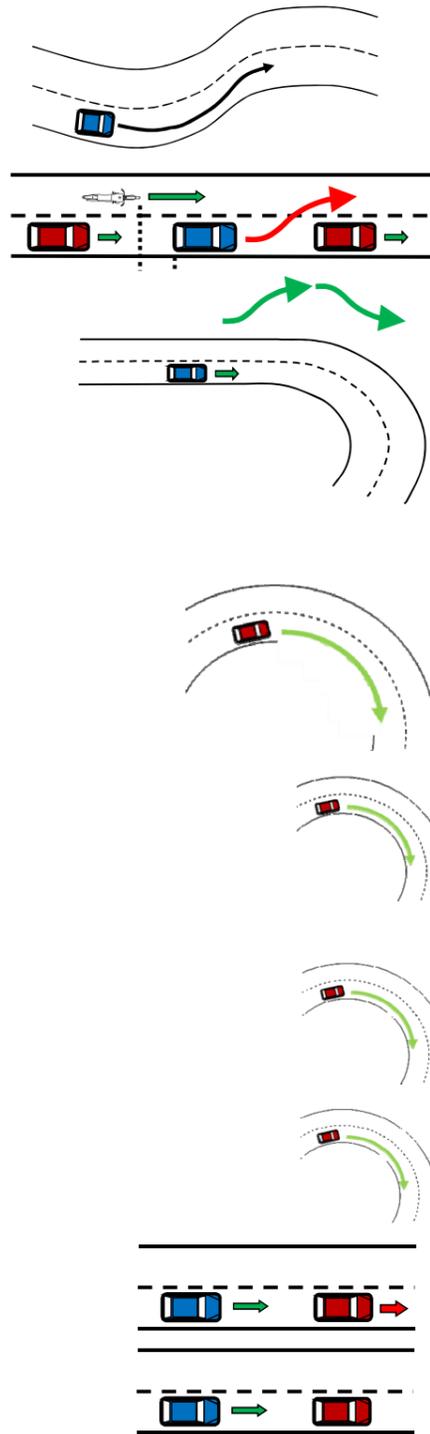


Overview about proposed tests for Cat E ACSF

Submitted by the experts of Germany

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	aim	track (for the functional phase of the test)	speed v (for the functional phase of the test)	lateral acceleration ay (for the functional phase of the test)	pass criteria	alternative
Tests for category E						
FU1 Lane keeping	check lane keeping functionality within system boundaries	curved to deliver range for v and ay	varying between v _{min} and v _{max} - 10 km/h	varying between 0.5 m/s ² and 90% of a _{ymax}	vehicle does not cross lane marking	if track does not cover the whole ranges for speed and lateral acceleration, manufacturer shall provide data for the rest of the range
FU2 Abort of lane change	check if willingness for lane change is aborted if motorcycle approaches from behind	straight, 2 lanes	the lower of 80 km/h or v _{max} - 20 km/h L3: 50 km/h above this value	-	willingness for lane change is aborted as long as motorcycle is within critical section (6 s TTC corresponding to approx. 80 m to 0 m behind)	if willingness for lane change is "no" for the whole test, skip obstruction vehicle and successively reduce motorcycle speed
FU3 Lane change	check double lane change functionality	straight, 2 lanes	the lower of 80 km/h or v _{max} - 20 km/h	-	vehicle does not cross outer marking of second lane and double lane change completed	-
TR1 Lateral acceleration exceeded	check transition demand and MRM in case of a curve being too tight	straight + curved to deliver appropriate ay	the lower of 80 km/h or v _{max} - 10 km/h	at least the lower of a _{ymax} + 0.5 m/s ² or 3.5 m/s ²	<ul style="list-style-type: none"> _ transition demand given immediately _ does not cross marking for 4 s after transition demand _ MRM initiated 4s after transition demand _ hazard light together with start of MRM or _ vehicle reduced speed appropriately in advance of the curve 	-
TR2 Missing marking	check transition demand and MRM in case of a missing lane marking	curved to deliver ay and with one lane marking missing in a section of min. 150 m	v _{max} - 10 km/h	a value between 0.5 m/s ² and 90% of a _{ymax}	<ul style="list-style-type: none"> _ transition demand given immediately _ does not cross marking for 4 s after transition demand _ MRM initiated 4s after transition demand _ hazard lights together with start of MRM or _ vehicle successfully completes whole section with missing lane marking (staying in the lane) 	-
TR3 Driver not available	check transition demand and MRM if driver does not show appropriate actions	curved to deliver ay	v _{max} - 10 km/h	a value between 0.5 m/s ² and 90% of a _{ymax}	<ul style="list-style-type: none"> _ warning signal when driver is detected not to be available _ transition demand max. 15 s after start of warning _ does not cross lane marking for 4 s after transition demand _ MRM initiated 4 s after transition demand _ hazard light together with start of MRM 	-
TR4 Failure	check transition demand, failure warning and MRM in case of a single sensor failure	curved to deliver ay in a section of min. 200 m	v _{max} - 10 km/h	a value between 0.5 m/s ² and 90% of a _{ymax}	<ul style="list-style-type: none"> _ failure warning and transition demand 0.5 s after failure was induced _ does not cross marking for 4 s after transition demand _ MRM initiated 4 s after transition demand _ hazard light together with start of MRM 	-
TR5 Taking over steering task by driver	check abortion of MRM after a single sensor failure in case of driver override	curved to deliver ay in a section of min. 200 m	v _{max} - 10 km/h	a value between 0.5 m/s ² and 90% of a _{ymax}	<ul style="list-style-type: none"> _ ACSF deactivated _ MRM aborted _ hazard light deactivated 	-
EM1 Moving target (decel. 6 m/s²)	check protective braking in case of danger of collision due to braking vehicle ahead	straight, adjacent lanes blocked	the lower of 80 km/h or v _{max} - 10 km/h	-	no collision	-
EM2 Stationary target	check protective braking in case of danger of collision with stationary object ahead	straight, adjacent lanes blocked	v _{max} - 10 km/h	-	no collision	-