TASK FORCE DIRECT VISION: PROGRESS & STATUS OF THE DRAFT REGULATION & KEY DISCUSSION POINTS

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OBJECTIVES

- High Level overview of the latest status
  - Implementing agreed (VRU Proxi 19) ‘Hybrid’ approach and limit values in regulatory text
  - Physical test method
  - Developing a simplified approach for M2/N2 [and M3] vehicles
  - The potential for small exemptions for existing vehicle types compensated by active safety
  - The potential to reduce unnecessary design constraints associated with the frontal limit value
CORE REGULATORY TEXT

- Initial draft incorporating latest agreements complete (except information doc)
- Text added to define separated views to each side, separated by A-pillars, to enable agreed hybrid approach
- Limit values applied as shown

<table>
<thead>
<tr>
<th></th>
<th>Minimum Volume (m³) by Direct Vision Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Visible Volume (Nearside)</td>
<td>3.4</td>
</tr>
<tr>
<td>Visible Volume (Front)</td>
<td>1.8</td>
</tr>
<tr>
<td>Visible Volume (Offside)</td>
<td>2.8</td>
</tr>
<tr>
<td>Visible Volume (Total)</td>
<td>11.2</td>
</tr>
</tbody>
</table>
PHYSICAL TEST METHOD

- Practical testing has been completed by LDS with no major difficulties, some small refinements.
- Results from simulating the physical method show there is no single height for measurement that accurately represents volume across all truck designs studied.
  - Evaluating at 5th female shoulder height under-estimates volume for tall vehicles.
  - Evaluating at top of assessment zone (95th male shoulder height) under-estimates volume for low vehicles.
- Options for solution
  - Evaluate at 3 heights (improved accuracy, additional test effort)
  - Evaluate at top of zone (vehicles that are under-estimated pass by a large margin so does not affect approval. Risk: unintended consequence, new designs?)
- Initial decision - implement in regulatory text at 3 heights and simplify later if further analysis concludes it is reasonable.
M2, N2 AND [M3] VEHICLES

- Draft Regulatory text developed, subject to validation by OICA
- Principle
  - M2/N2 derived from N1 can be approved according to revised R125 as alternative
  - Other M2/N2 [and M3] in practice will usually greatly exceed level 1 requirements and can be deemed to comply if certain geometrical criteria showing they are suitably low to the ground are met
Agreed to add a proposal for an amendment with Transitional Provisions to enable this

Aim: to develop proposal in parallel with finalisation of core proposal so CPs are informed of all intentions when deciding on core proposal

Initial discussions around:

- The use of height measures to identify the relevant vehicles and any risks of incentivising height increases
- Mechanisms to ensure only partial exemptions – i.e. vehicles still apply all vision improvements (e.g. CMS, lower door windows) even if they still can’t meet main limit value
- The format of the active safety compensation required (e.g. “Motion Inhibit” system for moving off situation)
MINIMISING DESIGN CONSTRAINTS ASSOCIATED WITH APPLICATION OF A ‘SEPARATED APPROACH’ WITH LIMITS TO EACH SIDE

- Agreed that this is necessary but not straight forward
- Very likely it will need to be implemented as a subsequent amendment to 1st core regulatory proposal
- Will be developed in parallel and as quickly as possible
- Agreed that a method similar to T&E proposal (Option 2) appears most likely to succeed
  - Front Zone – full width ahead of frontal plane
  - Nearside – residual area to nearside of nearside plane
  - Offside – residual area of offside of offside plane
- Agreement that ACEA & LDS will work together to solve
- Funding support for LDS contribution is sought
SUMMARY

- Progressing well on proposal for a 1\textsuperscript{st} core regulatory text, based on agreements at VRU-Proxi 19

- Significant issues still open and likely to become parallel or subsequent amendments
  - Exemptions existing types compensated by active safety
  - Reducing the design dependency of limits to each side