PRESENTATION OF

INTERNATIONAL ORGANIZATION OF MOTOR VEHICLE MANUFACTURERS

Additional Sound Emission Provisions
Analysis Information

51th GRB, February 2010
### Additional Sound Emission Provisions (ASEP)

**Situation**

- **Proposal 1**: as amended by GRB IG in May 09
  - **Limitation**: multiple ideas to frame the discussion areas

<table>
<thead>
<tr>
<th></th>
<th>OICA</th>
<th>KBA</th>
<th>I</th>
<th>RDW</th>
<th>J</th>
<th>Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slope</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>?</td>
<td>?</td>
<td>5</td>
</tr>
<tr>
<td>Edging</td>
<td>1,5</td>
<td>1</td>
<td>1</td>
<td>?</td>
<td>?</td>
<td>1</td>
</tr>
<tr>
<td>Margin</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>?</td>
<td>?</td>
<td>1-2</td>
</tr>
<tr>
<td>Bonus</td>
<td>?</td>
<td>?</td>
<td>-</td>
<td>?</td>
<td>?</td>
<td>+</td>
</tr>
</tbody>
</table>

- **Proposal 2**: as presented by NL in GRB 50
  - **Limitation**: only one proposal from the Netherlands
  - Proposal need the assumption of limit values for Annex 3 Method B, which are currently not available.
  - NL assumed limits as elaborated by GRB Informal Group on Reg51 in 2005.

Report of IG Chairman focuses on these two parameters.
VEHICLES WITH PMR < 120
(Market Share 99% for EU14 based on Year 2007)

Additional Sound Emission Provisions (ASEP)
VEHICLES WITH 120 < PMR < 200
(Market Share 1% for EU14 based on Year 2007)
VEHICLES WITH PMR > 200
(Market Share less than 0.1% for EU14 based on Year 2007)

Prop 1
OICA values

Anchor point Proposal 1
Area of Discussion Proposal 1
Anchor point Proposal 2
Limitation Proposal 2

Sound Level [dBA] vs. Normalized Engine Speed N/S [%]

Additional Sound Emission Provisions (ASEP)
CONCLUSIONS

• Vehicle technology show very big variety of sound behaviour.
• Thus it is very difficult to define an appropriate method.
• Proposal 1 (as amended by GRB Inf. Grp ASEP in May 2009) is the most accurate description of the any vehicle technology.
• The elaborated value range for the limitation parameter XYZ covers as well the proposal 2 of the Netherlands.

• Proposal 1 should be selected.