

Submitted by the Co-Chairs of  
the IWG on EDR/DSSAD

Informal document GRVA-14-39  
14<sup>th</sup> GRVA, 26-30 September 2022  
Provisional agenda item 4(c)

# **Activities/Deliverables of IWG on EDR/DSSAD**

**September 2022**

# Mission of the EDR/DSSAD IWG

ToR of the IWG (ECE/TRANS/WP.29/1147 Annex VII)  
(adopted in the 178th WP.29 in June 2019)

The IWG shall **develop draft proposals** for **Event Data Recorder (EDR) for conventional vehicles and automated/autonomous vehicles** and for **Data Storage System for Automated Driving (DSSAD) for automated/autonomous vehicles**. These categories shall be understood as systems collecting and storing a determined range of vehicle data, including:

- a. Information related to collisions valuable for accident reconstruction (EDR);
- b. The status of the automated/autonomous driving system and the status of the driver (DSSAD).

To this effect, the IWG shall address the following issues:

- a. Define the scope and specific objectives of and differences between EDR and DSSAD,
- b. Define EDR and DSSAD requirements.

In particular, the IWG will consider defining the categories of data recorded, the events triggering recording, as well as technical specifications in terms of performances of such systems, such as the required endurance, accessibility, storage capacity or the specific security requirements, as well as the required privacy and data protection by design features.

# Overview of the IWG activities

	Projects Completed	Current Work	Future Work
Comparison between EDR and DSSAD	Comparison between EDR and DSSAD (WP29-179-19, Nov. 2019)	<ul style="list-style-type: none"> <li>• Review of purposes of DSSAD</li> <li>• Prioritization of discussion topics</li> <li>• Updating consolidated document of domestic activities on DSSAD</li> </ul>	<ul style="list-style-type: none"> <li>• DSSAD performance elements for ADS (Jun. 2024)</li> </ul>
DSSAD	DSSAD requirements (within ALKS (UNR157)) (181st WP.29, June 2020)	<ul style="list-style-type: none"> <li>• Review of DSSAD requirements for the extension of the Lane change function in ALKS (UNR 157). <i>GRVA/2022/16</i></li> </ul>	
EDR	EDR requirements (UNR 160 00/01 series) (183rd WP.29, Mar. 2021), and Amendments (186th WP.29 Mar. 2022)	<ul style="list-style-type: none"> <li>• EDR for HDV</li> <li>• Common performance elements for 1958/1998 CPs</li> </ul>	<ul style="list-style-type: none"> <li>• EDR for HDV (Mar. 2023)</li> <li>• Common performance elements (Mar. 2023)</li> <li>• EDR Step 2 (Mar. 2024)</li> <li>• EDR for ADS (Jun. 2024)</li> </ul>

## Activities since GRVA #13

- SG DSSAD 9: 7th June 2022
- SG DSSAD 10: 13th September 2022
  - Objective /Purpose of DSSAD
  - Discussion of DSSAD requirements
  - Group is focused on discussion of data elements to be recorded as its primary activity, to be followed by a discussion on the hardware requirements.
- 5 SG EDR sessions
  - EDR for HDV

## DSSAD Objective

- The group has agreed that the primary objective of a DSSAD system is:  
**“Data recorded to evaluate/monitor overall safety performance and identify when ADS is in control of vehicles”**
- Notably, it was agreed not to include liability as a primary goal of DSSAD.
- The group agreed that while data obtained from the DSSAD systems can be used for other purposes including liability, this was not the primary goal or objective of the DSSAD requirements.

## Addition of Data elements along with Lane Change function (01 series of UNR 157)

- After our May GRVA session, the DSSAD chairs held discussions with the Special Group on ALKS including the Chair of the special group and OICA to amend the UN Regulation No. 157, as amended by WP.29/2022/59/Rev.1, to change 'Abortion of Lane Change Procedure' that is to be recorded to 'Abortion of Lane Change Manoeuvre'.  
**(2022/GRVA/16)**

Updating consolidated document of domestic activities on DSSAD  
(GRVA-14-40)

- In the May session of GRVA, **Review of the existing national / regional activities and a proposed way forward for DSSAD** was introduced (GRVA-13-06).
- Some updates have been added, and the latest document is expected to be sent to WP.29 as **“Inventory of best ADS storage practices”** that is requested in FDAV.

# Projects are ongoing

EDR (ADS related only) and DSSAD in GRVA in the latest Programme of Work  
(ECE/TRANS/WP.29/2022/1)

**Table 5**  
**Subjects under consideration by the Working Party on Automated / Autonomous and Connected Vehicles (GRVA)**

Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments
<b>Data Storage System for Automated Driving vehicles (DSSAD)</b>	Inventory of best ADS storage practices.  <b><u>DSSAD performance elements for ADS</u></b>	Framework document for automated/autonomous vehicles ECE/TRANS/WP.29/2019/34 as revised	GRVA, IWG on EDR/DSSAD	November 2022  <b><u>June 2024</u></b> (WP.29)	WP.29	Ongoing
<b>Event Data Recorder (EDR)</b>	<b><u>EDR Performance Elements for ADS</u></b>	Framework document for automated/autonomous vehicles ECE/TRANS/WP.29/2019/34 as revised	GRSG in cooperation with GRVA, IWG on EDR/DSSAD	<b><u>June 2024</u></b> (WP.29)	WP.29	Ongoing

**Table 6**  
**Subjects under consideration by the Working Party on General Safety Provisions (GRSG)**

Title	Tasks / Deliverables	References	Timeline (GRSG adoption)	Timeline (WP.29 adoption)	Comments
<b>Event Data Recorder</b>	<b><u>EDR performance elements for ADS</u></b>		Oct 2023	<b><u>June 2024</u></b>	



**Thank you for your attention!**