Informal document No. GRB-50-12
(50th GRB, 1 – 3 September, 2009, agenda item 3(c))

ASEP N1 Kei-car

50th GRB
1-3 September 2009
JASIC
Kei Car

N1 category
Specification for Kei car

Limited specification

- Vehicle length: < 3.40 m
- Vehicle width: < 1.48 m
- Vehicle height: < 2.00 m
- Engine displacement: < 660 cc
The number of vehicles owned of commercial vehicles in Japan

- Heavy duty trucks (4 million)
- Light commercial vehicles without Kei (4 million)
- Light commercial vehicles Kei (9 million)
The payload for N1 Kei cars are less than normal N1 because of small car.

### Payload for N1

<table>
<thead>
<tr>
<th>Payload</th>
<th>0kg</th>
<th>500kg</th>
<th>1000kg</th>
<th>1500kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>N1(GVM&gt;2.5t)</td>
<td></td>
<td></td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>N1(GVM≤2.5t)</td>
<td></td>
<td></td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>N1 Kei car</td>
<td></td>
<td></td>
<td>[ ]</td>
<td></td>
</tr>
</tbody>
</table>

### GVM for N1

<table>
<thead>
<tr>
<th>GVM</th>
<th>1000kg</th>
<th>2000kg</th>
<th>3000kg</th>
<th>4000kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>N1(GVM&gt;2.5t)</td>
<td></td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>N1(GVM≤2.5t)</td>
<td></td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>N1 Kei car</td>
<td></td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
• Kei specially-equipped

• express delivery
• Kei truck in use
Difference between van and truck

- For goods truck coming from M1
- Kei car
- N1 truck GVM > 2.5t
- Same group

- For goods truck: different
- Same group: similar
The engine speeds in Annex3 for N1 Kei truck already cover the maximum engine speed for ASEP.
N1 Kei cars are used for portage and same usage as bigger N1. The PMR of N1 Kei car is same as that of bigger N1.

The vehicles with PMR $\leq 35$ should be applied ASEP as a same group.
Payload (GVM-(Kerb weight+75)) VS. PMR (Rated engine power / GVM x 1000)

Exemption of ASEP

Kei car

GVM-(kerb mass with driver)
Conclusion

・N1 Kei car should be same group as bigger N1 because of same usage, same vehicle construction, and same performance.

・The payload of N1 Kei car is 300kg which is much less than the payload of bigger N1. But vehicle size/mass (GVM) and engine power are also small. Both of PMR(GVM) are same range.

・The engine speed in new Annex3 for such vehicles already covers the maximum engine speed for ASEP.

Therefore, it is not necessary to do ASEP test for the vehicles with PMR(GVM) ≤35 of N1. They can be excluded.