

EDR: Table of criteria-Differences between EDR & DSSAD

		EDR for conventional vehicles	EDR for ADs	DSSAD for ALKS
System	Purpose (why do the contracting parties want to introduce this function into the vehicle?)	Accident analysis for developing safer vehicle <ul style="list-style-type: none"> [conducting road safety analysis] [assessing effectiveness of specific measures taken] <i>Comments: those two means are end-usage for developing safer vehicle for accident analysis</i>		<u>Analysis of AD system activation status for developing safer AD vehicle</u> Clarify if the system or the driver <ul style="list-style-type: none"> Was, or Was requested to be in dynamic control of the vehicle at a certain time, for the sake of legal responsibility <i>Comments: should not be included in technical regulation as "legal responsibility" is different among each nation</i>
	What it shall/should not do <u>項目残す(delete this line)</u>	<ul style="list-style-type: none"> Detect who is driving [Identifying the owner/holder of the vehicle on the basis of the stored data.] 	<ul style="list-style-type: none"> Detect who is driving <i>Comments: DSSAD provide this information</i> [Identifying the owner/holder of the vehicle on the basis of the stored data.] 	Provide data on accident analysis
	PTI (Change order)	TBD		TBD
	Recording Period	before & during crash <i>Reference: 5s before events 300ms after event in Part 563</i>		During <u>AD system</u> *ALKS in operation <u>(*=ALKS for the short-term goal.)</u>

	System storage capabilities	1+1 “EDR event”	1+1 “EDR event”	Continuously records [X months or some 1000s of “DSSAD events”, 1st achieved] TBC according to ACSF <i>Comments: EDR records crash events based but DSSAD needs to record while ALKS is active</i>
	System crash survivability (Change Order)	Resistance to R94 crash test		Unnecessary
	“event” definition	“Event” means a crash or other physical occurrence that causes the trigger threshold to be met or exceeded, or an air bag to be deployed, whichever occurs first.		[Event: e.g. change of HAD system status, TD emission, MRM engagement/end, TO], ODD status , Failure , Driver availability]. (In line with ACSF IWG)
	Battery restitution Data survivability after a crash event	All data mandatory per the Table must be stored after R94 crash test.		Able to retrieve (details to be determined in technical requirements)
	System crash survivability Requirement for data recording during crash	Resistance to R94 crash test		Does not necessary to record data during & after crash event
	Environmental robustness (vibrations, etc.)	Tbd Tbd <u>(No difference between EDR and DSSAD)</u>		Tbd
	Malfunction detection of storage system	Tbd Unnecessary <u>Diagnosis is required as the system (e.g. airbag)</u> • Has being proven in the market		Input from ACSF is expected <u>Diagnosis will be required as the system</u> In the current ALKS draft, ALKS is active only when “DSSAD is operational”
	PTI	To be covered in “retrieval means”		
Data technique	Where to store (in the vehicle vs. the cloud)	should be technologically natural		

		(vehicle requirements should be determined in technological requirements)	
	Data format	Details to be determined in technical requirements	
	Data element	Details to be determined in technical requirements	
	Storing duration	not less than 10 days after the crash test(=part 563)	[X] DSSAD events or [X] months
	Retrieval means	Capable to access & retrieve the stored data	
	Accuracy	Details to be determined in technical requirements	
	Access means	The same as "retrieval means"	
	Erasing means (?)	Details to be determined in technical requirements	
	Sampling rate	Shorter sampling rate is required for recording crash event	Record at the defined event
	Data identification (this data really belongs to that vehicle)	Details to be determined in technical requirements	
	Triggering parameter	Same as "event definition"	
Data usage	Data ownership	Out of scope of technical requirements	
	Data protection (privacy)	Out of scope of technical requirements (consideration for privacy is necessary in each regulation)	
	Information to the user (driver, vehicle owner)	Details to be determined in technical requirements(e.g. in owner's manual)	
	Who must access which data?	Out of scope of technical requirements	
	Plausibility	Out of scope of technical requirements (e.g. To be validated by other independent sources)	
	Authorization process	Out of scope of technical requirements (determined by each national regulation)	
	How fast to deliver the data to a third party	Out of scope of technical requirements	
	Cybersecurity	Defined in cybersecurity regulation incl. software update (under discussion in GRVA)	