Hazard ID			
	Operational Mode	**Operational Scenario**	**Environmental Details**
HA-001	OM03 - Normal Driving	OS04 - Highway	EN06 - Rain (slippery r
HA-002	OM03 - Normal Driving	OS03 - Country Road	EN01 - Normal conditions
HA-003	OM03 - Normal Driving	OS02 - City Road	EN03 - Fog (degraded view)
HA-004	OM03 - Normal Driving	OS02 - City Road	EN07 - Snow (slippery road)

Situational Analysis

Situation Details	Other Details (optional)	Item Usage (function)	Situation Description
SD02 - High speed		IU01 - Correctly used	Normal Driving on Highway at high speed with correctly used system.
SD02 - High speed		IU02 - Incorrectly used	Normal Driving on Highway at high speed with incorrectly used system
SD02 - High speed		IU01 - Correctly used	Normal Driving on city road at high speed with correctly used system
SD02 - High speed		IU01 - Correctly used	Normal Driving on city road at high speed with correctly used system

Hazard Identification			
Function	**Deviation**	**Deviation Details**	**Hazardous Event (resulting effect)**
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 Lane Departure Warning applies too much oscillating torque (above limit)	EV00 - Collision with other vehicle
Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	DV03 - Function is always activated	Lane Keeping Function is always activated	EV00 - Collision with other vehicle
Lane Departure Warning (LDW) function shall apply an oscillating steering torque to provide the driver with haptic feedback	DV19 - Sensor detection is wrong	The Camera ECU doesn't detect lane lines	EV-02 - Side collision with other traffic
Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	DV10 - Actor effect is reverse	Due To a snowy conditions, the LKA function takes car away from the center of the lane due to non detection of lane lines	EV-02 - Side collision with other traffic

Event Details	Hazardous Event Description	Exposure (of situation)
High haptic feedback can affect driver's ability to steer as intented. The driver could lose control and could collide with another vehicle or road infrastructure.	The LDW function applies too high an oscillating torque to the steering wheel	E3 - Medium probability
The Driver used the function to mimic autonomous car, thus lost focus from driving.	The Driver didn't use the LKA function as intended	E2 - Low probability
The Lane Departure warning system doesn't work as intended due to camera ECU not able to detect lane lines.	The LDW function didn't work as intended, i.e. it didn't warn the driver when he is steering off the lane.	E2 - Low probability
The LKA function doesn't work as wanted by the user to keep vehicle in the center of lane	The vehicle veers of the road and collides with the traffic in the other lane	E1 - Very low probability

Hazardous Event Classification			
Rationale (for exposure)	**Severity (of potential harm)**	**Rationale (for severity)**	**Controllability (of hazardous event)**
Driving on a highway during rain can happen once a month or more, as described by E3	S3 - Life-threatening or fatal injuries	Collision at high speeds can result in life threatening injuries	C3 - Difficult to control or uncontrollable
This can happen a few times a year for most of the driver.	S3 - Life-threatening or fatal injuries	Collision at high speeds can result in life threatening injuries	C3 - Difficult to control or uncontrollable
Foggy Days happen a few times a year depending on the location	S3 - Life-threatening or fatal injuries	Side Collision at high speeds can result in life threatening injuries	C3 - Difficult to control or uncontrollable
Snow fall happens very rarely	S3 - Life-threatening or fatal injuries	Side Collision at high speeds can result in life threatening injuries	C3 - Difficult to control or uncontrollable

	Determination of ASIL and Safety Goals	
Rationale (for controllability)	**ASIL Determination**	**Safety Goal**
It is difficult to control steering wheel with excessive vibrations at high speeds for most of the drivers	ASIL C	The oscillating steering torque from the Lane Departure Warning function shall be limited.
Lane Keeping Assistance is always on here, the driver may assume that the car is driving autonomously and lose control in the process	ASIL B	The Lane Keeping Assistance system shall be time limited, thus after a lane keeping manoeuvre, the control is given back to the driver
The Driver believes that the system is working as intended and thus takes less precautions while driving	ASIL B	The Lane Departure Warning System shall warn the driver when one of its sensor isn't giving proper values.
The Driver believes that the lane keeping assistance system is keeping the car in the center of the lane and thus takes less precautions while drivind	ASIL A	The Lane Keeping Assistance system shall not adjust the steering wheel when it doesn't receive proper values from camera.