Informal Document GRVA-15-42 15th GRVA, 23-27 January 2023 Provisional agenda item 5(a)

Status report of CS/OTA IWG

For 15th session of GRVA January, 2023

Meetings (after 14th GRVA session)

- CS/OTA 23rd Session: Web meeting, 19 October 2022
- CS/OTA 24th Session: Web meeting, 1st & 2nd December 2022

Outline of activities

- 1. Proposed amendment to UN R155 (Informal document: GRVA-15-05)
- Proposed amendment to the interpretation document for UN R155 (Informal document: GRVA-15-06)
- 3. Questionnaire on possible software update cases

1. Proposed amendment to UN R155 (Informal document: GRVA-15-05)

Original text of:

- "4.1" of Annex 5, Part A, Table A1 Example of vulnerability or attack method; and
- "4.1" of Annex 5, Part B, Table B1 Threats to "Vehicle communication channels"
 - "Spoofing of messages (e.g. 802.11p V2X during platooning, GNSS messages, etc.) by impersonation"

Amending to read:

- "Spoofing of messages by impersonation (e.g. 802.11p V2X during platooning cooperative awareness or manoeuvre coordination messages, GNSS messages, etc.)"
- > Description generalized not specifying a specific protocol standard.

1. Proposed amendment to UN R155 (Informal document: GRVA-15-05)

- Corresponding mitigation "M10" to the amendment in Table A1:
 "The vehicle shall verify the authenticity and integrity of messages it receives"
- > No changes made.

Note: After discussions, including TFCS-24-06 regarding GNSS from the EU Space Agency, the group decided NOT to change the current text of mitigation "M10".

2. Proposed amendment to the interpretation document for UN R155 (Informal document: GRVA-15-06)

The intention of the proposed amendment is to:

 Clarify the version of the ISO/SAE standard referred to in the interpretation document.

(ISO/SAE 21434 > ISO/SAE 21434:2021)

- Note ISO PAS 5112 which is the audit processes standard corresponding to ISO/SAE 21434:2021.
- Update the text regarding the alternative provisions concerning development phase for early approvals to correspond to the latest version of UN R155 as amended by Supplement 1 (see ECE/TRANS/WP.29/2022/54)
- Make minor editorials improvements and corrections.

3. Questionnaire on possible software update cases

Current status of software update post registration

UNECE R156 provides uniform provisions on ensuring safe deployment of software updates (with/without hardware changes/upgrades) performed at any point of time during the lifetime of a vehicle.

However, certain aspects of modifications made after registration on a type level, for example adding/updating functionality, are not prescribed and are not allowed in certain countries.

Some countries require that once a vehicle is registered, it should remain in conformity with its type-approval or that only approved updates can be made to the vehicle.

3. Questionnaire on possible software update cases

- R156 regulatory text/interpretation document does not address post-registration updates in detail even though the primary intention of the regulation was to address updating software for vehicles in-service.
- Consequently, a manufacturer is obliged to enquire in every country if the modification has an impact on the registration of the vehicle and if an inspection by an authority is necessary.

3. Questionnaire on possible software update cases

- CS/OTA IWG has discussed identified software update cases and has distributed a questionnaire to CPs within the group (document number is TFCS-24-07) to gather further information on national implications.
- This may be used in the considerations of the next steps that the group may take.

Thank you