



# IWG-DPPS Comments

Deploy HEIGHT vs FULLY DEPLOYED

March 2018

# TF-DPPS COMMENTS

## CURRENT Requirements INF GR/PS/141 Rev.1

Current requirements based on INF GR/PS/141 REV. 1:

Test Procedure Item 3:

The system reaches and remains in the intended position before head impact;  
The system can be supported in a representative way <sup>2)</sup>

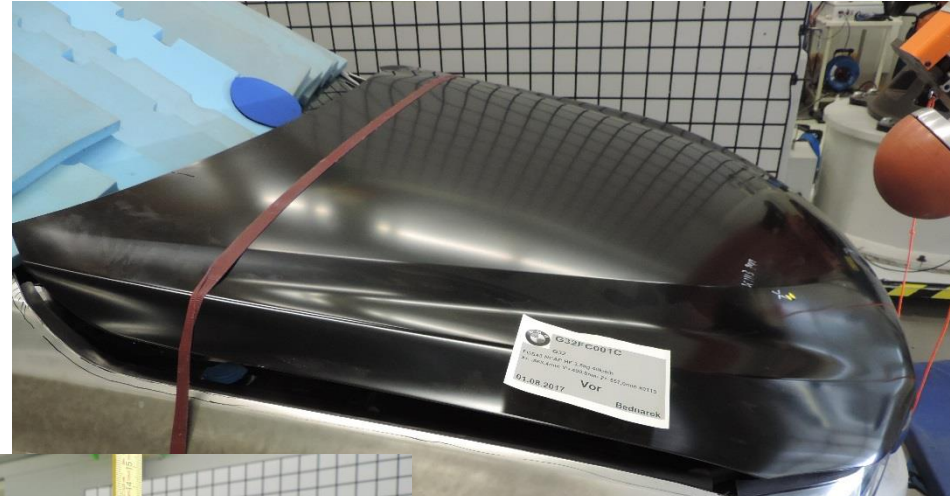
<sup>2)</sup> “Supported in a representative way” could mean e.g. by a spring system.

# TF-DPPS COMMENTS

## Deploy Height: Guaranteed (INTENDED) Height

### Example:

System supported in a representative way by a spring / belt system



Deploy height (intended) specified by the vehicle manufacturer.

In this case :  
60 / 40 mm



# TF-DPPS Comments

## FULLY DEPLOYED Height

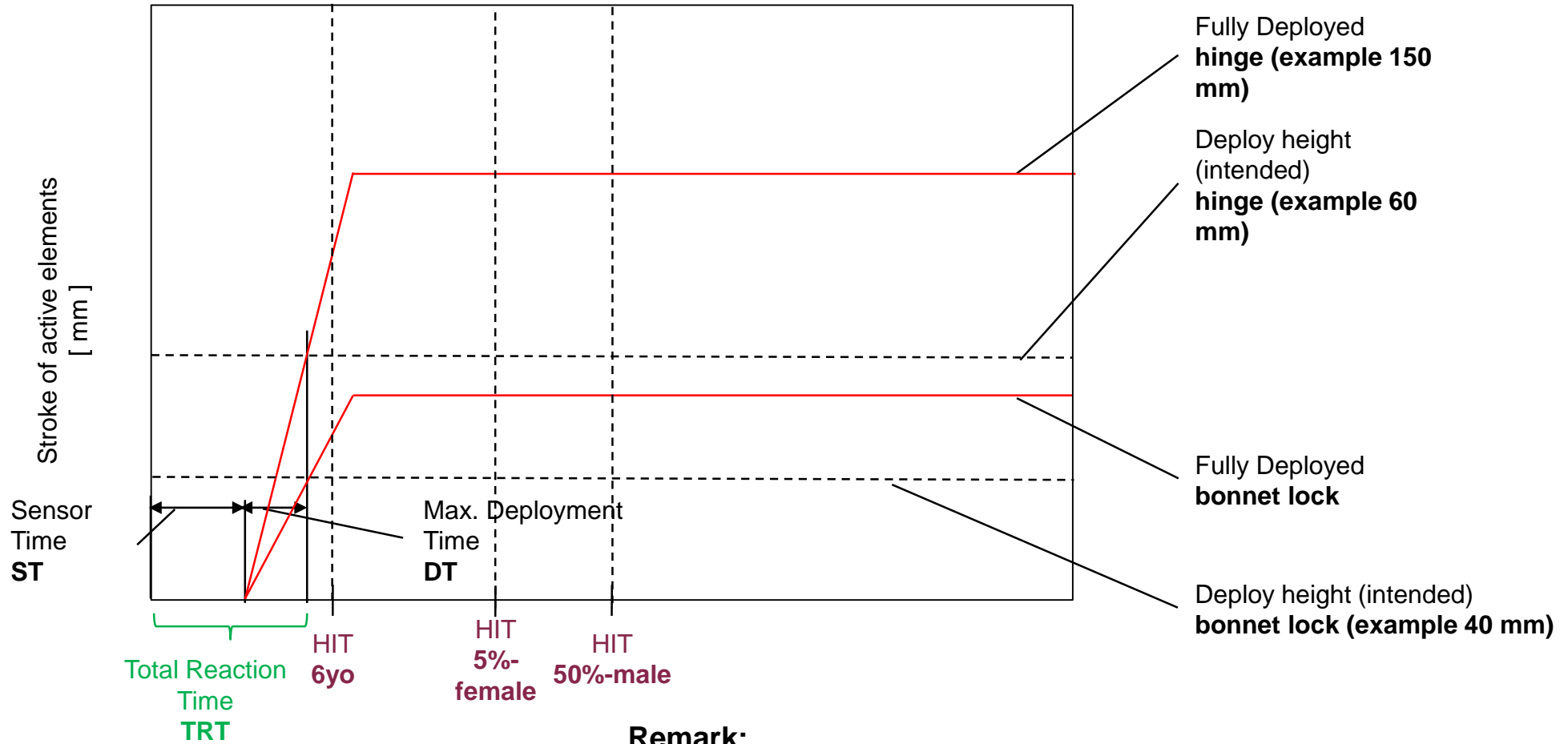
Fully Deployed  
Height  
150 mm

(to provide max.  
deformation space  
for larger  
pedestrians with  
later impacts)



# TF-DPPS Comments

## Static headform Test Procedure – TRT < HIT



**Remark:**  
 Example shows deployable system with active elements at bonnet hinge and bonnet locks as well.

## TF-DPPS Comments

# OICA Proposal BASED ON GRSP-58-31

### OICA Proposal based on GRSP-58-31:

3.19. 'Deployed position' means the position of the lifted vehicle outer surface specified by the manufacturer. The lifted vehicle outer surface shall reach a position equal to or above the deployed position during the time between the Total Response Time and the Head Impact Time that corresponds to the rear end of the test area.

3.32. 'Outer surface' means those components of the vehicle within the test areas, which are contacted by the pedestrian in case of an accident. The outer surface may include the bonnet, the fenders, but also external airbags or other components within the test area.

## TF-DPPS Comments

# DEPLOY HEIGHT VS Fully deployed

**The advantage of the current OICA Proposal (based on GRSP-58-31) is that all available systems are covered and it is in line with the current requirements based on INF GR/PS/141 Rev. 1**

Therefore we strongly propose:

To accept a guaranteed (intended) height for the testing of a deployable system and NOT only a fully deployed system.

Intended height is a minimum height specified by the manufacturer to fulfill legal requirements. Higher positions of “lifted vehicle outer surfaces” cause better performances (e.g. for larger pedestrians with later HIT) and covers a wider range of real world cases

# TF-DPPS Comments

## DEPLOY HEIGHT VS Fully deployed

### **Conclusion / Consequences:**

Otherwise these requirements would be design restrictive and lead to an intensification of the current requirements.

Consequence: Unnecessary burden for vehicle manufacturers (redesign of the vehicles) without improvement of traffic safety.