

Hazard ID	Situational Analysis						Hazard Identification						Hazardous Event Classification						Determination of ASIL and Safety Goals		
	Operational Mode	Operational Scenario	Environmental Details	Situation Details	Driver Details (footwear)	Item Usage (function)	Situation Description	Function	Deviation	Deviation Details	Hazardous Event (qualitative effect)	Event Details	Hazardous Event Description	Exposure (of situation)	Risk rate (for exposure)	Severity (of potential harm)	Risk rate (for severity)	Correlability (of hazardous event)	Risk rate (for correlability)	ASIL Determination	Safety Goal
HA-001	OM03 - Normal Driving	OS04 - Highway	EN06 - Rain (slippery road)	SD02 - High speed		IJ01 - Correctly used	Normal Driving on Highway during Rainy conditions (Slippery Road) with High speed	Lane Departure Warning (LDW) function shall apply an oscillating torque to provide the driver with haptic feedback.	DV04 - Actor effect is too much	The LDW function applies an oscillating torque with very high torque (above limit).	EV00 - Collision with other vehicle	High haptic feedback can affect driver's ability to steer as intended. The driver could lose control of the vehicle and collide with another vehicle or with road infrastructure.	Total loss of control of the steering	E3 - Medium probability	Highway driving is common and driving on wet roads happens with medium probability.	S3 - Life-threatening or fatal injuries	On Highways speed of vehicle is expected to be high	C3 - Difficult to control or uncontrollable	If the steering wheel vibrates excessively with wild swings then it is difficult to control for any average driver.	C	The oscillating steering torque from the LDW function shall be limited.
HA-002								EN01 - Normal conditions	SD01 - High speed	IJ02 - Incorrectly used	Normal Driving on Country Road during Normal conditions with High speed	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in lane line.	DV03 - Function always activated	Lane keeping assistance is always on	EV00 - Collision with other vehicle	Since the drivers hands aren't on the wheel at high speeds, a vehicle accident would not be controllable.	Total loss of control of the steering	E2 - Low probability	country driving is part of regular driving, however misusing the system is not that common. The combination hence happens with a low probability	S3 - Life-threatening or fatal injuries	On country roads speed of vehicle is expected to be high
HA-003	OM03 - Normal Driving	OS04 - Highway	EN06 - Rain (slippery road)	SD02 - High speed	IJ01 - Correctly used	Normal Driving on Highway during Rainy conditions (Slippery Road) with High speed	Lane Departure Warning (LDW) function shall apply an oscillating steering torque to provide the driver with haptic feedback.	DV10 - Actor effect is reverse	The motor providing torque to steering wheel is applying torque in reverse direction.			EV02 - Side collision with other traffic	The vehicle moves outside of the lane instead of moving back to the center due to reverse torque applied.	The LDW steered the vehicle to the opposite lane.	E3 - Medium probability	Highway driving is common and driving on wet roads happens with medium probability.	S3 - Life-threatening or fatal injuries	On Highways speed of vehicle is expected to be high	C3 - Difficult to control or uncontrollable	The LDW keeps increasing the torque which is applied in reverse as it finds that the vehicle keeps moving out of the lane.	C
HA-004	OM03 - Normal Driving	OS02 - Country Road	EN01 - Normal conditions	SD01 - Low speed			IJ01 - Correctly used	Normal Driving on Country Road during Normal conditions with Low speed	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in lane line.	DV01 - Function not activated	The camera sensor stop functioning and the Lane Keeping Assistance function continue to be activated.	EV00 - Collision with other vehicle	The Lane Keeping Assistance provides incorrect and random Torque causing the vehicle to steer out of control.	Possible loss of control of the steering	E3 - Medium probability	Driving in country roads at Low speeds under normal conditions is common	S2 - Severe and life-threatening injuries	On country roads at low speeds risk of life threatening injury is not high	C3 - Difficult to control or uncontrollable	Random jerks on steering wheel are difficult to control	B