

- 1. Introduction Use Case**
- 2. Modules**
- 3. Required changes**
- 4. Timeline**

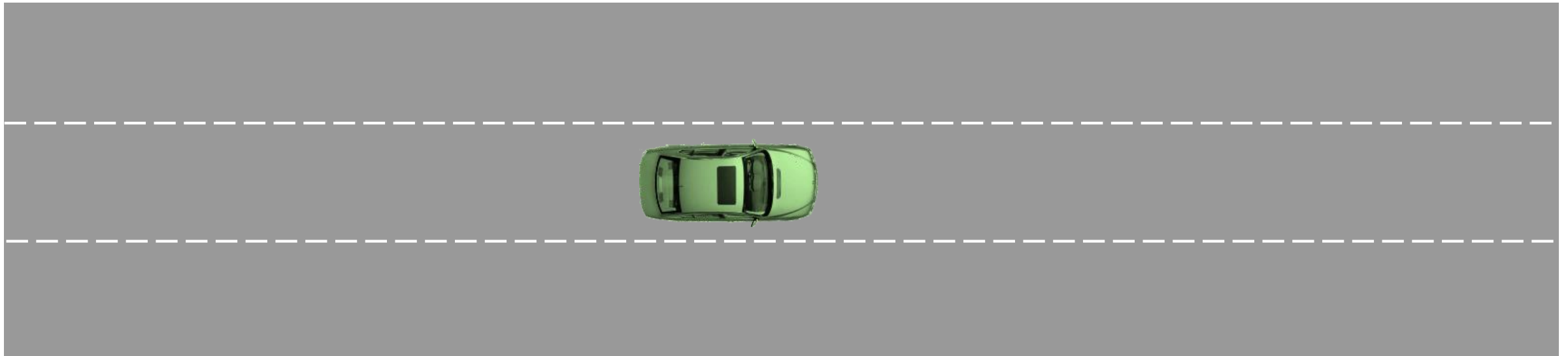
USE CASE

AEB VALIDATION USING CUT IN SCENARIO



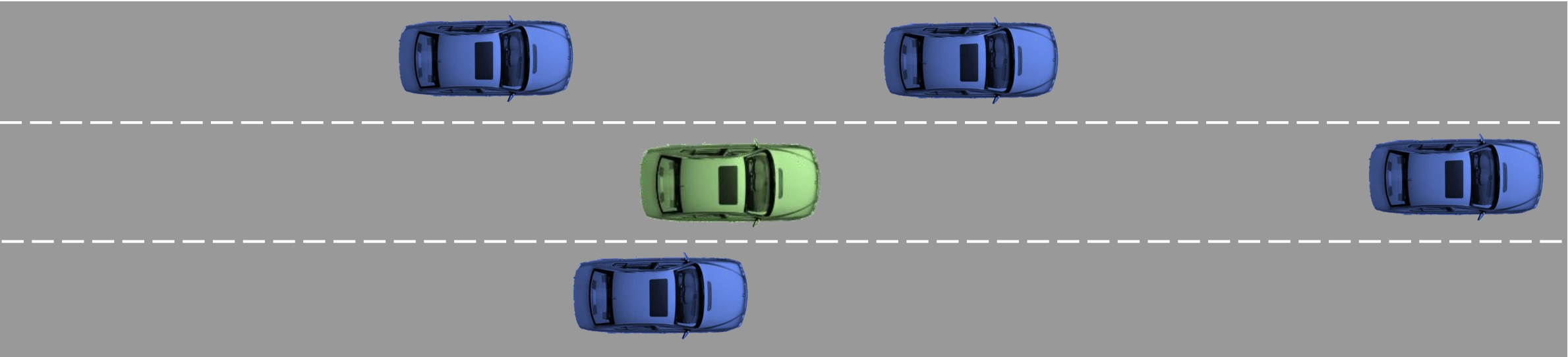
USE CASE

AEB VALIDATION USING CUT IN SCENARIO

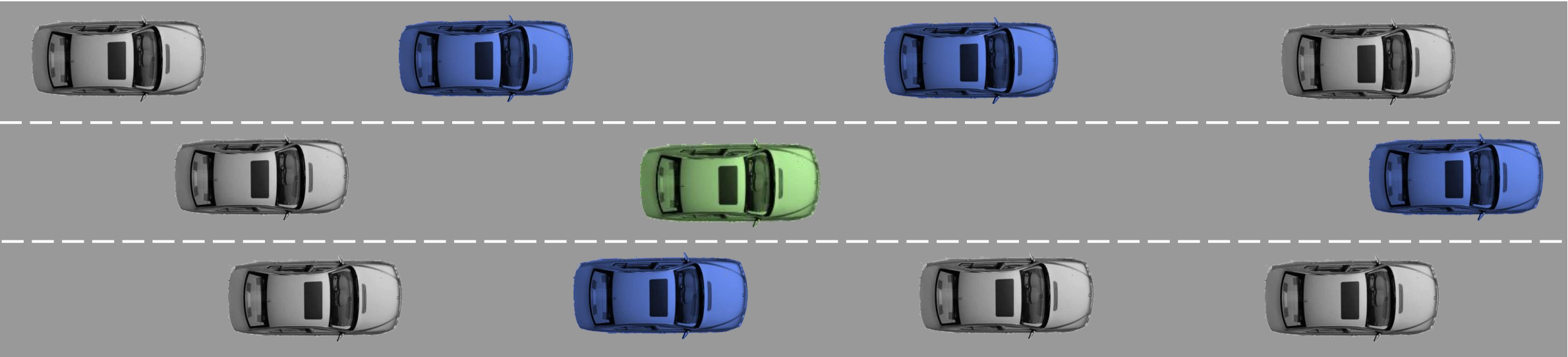


USE CASE

AEB VALIDATION USING CUT IN SCENARIO

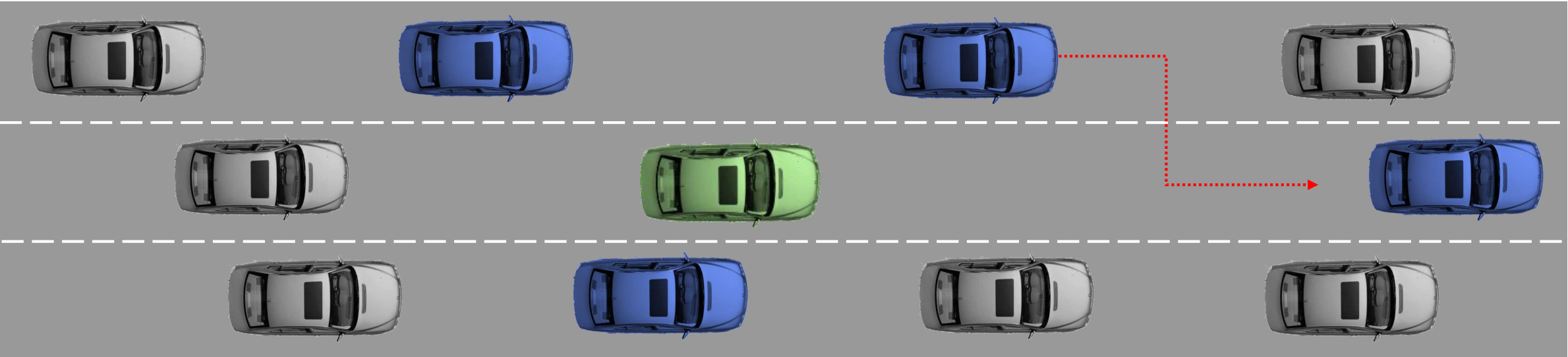


USE CASE AEB VALIDATION USING CUT IN SCENARIO

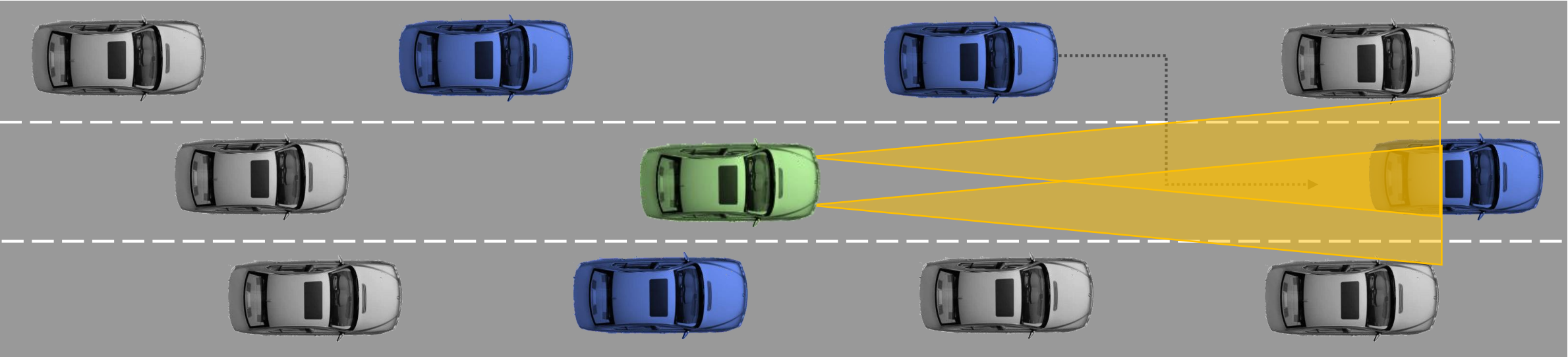


USE CASE

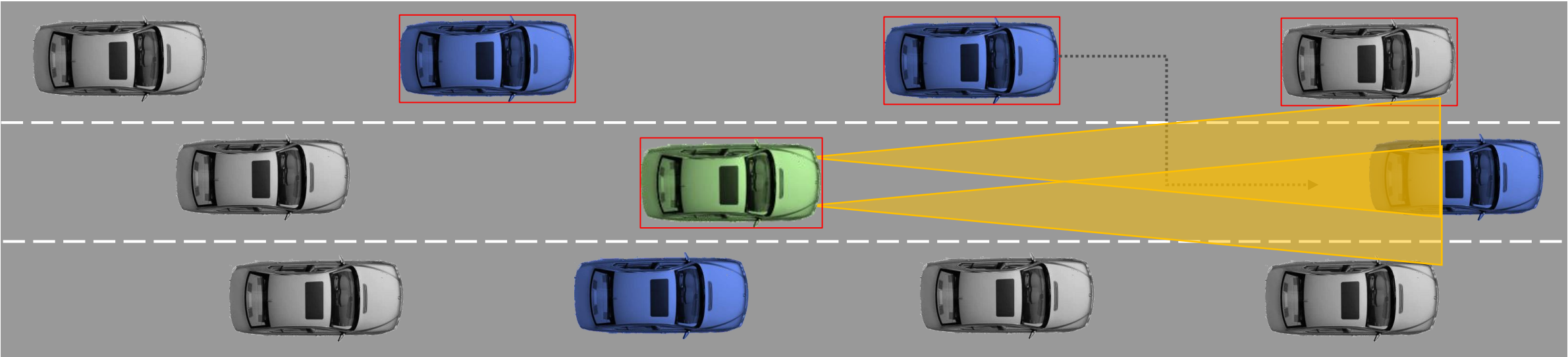
AEB VALIDATION USING CUT IN SCENARIO



USE CASE AEB VALIDATION USING CUT IN SCENARIO



USE CASE AEB VALIDATION USING CUT IN SCENARIO



USE CASE

AEB VALIDATION USING CUT IN SCENARIO

- Given is a road with 3 lanes
Scope: OpenDRIVE import, OSI ground truth generation
- An **ego car** is placed at the center lane, surrounded by **4 scenario cars**.
The rest of the scenery is filled with **common cars**.
Scope: OpenSCENARIO import, SpawnLogic, OSI world representation
- At a given time, one of the scenario cars performs a sudden lane change, following a predefined trajectory.
Scope: TimeTriggerEventDetector, Manipulator, TrajectoryFollower
- Several cars are equipped with a simplified automatic emergency brake (AEB), which takes the input of two geometric sensors. TBD!
Exemplarisch nur Ego
Scope: Stochastic Distribution of Modules, AssistantSystems, GeometricSensors
- Each AEB automatically merges the information from its sensors and starts braking in case of emergency.
Scope: AssistantSystem, SensorFusion, SignalPrioritizer
- The simulation is repeated several times with stochastic variation to see the variability of the AEBs intervention.
Scope: Stochastic Placement of Agents, Output