Comparison of
Cat.C HMI solution and
vehicle without Cat.C

Industry input to ACSF 11th meeting

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V2.5

Manual lane change without ACSF C

B1+C Lane Change - HMI solution

1. Necessity of a lane change

Visualy by the driver

Visualy by the driver

2. Detection of free space in the adjacent lane

The driver monitors the environment

The driver monitors the environment

Manual lane change without ACSF C	**B1+C Lane Change - HMI solution**

3. Initiation of the lane change procedure

Activation of the direction indicator by the driver

Number of flashes depends on driver

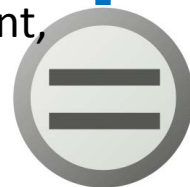Activation of the direction indicator and „arming" of Cat.C lane change by the driver (by the stalk or another means)

Minimum 3 flashes in all cases.
Use of direction indicator guaranteed.

4. Monitoring of the traffic

The driver monitors the whole environment (front, side and rear).

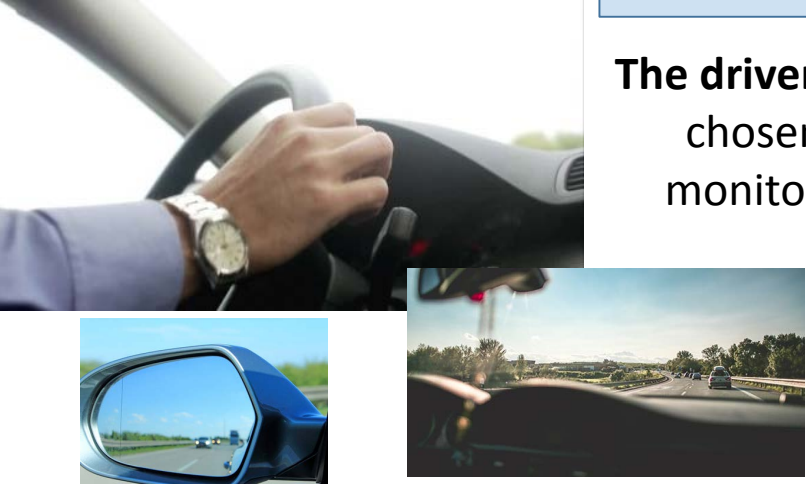The driver monitors the whole environment (front, side and rear).

ACSF supports the driver until start of manoeuver → favors good monitoring by the driver.

| **Manual lane change without ACSF C** | **B1+C Lane Change - HMI solution** |

5. Lane change manoeuver

The driver steers to the chosen lane and monitor the traffic

The driver initiates the manoeuver, the system assist the driver to steer into the chosen lane, while the driver can pay more attention on the traffic situation

Reduction of the workload + Smooth / standardized manoeuver

6. Finalize the lane change

Back to driving in the lane (w or w/o B1).

Back to B1

Conclusions

❑ B1+C HMI solution:

- brings safety advantages during lane change vs no ACSF and vs B1 only

- brings no drawback vs no ACSF and vs B1 only

❑ Blind spot / rearward sensors bring the same safety advantages if they are implemented with or without ACSF C

❑ Current ACSF C solutions on the market are using « pre-existing blind spot / rearward detection systems-functions »

- *Since they are there, let's use them with ACSF C...*

- *They are not a must for a safe B1+C...*