Transmitted by the Chair of the IWG on FVA

GRSG-IWG-FVA

Informal document GRSG-125-27-Rev.1 GRSG 125th session, 27 – 31 March 2023 Agenda Item 9

IWG on FVA Status Report

March 2023

Status Update IWG-FVA

- Workshop + hybrid meeting took place on November 9th 2021 in the Netherlands Manufacturers brought 3 vehicles with FVA systems, available for test drives on public roads
- 7 more meetings: 18 January, 8 March, 28 June and 21 September, 15 November, 19 December 2022 and 15, 16 March 2023
- 3. 3 expert groups have been defined:
 - Technical Requirements
 - Administrative Provisions
 - Literature Study
- 4. All information available on the UN-ECE webpage: <u>https://wiki.unece.org/display/trans/FVA+Informal+Working+Group+Meetings</u>

5. <u>Current state of play (phase 1, covered by TF-FVA)</u>:

 - 02 series of amendments to UN R125: based upon ECE/TRANS/WP.29/2021/100; date of entry into force 22.06.2022 (https://unece.org/sites/default/files/2022-09/R125r2am3e.pdf)

 - suppl. 1 to 02 series of amendments: based upon <u>ECE/TRANS/WP.29/2022/24</u>: adopted during the March 2022 session of WP.29; date of entry into force 08.10.2022

- 6. <u>Next phase 2</u>:
 - new amendments to UN R125.02 to keep up with technical progress
 - draft new Regulation on FVA for vehicle categories M1/M2/M3, N1/N2/N3
 - update of UN R125, split off FVA section

7. <u>Future phase 3</u>:

- to include vehicle category L and possibly update UN R22 (helmets)

8. Order of things:

- looking into literature and information available through automotive conferences and presentations
- working on technical requirements
- working on administrative provisions

9. <u>Keeping up with technical progress</u>:

 proposal for supplement <u>3</u> to UN R125.02: <u>GRSG/2022/27</u> as amended by informal document: <u>GRSG-124-09rev.1</u>. Document <u>ECE/TRANS/WP.29/2023/22</u> as adopted at the March 2023 session of WP.29; date of entry into force: [....10.2023]

- switching off relaxation provision in case of backing event according to UN R158
- update of Annex 5 with more examples
- introduction of new paragraph to explain FVA to be used for optional or mirrored information only

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10. <u>Items currently under discussion where consensus is reached</u>:

- **brightness**: provision not needed (not primary source). JAMA guideline exists.
- obstruction: JAMA guideline to be used as the starting point
- distraction: has to be covered by the safety concept
- readability, optical quality, latency, eyebox size: as FVA is not primary source of information, no need to define provisions at this stage
- visibility from outside: no issue with current systems. If it becomes an issue in the future, it will have to be addressed

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10. Items currently under discussion where consensus is reached (cont.):

HMI:

- symbols used: UN R121 alt. ISO 2575; mirrored from cluster
- colour codes: follow UN R121
- <u>information not covered by UN R121 or ISO 2575</u>: follow the logic provided for in UN R121
- virtual image distance and eye point

literature study shows that it helps to define a good virtual image distance that prevents drivers having to refocus between the projected images and the real view. This is not further defined but assumed to be covered in the safety concept.

10. Items currently under discussion where consensus is reached (cont.):

- provisions for standstill and during parking while engine running (trucks)
 "The information displayed by the FVA shall be driving related only and submitted to the provisions of paragraph 5.3.1 to 5.3.7, except:
 - as long as the vehicle is parked or
 - if the vehicle is performing the dynamic driving task (DDT) as described
 - e.g. in UN Regulation 157.
 - In the latter case, non-driving related information shall disappear within 500ms upon initiation of a transition demand."

11. Items to be further discussed in the TWG:

- definition of FVA area for heavy duty vehicles

two general areas have been defined; area 1 and 2, independent of the vehicle category. The positions of lines "X" and "Y" need some further consideration.

- interaction with other Regulations: R10, 46, 48, 121, 151, ...

<u>allowing non-driving related information to be displayed in area 2</u>?
 Discussion within the IWG about the difference between "safer" versus
 "maybe less dangerous but still dangerous". Showing e.g. incoming phone call may be acceptable but what about showing the list of contacts in order to scroll through and make a call ?

Guidance from GRSG is welcome.

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Status Update IWG-FVA (Cont.)

Draft proposal:

See GRSG-125-28

Original terms of reference

D) WORK PLAN AND TIME SCHEDULE

- April 2021 Finalization of proposal for ToR during the 121st session of GRSG
- June 2021 Ask for mandate to start IWG in WP.29 and AC.2
- December 2022 Finish the work of the IWG-FVA
- April 2023 Submit proposal for a new Regulation (and/or an amendment of the existing UN Regulation 125) to GRSG

The IWG-FVA kindly requests to WP.29, to extend its mandate to April 2024

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Thank you for your attention !