
Virtual Session only

		Working Documents <small>(*) not available before the meeting</small>
1.	Welcome and opening remarks	
Mr.Ficheux welcomes the participants to this 06 th Session.		
2.	Introduction of participants and organizations	TFVS-06-02(*)
Attendees this 06 th session of the TF-VS agreed for sharing with the group: <ul style="list-style-type: none"> - the attendance list as proposed under document TFSL-06-02, - any document used and/or presented during this Session and making them public on the UNECE website.		
3.	Adoption of the agenda Adoption of Report of 05th Session	TFVS-06-01 Rev.2 TFSL-05-07
Agenda as Revision 2 adopted. No comment on report of the 05 th Session.		
4.	Cross-matrix <ul style="list-style-type: none"> a. Feedback on document TFVS-05-06 b. Comments related to the cross-matrix by Japan 	TFVS-05-06 TFVS-06-03(*) TFVS-06-05(*)
<ul style="list-style-type: none"> - Document TFVS-05-06 – this document proposed by Mr.Gerhard has been presented and explained. <ul style="list-style-type: none"> o The mean of this cross-matrix is to have the right understanding before introducing various parameters because the traffic noise is extremely variable. Millions of scenarios can be created where traffic noise will occur in different type of areas, few/high traffic, fluent/congested traffic, crossings/roundabouts/... We need to identify to which scenario(s) we want to refer. Then these scenarios can be used in various studies, models or investigations coming from different players for a better understanding. o In the document TFVS-05-06, we have started to create parameters which could be taken into account for the different scenario. For each parameter, a definition, an explanation illustrated by example are introduced. o List of parameters proposed: <ul style="list-style-type: none"> ▪ Street category ▪ Daily traffic volume (DTV) ▪ Lanes ▪ Maximum vehicle speed LDV/ HDV/ MC 		

- Light Duty Vehicles (LDV)
- Heavy Duty Vehicles (HDV)
- Motorized two-wheelers (MC) → to be revised according to the IMMA comments because the whole L category covers 2/ 3/ 4-wheelers with different powers – to be clarified
- Split HDV ($p\%_{HDV}$)
- Split MC ($p\%_{MC}$)
- Vehicle category share ($\xi\%$)
- Level of Service (LoS)
- Level of Interruption (LoI)
- Hourly Traffic Volume Distribution (HTV)
- Speed attenuation
- Observer distance
- Road surface
- Should we also cover manipulated vehicles and consider after-market?
- Other parameters to be added as noise barriers, surroundings of the roads (height differences, buildings, pavements), weather conditions? → the group supports to share any additional information/other parameters linked to local/national experiences.
- The scenarios will have to be chosen and the number of scenarios limited – a good balance will have to be found.

An initial draft of excel table not presented during this Session will be shared with the group linked to the report of this 06th Session → see document TFVS-06-05.

- **Document TFVS-06-03** from Japan presented by Mr. Shirahashi
 - Japan proposes:
 - Due to the high number of parameters proposed in document TFVS-05-06, to categorize these parameters to help in the choice of the scenarios
 - Additional parameters according to their national experience
 - A. Location
 - + 'Specific feature for road'
 - Both height & horizontal distance should be taken into account under the parameter '15. Observer distance'
 - B. Sound propagation
 - Really to be considered? Not really under the GRBP scope
 - C. Traffic flow
 - Attenuation should also be taken into account for the parameter '14. Speed attenuation'
 - D. Sound sources
 - + Electric vehicles, modified vehicles, regulation level and sound power levels
 - road should be also added in this category
- It was also reminded that when the 10-15 scenarios will be defined, they will have to be compared to the typical scenario currently used through the different noise regulations.
- For the road traffic noise prediction model, other study is existing from JARI → need to better understand the different worldwide prediction models such as CNOSSOS-EU, ASJ-RTN, JARI to improve road traffic noise.

Conclusion: the group supports

- *the idea for a cross-matrix through different parameters to be able to define scenarios for future,*
- *to consider any available road traffic noise prediction models, and*
- agreed to have a new dedicated hybrid (if possible) sub-group meeting to continue the work on this cross-matrix/table – what could be added/missing? → for details, see Item.5 below.*

Target is to be able to make some proposal at next GRBP-75 in February 2022.

5.	<p>Next meeting(s)</p> <ul style="list-style-type: none">- <u>Sub-group session for Cross-matrix on 19th January 2022</u> - 10:00-15:00 - HYBRID at ACEA Office in Brussels (to be confirmed according to the Covid situation some days before) From today's discussions regarding parameters<ul style="list-style-type: none">→ table to be built (initial draft table to be shared with the group)→ define how to calculate relevant scenarios→ Volunteers:<ul style="list-style-type: none">○ Netherlands: Niels den Ouden○ Germany: Bernd Schüttler○ France: Elodie Collot, Serge Ficheux○ EC: Marco Paviotti○ Heinz Stevens○ Japan: Fumio Ito, Mahito Moriyama, Yoshihiro Shirahashi○ OICA: Klaus Neuhaus, Per-Uno Sturk, Gianluca Di Nenno, Shervin Solhkonan, Hans-Martin Gerhard, Françoise Silvani→ If other Contracting Parties volunteer to participate this sub-group, please inform Ms.Silvani.- <u>07th Session on 07th February, 2022</u> – 10:00 to 16:00 (CET) – HYBRID meeting at Palais des Nations in Geneva (tbc.):<ul style="list-style-type: none">○ Japan presentation○ UK presentation tbc○ Cross-matrix	
6.	Adjourn	
<p>Mr. Ficheux thanks the participants for all very good & interesting presentations, as well as very fruitful discussions.</p>		

All documents of this TF-SL are/will be available via the [UNECE website - Task Force on Sound Limits \(TF-SL\)](#).