OICA comments to the Draft Regulation on Direct Vision

(documents GRSG-122-24 & GRSG-122-25)

I. General comment:

The presentation GRSG-122-25 may be misleading since it presumes that the proposed criterion for direct vision is all about the design of the truck cab. However, the absolute largest part of the volumetric performance is a direct function of the truck chassis height and the cab floor height, and these characteristics are driven by transportation needs rather than design parameters that a truck manufacturer can influence.

With limit values pushed so far as in the proposal, the Direct Vision requirement becomes primarily a limitation on chassis height, secondly a limitation on cab floor height and only thirdly a design requirement for cab properties. This will result in detrimental effects on society and transport efficiency. OICA points out that such pure direct vision requirements will remove existing, approved vehicles from the market.

II. Slide 3:

The “excellent correlation” [between the proposed simplified test and the CAD data analysis] implies to evaluate a huge amount of test positions, which contradicts the objective of a simplification of a physical method. OICA urges the Technical Services and GRSG experts to really look to the physical test method proposed with regards to feasibility during type-approval or market surveillance (e.g. in the EU), to help finding the best compromise.

The method was never evaluated by Technical Services to date and not yet performed by manufacturers. OICA requests that sound opinion from the Technical Services be at the basis of a GRSG decision about the proposed method.

III. Slide 6:

The truck shown in this slide is a worst case scenario. Also some of the grey VRUs are covered by MOIS and BSIS as from 2024. Indeed a vehicle with such bad performance as shown in the picture should be improved to accommodate the new regulation.

IV. Slide 7:

“Mal-adjusted mirrors” is a matter of user behaviour, should not be used as an arguments since the same argument could then be used against direct vision: some field data suggests that accidents occurred despite VRU was visible, because the driver didn’t look in the right direction.

OICA points out that Type Approval requirements and in-use behaviour should not be mixed-up. As an example, the driver could place something on the dashboard, thereby jeopardising the direct vision, in a vehicle perfectly complying with the Type Approval requirements. the concern of mirrors mal-adjustment can also be solved with CMS.
V. Slide 9-11:

These slides seem to forget the provisions of MOIS and the BSIS for the proposed levels.

VI. Slide 11:

In the current draft text of the regulation, the requirements for different volumes around the vehicle are specified (see table 1 in GRSG-122-24). The “translation” of these volumes with respect to the shown field of indirect view cannot be achieved easily – it is unclear whether this means an overlap of 1, 2, 3 or even more “rows” of ‘green’ VRUs with the indirect field of vision. Therefore OICA urges the GRSG experts to closely review these proposed limit values.

*Note: There is currently no consensus about the limit values in the IWG VRU-Proxi. Nevertheless, ‘[ ]’ were removed by a majority during last IWG session.*

VII. Slide 12:

Industry is of the opinion that the ambition level is over achieved and the requirements have great implications on future designs (as there are also other legislations to be considered)

VIII. Slide 13:

The draft text is **not technology neutral** since it is focusing on a single solution “direct vision”, not allowing for any other technology to reach the same performance of driver awareness. In addition the text is **not design neutral**. The text is based on current cab designs, but does not take into account future cab designs developed under other regulation constraints. As mentioned in other industry statements there are other legislations to be considered (e.g. emissions with new power trains) not only linked to “very unique designs”. This is the case for all current designs and also for future design.

Example: Narrow cab designs which are preferable to comply to the CO2 regulation are penalized by the separate front volume approach.

The wording “impossible” used in the slide should be understood as not possible to continue supplying the market with many truck specifications that are needed for continued transport efficiency, despite OEMs making all possible product changes. Therefore, it makes sense to introduce an amendment with reduced level of direct vision for those types, coupled with advanced assistance safety systems. This will not primarily become a relaxation for OEMs but a means to continue supply the market with highly efficient vehicles at a considerable higher safety level.

IX. Slide 14:

The configuration shown on the picture is one among many possibilities and giving therefore a wrong expectation. The left and right pictures do not show the same vehicle (left picture shows a vehicle with mirrors, while right picture is equipped with CMS). The vehicle on the left is actually not yet assessed (no clue whether it complies with the proposed requirements) and it is not representing a worst case application (there exist higher cab mountings).
The picture also might give the erroneous impression that there are no other ways in design and architecture to meet the DV requirements.

The largest part of the volumetric performance is a direct result of the truck chassis height and the height of the cab floor. All OEMs do not offer the full range of trucks that the market demands. Stating that one “model” or OEM already fulfils the proposed requirements may therefore in reality be a statement that the OEM does not offer e.g. high chassis or driven front axles, rather than a statement on the cab performance. Also, since a cab production cycle is typically well above 20 years, it would be a lucky coincidence for a manufacturer should that cycle match the timing when direct vision requirements are known and hence if their cab range meet higher direct view requirements.

Direct vision has not been required at all for heavy vehicles in the past and the final requirement is not yet fully known.