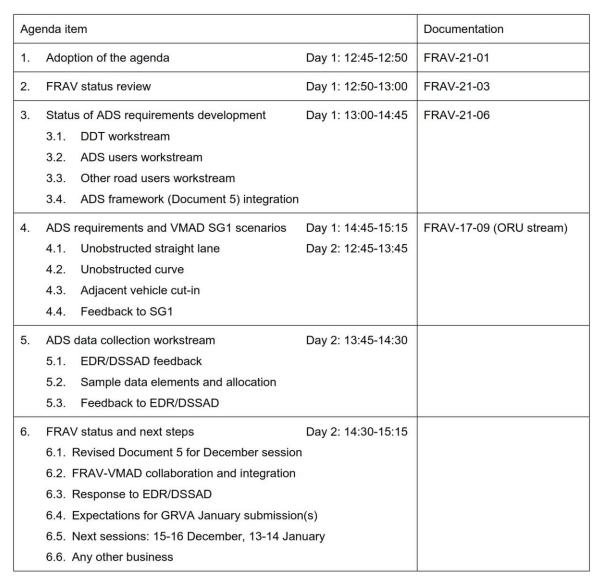
Document FRAV-21-03

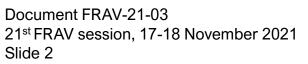
21<sup>st</sup> Session Status Review and Session Orientation

> Web Conference 17-18 November 2021



## Agenda item 1 Adoption of the agenda







#### Agenda item 2 FRAV status



- Development of ADS safety requirements
  - FRAV-23-05: Consensus document for submission to GRVA-12
    - FRAV-22-05: Draft document integrating consensus from workstreams
  - Document 5 contents
    - Terms and definitions
    - Guidelines for manufacturer descriptions of the ADS, its features, intended uses, and limitations on use
    - ADS safety requirements
      - ADS DDT performance
      - ADS performance under safety-critical scenarios
      - ADS HMI and user safety requirements
      - ADS failure mode management
      - ADS operational safety over vehicle lifetime
  - Alignment with VMAD scenarios and assessment methods
- ADS data collection input to EDR/DSSAD

Document FRAV-21-03 21<sup>st</sup> FRAV session, 17-18 November 2021 Slide 3

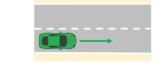
## Slide 8 Document FRAV-21-03

Document FRAV-21-03 21<sup>st</sup> FRAV session, 17-18 November 2021 Slide 4

# Elaboration of ADS safety requirements

- DDT workstream
- ADS users workstream
- ORU workstream
- Integration into revised Document 5
- Alignment with VMAD scenarios
  - Consideration of initial three scenarios
  - Coverage of all motorway scenarios
  - Application of scenarios to VMAD assessment methods

#### Scenario samples



The ADS feature is moving the vehicle within a straight unobstructed lane of travel.



The ADS feature is moving the vehicle within a lane of travel along an unobstructed curve.



The ADS feature is moving the vehicle within a straight unobstructed lane of travel with a vehicle moving alongside in an adjacent lane. The adjacent vehicle moves into the path of the ADS vehicle's lane of travel.

### Which requirements would ensure safe ADS navigation of these

scenarios? Secondary consideration: What variables might impact ADS performance or response(s)?

Document FRAV-20-03 20th FRAV session, 14 October 2021

#### Agenda item 5 ADS data collection



- Two main uses of data
  - Crash reconstruction and analysis under legal frameworks for EDR
  - Performance monitoring and reporting under legal framework to be determined
    - Manufacturer data collection and processing
- EDR/DSSAD request for examples
  - Data elements and their categorization
  - FRAV framework
    - EDR-specific data, ISMR data, and "dual use" data elements
    - Differentiation of ADS configurations and relevant data (especially link to HMI aspects)
    - Alignment with FRAV framework and requirements: terms and definitions, ADS configurations, ADS requirements (e.g., ADS "states and actions").

## FRAV Calendar

Session 22: 15-16 December

Session 23: 13-14 January (Physical session same week as VMAD...?)

Session 24: 1 February

- December
  - D5-aligned updated worktables ("draft D5")
  - SG1 scenarios exchange
  - SG3 documentation/ISMR exchange
  - SG4 nominal/safety-critical v. track/real-world testing exchange
- January
  - Endorsement of new D5 for GRVA
  - SG1 scenarios consistency
  - SG3 documentation/ISMR consistency
  - SG4 nominal/safety-critical v. track/real-world testing consistency

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