TASKFORCE ON THE FITNESS FOR AUTOMATED DRIVING SYSTEMS OF REGULATIONS AND GLOBAL TECHNICAL REGULATIONS (FADS)

Seventh Meeting

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Meeting notes by agenda items

4. Review of high-level issues

The seventh meeting of the taskforce mostly focused on consolidating the list of high-level issues to report to WP.29, based on the issues previously discussed in the sixth meeting as well as new input from experts from all WP.29 screening taskforces. The summary of the expressed positions from the participants was uploaded as document FADS-07-02, and is summarised below:

Issue 1: Active safety systems and dual mode

For this issue, inputs were provided by the chairs of the GRBP and GRSG screening taskforces, as well as the experts from France, Japan and the United Kingdom. Overall, while it is agreed that active safety systems may usually be suspended in automated mode (as is currently the case for Regulation No. 152 on AEBS), more consideration should be given to each type of system depending on factors such as its inputs and response time. Additionally, even if such systems are indeed suspended in automated mode, ensuring a smooth transition is critical when control is handed back to the driver; this should be considered when amending existing active safety Regulations.

Issue 2: "On-by-default" systems in dual mode

Inputs were provided by the chair of the GRSP screening taskforce, as well as the experts from France and the United Kingdom. Overall, the experts agreed that systems which are on by default should be active at least when a human driver takes control of the vehicle for the first time in a driving cycle. Additionally, the expert from the United Kingdom noted that transitions from automated to manual mode represent a high level of risk, and argued that active safety systems should therefore be switched back on at the start of each transition from automated to manual mode.

Issue 3: Active safety systems optical warning signals

The experts agreed that dual-mode vehicles in automated mode are functioning as intended, and therefore should not issue a warning signal for functions which are automatically suspended as part of their normal operation.

Issue 4: R78 and automated vehicles

This issue, originally intended to gather positions on the possible ways to handle the review of Regulation No. 78 on braking for vehicles of L category, will be reported to WP.29 as regarding vehicle categories in general. Positions were expressed by the experts from France and the United Kingdom, as well as IMMA and OICA. Overall, it was agreed that vehicle categories in their current definition by RE.3 is not satisfactory, and that their redefinition at the WP.29 level will be necessary to make existing Regulations applicable to automated vehicles. The expert from OICA proposed to share the results of their internal review at the 16th

session of GRVA in May 2023. Regarding vehicles of category L more specifically, the expert from IMMA reminded the taskforce that there is no plan from IMMA manufacturers to develop automated two- or three-wheeled vehicles in the short or medium term. He therefore requested that WP.29 be informed of this significant difference between these vehicles and light quadricycles, although they are all part of the L category.

Issue 5: Versions of Regulations

Inputs for this issue were provided by the experts from France and OICA. Overall, it was agreed that the review will only cover the latest state of the art whenever possible. However, it is not yet clear if this will be achieved by only issuing supplements to the latest Series of amendments to each Regulation, or by issuing a new Series of amendments (see issue No. 16).

Issue 6: Controls other than steering wheels and pedals

Inputs for this issue were provided by the experts from France and the United Kingdom. Overall, it was agreed that in line with the positions from FRAV and VMAD, the screening will not consider any additional forms of control of the vehicle,

Issue 7: Conformity of Production

Inputs for this issue were provided by the expert from France. Overall, the taskforce agreed that COP may represent an issue for certain Regulations, but recommended that COP specialists consider this issue when starting the amendment process.

Issue 8: Destination of warnings

Inputs for this issue were provided by the experts from France and the United Kingdom, as well as OICA/CLEPA. Overall, it was agreed that the general task of handling warnings and their destination should be delegated to the ADS, although consideration could be given as to how certain critical warnings can be guaranteed to be sent to a human person.

Issue 9: Impact of the ODD of the ADS on tests

Inputs for this issue were provided by the experts from France and the United Kingdom, as well as OICA. Overall, the experts agreed that this issue, which covers not only the condition but also the performance criteria of the tests, should be answered by the results of the discussions between FRAV and VMAD.

Issue 10: Testing basic performance criteria

Inputs for this issue were provided by the expert from France. Overall, the taskforce agreed that in general, tests for basic performance should be carried out separately from the tests related to the ADS, although testing protocols could be modified based on the guidelines given by NATM.

Issue 11: Test mode

Inputs for this issue were provided by the experts from France and the United Kingdom. Overall, the experts agreed that manufacturers shall provide the necessary means to conduct tests for non-ADS and ADS Regulations, which might be carried out not only by Technical Services and Type Approval authorities, but also by Market Surveillance authorities and other relevant bodies. This should be confirmed by the result of the fourth subgroup of VMAD.

Issue 12: Failure alerts and driver decisions

Inputs for this issue were provided by the expert from France. Overall, it was agreed that similarly to Issue 8, all receivers and decision processes should be explicitly described in the technical definition of the ADS.

Issues 13 to 16 were newly considered during the meeting and did not result in a consensus by the taskforce. The experts agreed to reconvene on these issues during the 8th meeting of the taskforce.