

Based on working paper EDR-DSSAD-01-07-r3

Comparison between EDR and DSSAD

This document aims at providing a comparison between Event Data Recorder (EDR) and Data Storage System for Automated Driving (DSSAD), as a first outcome of the joint GRVA/GRSG informal group on EDR/DSSAD, as per the request of WP.29 at their 178th session (June 2019), the revised Framework Document ECE/TRANS/WP.29/2019/34/Rev.1 and the informal group terms of reference as reflected in the official report of that WP.29 session (Annex VII).

When constructing this document, the EDR/DSSAD informal group made the decision to limit the items to those that make a clear discrimination between EDR and DSSAD. The other items will be considered by the informal group when establishing the performance requirements for both systems.

This document is expected to be reviewed and completed and/or corrected by GRVA at their 4th session (24-27 September 2019) and GRSG at their 117th session (8-11 October 2019), before being forwarded to WP.29 for their 179th session (12-15 November 2019).

EDR/DSSAD: Comparison table

Item	EDR for conventional vehicles	EDR for ADs	DSSAD (L3-L4)
Scope (categories of vehicles in the text)	Step1: Passenger cars and light duty vehicles (Vehicle categories according to R.E.3: M1, N1) Step 2: [Heavy duty vehicles (Vehicle categories according to R.E.3: M2,M3,N2, N3)]		[For ALKS: Any vehicle of automation level 3 or 4 with ALKS] USA: disagreement to already include heavy duty vehicles
System			
Purpose (why do the contracting parties want to introduce this function into the vehicle?)	Accident analysis		AD system operation status
System storage capabilities	1+1 “EDR event”		[X months or some 1000s of “DSSAD events”, 1 st achieved] TBC according to ACSF
Capability to record data during a crash event	Resistance to high deceleration and mechanical stress of a severe impact		NA
Data survivability after a crash event	Resistance to high deceleration and mechanical stress of a severe impact		Resistance to high deceleration and mechanical stress of a severe impact
“trigger to initiate the data storage”	Event, e.g. crash, physical occurrence that causes the trigger threshold to be met		Change in the system operation status.