Discussion Issues on DPPS Testing

4th DPPS TF Meeting, 2017.11.21~23

Ministry of Land, Infrastructure and Transport
Korea Transportation Safety Authority,
Korea Automobile Testing & Research Institute
Issues on test area with a deployed hood

■ ISSUE 1

• Headform Test Area is laterally likely to be reduced with a deployable hood, compared to the area with non-deployable hood

• If a deployable hood is optional, there would be two different test areas existing in the same car model

→ Test area is the area which is supposed to be tested
→ Pedestrian head can be crashed into the area
→ How do the public understand the different test area?
ISSUE 2

- If the compliance test is conducted in a test laboratory of the authority, manufacturers must provide technical support to make the hood deployed before the authority marks the test area.

→ Marking the test area and figuring out the impact points takes some time (1~2 days)
 ISSUE 3

- Where the deployable hood is lifted up high, marking the bonnet rear reference line following the definition might be impossible

→ The reference line must be physically definable by the authority like other reference lines according to the definition and not just rely on manufacturer’s data
ISSUE 4

- How can the authority select impacts points, considering the worst case in the engine room?
  → Choose impact points with a completely open hood?
  → How to consider the contour of the vehicle surface?
ISSUE 5

How can the test area be defined for the deployable hood with a pedestrian airbag system?

→ Is it appropriate to mark the test area only with deployed hood?

→ How to mark the bonnet rear reference line with the semi-circular template?

→ What if there is a car with only pedestrian airbag system?
ISSUE 6

- What if the test area would be extended rearward in the future?
  
  → How to define the test area with a deployed hood?

  → Various considerations (WAD, Impact points, etc.)
**ISSUE 7**

- How to define the test area when the dynamic headform test should be conducted partially?

→ Various considerations (WAD, Hood part’g, 82.5, etc.)
ISSUE 8

- Difference between the valid height for measuring TRT and the actual height of deployed hood in headform testing

<table>
<thead>
<tr>
<th>tested in Korea</th>
<th>A car</th>
<th>B car</th>
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<tbody>
<tr>
<td>Height for TRT test (manufacturer provided)</td>
<td>60 mm</td>
<td>90 mm</td>
</tr>
<tr>
<td>Height in static headform test in deployed position (measured)</td>
<td>71 mm</td>
<td>149 mm</td>
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