Scope of GTR- Pole Side Impact

Commercial vehicle use and accident data

Informal Group on Pole Side Impact
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Seoul
Scope in the first version of the draft document:

“This regulation shall apply to all Category 1-1 vehicles; Category 1-2 vehicles with a Gross Vehicle Mass of up to 4,500 kg; and Category 2 vehicles with a Gross Vehicle Mass of up to 4,500 kg¹.

1) A contracting party may restrict application of the requirements in its domestic legislation if it decides that such restriction is appropriate.”
### Typical vehicles of category 1-1

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small vehicles</td>
<td><img src="image" alt="Kei-car" /></td>
</tr>
<tr>
<td>Sedan and Wagoons</td>
<td><img src="image" alt="Sedan and Wagoons" /></td>
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<tr>
<td>MPV</td>
<td><img src="image" alt="MPV" /></td>
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<tr>
<td>SUV</td>
<td><img src="image" alt="SUV" /></td>
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<tr>
<td>Sport cars</td>
<td><img src="image" alt="Sport cars" /></td>
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</tbody>
</table>
Typical vehicles of category 1-2 and 2

Category 1-2

Category 2
Global Market Situation & Accident Analysis

Japan:
- Vehicle fleet with small passenger and commercial vehicles; the smallest of them (Kei-cars) are a specific vehicle category for the Japanese market
- Vehicles of category 1-2 and category 2 are mainly for commercial use
- No significant number of fatalities and severe injuries from side pole impact in vehicles of category 1, 1-2 and 2

US:
- High number of pick-up trucks. A large number of those vehicles are for private use
- Accident research indicated a larger number of category 2 vehicles involved in severe pole side impacts

Europe:
- Most category 1-2 and 2 vehicles have a flat front design and are mainly for commercial use. The number of pick-up trucks is low
- Low number of Pole Side Impact with vehicles of category 1-2 and 2
- Marginal number of fatalities and severe injuries in those accidents
Result of German Accident Analysis

Example: GIDAS data; number of pole side impact accidents

- **Accidents vehicles M1**
  - 22097 = 100%
  - Side impact: 6647 = 30.1%
  - Pole Impact: 326 = 1.5%

- **Accidents category N**
  - 3180 = 100%
  - Side impact: 827 = 26.0%
  - Pole impact: 15 = 0.5%

- **Accidents category N up to 4.6tons**
  - 1254 = 100%
  - Side impact: 320 = 25.5%
  - Pole impact: 11 = 0.9%

→ M1 vehicles involved in pole impacts about twice as much vehicles of category N
Result of German Accident Analysis

Example: GIDAS data; number of severe injuries and fatalities

- Percentage of occupants in pole side impacts with respect to the corresponding injury severity class

- In the GIDAS sample (10667 occupants of passenger cars or light utility vehicles) there is no fatally injured occupant of a light utility vehicle in a pole side impact, and only one severely injured occupant.
Conclusion

- Kei-cars are specific and very small vehicles for the Japanese market
- Low number of severe injuries and fatalities with category 1-2 and 2 vehicles in Japan and Europe
- Main idea: Exclude vehicles of category 1-2 and category 2 from pole side impact.
- Differences in the vehicle fleet between US and other regions of the world:
  - Pick up in US
  - Flat front vehicles in other regions of the world

**OICA proposes to modify the scope of the draft gtr:**

- Exclude category 1-1 and 2 with a width of less than 1500 mm from the scope
- Exclude category 1-2 and category 2 vehicles from the scope
Thank you