# Comments on BASf's Prerequisites for Deployable Pedestrian Protection Systems

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Proposed for deployable bonnets</th>
<th>Applies to non-deployable bonnets acc. to gtr9/UN R127?</th>
<th>Scope of current gtr9/UN R127 and/or practice in certification?</th>
<th>Comment</th>
</tr>
</thead>
</table>
| Pedestrian detection                             | Proof of "hardest to detect"    | Not needed                                               | No                                                              | A) Proof of detection is clearly needed, existing legislation test with legform serves for functional proof;  
B) No proof that there are real world issues with detection of different pedestrians;  
C) Proposal mixes consumer testing with legislation;  
D) No tools certified for this purpose and biomechanical properties not validated;  
E) Implementing "Hardest to detect" penalizes deployable bonnets compared to non-deployable                                                                                      |
| Protection at speeds below the deployment threshold | Proof just below the lower deployment threshold | Not needed                                               | No                                                              | A) Proof seems acceptable in the non-deployed state that basic protection is provided;  
B) Proposal mixes consumer testing with legislation;  
C) Concerns that the test tools (headforms) are not validated for the velocities to be tested                                                                                                           |
| Protection at higher speeds                      | Proof of triggering at higher velocities | No                                                       | No                                                              | A) No proof of performance or protection with this;  
B) Proposal mixes consumer testing with legislation;  
C) Creates conflicts with other legal requirements (crash etc.);  
D) Implementing "Triggering at higher velocities" penalizes deployable bonnets compared to non-deployable                                                                                       |
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<th>Correct timing of the deployment</th>
<th>Proof that the bonnet is in place when the pedestrian hits it, depending on stature</th>
<th>Not needed</th>
<th>Yes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearance requirement</td>
<td>Proof that a certain under-bonnet clearance is provided</td>
<td>No</td>
<td>No</td>
<td>A) No proof of performance or protection with this (see NHTSA comment in the 1st meeting); B) No proof that there are real world issues with this; C) Proposal mixes consumer testing with legislation; D) Proposal is design restrictive; E) Implementing &quot;Under-bonnet clearance&quot; penalizes deployable bonnets compared to non-deployable</td>
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</tbody>
</table>

**General comment:** Certification acc. to legislation covers all possible variants, standing heights etc. of a vehicle. Additional requirements therefore multiply several times. Legislation needs to consider this.