Hazard ID	Situational Analysis						
	Operational Mode	Operational Scenario	Environmental Details	Situation Details	Other Details (optional)	Item Usage (function)	Situation Description
HA-001	Normal driving	Highway	Rain (slippery road)	High speed		Correctly used	highway driving in the rain
HA-002	Normal driving	Country Road	Normal conditions	High speed		Incorrectly used	misuse as a fully autonomous function
HA-003	Normal driving	Highway	Normal conditions	High speed		Correctly used	Driving on the highway under normal conditions
HA-004	Normal driving	Country Road	Fog (degraded view)	Low speed		Correctly used	Driving on a country road during fog.

Hazard Identification					
Function	**Deviation**	**Deviation Details**	**Hazardous Event (resulting effect)**	**Event Details**	**Hazardous Event Description**
Lane Departure Warning (LDW) function shall apply an oscillating steering torque to provide the driver with haptic feedback	Actor effect is too much	The LDW function applies an oscillating torque with very high torque (above limit).	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 LDW function applies too high an oscillating torque to the steering wheel (above limit).
Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	Function always activated	The LKA is always active and can be misused by the driver as a kind of autonomous driving function.	Collision with other vehicle	If the driver can always use the LKA, this over-reliance can lead to the driver losing focus and the vehicle getting into an accident.	The LKA is always on and can be misused.
Lane Departure Warning (LDW) function shall apply an oscillating steering torque to provide the driver with haptic feedback	Actor effect is too less	The LDW function does not apply enough oscillating torque to be felt by the driver.	Collision with other vehicle	The driver is not warned about a lane departure and hence cannot react to it a.	The LDW function does not apply high enough oscillating torque for the driver to notice.
Lane Keeping Assistance (LKA) function shall apply the steering torque when active in order to stay in ego lane	Sensor sensitivity is too low	The LKA sensor (camera) does not correctly identify the lane markings and thus does not correct the steering torque.	Collision with other vehicle	The driver is not warned about a lane departure and hence cannot react to it a.	The LKA does not identify the lane markings due to their low visibility.

Hazardous Event Classification					
Exposure (of situation)	**Rationale (for exposure)**	**Severity (of potential harm)**	**Rationale (for severity)**	**Controllability (of hazardous event)**	**Rationale (for controllability)**
E3	driving on wet roads occurs quite often	S3	high speed of driving	C3	most drivers would have difficulty controlling the vehicle
E2	misuse of the system occurs with low probability	S3	high speed of driving	C3	most drivers would have difficulty controlling the vehicle
E3	driving on the highway occurs often	S3	high speed of driving	C2	most drivers would be able to keep the lane even without warning
E2	fog does not occur that often	S2	driving speed lower due to fog	C2	most drivers would be able to keep the lane even without assistance

Determination of ASIL and Safety Goals	
ASIL Determination	**Safety Goal**
C	The oscillating steering torque from the LDW function shall be limited.
B	The LKA 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.
B	The oscillating steering torque from the LDW function shall be over a certain threshold.
QM	The LKA shall warn the driver when it's sensor cannot see lane markings due to poor visibility.