

Transmitted by Chair of SIG AVRS

Informal Document **GRBP-77-18**  
77<sup>th</sup> GRBP, February 7-10, 2023,  
agenda item 11

# Report to 77<sup>th</sup> Session of GRBP (February 2023)

Special Interest Group Automated Vehicles Regulation Screening  
(SIG AVRS)

# SIG Automated Vehicles Regulation Screening



**2**

## Number of Meetings

### Web-meetings

1<sup>st</sup> SIG AVRS: 7<sup>th</sup> December 2022

2<sup>nd</sup> SIG AVRS: 18<sup>th</sup> January 2023

Guidance meetings with GRVA FADS

Sept/Oct 2022



**12**

## Participants (Contracting Parties & NGOs)

- CPs:  
Germany, China, Japan, Netherlands
- NGO's:  
OICA, JASIC

# SIG Automated Vehicles Regulation Screening

## Targets

- WP29 requests a screening of regulation for application of Automated Vehicles.
- GRVA proposed a template for the screening
- TF-FADS (GRVA) provides further guidance

## Roles

- Chair: Netherlands
- Secretariat: OICA

## SIG AVRS wikipage

<https://wiki.unece.org/pages/viewpage.action?pageId=190087308>

### Documentation:

Report of the World Forum for Harmonization of Vehicle Regulations on its [187th session](#) pg.8/9

19. AC.2 received an update on the work of GRVA and automated vehicles related activities:

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(e) AC.2 recommended the GRs to consider using the template in [GRVA-13-18](#) when screening UN GTRs and UN Regulations with regards to ADS.

Reference:

[https://unece.org/sites/default/files/2022-07/ECE-TRANS-WP29-1166e\\_0.pdf](https://unece.org/sites/default/files/2022-07/ECE-TRANS-WP29-1166e_0.pdf)

<https://unece.org/sites/default/files/2022-05/GRVA-13-18e.pdf>

# Screening process: Presumptions

1. Availability of manual driven vehicles was assumed.
2. Categories of AVs are not defined yet
  - Excluding an AV-category is not possible yet
  - AV-categories could be useful
3. Automation of Powered 2 Wheelers is unlikely, but prototypes exist.
  - L1/L3 is not excluded
  - Priority could be “LOW”

# Screening process: Considered items

1. Terminology and concepts
2. Relevance of regulation for AVs
  - The subject of the regulation is relevant to the AVs
  - The test method needs reconsideration for AVs
    - For driverless AVs (Level 5, shuttles)
      - With passenger
      - Without passengers (cargo)
    - For AVs with driver (Level 3/4, fallback driver/user)
    - Bi-directional AV's
3. Requirement to AVs to fulfill Regulation that is screened.

UN Regulations	Title	Topic	Vehicle and/or Component	category	to be checked	changes required	First suggestions of the SIG-AVRS					Possible action
							Issue	Issue for fully automated vehicles?	Issue for dual mode vehicles?	Issue for vehicles without occupants?	Issue for other use cases?	
UN R 9	Noise of three-wheeled vehicles	Noise	Vehicle	L2, L4, L5	YES	YES	measurement procedure	YES	No	YES		Test mode
UN R 28	Audible warning devices	Noise	Component & Vehicle	M, N, L3, L4, L5	YES	YES	requirements for courtesy hom. actuation	YES	YES	YES		new requirements
UN R 30	Tyres for passenger cars and their trailers	Tyres	Component	M, O	No							
UN R 41	Noise emissions of motorcycles	Noise	Vehicle	L3	YES	??**	measurement procedure	YES	No	?		Test mode
UN R 51	Noise of M and N categories of vehicles	Noise	Vehicle	M, N	YES	YES	measurement procedure	YES	No	YES		Test mode
UN R 54	Tyres for commercial vehicles and their trailers	Tyres	Component	N, O	No							
UN R 59	Replacement silencing systems	Noise	Component & Vehicle	M1, N1	YES	copy UN R 51	measurement procedure	YES	No	YES		Test mode
UN R 63	Noise emissions of mopeds	Noise	Vehicle	L1	YES	??**	measurement procedure	YES	No	?		Test mode
UN R 64	Temporary use spare unit, run flat tyres	Tyres	Component & Vehicle	M, N	YES	??**	measurement procedure	?	No	?		
UN R 75	Tyres for motorcycles/mopeds	Tyres	Component	L1, L3	No							
UN R 92	Replacement exhaust silencing systems (RESS) for motorcycles	Noise	Component & Vehicle	L	YES	copy UN R 41**	measurement procedure	YES	No	?		Test mode
UN R 106	Tyres for agricultural vehicles	Tyres	Component	T, R, S	No							
UN R 108	Retreaded tyres for passenger cars and their trailers	Tyres	Component	M, O	No							
UN R 109	Retreaded tyres for commercial vehicles and their trailers	Tyres	Component	N, O	No							
UN R 117	Tyres, rolling resistance, rolling noise and wet grip	Tyres	Component*	M, N, O	No							
UN R 124	Replacement wheels for passenger cars	Tyres	Component	M	YES	YES	application in Avs	YES	YES			new requirements
UN R 138	Quiet Road Transport Vehicles (QRTV)	Noise	Vehicle	M, N	YES	YES	measurement procedure	?	No	?		new requirements, Test procedure
UN R 141	Tyre Pressure Monitoring Systems (TPMS)	Tyres	Component & Vehicle	M1, N1	YES	YES	warning strategy, actions?	YES	YES	YES		new requirements
UN R 142	Tyres installation	Tyres	Component & Vehicle	M1	YES	?	vehicle dynamic aspects?	YES	YES	YES		new requirements
UN R 164	Studded tyres with regard to their snow performance	Tyres	Component*		No							
UN R 165	Audible reverse warning devices and audible reverse warning signals	Noise	Component & Vehicle	M2, N2, M3, N3	YES	?	warning strategy	YES	YES	YES		new requirements
GTR No. 16	Tyres	Tyres	Component*		No							

Sum of "YES" 13

\* needs any non fully automated vehicle for testing

\*\* usecase questionable

20-1-2023

# SIG- AVRS Results

- 21 regulations screened
- 13 regulations for further consideration
- Limited prioritization
- First suggestion
  - for further considerations
  - to clarify the results of the screening

# Next steps

- Formalization of the report and submission to WP29.
- Prioritization of findings in GRBP priority list.
- Include further assessment of specific regulations in future ToR's.



Thank you for your attention