	INSTRUCTIONS:																					
	Fill out the hazard analys	sis and risk assessment b	elow.																			
		lane departure warning for																				
	Then come up with your	lane keeping assistance own situations and hazan	ds for the lane assistan	ce system. Fill in the HA-0	003 and HA-004 rows	š.																_
	When finished, export yo	our spreadsheet as a pdf fi	ile so that a reviewer ca	n easily see your work.																		_
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Hazard ID				Situational Anal	ysis					Hazard Identification					Haz	ardous Event Classificati	on		Determ	nination of ASIL and Safety Goals		
	Operational Mode	Operational Scenario	Environmental Details	Situation Details	Other Details (ontional)	Item Usage (function)	Situation Description	Function De	riation 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 bazardous event)	Rationale (for controllability)	ASIL Determination	Safety Goal		
001	OM03 - Normal driving	OS04 - Highway		o SD02 - High speed	(Carrier)	IU01 - Correctly used	used system	Lane Departure DV04 Warning (LDW) function shall apply an oscillating much steering torque to provide the driver with haptic feedback	Actor The LDW function applies s too oscillating torque with very high torque (above limit).	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.			Driving highway in rainy condition is quite often	S3 - Life-threatening or fatal injuries	On highway speed of vehicle is expected to be high		Vibrating excessively with wild swigs of the steering wheel, most drivers would have difficulty controlling the vehicle	С	The oscillating steering torque from the lane departure waning function shall be limited.		
	OM03 - Normal driving	OS03 - Country Road	conditions	SD02 - High speed		IU02 - Incorrectly used	Normal driving on country roads during normal conditions with high speed (the driver is misusing the lane keeping assistance function as an autonomous function)	function shall apply the steering torque when active in order to stay in ego lane	Function The LKA function is always activated by misusing the function	other vehicle	to misusing the function by taking both hands off the wheel and incorrectly treating the car as a full autonomous vehicle.	a fully autonomous vehicle.		combination probably does not happen often	S3 - Life-threatening or fatal injuries		uncontrollable		В	The lane keeping assistance function shall be time limited and the additional steering torque shall end after given time interval.		
003	OM03 - Normal driving		conditions	SD02 - High speed		IU01 - Correctly used	Normal driving on a highway at normal condition with high speed and correctly used system	Assistance (LKA) effect function shall apply the steering torque when active in order to stay in ego lane	Actor The torque from LKA is no s too less enough to keep tane when car is running curve	other vehicle	Potential for a vehicle collision because LAK could not keep ago lane due to the less steering torque to keep the lane when car is runing on curve	lane when running on curve.	probability	Driving highway and curved road is quite often	S3 - Life-threatening or fatal injuries	On highway speed of vehicle is expected to be high		If the car is going out of the ego lane, maybe driver could add more steering torque to stay ego lane.	В	The LKA shall confirm that LKA steering torque limit is enough to keep on curved road. And if not, LKA shall make warning to driver.		
004	OM03 - Normal driving	OS02 - City Road	EN04 - Snowfall (degraded view)	SD01 - Low speed		IU02 - Incorrectly used	Driving on city road during snowing with low speed and correctly used system	LKA function shall apply steering toque when active in order to stay in ego lane	Sensor The LKA camera sensor is miss detecting the lane line due to snow	EV00 - Collision with other vehicle	Potential for a vehicle collision due to miss detecting ego lane line due to snow	Camera sensor miss detecting ego lane due to snow	E1 - Very low probability	The driver is running on snowed road and misusing the system, that combination probably does not happen ofthen	S1 - Light and moderate injuries	Car speed is low	C2 - Normally controllable	If LKA is going to take wrong lane, driver probably could correct steering wheel and car direction.	QM	The LKS should be deactivated if the camera could not detect lane correctly nor not possible to work correctly under those condition.		