

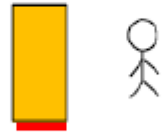


Performance Requirements



Lane Keeping -

Do not cross line



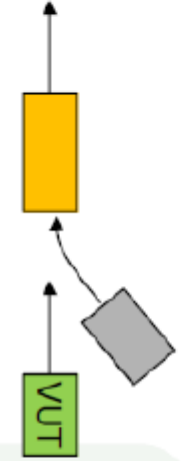
Stopping for a traffic participant in lane -

Avoid collision



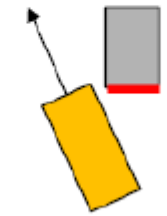
Following a vehicle -

Maintain safety distance



Lane change into lane -

Avoid collision up to specific parameters



Other vehicle lane change out of lane -

Avoid collision up to specific parameters

General

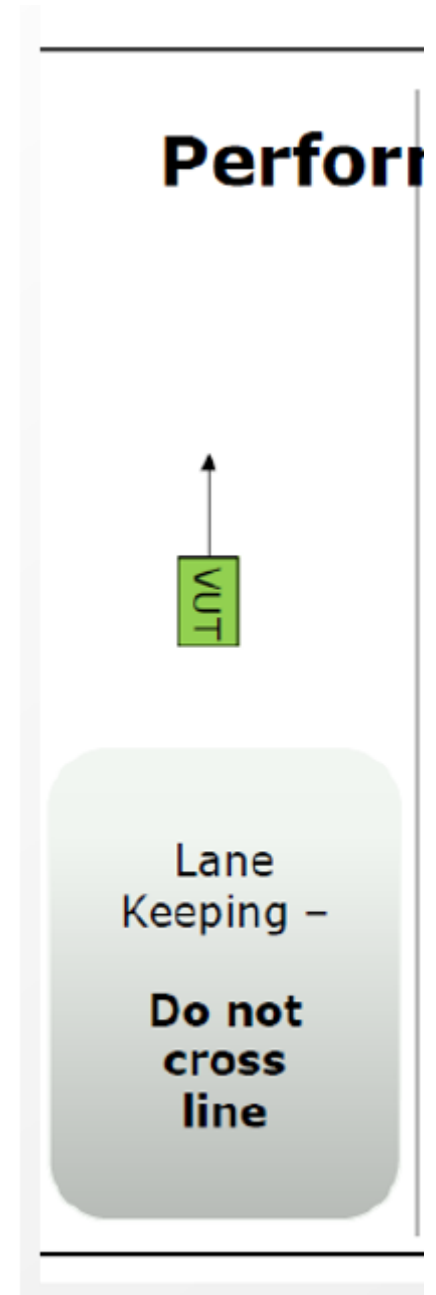
- Perform parameter variations (speed, curvature, speed profile)
- Different target types (car, motorcycle)
- Different offsets

Scenario1: Keep Lane

Pass/Fail Criteria (either already defined in regulatory draft or still needed):

- Not crossing lane markings

Relevant Parameters:



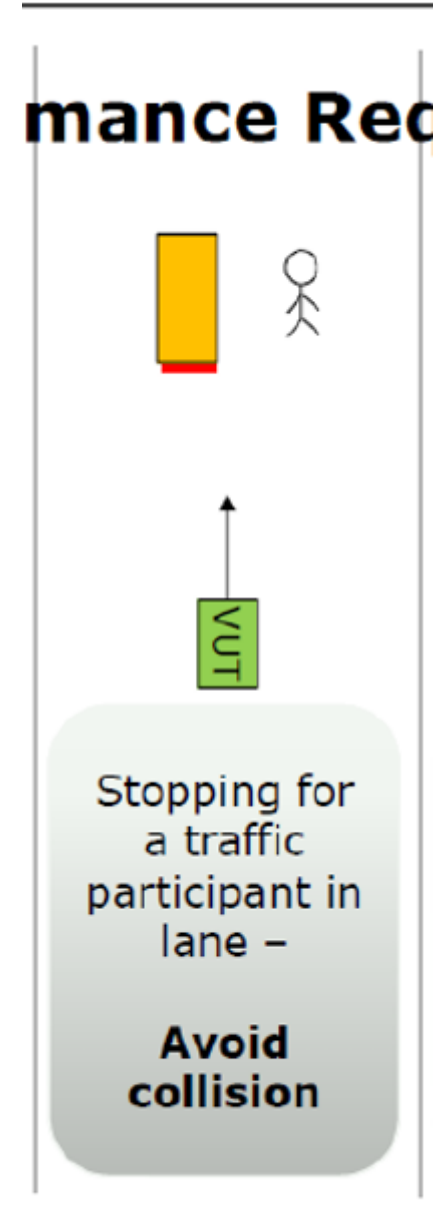
Scenario2: Stationary traffic participant in lane

Pass/Fail Criteria (either already defined in regulatory draft or still needed):

- **Avoid Collision** or **Only use regular Maneuver (max. -5m/s^2)**

Relevant Parameters:

- **Type of target:** vehicle (car, motorcycle), road user, blocked lane
- **Obstruction:**
- **Position in Lane:**



Scenario3: Following Vehicle

Pass/Fail Criteria (either already defined in regulatory draft or still needed):

- Keep safety, adapt speed without Emergency Maneuver
- Don't exceed maximum speed

Relevant Parameters:

- Lead vehicle dynamic behavior (acceleration, deceleration, ...)

Requirement



Following a
vehicle –

**Maintain
safety
distance**

Scenario4: Cut-in

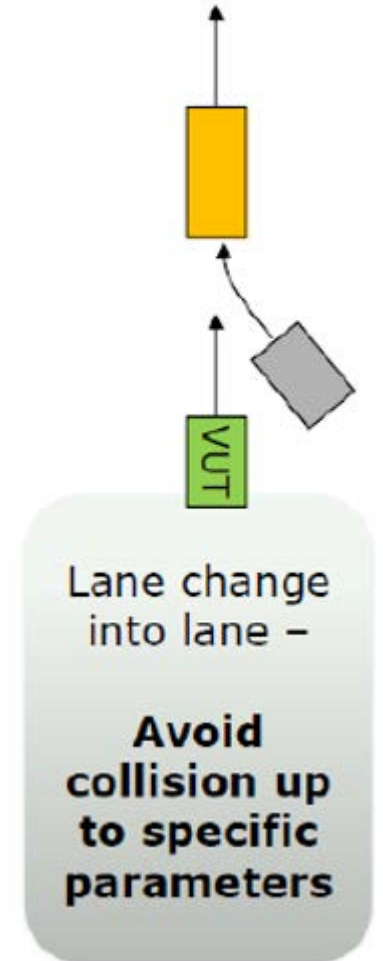
Pass/Fail Criteria (either already defined in regulatory draft or still needed):

- Avoid collision (up to parameter xxx)
- Don't change control strategy above parameter xxx
- Restore safety distance
- Adapt speed
- Detection capabilities
- Emergency Maneuver

Relevant Parameters:

- TTC (with regard to which point)
- Behavior of cut-in vehicle (constant speed or decelerating or accelerating)
- Distance incl. Possible minimum distance
- Speed difference
- Required deceleration to avoid

S



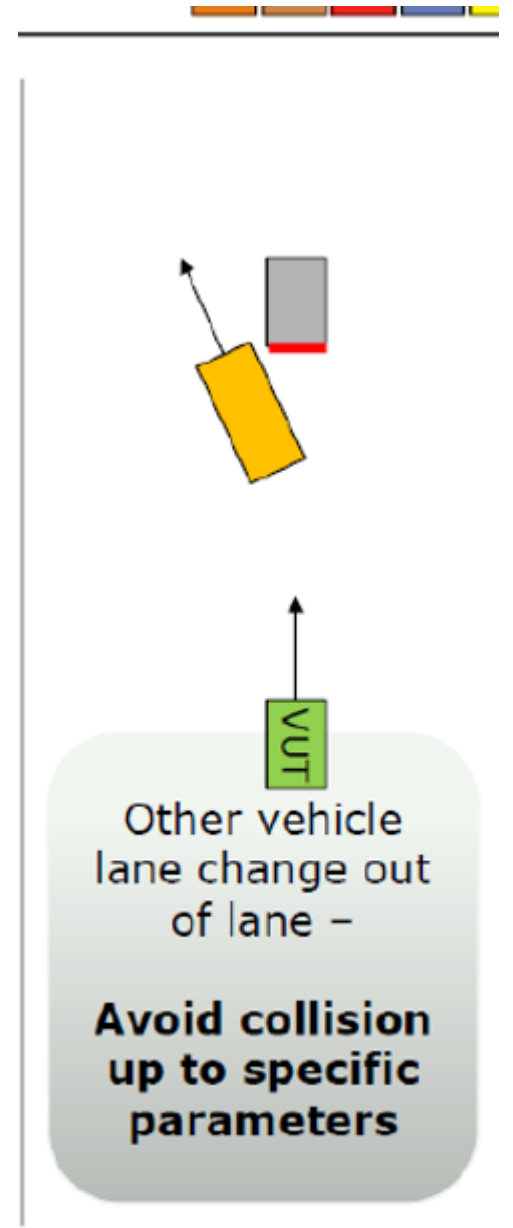
Scenario5: Cut-out

Pass/Fail Criteria (either already defined in regulatory draft or still needed):

- Avoid collision for any type of cut-out maneuver that doesn't lead to a collision with the stationary vehicle

Relevant Parameters:

- Target type: vehicle (car, PTW?)
- Position of target



General others

Dedicated means to activate and deactivate

Default status of new engine start/run

System active if driver is in driver seat & belt is fastened

System active if driver is available

System active if no failure

System active if DSSAD is operational

Same dedicated means to activate and deactivate manually

Means of desactivating protected against unintentional action

At time of desactivation driver must be in lateral control

Desactivation by input to driving controls

Desactivation during an ongoing transition demand

Desactivation in case of severe failure

Driver presence

Criteria for deeming driver availability

Driver attentiveness

Other activities than driving task

+ override

Additional

- Mandatory real road test drive after passing the track testing
- Additional other test cases may be tested (e.g. separation of highway, exiting and entering vehicles, partially blocked lane, tunnel...)
- Evidence regarding false reaction avoidance performance + evaluation (test) -> to be checked whether already sufficiently adressed
- TS shall confirm/describe the detection areas to the front and lateral