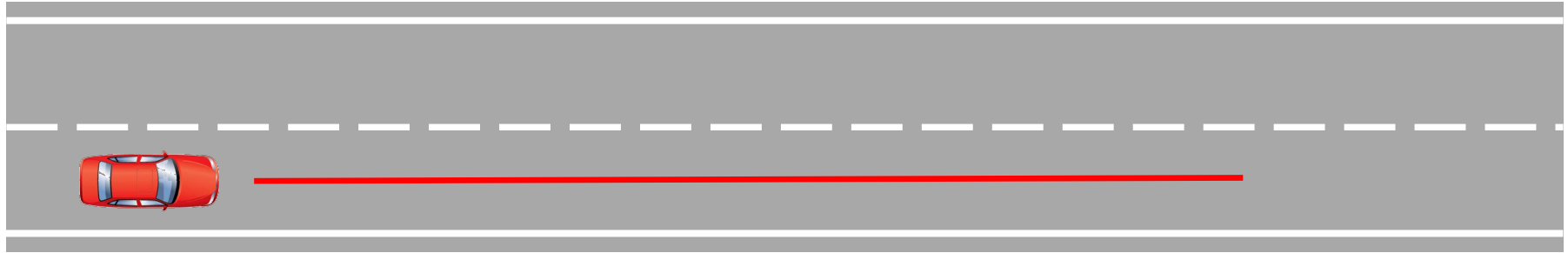


# Presentation of ACSF C tests

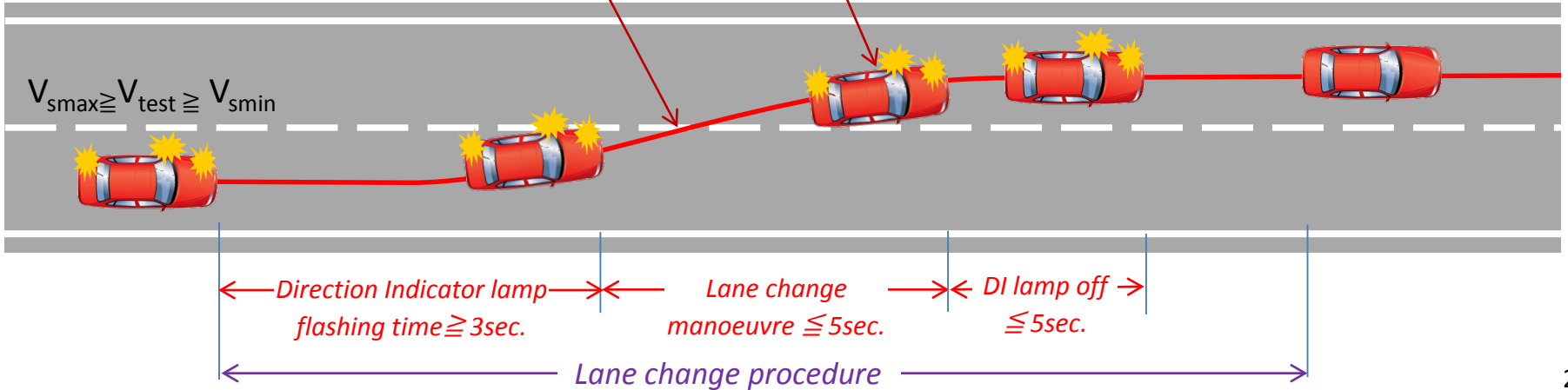
Industry input to ACSF IG  
14<sup>th</sup> meeting  
August 2017, Köln

# 3.5.1. Lane change functional test

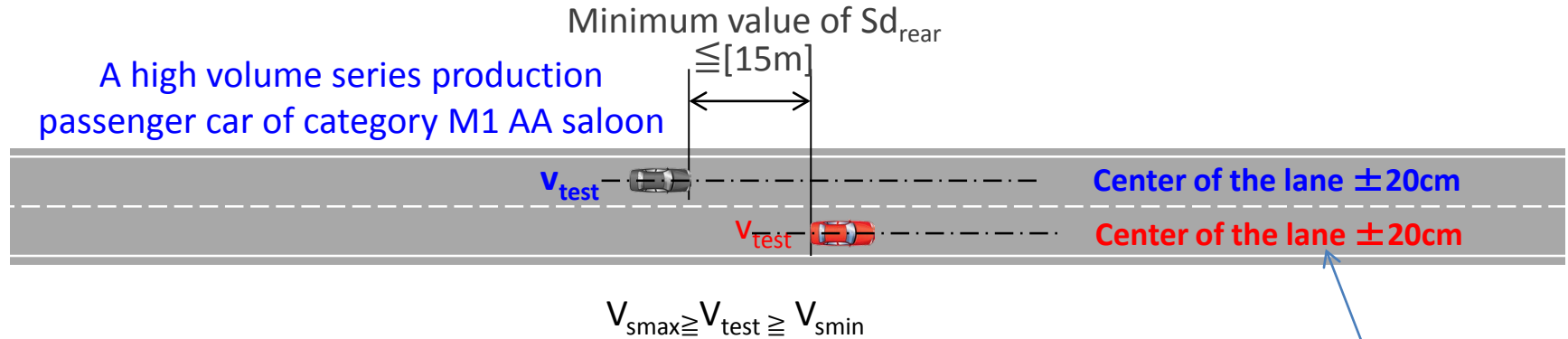
## Conditions are not met



## All conditions are met



## 3.5.2. Abort of lane change test



Is it needed?

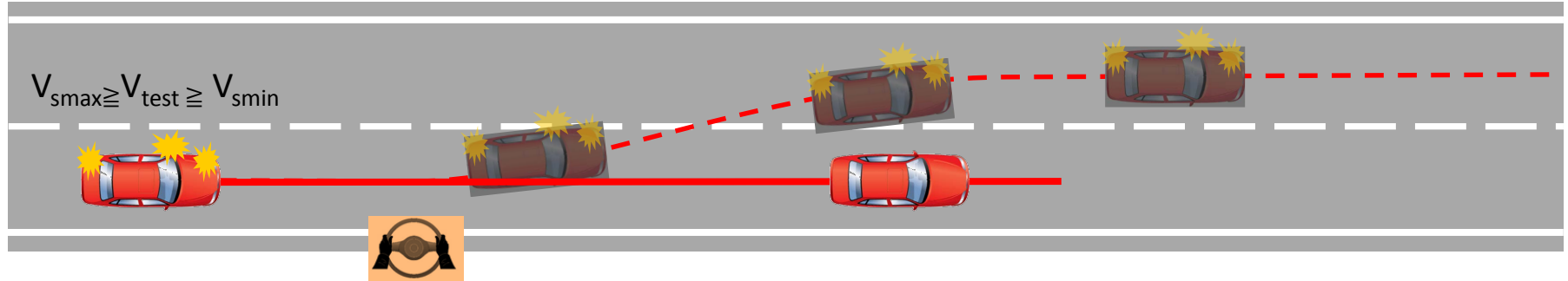
*The driver shall initiate the lane change by the deliberate action.*

- 1. The lane change procedure does not start.*
- or*
- 2. The lane change procedure is canceled no later than 10 seconds after the deliberate action of the driver, if the lane change procedure has started and the manoeuver is delayed. The driver is informed that the manoeuver is delayed.*

## 3.5.3. Overriding force test

### Applicable Paragraph

5.6.5.3

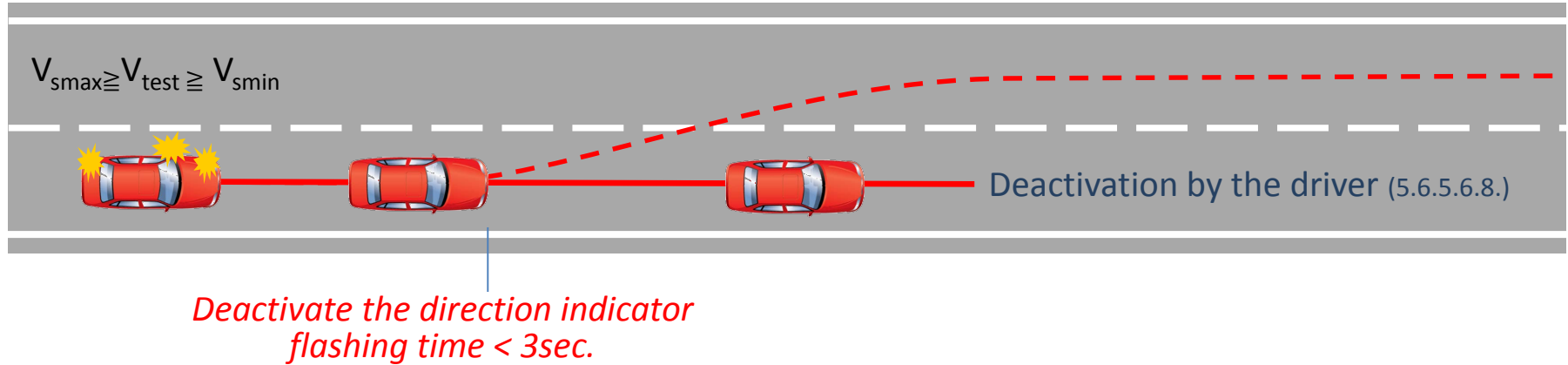


*firmly maintain the steering in the straight direction*

### Procedure

1. *Initiate lane change*
2. *Before the start of the lane change manoeuvre, the driver shall firmly maintain the steering in the straight direction.*
3. *Measure the steering effort*

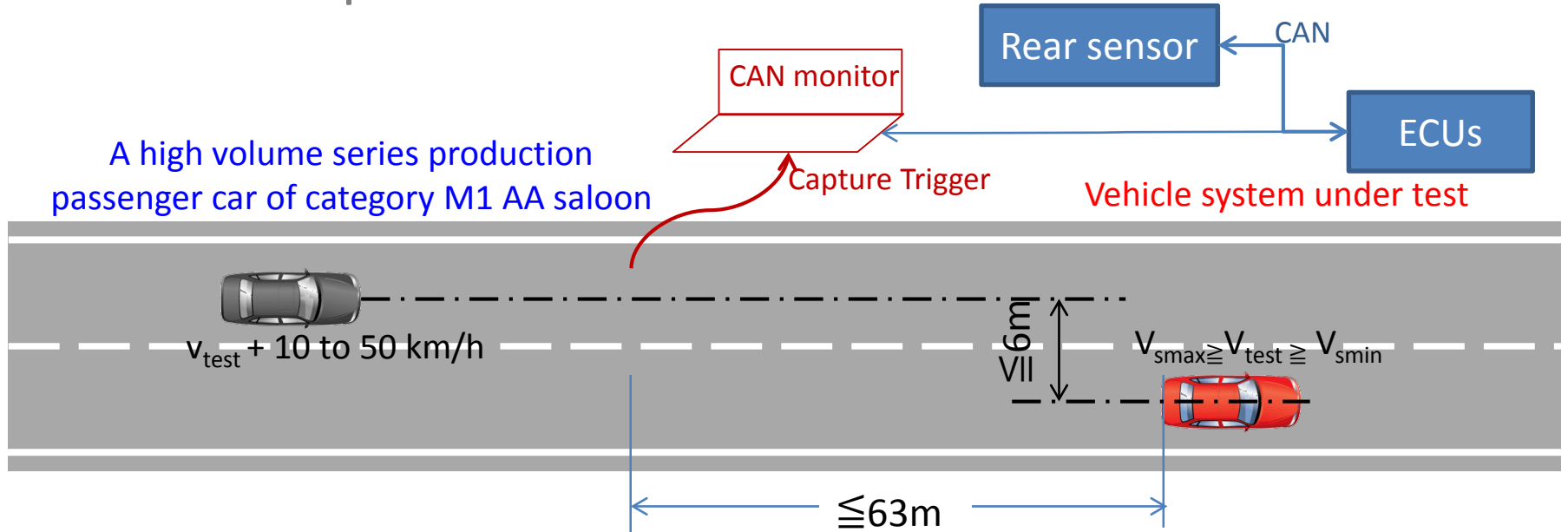
## 3.5.4. Deactivation test



### Procedure

1. Initiate lane change
2. Before the start of the lane change manoeuvre, the driver shall deactivate the direction indicator.

### 3.5.5. Sensor performance test



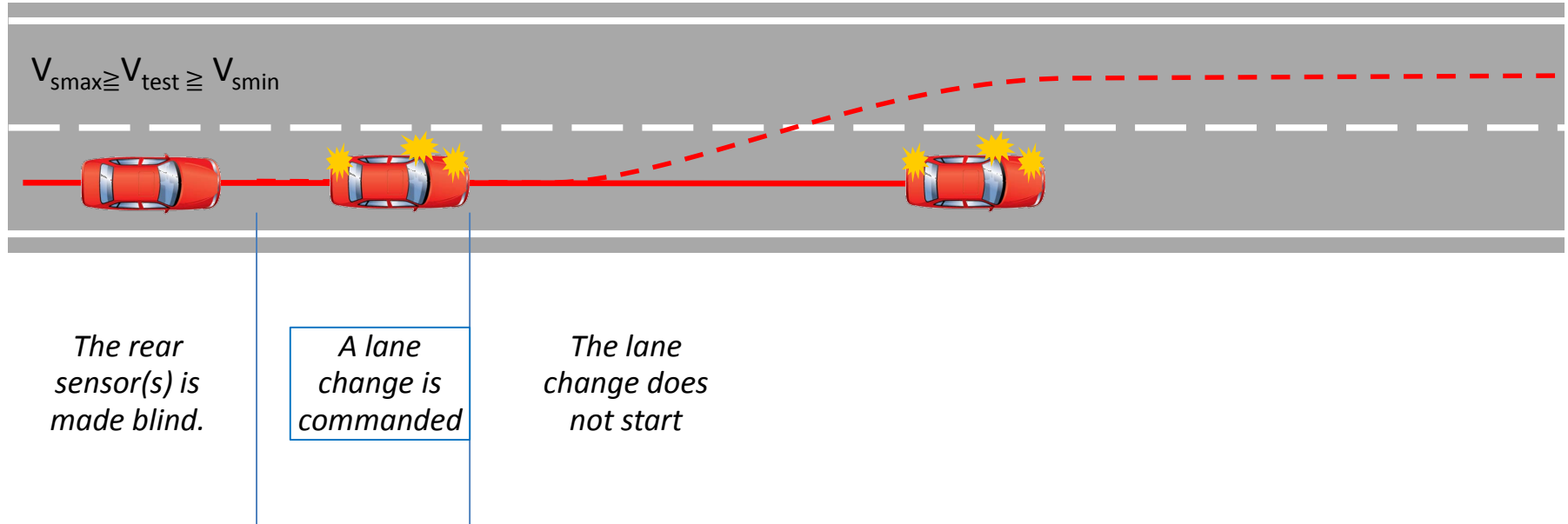
#### Measurement

Capture the sensor data at the timing the rear vehicle is detected  
Confirm the actual distance to the rear by using GPS data of both vehicles  
**Connection of CAN monitor system should be allowed.**

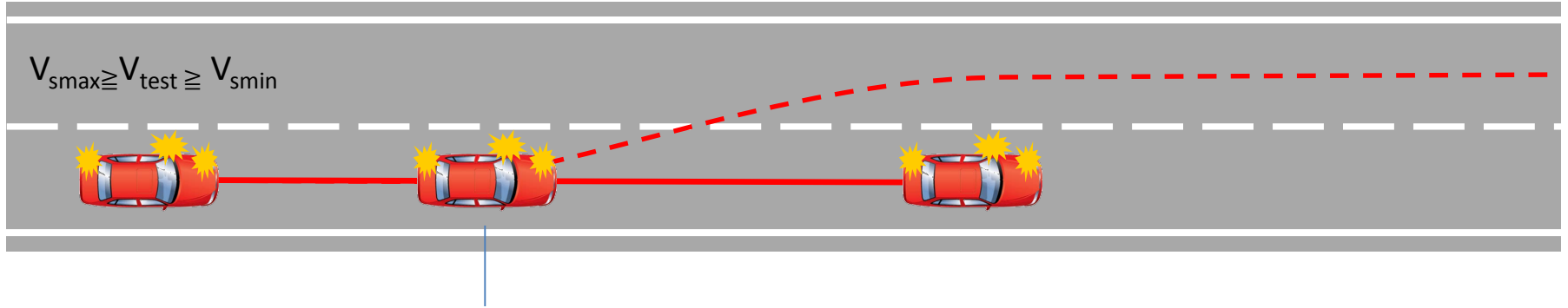
**The test shall be repeated with a motorbike (L3), and the distance shall be set at 55m.**

## 3.5.6. Sensor blindness test

Extra-test proposed by industry



### 3.5.7.3. Engine start/run cycle test (Phase 1)

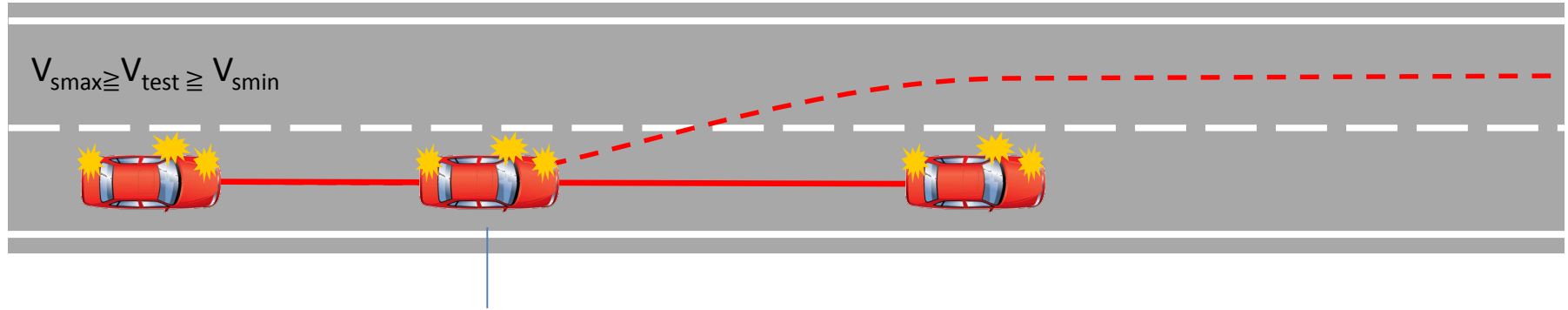


#### Procedure

1. A new engine start/run cycle
2. Check ACSF C is default off.



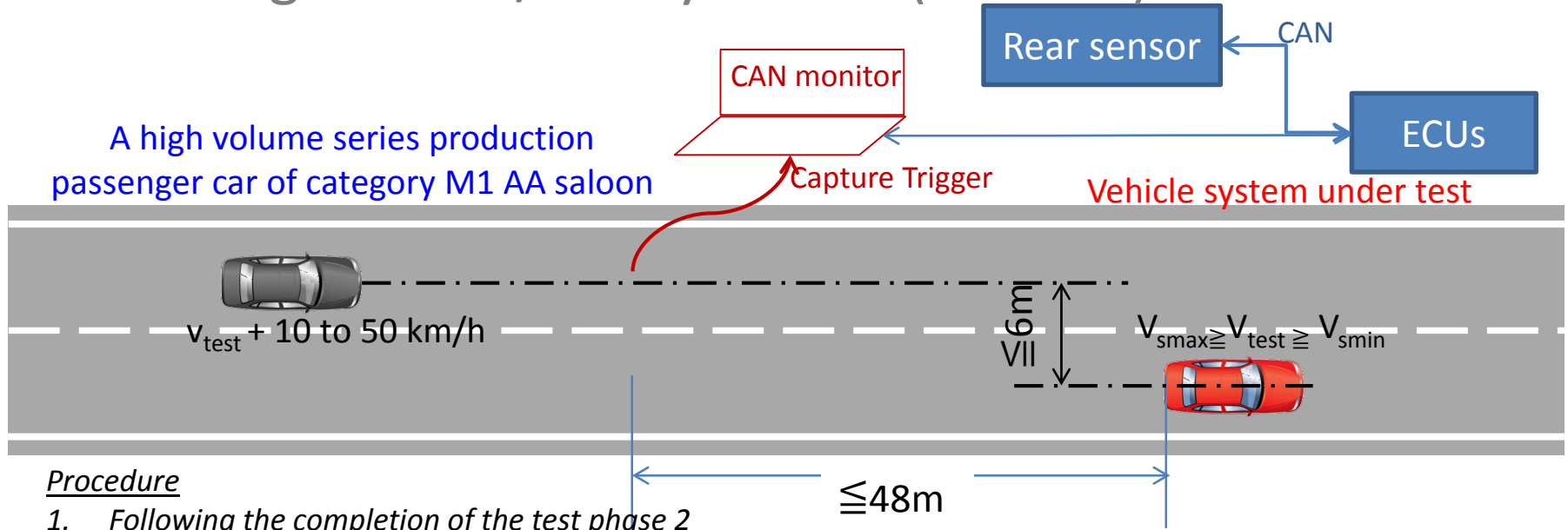
### 3.5.7.3. Engine start/run cycle test (Phase 2)



#### Procedure

1. Perform phase 1
2. The driver switches on ACSF C
3. The driver commands a lane change right after ACSF C switched on → No lane change

### 3.5.7.3. Engine start/run cycle test (Phase 3)



#### Procedure

1. Following the completion of the test phase 2
2. A vehicle approaches from the rear on the adjacent lane
3. After the rear coming vehicle entirely passed the test vehicle, the driver commands a lane change.

#### Measurement

- Capture the sensor data at the timing the rear vehicle is detected
- Confirm the actual distance to the rear by using GPS data of both vehicles
- **Connection of CAN monitor system should be allowed.**

#### Test is passed if:

- The lane change is performed and
- The distance between both vehicles at the time ACSF detects the rear coming vehicle is  $\geq 48\text{m}$