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	Rain (spllippery road)	SD02 - High speed		IU01 - Correctly used	Highway driving in wet road	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 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.	The lane departure warinig function applies an excesive torque and/or at high frequency.	E3 - Medium probability	In some countries there are more than 200 rainy days per year. And other countries have strong seasonal precepitations.	S3 - Life-threatening or fatal injuries	Fatal due to decelarations and possible fixed obstacles in the road.	C3 - Difficult to control or uncontrollable	An average driver seldom will experience a lack of control on the steering wheel.	C	The oscillation applied to the steering wheel shall be limited in frequency and amplitude.
HA-002	OM03 - Normal driving	OS02 - Country Road	EN01 - Normal conditions	SD02 - High speed		IU02 - Incorrectly used	Normal driving on country roads during no	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	DV03 - Function always activated	The driver was making use of the function and taking both hands off the wheel. Incorrectly usign the system as a fully autonomous vehicle.	EV00 - Collision with other vehicle	The keep lane assistance is always active. The driver misuses the funtionality and removes both hands off the wheel for a long period of time (>3s)	The LKA is always active	E2 - Low probability	The drivers normally do not feel confortable releasing the steering wheel at high speed.	S3 - Life-threatening or fatal injuries	Fatal due to decelarations and possible fixed obstacles in the road.	C3 - Difficult to control or uncontrollable	The driver will not have time to react as the hands are off the steering wheel.	B	The LKA funciton shall be limited in duration, and applied torque to the steering column shall end after a fixed duration. This way the driver wont have the confidence to release the steering wheel.
HA-003	OM03 - Normal driving	OS04 - Highway	EN01 - Normal conditions	SD02 - High speed	Day time + Obstacle on the road	IU01 - Correctly used	Normal Driving on highway during Normal conditions with high speed (day time + Obstacle on the road)	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 vibration is not perceived by the driver	EV04 - Car comes off the road	The vehicle crashes with the side bumpers	The feedback is not perceived while the ADAS system acting, then the driver overcompensates the torque given by the system. Then the system stops providing the torque but the driver is still applying it. This causes oscillations in the vehicle trajectory.	E3 - Medium probability	Lane keeping function is probably used on highway	S3 - Life-threatening or fatal injuries	On highway speed of vehicle is expected to be high	C2 - Normally controllable	Other systems in the vehicle are designed to minimize this scenario (stability control etc)	B	The vibration shall be easily perceived by the driver.
HA-004	OM03 - Normal driving	OS04 - Highway	EN01 - Normal conditions	SD02 - High speed	Day time + Obstacle on the road	IU02 - Incorrectly used	Normal Driving on highway during Normal conditions with high speed (day time + Obstacle on the road)	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	DV11 - Actor effect is wrong	The driver observes an obstacle in the road, then tries to avoid it by applying torque to the steering wheel. The LKA applies a torque in the opposite direction. As the driver did not had the tiem to activate the change lane light	EV-04 - Front collision with obstacle	the total torque applied to the steering wheel is 0, and the car hits the obstacle.	LKA blocks emergency action	E2 - Low probability	Normally highway are cleaned on a regular basis, but in some places rocks fall from the hills	S3 - Life-threatening or fatal injuries	As the action is an emergency, the obstacle may be of considerable size.	C3 - Difficult to control or uncontrollable	Even when the driver is acting the is no response.	B	The system must stop the torque applied if there is a torque > MAX_OPPOSITE_TORQUE