Proposal for applicability
Basic principle

- Define an applicability that is acceptable to all
- If a Contracting Party wishes to expand the applicability defined in the gtr, it can do so upon national implementation of the gtr. The preamble could give guidelines on the requirements for the expansion and the range of the expansion.
  - It should be noted that for gtr 1 “door locks” the application only specifies category 1-1 and category 2 vehicles. However, in the NPRM also buses with a GVW of 4536 kg or less are included.
  - This shows that expanding a gtr nationally is possible
Accident data was already presented (HR-4-10 – Japan), showing there is no real world justification to raise the weight limit above 3500 kg.

Number of Occupants Sustaining Neck Injuries in Rear-Impacted Vehicles by Vehicle Class (2004)

Vehicles with GVW up to 3.5t account for 97.5% of rear-impacted vehicles which occupant(s) sustained neck injury.

<table>
<thead>
<tr>
<th>GVW</th>
<th>Vehicle Class</th>
<th>Number of Occupants</th>
<th>Subtotal by GVW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 3.5t</td>
<td>Passenger car</td>
<td>200,666</td>
<td>302,157 (97.5%)</td>
</tr>
<tr>
<td></td>
<td>Mini-car</td>
<td>63,664</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Truck (up to 3.5t)</td>
<td>15,451</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mini-sized truck</td>
<td>22,376</td>
<td></td>
</tr>
<tr>
<td>Over 3.5t</td>
<td>Truck (Over 3.5t)</td>
<td>6,636</td>
<td>7,173 (2.3%)</td>
</tr>
<tr>
<td></td>
<td>Bus</td>
<td>537</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>Special-purpose</td>
<td>609</td>
<td>609 (0.2%)</td>
</tr>
</tbody>
</table>

Number of occupants sustaining minor neck injury in rear-impacted vehicles: 309,939
Accident data was already presented (HR-2-10 – OICA), showing the decrease in whiplash injury with the increase in weight.
What vehicles would be included outside US when enlarging the scope from 3500 kg to 4536 kg?

- This represents a problem as the chassis is used for a vehicle model range exceeding the 4536 kg limit (HR-5-18- Japan).
- The scope would on paper be widened up to 4536 kg but in practice to 7500 kg (N2 vehicles)
  - whilst in reality, these vehicles do not occur in the accident statistics for whiplash
  - and there is no cost benefit justification for inclusion of these vehicles
Situation in the Korean market is very similar to the Japanese market

- Enlarging the GVW from 3500 kg to 4536 kg would affect only trucks
- These vehicles are irrelevant in the accident statistics for whiplash
Conclusion and proposal

- **Conclusion:** The upper weight limit should be 3500 kg.

- **Proposal:** §2. Application:
  
  “This standard applies to Category 1-1 vehicles, Category 1-2 vehicles with a gross vehicle mass of up to 3500 kg and Category 2 vehicles with a gross vehicle mass of up to 3500 kg.”