

Hazard ID	Situational Analysis						Hazard Identification				Hazardous Event Classification				Determination of ASIL and Safety Goals						
	Operational Mode	Operational Scenario	Environmental Details	Situation Details	Other Details (if relevant)	Item Usage (if relevant)	Situation Description	Function	Deviation	Deviation Details	Hazardous Event (first noticeable effects)	Event Details	Hazardous Event Description	Exposure (inf. situation)	Rationale (first exposure)	Severity (inf. potential harm)	Rationale (for severity)	Controllability (inf. hazardous event)	Rationale (for controllability)	ASIL Determination	Safety Goal
HA-001	Normal Driving	Highway	Snow	High Speed	Windshield slightly covered	Correctly Used	Driving through a road work site in the winter	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	Actor effect is wrong	Crash is caused due to misinterpretation of slightly covered camera and snow covered road	Side collision with obstacle	Vehicles tried to drive through road work site	Vehicle crashes into obstacle of road work site	Low probability	Snow is quite rare (<2%) within western Europe	S1	High chance of hitting a road work vehicle or concrete block	C2	Depending on the situation the distance to the obstacle is quite often very low so in many situation a crash can not be avoided but the control of the car could be restored	ASIL B	Under extreme weather conditions the LKA keeping system should deny activation to prevent this situation. The driver should be made aware that the LGA is no autonomous system and that regularly road work sites can lead to uncontrollable situations.
HA-002	Normal Driving	City road	Normal conditions	Low speed		Correctly Used	Cruising through the city center	Lane Departure	Actor effect is too much	Driver is scared due too too intense vibration of the steering wheel	Potential loose of control	Vehicle drives through city, crosses lane and too intense feedback is created	Potential crash with other car/obstacle	High probability	An everyday situation while driving through the city	S2	Medium danger of other participants	C1	Controllability should be easily regainable	ASIL B	It needs to be ensured the torque applied to the steering wheel can never exceed a given amount, even if the LGA system would request it. The maximum requested torque of the LGA system needs to be defined and verified.
HA-003	Normal Driving	Country road	Normal conditions	High speed		Incorrectly used	The driver uses the car as if it were autonomous	Lane Keeping Assistance	Function Always Activated	Function should be deactivated when used abusively	Potential death through due to collision with obstacles close to the road	Vehicle leaves the road at high speed	Vehicle leaves the road because it can not drive autonomous but the user thinks so	High probability	An everyday situation	S4	Very likely	C2	Controllability could be regained	ASIL B	User is not allowed to take his hands off the wheel for more than a given amount of seconds. User should be loudly alarmed if he does otherwise
HA-004	Service	N/A	Car service	Stopped		Correctly Used	Vehicle is in a service center and causes and accident due to automatic steering	Lane Keeping Assistance	Function unexpectedly activated	Function was activated in a wrong situation	Potential damage of car and service personnel	Vehicle steered while not driving	Vehicle steers in still-stand and causes accident	Low probability	Quite unlikely	S1	Likely	C0	Control could be regained by counter-steering	QM	Lane Keeping needs to be deactivated in still-stand and deactivated in service mode