

# GRVA Taskforce on Fitness for ADS

1<sup>st</sup> Meeting — 7 October 2022

# Recap of guidance from WP29 & GRVA

- Report to WP29 in March 2023
- Intermediary report to GRVA in January 2023
- Guidance from GRVA:

## **1. Vehicles in the scope:**

- Vehicles equipped with an ADS including, but not limited to:
  - Dual-mode vehicles
  - Vehicles without manual driving capabilities
  - Vehicles with or without occupants

## **2. Screen regulations with:**

- Terms such as “driver” (interaction with controls in the vehicles, signals, etc.), “seating position” (incl. seat references) and other topics (performance requirements)
- Terms such as “driver”, “seating position”, “seat”, etc. in relation with testing provisions

## **3. Recommendation:**

Any proposal to introduce ADS-related terminology shall be reviewed by GRVA to ensure consistent terms and definitions.

# Inventory of GRVA Regulations and GTRs

Regulation	Title
R13	Heavy vehicle braking
R13H	Brakes of M1 and N1 vehicles
R78	Braking (category L vehicles)
R79	Steering equipment
R89	Speed limitation devices
R90	Replacement braking parts
<i>R102</i>	<i>Close coupling devices (CCDs)</i>
R130	Lane Departure Warning System (LDWS)
R131	Advanced Emergency Braking Systems (AEBS)
R139	Brake Assist Systems (BAS)
R140	Electronic Stability Control (ESC)
<i>R147</i>	<i>Mechanical coupling components of combinations of agricultural vehicles</i>
R152	Advanced Emergency Braking Systems (AEBS) for M1 and N1 vehicles
R155	Cyber security and cyber security management system
R156	Software update and software update management system
R157	Automated Lane Keeping System (ALKS)

GTR	Title
GTR 3	Motorcycle brake systems
GTR 8	Electronic stability control systems

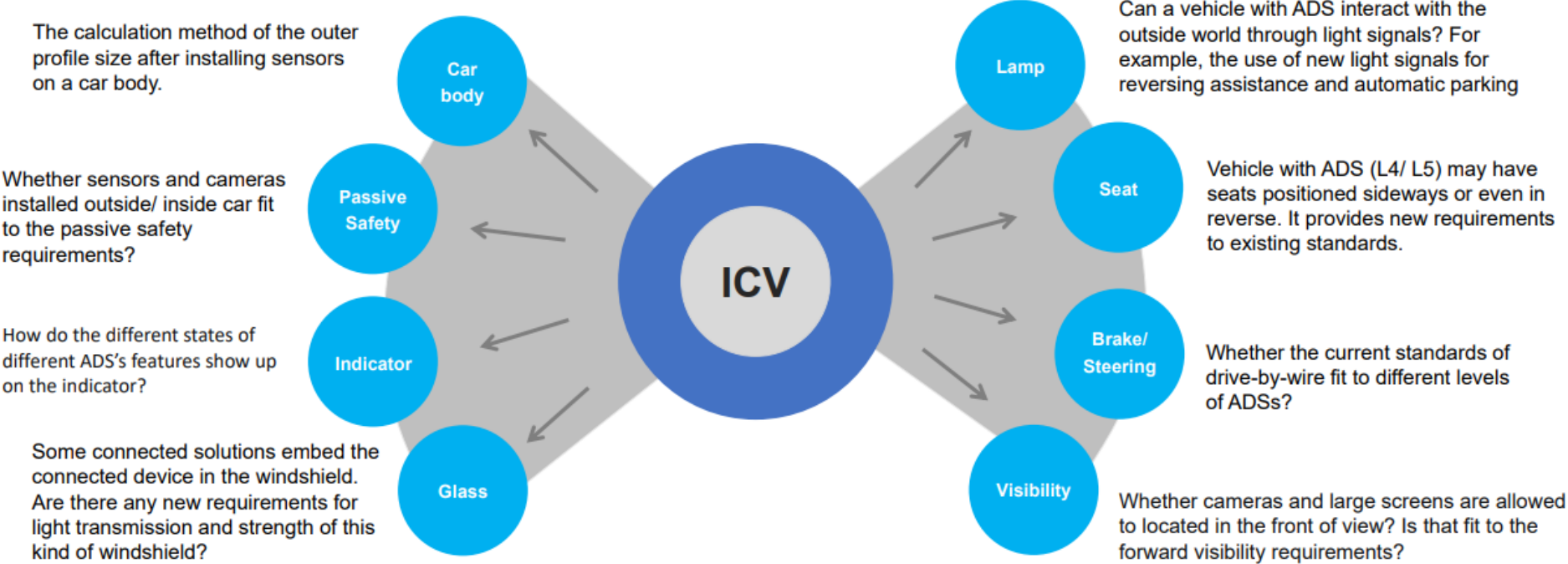
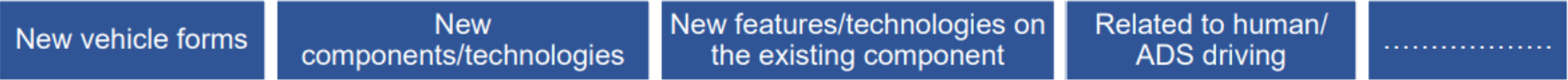
- = within scope
- = to be decided
- = may need to consult GRSG

# Inventory of relevant explicit terms

Relevant terms for scanning Regulations and GTRs						
Word	Variations					
Driver	Person					
Driving seat	Seating position	R point	Driving position			
Foot	Pedal					
Hand	Steering wheel					
Eye	See	Visible				
Hear	Audible					
Telltale	Visual warning	Acoustic warning	Haptic warning	optical signal	instrument panel	
Pedal						
Steering Wheel						
Manual						

Provisional template for listing terms related to human driving

# Inventory of relevant implicit terms



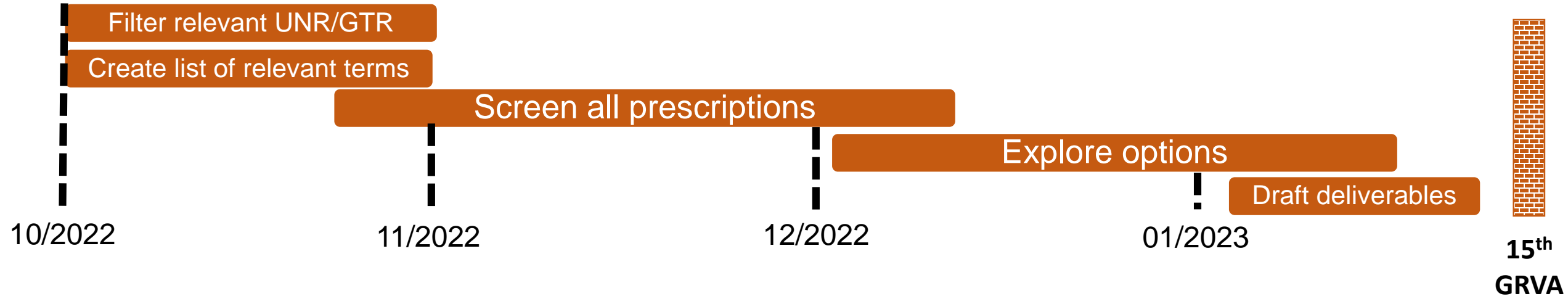
# Deliverables

- Table of all relevant prescriptions
  - Step 1  • Reason for ADS impact
  - Level of impact / priority
  - Step 2  • Options for making the prescription fit for ADS
- TBD: Whitebook for drafting future Regulations / GTRs
  - For non ADS Regulations, terms to avoid and precautions to take
  - For ADS Regulations, prescriptions identified in non ADS Regs that must be implemented in ADS Regs

# Template spreadsheet for screening UNR/GTR

1	Select the Key Word Operator		MANUAL EDIT HERE											High (3) to Low Priority (1)
2	Filter	Res. Filter												
3	Key word1	Key word2	Key word3	Key word4	Key word5	Key word6	Key word7	Regulation N°	Paragraph N°	Original paragraph	Options	Potential amendment text	Priority	
4	Hand	Driver	Driving seat					UNR 13	5.1.2.2	The secondary braking system shall make it possible to halt the vehicle within a reasonable distance in the event of failure of the service braking system. It shall be possible to graduate this braking action. The driver shall be able to obtain this braking action from his driving seat while keeping at least one hand on the steering control. For the purposes of these provisions it is assumed that not more than one failure of the service braking system can occur at one time.		The secondary braking system shall make it possible to halt the vehicle within a reasonable distance in the event of failure of the service braking system. It shall be possible to graduate this braking action. The driver or ADS shall be able to obtain this braking action while maintaining steering control. For the purposes of these provisions it is assumed that not more than one failure of the service braking system can occur at one time.		
5	Monitoring	Hand								test		test		
6	Eyes									test		test		
7	Monitoring									test		test		
8	Monitoring	Operator								test		test		

# Provisional timeline





# Scheduling future meetings

- 2<sup>nd</sup> meeting targeted for **21 October**
- Target pace: 5~6 meetings before 15<sup>th</sup> GRVA
- In-person meetings: welcoming volunteers for hosting
  - Potential dates:
    - Mid-December
    - Week before 15<sup>th</sup> GRVA (e.g. 19-20 January 2023)
    - Between 15<sup>th</sup> GRVA and 189<sup>th</sup> WP29 (February 2023)

# Next steps

- Link to all relevant files: <https://wiki.unece.org/pages/viewpage.action?pageId=179700571>
- Next meeting:
  - Presentation of existing work
  - Validation of relevant UNR / GTR
  - Validation of relevant terms
  - Dispatching UNR/GTR screening

# Backup

- EU [ADS Regulation 2022/1426](#)
- NHTSA [Occupant Protection for Automated Driving Systems](#)