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

Informal document **GRVA-20-24** 20th GRVA, 23-27 September 2024 Provisional agenda item 4(c)

Activities/Deliverables of IWG on EDR/DSSAD

September 2024

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 <u>develop draft proposals</u> for <u>Event Data Recorder (EDR) for conventional</u> vehicles and <u>automated/autonomous vehicles</u> and for <u>Data Storage System for Automated</u> <u>Driving (DSSAD) for automated/autonomous vehicles</u>. 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)	 DSSAD performance elements guidance document (June 2025) 	
DSSAD	DSSAD requirements (ALKS (UNR157)) (181st WP.29, June 2020) (189th WP.29, March 2023) Updating consolidated document of domestic activities on DSSAD (188th WP.29, Nov. 2022) Primary purposes of DSSAD, Prioritization of discussion topics		
EDR	EDR requirements (UNR 160 00/01 series) (183rd WP.29, Mar. 2021), and amendments (186th WP.29, Mar. 2022) Acceleration Data Accuracy Verification Procedures (125th GRSG, 2023/11&15 etc.) EDR for HDV (UNR 169, 191st WP.29, Nov.2023)	 EDR performance elements for ADS (Nov 2025) Supplement for 8-12t (March 2025) 	 EDR Step 2 (March 2026) EDR Step3 (March 2027)

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May 28,29

June 18

- EDR/DSSAD IWG #25 (hybrid in Paris, France) Sep. 17-19
- SG-DSSAD #21 June 19
 SG-DSSAD #22 July 18
 SG-DSSAD #23 Sep. 4
- SG-DSSAD #20

• SG-EDR #40

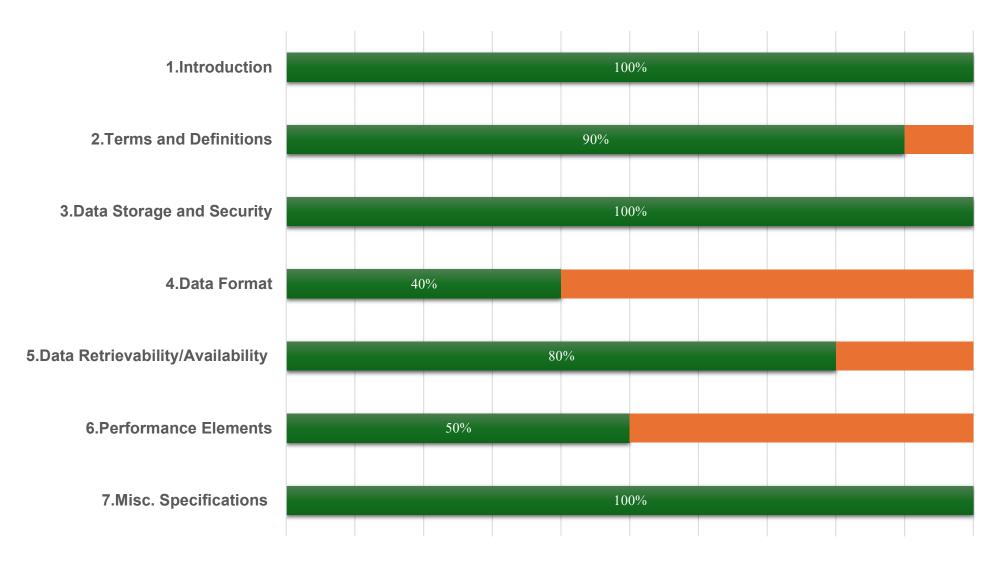
Activities of EDR/DSSAD IWG since GRVA #19

Summary of Recent Activities on DSSAD

- Group is focusing on discussion of DSSAD Performance Elements Guidance Document to submit to WP.29 March 2025.
- The guidance document consists of the following chapters:
 - 1. Introduction
 - 2. Terms and Definitions
 - 3. Data Storage and Security
 - 4. Data Format
 - 5. Data Retrievability/Availability
 - 6. Performance Elements
 - 7. Misc. Specifications

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1.	Intro	duction: «
	evalı	DSSAD refers to a capability of a vehicle to monitor the performance of its imated Driving System (ADS). This document provides recommendations to enable lations of ADS performance. This document has been prepared to support WP.29 erations under the 1958, 1997, and 1998 Agreements.+
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2.	Tern	as and Definitions: (Source: FRAV/VMAD integrated document) \leftrightarrow
		ection defines terms used in this document. Use of these terms and their definitions mmended in the development of legal requirements related to ADS and ADS es. ϕ
	2.1	Automated Driving System (ADS) means the vehicle hardware and software that are collectively capable of performing the entire Dynamic Driving Task (DDT) on a sustained basis. ¹
	2.2	(ADS) function means an ADS hardware and software capability designed to perform a specific portion of the DDT.⊬
	2.3	ADS vehicle means a vehicle equipped with an ADS. \leftrightarrow
	2.4	Driver means a human user who performs in real time part or all of the DDT and/or DDT fallback for a particular vehicle. ⁴⁴
	2.5	Dynamic Driving Task (DDT) means the real-time operational and tactical functions required to operate the vehicle. \oplus
	2.5.1.	The DDT is always performed in its entirety by the ADS which means the whole of the tactical and operational functions necessary to operate the vehicle (i.e., the ADS performs "the entire DDT" as stated in the definition of an "Automated Driving System" under para. 3.1.). These functions can be grouped into three interdependent categories: sensing and perception, planning and decision, and control. ⁴⁴

Progress Chart on DSSAD Guidance Document



Current Schedule for EDR/DSSAD IWG

- TF-EDR (8-12ton) #3
- SG-DSSAD #24
- SG-EDR (Step2) #41
- SG-DSSAD #25
- SG-DSSAD #26
- EDR/DSSAD IWG #26 (hybrid in U.S.)

October 21 October 23,24 November 4/5 (TBD) November 6 December 17 January 14-16

Thank you!