

Test Methods for ADAS Systems

EBA Test Device (ETD)



Goal: Non-destructive testing up to a collision in longitudinal traffic in order to test integrated safety systems

Testing of

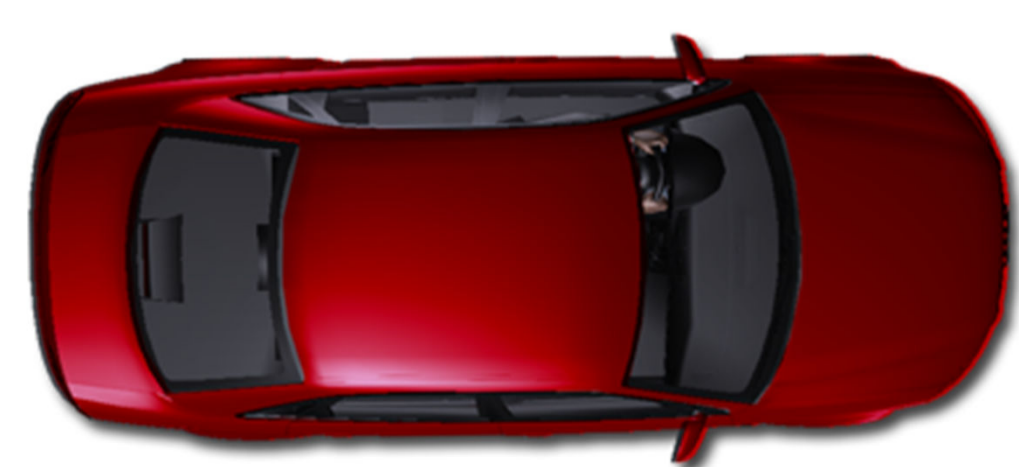
- Emergency Brake Assist (EBA)
- Forward Collision Warning (FCW)
- Safety Assist Systems (Longitudinal)



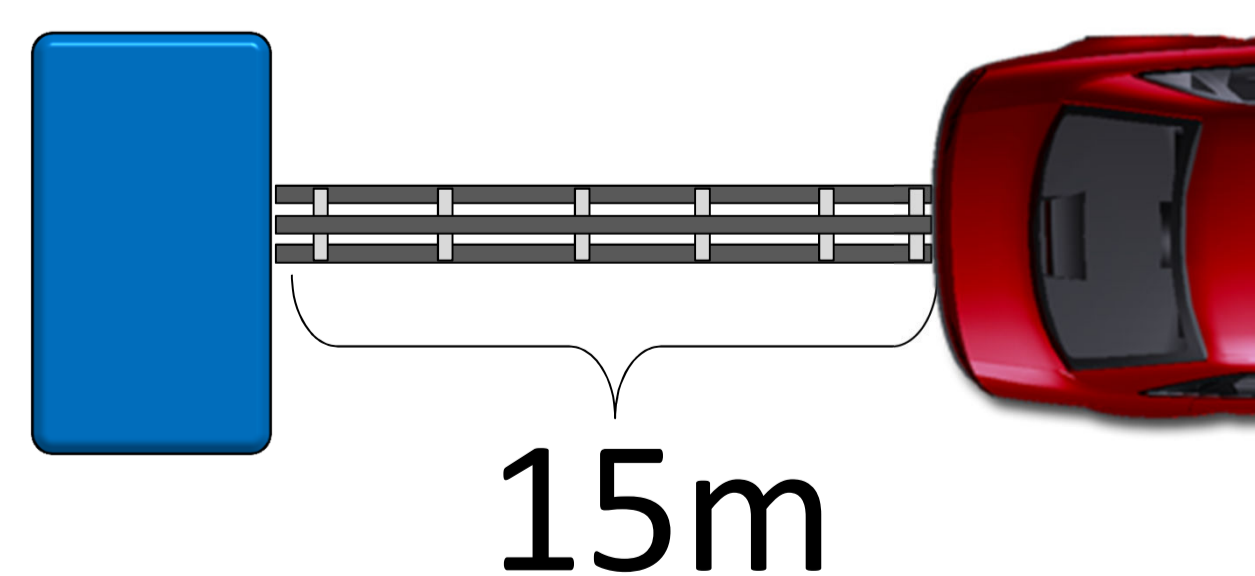
Function/Concept:

- Flexible elements will be folded when a collision occurs
- The flexible elements will resist a deceleration up to 0.8g
- Lane change and offset tests can be conducted
- Turn around with a radius of 40m is possible
- Lightweight setup can be handled by one person
- A common station wagon is sufficiently for transport and propulsion

Test Vehicle



Target



Technical Data	
Length	up to 15m
Test Velocity	$v \leq 80$ km/h
Target Deceleration	$a \approx 0,8$ g
Collision Velocity	$v \leq 40$ km/h (damage free)
Sensor Technologies	Radar, Camera, Lidar (Laser)
Turn around Radius	app. 40m

Supported by:



on the basis of a decision by the German Bundestag