

ACSF B2 and C2

Industry expectations from ACSF IG Tokyo meeting

Industry input to ACSF IG
16th meeting
January 2018, Tokyo

Background

- During the past 2 years, ACSF IG has developed R79 series 02 and 03 for assistance systems where the driver is required:
 - to monitor the road at all times (i.e. no side activities), and
 - to resume driving whenever necessary or demanded.

In the case of ACSF B1 and C, the driver was even required to be **hands-on**.
Despite not explicit in UN R79, such systems are **SAE level 2**.
- In June, “WP29 agreed to **request GRRF to address SAE level 3 and 4**, to defer the document (WP.29-172-08) to GRRF and to request GRRF to report on their view of the document at the November session of WP.29”.
- In November, WP29 adopted the **extension of ACSF IG until March 2019**:
 - to deliver ACSF B2 (hands-off in the lane, highway-only) and
 - to consider the need for an ACSF C2.

ACSF B2 - Industry expectations

- No formal decision was made at WP29 nor at GRRF, regarding the level of automation of ACSF B2.
- The question is now whether ACSF B2 should be considered by the ACSF IG in the context of a level 2 and/or level 3 system.
- Status of the market:
 - Level 2 hands-off systems in terms of B2 have **already been introduced** on some markets.
 - First level 3 Hands-off systems are in development and are expected to be **on the market soon**.
- **Industry expectations from ACSF IG:**
 - Consideration of the **levels of automation 2 and 3** in the context of UNECE IWG ITS/AD (see document ITS-AD-13-03) is needed for the on-going work of the IWG ACSF, with respect to category B2.
 - Industry sees the **urgency** to develop requirements and enable the approval of category B2 systems of level 2 and level 3, **within the defined mandate of the ACSF IG**.

ACSF C2 - Industry expectations

- 2-steps HMI was proposed by Germany and Japan in Osaka (ACSF-09-04):
“...Thinkable is a mandatory second confirmation of the lane change... These HMI requirements,..., should be developed by OICA/CLEPA as an alternative for the sensor requirements.”

It was further developed by G in Paris (ACSF-10-03) and in Berlin by G/J (ACSF-11-03). At ACSF-12 in Seoul, C1 was finally prioritized.

- At GRRF-85 of December, the text of ACSF C1 (now called C) was **adopted**.
- Industry still have a **strong interest** for ACSF C2, e.g. regarding:
 - C2 is a more natural HMI, closer to manual lane change: the driver have full control on the timing of the 2 steps of a LC (thus the time may be increased)
 - Current C requirements are design restrictive regarding the HMI
 - HCVs have a particular interest for C2
 - Automatic deactivation of direction indicator causes unnecessary technical problems; this may be corrected with C2
- **Industry expectations from ACSF IG is to start the drafting phase to cover C2.**