

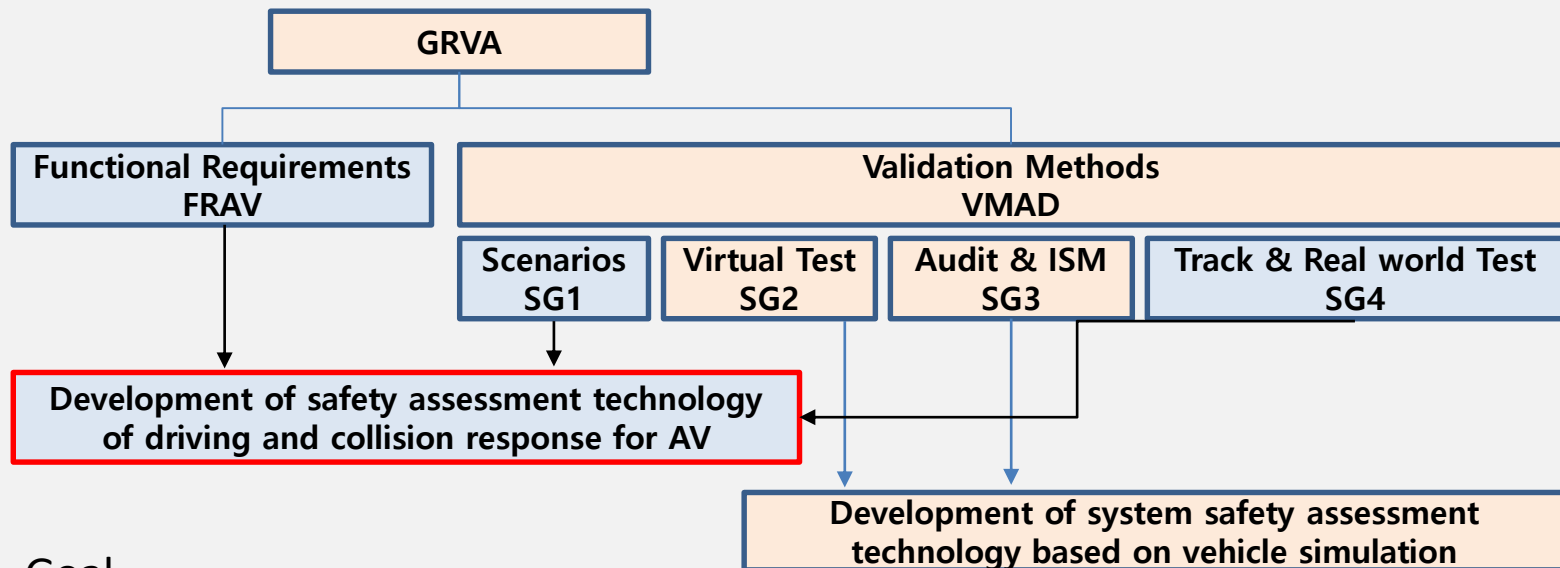
# Introduction of Korea R&D Project on Automated Driving System

5<sup>th</sup> ADS IWG meeting  
Dec. 2024, Seoul

Korea Automobile Testing & Research Institute

# Project Overview

- Project : Development of safety assessment technology of driving and collision response for automated vehicle (2021~2027)
- Background



- Goal
  - Development of real-vehicle-based safety assessment technology for automated driving functions and passengers' safety verification

# Development of driving safety assessment technology

- Development of driving test scenarios suited to Korean traffic conditions
  - Analysis of accident data from police agencies and insurance companies, actual driving data, etc.
  - Establishment of scenario development methodology with reference to the PEGASUS project
  - Development of scenario form and design of scenario library
- Research for safety assessment technology of driving
  - Analysis of current safety regulations related to steering, braking system and derivation of required necessary revisions
  - Research on items necessary for safety regulations through analysis of FRAV-VMAD guideline and EU Regulation 2022/1426, etc.

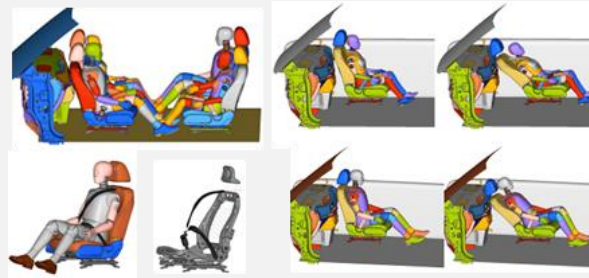
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# Development of collision safety assessment technology

- Development of assessment technology for interior safety devices in AV
  - Study on the seating arrangements and movement prediction of AV passengers
  - Development of analytical/simulation model for seats and interior safety devices in AV
  - Research on injury criteria for passengers of AV
- Development of safety assessment technology for AV during collision
  - Analysis of current safety regulations related to collision and derivation of required necessary revisions
  - Analysis of real-world accident data and derivation of collision scenarios in AV
  - Analytical/simulation study on test methods optimized for AV passenger protection





# Future Plan

- **Development of driving scenarios and scenario library**
  - Scenarios developed from this project will be uploaded to the library to share with ADS manufacturers and research institutes for their use.
- **Study for ADS regulations**
  - Monitoring of the results from the ADS IWG discussions
  - Harmonizing the minimum performance criterias and evaluation methods from UNR and GTR in the vehicle safety regulations of Korea
- **Development of collision safety assessment technology**
  - The safety assessment protocol for collisions developed in this project will be implemented at KNCAP in the near future.



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# Thank you

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