

VMAD-18-08

# VMAD

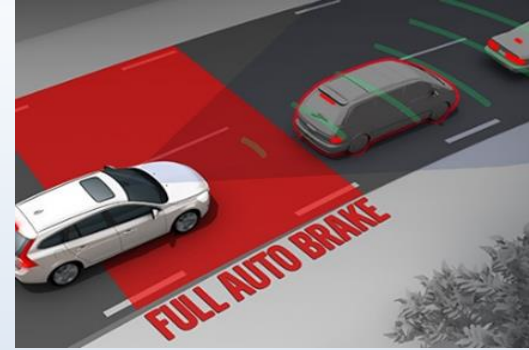
## Subgroup 4: Test track- / Real world testing

VMAD Webex meeting 18/19 May 2021



**UNECE**

# SG 4's meeting 22 April 2021 (1)

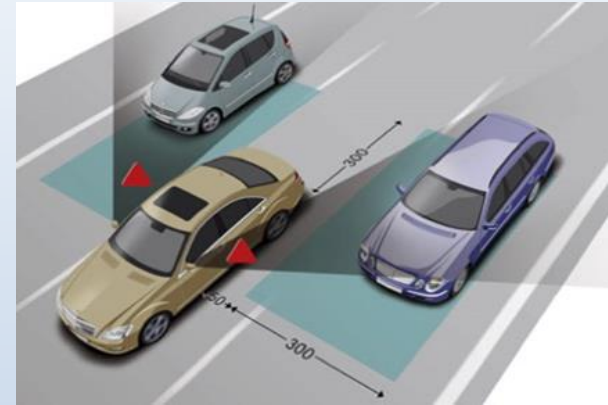


- Approval SG 4's draft workplan;
- Steps to be taken:
  1. Identification best practices TT and RWT (by May 2021; VMAD-18)
  2. Identification of:
    - Supporting components to be developed by other groups (i.e. scenarios by SG 1; Functional requirements FRAV);
    - Outline / considerations when describing procedures for TT and RWT.
    - Missing elements



# SG 4's meeting 22 April 2021 (2)

- First draft of step 2 by July 2021 (VMAD-19)
- Final draft by September 2021 (VMAD-20)



# SG 4's meeting 22 April 2021 (3)

- Finally; step 3:
  - Identify how TT and RWT could be used for validation functional requirements FRAV
  - Determination levels of abstraction scenarios for TT and RWT
  - With SG 1: identification scenario elements ODD for reproduction in test procedures and how to measure
  - Identification information / data that can provide clear, objective assessment of ADS performance
- Timeframe step 3: following September 2021 (VMAD-20)



# Delivery Step 1...

- Document step 1 delivered as a first concept: VMAD-SG4-06-05
- Overview Available Best Practices, Procedures, Technical Resources & Tools (for TT and RWT)
- Input several parties delivered; will be elaborated in next version
- Confirmation and approval in next SG 4 (June 2021)
- Delivery to VMAD (July 2021, as part of documentation on Step 2)



# Document best practices (1)

Containing (for TT):

- Regulations and standards for Automated Driving systems and ADAS: UN, ISO regulations:
  - New Car Assessment Programmes (NCAP's) Protocols: EuroNCAP, a.o.
  - Academic literature

Containing (for RWT):

- Regulations and standards for Automated Driving Systems (ADS)
  - UN regulation 157 (specifications ALKS)



# Document best practices (2)

Containing (for RWT):

- Regulations and standards for testing vehicles on public roads
  - Real-Driving emissions (RDE) Test procedure
- Guidance for Automated Driving Systems (ADS)
  - Safety assessment for Automated Driving Systems (in Canada)
- Regulations, Standards and Guidance on Automated Vehicles Trials on Public Roads
  - L3 Pilot Deliverable D3.4 – Evaluation Plan
  - Uk's Code of Practice: Automated vehicle trialling
  - FESTA Handbook
  - a.o.



# Document best practices (3)

Containing (for RWT):

- Academic Literature
- Overview of Available Technical Resources and Tools
  - None defined yet
- Appendix:
  - Consumer Protection Tests in EURO NCAP

