Hazard ID	Situational Analysis				
	Operational Mode	**Operational Scenario**	**Environmental Details**	**Situation Details**	**Other Details (optional)**
HA-001	OM03 - Normal Driving	OS04 - Highway	EN06 - Rain (slippery road)	SD02 - High speed	Day Time
HA-002	OM03 - Normal Driving	OS03 - Country Road	EN01 - Normal conditions	SD02 - High speed	Day Time
HA-003	OM03 - Normal Driving	OS10 - Road with construction site	EN01 - Normal conditions	SD02 - High speed	Day Time
HA-004	OM04 - Backwards Driving	OS01 - City Road	EN01 - Normal conditions	SD01 - Low speed	Day Time

		Hazard		
Item Usage (function)	**Situation Description**	**Function**	**Deviation**	**Deviation Details**
IU01 - Correctly used	Normal Driving on a Highway during Rain at High speed at Day time	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 oscilating torque is too strong
IU02 - Incorrectly used	Normal Driving on a Country Road in Normal conditions at High speed at Day time	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 function allows the driver to stop focusing on driving and lose situational awareness
IU01 - Correctly used	Normal Driving on a Road with construction site in Normal conditions at High speed at Day time	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	DV03 - Function always activated	The steering torque is too strong that the driver cannot avoid the contruction site
IU01 - Correctly used	Backwards Driving on a City Road in Normal conditions at Low speed at Day time	Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	DV03 - Function always activated	The steering torque keeps on and disturbs the driver

Identification				
Hazardous Event (resulting effect)	**Event Details**	**Hazardous Event Description**	**Exposure (of situation)**	**Rationale (for exposure)**
EV00 - Collision with other vehicle	High torque feedback may affect the driver's ability to control the vehicle. The driver may lose control of the vehicle.	Total loss of vehicle's control caused by very high oscillating torque	E3 - Medium probability	Driving on wet roads
EV00 - Collision with other vehicle	If the driver misuses the lane keeping assistance function as a fully autonomous function, the driver will lose situational awareness and be unable to respond to prevent a collision	The LKA function allows the driver to stop focus on driving and lose situational awareness	E2 - Low probability	Drivers usually are paying attention to the road
EV-01 - Side collision with obstacle	Vehicle crashes into the obstacle or road infrastructure with injury to driver and any others present	Total loss of vehicle's control	E2 - Low probability	Constructions sites on a highway are commom
EV-03 - Rear collision with trailing traffic	Vehicle crashes into the obstacle or road infrastructure	Total loss of vehicle's control	E1 - Very low probability	Backwards driving in the city is very rare

Hazardous Event Classification				Determin
Severity (of potential harm)	**Rationale (for severity)**	**Controllability (of hazardous event)**	**Rationale (for controllability)**	**ASIL Determination**
S3 - Life-threatening or fatal injuries	Driving at High Speed	C3 - Difficult to control or uncontrollable	Because the driver cannot control the steering wheel, the vehicle cannot be controlled	C
S3 - Life-threatening or fatal injuries	Driving at High Speed	C3 - Difficult to control or uncontrollable	Because hands aren't on the wheel at high speed, a vehicle accident would not be controllable	B
S2 - Severe and life-threatening injuries	On highway speed of vehicle is expected to be high	C3 - Difficult to control or uncontrollable	On a highway at high speed, lose control even for some seconds can be really dangerous	A
S1 - Light and moderate injuries	In city traffiic, speed of vehicle is expected to be low	C1 - Simply controllable	When driving backwards the driver is usually paying more attention, and it is easily controlled by applying brakes	QM

ation of ASIL and Safety Goals
Safety Goal
Oscillating steering torque delivered to the steering wheel by the LDW function shall be limited
The LKA function shall be time-limited so that the driver cannot misuse the system for autonomous driving
Steering torque shall be time limited
Steering torque shall be disabled