

OICA/CLEPA Input

to the

Special interest group on UN-R 157

with regard to

Types of maneuvers crossing lane markings

Types of maneuvers crossing lane markings and a proposal how to regulate them

MRM Lane Change

A lane change across regular lanes of traffic as well as to the hard shoulder performed in order to reach a target stop are.

How to regulate?

Could be regulated by adding provisions to the section 5.5.

Minimal Risk Manoeuvre on the basis of the already established provisions for UN-R79 Risk Mitigation Function.

Evasive steering crossing lane markings

A steering maneuver performed when there is an imminent risk of collision.

How to regulate?

By adding provisions in the section 5.3. **Emergency Manoeuvre** on ensuring not to endanger other road users during the manoeuvre.

Regular Lane Change

Any lane change that is not performed during an MRM is considered a regular lane change.

How to regulate?

Could be regulated in a separate section 5.2.6. **Regular Lane Change**, by identifying in which regard a regular lane change differs from an MRM lane change.

Lateral offset crossing lane markings

A maneuver that is performed when required by traffic rules (e.g. forming an emergency access corridor) or when operation cannot be continued within the current lane of travel while there is no imminent risk of collision yet.

How to regulate?

This could be addressed by the already agreed provision

“5.2.1. *The activated system shall keep the vehicle inside its lane of travel and ensure that the vehicle does not **unintentionally** cross any lane marking (outer edge of the front tyre to outer edge of the lane marking). [...]*”

without any further modifications, as safety is already ensured by par. 5.1.1. (free from unreasonable risk) and 5.1.2. (compliance with traffic rules).

Generic lane change

Building up
intention

Checking
surroundings

Pre-indication to
other traffic

Moving to other
lane

Resume lane
keeping

**„No useless
maneuvers“**

- Slower moving lead vehicle
- Routing
- Blocked lane
- Lane merge
- Perform MRM

**„Don't claim occupied
space“**

- Road users beside ego
- Approaching vehicles
- Other road users' intention

**„ Behaviour
foreseeable for others“**

- Turn indicator
- Timing
- Starting position

**„ Perform Manoeuvre in
a straight manner“**

- Timing
- Continuous movement
- Abort criteria

**„Behaviour
foreseeable for others“**

- Release indicator
- Stable lane position