GRE TF "Autonomous Vehicle Signalling Requirements" (AVSR)

Document: AVSR-06-04

Date: 2022-06-24

# GRE Taskforce on Autonomous Vehicle Signalling Requirements (AVSR)

# 6<sup>th</sup> meeting

15<sup>th</sup> of June 2022, 9:00 – 15:00 CET SIS (Swedish Institute for standards), Solnavägen 1 E, Stockholm, Sweden.

## **Hybrid / WebEx-Meeting**

### **DRAFT REPORT**

|  |   | Documents  |  |  |
|--|---|--|--|--|
| 1  | Welcome and opening remarks   |  |  |  |
| Warm welcome by the chair to all participants, either taking part in person or online.   |   |  |  |  |
| 2  | Introduction of participants and organisational issues  |  |  |  |
|  | Puglisi gave some organisational information about the meeting in hybrid-fis reproduced in annex I of this report.  | Format. The attendance   |  |  |
| 3  | Adoption of the agenda  | AVSR-06-01   |  |  |
| OICA asked if there might be an error in the GRE report (as reproduced under item 5)? It is written "level 3 and below", but shouldn't it read rather "level 3 and above". The chair answered that he wants to keep it as general as possible, independent from the level of automation.  → Agenda is approved |   |  |  |  |
| 4  | Approval of the report of the previous session  | AVSR-05-02   |  |  |
|  | - Report 5 <sup>th</sup> meeting –WebEx, 13 <sup>th</sup> of March 2019   |  |  |  |
| No comments to the report of the last meeting → report is approved   |   |  |  |  |
| 5  | <ul> <li>"(Proposal for) changes of the original Task of TF "AVSR"</li> <li>Added new item (in bold) to the original Task:</li> <li>Task:</li> <li>a) Is there a safety requirement for AV's to provide signals to indicate their status and to communicate their next intended actions?</li> <li>If so, shall such signals</li> <li>be visual,</li> <li>audible,</li> <li>or a combination?</li> </ul> | Informal documents:<br>GRE-86-12<br>GRE-86-13<br>GRE-86-20-Rev.1 |  |  |

b) Develop a proposal for necessary changes of R 48 in the context of driver assistance systems, advanced driver assistance systems and autonomous vehicles to implement the alternative switching of light signalling functions independently of the driver by separate technical units.

Task a and b are considered equivalent. Task b has priority as long as the required input from GRVA/ FRAV regarding task a is missing.\*\*"

"GRE took note of WP.29 and AC.2 discussions on coordination of work on Automated Driving Systems (ADS), including the conditions, if any, under which an ADS external lighting signal should be activated (GRE-86-13). While awaiting GRVA recommendations and AC.2 guidance on the issue, GRE stressed the need to screen UN Regulation No. 48 to identify which amendments would be necessary to cater for ADS level 3 and below. GRE noted that TF AVSR would convene a kick-off meeting on this topic in June 2022 and encouraged all experts to participate. \*\*\*"

The chair explained that the focus of today's meeting is not about the ADS signal but to work on UNR48 to make it mature & future-proof for autonomous vehicles.

Review of definition(s) of "ADS" provided by GRVA (if any) to determine the equivalence to the "Driver"

first idea independent of GRVA:

"System" means the part of the vehicle which controls its operation; it may be operated by driver support features or automated driving features.

Different proposals of definitions where discussed. OICA is in favor to stay with the definitions given by GRVA, Australia also suggest staying with the definition of UN-Regulations. Germany wants to use an independent definition, in order not to be depending on possible changes in other Regulations, influencing then again the content of UN-R48.

Definitions coming from GRVA:

https://unece.org/sites/default/files/2022-05/GRVA-13-36e.pdf - Informal Document from FRAV.

#### 7 Discussion of draft document

AVSR-06-02

OICA wants some clarification about the chosen approach to modify the document. Chair answered that he checked R-48 in order to identify some keywords which might trigger the need of a change (colour-coded marking in AVSR-06-02).

The experts went through the document paragraph by paragraph with discussion and changes to the text according to the comments of the participants.

Open issues to be solved off-line:

- "alternative" definition of "system" → "CP-group"
- Load condition (with and w/o driver) → OICA
- Levelling issues → OICA
- Transfer of content in the existing document to the consolidated 08-series UN-R48 (because text has changed in some parts)  $\rightarrow$  DE

| 8  | Miscellaneous   |  |  |  |
|--|---|--|--|--|
| Nothing  |   |  |  |  |
| 9  | Next steps  |  |  |  |
| -  | <ul> <li>OICA to give asap additional feedback as agreed in today's meeting (see item 7)</li> <li>NL, UK, F and DE to give asap additional feedback as agreed in today's meeting (see item 7)</li> <li>DE will prepare a revised document on the basis of the latest consolidated version of 08-series UN-R48, based on the outcome of today's meeting and eventually also the outstanding feedback (see item 7)</li> <li>DE will send a formal document to GRE-87 before the deadline</li> <li>TF AVSR will schedule another meeting after the summer break, to finalize the work and prepare an informal to the existing formal proposal (see item 10)</li> </ul> |  |  |  |
| 10   | Next meeting(s) (12 week deadline to GRE 02.08.22)  |  |  |  |
|  | • [ ] July 2022   |  |  |  |
| DE will invite for a hybrid-meeting in week 38, proposal: Bonn & WebEx (tentatively 20., 21. or 22. of September)  |   |  |  |  |
| Note by the secretariat: 7 <sup>th</sup> TF AVSR meeting September 22 <sup>nd</sup> , 2022, Time t.b.d. Hybrid meeting, WebEx & F2F at Karlsruhe University, Germany |   |  |  |  |
| 11   | Closure   |  |  |  |
| The chair thanked all participants (in person & online) for the fruitful discussion & closed the meeting at 14:00.   |   |  |  |  |

<sup>\*\*</sup> GRE-86-12

<sup>\*\*\*</sup> GRE-86-20-Rev.1

## **Attendance list**

#### Online via WebEx connection:

Abdul Nilar, Alfonso Romero, Antoine Pamart, Elena Ansaloni, Emma De Marchi, Erik Vandervreken, Fulvio Rizzi, Georg Stüdlein, JM Prigent, Jie Sun, KICAS-HS, Kiyomi Fujimoto, Manabu Fushimi, Michiaki Sekine, Olallo Alcaide, Phil Bailey, Seiya Tatsuno, Siva Thiruvasagan, Soomin Kwon, Teruyoshi Fujita, Timo Kärkkäinen, Thomas Schramm, Torsten Schwarz, Valter Genone, Yoko Kato

#### <u>In Person at SIS Stockholm:</u>

Alexander Cosic, Anette Sawonski, Aurelie Berthel, Bart Terburg, Ben Huber, Benony Grigorescu, Claus Allgeier, Davide Puglisi, Derwin Rovers, Dieter Kooß, Eric Blusseau, Federico Matarazzo, Frédéric Hay, Gert Langhammer, Helmut Tiesler-Wittig, Jürgen Ewald, Karl Manz (Chair), Kotaro Hashimoto, Letizia Ruggeri, Luca Scozziero, Lukas Schwenkschuster (secretary), Magnus Nordeke, Mark Grainger, Michael Pernkopf, Niklas Blomqvist, Philipp Plathner, Rainer Krautscheid, Romeo Samoy, Sebastian Fahr, Silke Barton, Takahiro Koyama, Takashi Kanazawa, Thomas Bauckhage, Thomas Reiners, Walter Schlager, Wolfgang Huhn, Woochul Noh