

BAST answers to OICA comments on BAST proposal of criteria for Deployable Pedestrian Protection Systems to be tested in the deployed position

Requirement	Proposed for deployable bonnets	Applies to non-deployable bonnets acc. to gtr9/UN R127?	Scope of current gtr9/UN R127 and/or practice in certification?	Comment OICA	Answers BAST
Pedestrian detection	Proof of "hardest to detect"	Not needed	no	<p>A) Proof of detection is clearly needed, existing legislation test with legform serves for functional proof;</p> <p>B) No proof that there are real world issues with detection of different pedestrians;</p> <p>C) Proposal mixes consumer testing with legislation;</p> <p>D) No tools certified for this purpose and biomechanical properties not validated;</p> <p>E) Implementing "Hardest to detect" penalizes deployable bonnets compared to non-deployable</p>	<p>B) market penetration too low at that point in time</p> <p>C) proposal still to be put in legislative wording</p> <p>D) hardest to detect surrogate could be PDI-2 (as developed by industry for Euro NCAP), PDI-1, HBM</p> <p>E) no, because non-deployable systems do not need to detect (always present)</p>
Protection at speeds below the deployment threshold	Proof just below the lower deployment threshold	Not needed	no	<p>A) Proof seems acceptable in the non-deployed state that basic protection is provided;</p> <p>B) Proposal mixes consumer testing with legislation;</p> <p>C) Concerns that the test tools (headforms) are not validated for the velocities to be tested</p>	<p>B) proposal still to be put in legislative wording</p> <p>C) degree of validation at other impact speeds? AH with 4.8 kg compared to PMHS tests by Glaeser: Different impact speeds, angles, impactor masses. Results just an indication. No comparison for CH!</p>
Protection at higher speeds	Proof of triggering at higher velocities	no	no	<p>A) No proof of performance or protection with this;</p> <p>B) Proposal mixes consumer testing with legislation;</p> <p>C) Creates conflicts with other legal requirements (crash etc.);</p> <p>D) Implementing "Triggering at higher velocities" penalizes deployable bonnets compared to non-deployable</p>	<p>A) common understanding that more clearance provides additional protection</p> <p>B) proposal still to be put in legislative wording</p> <p>C) R94 at 56 km/h!</p> <p>D) No, because non-deployable systems do not need to trigger (always present)</p>
Correct timing of the deployment	Proof that the bonnet is in place when the pedestrian hits it, depending on stature	not needed	yes		

Clearance requirement	Proof that a certain under-bonnet clearance is provided	no	no	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 "Under-bonnet clearance" penalizes deployable bonnets compared to non-deployable	A) see BAST presentation from 1st meeting: lower HIC with increasing clearance. Performance criterion at the manufacturer's choice. B) market penetration too low at that point in time C) proposal still to be put in legislative wording D) as European Pedestrian Regulation for FPS to be applied to vehicles type approved before 01. October 2005 E) This is a combined criterion. To meet performance requirement at the manufacturer's choice
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