

OICA statement on the draft regulation on MOIS

(Moving Off Information System – document GRSG-118-06)

Context

The Informal Working Group VRU-Proxi started to discuss about the “Forward motion Vehicle driving straight or taking off from standstill” (MOIS) one year ago, in summer 2019. At that time, the discussion was mainly focusing on defining the accident scenario i.e. the scope, the type of Vulnerable Road Users (VRU), the manoeuvres and speeds of the ego vehicle and the VRU, that the future regulation may cover, and on the main functionalities (e.g. information and warning signals). The intention of the leading contracting parties was to require a M2, N2, M3, N3 function that informs and warns the driver about respectively the presence and the potential collision with a VRU when the vehicle is stationary or moving slowly.

Until the publication of the Working Document ECE/TRANS/WP.29/GRSG/2020/5 to GRSG, early January 2020, no draft text was shared nor discussed within the IWG VRU-Proxi. No standard (ISO, NCAP....), nor regulation or systems exist or cover such a function.

This new regulation is based only on theoretical assumptions, as described in the introduction of the Informal Document GRSG-118-06.

In 2020, it was clearly stated by OICA that the current sensors and functions available on the market or under development cannot cover the MOIS requirements. As the other stakeholders, Industry could only assume the future technical feasibility. It was indeed not possible for the suppliers and the manufacturers, during the first 6 months of 2020, to develop new sensors and systems, test them and then confirm their capability to fulfil the proposed requirements.

Usually, in a good economic and political context, it takes 4-5 years to develop such new functions.

OICA position

The Industry understands the need of having such a regulation available and the time constraints contracting parties may have. Nevertheless, the Industry cannot guarantee that within 2 years (the first regulatory application date currently known is in Europe where MOIS is required from July 2022):

- the systems will be robust enough: information collected by detection technology (sensors and software algorithm) that does not yet exist must be analysed, sorted and the system must be validated with real driving situations.
- the systems will be useful for the driver: HMI must be developed in relation with all systems installed in a vehicle for the best efficiency and acceptance

As stated by the European Commission in its report “Final report: In depth cost-effectiveness analysis of the identified measures and features regarding the way forward for EU vehicle safety”(Document number: CPR2411 – TRL):

“The benefits of VRU detection systems are dependent on the direct vision performance of the particular vehicle that the system is fitted to (reducing target population) and on the effectiveness of the particular VRU detection system (in improving detection accuracy and reducing driver overload).

It would therefore be expected that VRU detection system effectiveness will vary significantly across the EU HGV fleet.”

The text proposed in the current draft regulation per document GRSG-118-06 does not give sufficient consideration of “available technology” as mentioned in Article 1 paragraph 2 (b) of the 58 Agreement:

“The UN Regulation shall cover the following:

- (a) Wheeled vehicles, equipment or parts concerned;
- (b) Technical requirements, which shall be performance oriented wherever appropriate and not design-restrictive, **that give objective consideration to available technologies, costs and benefits as appropriate**, and may include alternatives;
- (c) Test methods ...”

Conclusion

OICA requests that the official report of the 118th session of GRSG states the following:

“Currently there are no systems in the market which are designed to fulfil the MOIS requirements. The current overall practical technology maturity level is strongly based on to-be-validated theoretical and functional analyses. Therefore, Industry highlight the aspect of current technology performance limitation under real life conditions, as mentioned in paragraph 0.7 of the draft regulation introduction.

OICA cannot guarantee that, at the time of entry into force of the draft regulation on uniform provisions concerning the approval of motor vehicles with regard to the Moving Off Information System for the Detection of Pedestrians and Cyclists (document GRSG-118-06):

- *the available technology (sensors and software algorithm), when installed in the vehicles, is robust enough under all real-life conditions*
- *the available technology (sensors and software algorithm), when installed in the vehicles, reaches a satisfying balance between HMI efficiency and driver's acceptance”.*