

Hazard ID	Situational Analysis				
	Operational Mode	Operational Scenario	Environmental Details	Situation Details	Other Details (optional)
HA-001	OM03 - Normal Driving	OS01 - City Road	EN01 - Normal conditions	SD01 - Low speed	Day Time
HA-002	OM03 - Normal Driving	OS03 - Highway	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 City Road in Normal conditions at Low speed at Day time	Lane Departure Warning (LDW) function shall apply an oscillating steering torque to provide the driver with haptic feedback	DV03 - Function always activated	The oscillating torque is too strong
IU01 - Correctly used	Normal Driving on a Highway 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
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 construction 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)
EV-06 - Front collision with oncoming traffic	Vehicle crashes into the obstacle or road infrastructure with injury to driver and any others present	Total loss of vehicle's control	E4 - High probability	Day driving in the city is a regular activity
EV-02 - Side collision with other traffic	Vehicle crashes into the obstacle or road infrastructure with injury to driver and any others present	Total loss of vehicle's control	E4 - High probability	Day driving on a highway is a regular activity
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
S1 - Light and moderate injuries	In the cities speed of vehicle is expected to be low	C1 - Simply controllable	At city speed, most drivers will be able to control the situation by applying brakes	QM
S3 - Life-threatening or fatal 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	D
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 should be limited
Steering torque should be time limited
Steering torque should be time limited
Steering torque should be disabled