(119th GRSG, 6-9 October 2020, Agenda item 10)

GRSG TF on FVA - Kick off Meeting

Notes

Date: 08.09.2020 2:00PM

Participants:

Olivier Fontaine	OICA
David Francis	OICA-SMMT
BENOIT MOREAU	OICA-PSA
Akinari Hirao	OICA-JAMA
ALEXANDRA-BRIGITTE SCHOLZ	OICA-PSA
Rania Kiesow	Germany-KBA
Bruce	Korea-KATRI
Hyoung Gu, Kim	Korea-KATRI
Tatsuya Ota	OICA-JAMA
Ansgar Pott	OICA-Hyundai
Moosong Pyun	Korea-Kikas
Kilho Maeng	Korea-Katri
Marc Larouche	BRP
PHAN Vuthy	OICA-Renault
Perl, Andreas	OICA-VDA
Francesco Siano (Guest)	OICA-GM
LADRET PICIORUS Romain (GROW)	European Commission
Marcus (Gast)	OICA-Audi
Rudolf Gerlach	Germany-TÜV Rheinland
Lehner, Barbara (EVFT)	OICA-MAN
Mahieddine Bellebna (Mercedes-Benz AG) (Gast)	OICA-Daimler Benz
Schaber, Lisa (ETB/1)	OICA-Volkswagen
Julian Brouté de Hita	ANFAG
Masahiro Oda	CLEPA-Denso
Lammers, Hans	The Netherlands - RDW
Justo Sancho (Invitado)	jsalpanes@dgt.es
Ramon Gouweleeuw	The Netherlands - RDW
Mohit Tyagi (ACEA) (Guest)	OICA-ACEA
Justo Sancho	Spain - DGT
Mueller von Kralik, Stephan	CLEPA-Webasto

1) Background

- Based on discussions with Type Approval Authorities, OICA asked GRSG during its 118th session to clarify the legal situation in case of extended Head Up Displays with document GRSG/2020/12 (the discussion was started by OICA during GRSG-116 with GRSG-117-27).
- During GRSG-118, NL informed to be in favor of provisions for such systems. This was supported by several CPs like Germany, France and UK. NL also informed that they are currently refusing approvals if an extended HUD is installed while other Type Approval Authorities have granted approvals to UN R 125 for vehicles having such a system.
- GRSG agreed to further review and discuss this question in a dedicated TF and asked OICA to organize the Kick-Off meeting.

2) Organisation

- Mr. Ramon Gouweleeuw (RDW) volunteered to act as the chair of this TF and Mr. Ansgar Pott (OICA-Hyundai) volunteered as secretary. The TF members agreed.
- Interested experts are invited to join the discussions and are asked to submit their contact data to A. Pott (apott@hyundai-europe.com). He will set up a mailing list for further communication.

3) Legal Situation Today



TAAM Question NL ECE R125.01 Augmen

Document:

- RDW informed about their questions to EU-TAAM (document attached) on the consideration of Augmented Reality for UN R125 approvals:
 - 1) Do you consider these projections "obstructions" as described in article 5.1.3.?
 - 2) Did you issue any WVTA according to 2007/46 with a form of Augmented Reality?
 - 3) If the answer to Q2 is yes, what were the conditions of approval?
 - 4) If the answer to Q2 is no, why not?
- NL received only few answers from other Type Approval Authorities but these answers showed that an extended HUD is seen as obstruction.
- NL sees the main key in current discussion in the question if such information -given
 to the driver via an extended HUD- can be seen as obstruction or not. If it is not seen
 as an obstruction it will consequently not be further reviewed during the R125
 approval process. This will most likely result in the situation that some Authorities
 are granting an approval to 125 while others are refusing. RDW proposed to define
 in a first step "obstructions".
- OICA volunteered to further review and to work out with RDW a proposal for the definition of obstructions until next TF meeting.
- KATRI informed that discussions on an extended AR-HUD started also for the Korean market. KATRI will give more information during next TF meeting

4) Discussion on document GRSG/2020/12

4.1 Definitions

Text in current proposal:

- "2.19. Head Up Display (HUD): Visual information displayed in area "S" as defined in paragraph 5.1.3.4.
- 2.20. Field of Vision Assistant (FVA): Visual information displayed in the transparent field of vision other than by the HUD to support the awareness of the driver in specific driving situations."
- It was agreed to further review the definitions and to add a definition for obstructions

4.2 Provisions

Text in current proposal:

- "5.1.3.5. The transparent field of vision as defined in paragraph 5.1.1. may be overlaid by information of a Field of Vision Assist. Such information shall be driving related only and limited to:
 - (a) Warning/Highlight hazardous traffic situation
 - (b) Warning/Highlight vulnerable road users or other road users which may be overseen

- (c) Information to maintain the distances to surrounding road users
- (d) Information to find and maintain the correct driveway

Other information may be given after agreement between manufacturer and technical service/approval authority. Examples of the above Warning/Highlights/Informations are given in Annex 5.

- 5.1.3.5.1. The symbols and graphics shown by the FVA shall disappear when the driving related situation defined above does not exist anymore.
- 5.1.3.5.2. The FVA shall highlight the real view and shall not fully mask objects.
- 5.1.3.5.3. The driver shall be capable to adjust the light intensity of the FVA and he shall be capable to switch off the FVA system."
- EC reminded that the technical performance of such systems can differ from simple systems to high tech systems and that the appearance of the scene in front of the vehicle can differ as such. In some conditions, an overlay of information could be without problems in others situations it could create a problem.
- Germany (TÜV Rheinland) confirmed, what was stated by the NL and asked for studies to ensure that an obstruction of the direct view and a distraction of the driver is not occurring. (After the meeting Germany offered to give a presentation about the results of the BASt Study during the next meeting)
- RDW stated that the BASt Study is focused on warning information, not on information for navigation.
- EC supported and asked for more information from studies already done or to be conducted.
- JAMA informed on ongoing studies to update their guideline for extended HUDs.
 Aim is to finalise the Study until End of 2020.
- OICA is open to a regulatory approach but reminded on the urgency as many
 manufacturers are ready to introduce such systems in near future. He reminded on
 the situation with restraint systems/airbags. Airbags were introduced without any
 regulatory provisions as benefit for the passengers and a regulatory activity started
 later to limit negative side effects. In the case of an extended HUD, negative side
 effects are for example the distraction of the driver.
- RDW informed to be fine with the 5.1.3.5. and especially the listed cases a) to d) but opposes to the sentence "Other information may be given…". In case that additional information have to be included, the legislative text could be modified in future after discussion at GRSG.
- § 5.1.3.5.2. is too vague and unspecific for RDW.
- OICA understands in principle but has difficulties to add further details as measurements for "masking" are very complicated (e.g.: objects and also the vehicle are not static in real world).
- Secretary proposed to go ahead with a two-step approach:
 - 1st step: to define basic provisions to enable the approval of extended HUD in short time. Basis could be the proposal for § 5.1.3.5. which would limit the negative side effect up to a certain level.
 - 2nd step: to define more detailed provisions, based on studies and further investigations to define and minimize remaining negative side effects.
 - → All to review if and under which conditions such an approach would be possible.

5) Next steps and next meeting:

- Definition of obstruction.
- Review proposal for 2-step approach and come with a revised proposal.
- Next meeting will be in the week of 12th October.