

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 (optional)	Item Usage (function)	Situation Description	Function	Deviation	Deviation Details	Hazardous Event (resulting effect)	Event Details	Hazardous Event Description	Exposure (of situation)	Rationale (for exposure)	Severity (of potential harm)	Rationale (for severity)	Controllability (of hazardous event)	Rationale (for controllability)	ASIL Determination	Safety Goal
HA-001	OM03 - Normal Driving	OS04 - Highway	EN06 - Rain (slippery road)	SD02 - High speed		IU01 - Correctly used	Normal Driving on a Highway during rain with high speed and correctly used system	Lane Departure Warning (LDW) function shall apply an oscillating steering torque to provide the driver with haptic feedback	DV04 - Actor effect is too much	the LDW function applies oscillation torque with a very high torque (i.e. above limit)	EV00Collision with other vehicle	High haptic feedback can affect drivers ability to steer as intended. The driver could loose control of the vehicle and collide with another vehicle or with road infrastructure.		E3 - Medium Probability	High country road driving is part of regular driving, however, rainy condition doesnt occur regularly	S3 - Life-threatening or fatal injuries	On country roads speed of vehicle is expected to be high	C3 - difficult to control or not controllable	Less than 90 % of all drivers or other traffic participants are usually able, or barely able, to avoid harm	ASIL C	The oscillating torque from the lane departure warning function shall be limited
HA-002	OM03 - Normal Driving	OS03 - Country Road	EN01 - Normal Conditions	SD02 - High speed		IU02 - Incorrectly used	Normal Driving on a country road during normal condions with high speed and incorrectly used system	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	DV03-Function always activated	The LKA is continuously applying torque	EV00Collision with other vehicle	Continious torque application especially when the driver is not holding the steering wheel could lead to vehicle drift away from the lane and collide with other vehicles		E2 - Low probability	High country road driving is part of regular driving, however, incorrectly used system is rare	S3 - Life-threatening or fatal injuries	On country roads speed of vehicle is expected to be high	C3 - difficult to control or not controllable	Less than 90 % of all drivers or other traffic participants are usually able, or barely able, to avoid harm	ASIL B	The lane keeping assistance function shall be time limited and the additional steering torque shall end after a given time interval so that the driver cannot misuse the system for autonomous driving.
HA-003	OM03 - Normal Driving	OS03 - Country Road	EN06 - Rain (slippery road)	SD02 - High speed		IU02 - Correctly used	Normal Driving on a country road during rainy conditions with high speed and correctly used system	Lane Departure Warning (LDW) function shall apply an oscillating steering torque to provide the driver with haptic feedback	DV05 - Actor effect is too less	the LDW function applies oscillation torque with a very less torque	EV07 None	Driver will not feel the vibration of the steering wheel. This driver will not loose the control of the vehicle		E3 - Medium Probability	High country road driving is part of regular driving, however, rainy condition doesnt occur regularly	S0 - No Injuries	No accident occurs	C1 -Simply controllable	99 % or more of all drivers or other traffic participants are usually able to avoid harm	QM	
HA-004	OM03 - Normal Driving	OS03 - Country Road	EN06 - Rain (slippery road)	SD02 - High speed		IU02 - Correctly used	Normal Driving on a country road during rainy condions with high speed and correctly used system	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	DV10 - Actor effect is reverse	The LKA add steering torque in the wrong direction	EV00Collision with other vehicle	The application of torque in the wrong direction will cause vehicle to drift away further from the Ego lane. This could lead to collision with other vehicles		E3 - Medium Probability	High country road driving is part of regular driving, however, rainy condition doesnt occur regularly	S3 - Life-threatening or fatal injuries	On country roads speed of vehicle is expected to be high	C3 - difficult to control or not controllable	Less than 90 % of all drivers or other traffic participants are usually able, or barely able, to avoid harm	ASIL C	The lane keeping assistance function shall apply torque in the correct direction to bring back the vehicle to the ego lane center