

## Interest for ACSF category C

### Safety related items / Features

- Ensures activation of flashing indicator in case of a lane change
- Smoother - standardized LC
  - Better traffic flow
  - Prevents aggressive driving / educates drivers, encouraging good driving behaviour
- Reduce driver workload, e.g. on CVs (more time for monitoring / checking critical situations)
- A natural supplement to B1 / increases usage rate of the assistance system
- Drivers are expecting continuous assistance even when changing the lane
- Comfort for driver

### Strategy

- Step wise introduction of automation, e.g. for CVs (likely not to start with cat D or E, until the trailer is involved)
- Get social acceptance / Create some trust in the systems
- Affordable entry systems for automation
- Makes B1 more attractive, leading to higher market penetration rate

### Misc.

- Make technology visible
- Commercial interest (UNECE)

### Additional information

'A comprehensive examination of naturalistic lane changes' was published by the U.S Department of Transportation's National Highway Transport Safety Administration (NHTSA) in 2004.

With regards to the use of the direction indicator two studies were cited:

- In one study it found that during 8% of lane changes the turn signal was not used and in another study, it was found that 14.6% of drivers did not use their turn on highways (10.3% for city streets).
- The distribution of turn signal onset time ranged from -2.42 to 3.62 s (with 0 indicating lane-change start). In other words, the manner in which turn signals are used may vary greatly among drivers, with some drivers activating the turn signal after beginning the lane change manoeuvre.

The implementation of an ACSF Category C function will encourage the driver to use the direction indicator and to perform the lane change manoeuvre in an appropriate manner, which in turn may help reduce the number incidents caused during a lane change.