

# **IWG on EDR/DSSAD Status Report**

**April 2024**

# Background IWG on EDR/DSSAD

In accordance with the ‘Framework Document on automated/ autonomous Vehicles’ (WP.29-178 June 2019):

“The IWG shall develop draft proposals for Event Data Recorder (EDR) for conventional and automated/autonomous vehicles and for Data Storage System for Automated Driving (DSSAD)”.



Chairpersons: The Netherlands, Mr. Tim Guiting  
Japan, Mr. Hisao Matsukawa  
USA, Mrs. Jane Doherty

Secretariat: OICA, currently new secretary being identified

Activities since GRSG-126: 1 2.5-day hybrid session, Tokyo  
7 virtual sessions, incl. Sub Groups on  
DSSAD, EDR and Task Force on ‘8-12t’.

# Activities

EDR	DSSAD
<b><u>Completed:</u></b>	
<ul style="list-style-type: none"><li>• UN R160 on light duty vehicle EDR incl. Amendments and Supplements.</li></ul>	<ul style="list-style-type: none"><li>• DSSAD requirements within UN R157 on ALKS, incl. Amendments.</li></ul>
<ul style="list-style-type: none"><li>• UN R169 on heavy duty vehicle EDR.</li></ul>	
<b><u>Current:</u></b>	
<ul style="list-style-type: none"><li>• Clarification on demonstration of compliance of vehicles with a max. mass up to 8/12t within UN R169.</li></ul>	<ul style="list-style-type: none"><li>• DSSAD performance elements for ADS: guidance document.</li></ul>
<ul style="list-style-type: none"><li>• EDR Step 2, future and advanced requirements.</li></ul>	
<ul style="list-style-type: none"><li>• EDR performance elements for ADS.</li></ul>	
<b><u>Future:</u></b>	
<ul style="list-style-type: none"><li>• EDR Step 3, future requirements.</li></ul>	

# State of play - DSSAD

## **DSSAD performance elements for ADS: guidance document.**

- Working document EDR-DSSAD-IWG-24-07\_rev1.
- Will provide input for the EDR workstream 'EDR performance elements for ADS'.
- More consideration by the IWG on this document is necessary.

# State of play - EDR for HDVs 8-12t (1/2)

UN R169 on HDV EDR, paragraph 4.1.:

- Approval for UNR169 may be based on UNR160 for a vehicle type with GVW up to 12t, if the vehicle type meets UN R160.01.
- For vehicle types with GVW between 8-12t: the manufacturer must demonstrate, to the satisfaction of the approval authority, that the triggering performance is equally effective.

At the IWG and during GRSG-126, some delegates challenged:

- the rationale for the additional requirement for 8-12t M2/N2 vehicles derived from M1/N1 (“lack of supporting data”),
- the potential unclear requirement for, and subjective assessment of, the additional demonstration to the approval authority.

# State of play - EDR for HDVs 8-12t (2/2)

The IWG on EDR/DSSAD was tasked to work on clarifying the additional demonstration requirement.

The IWG on EDR/DSSAD discussed the 8-12t issue during various meetings. Supporting data was submitted to, and reviewed during, the hybrid session on 10 April. The IWG concluded that:

- the positions on the rationale for the additional requirements for 8-12t vehicles remained unchanged,
- the IWG would continue to work on clarifying the provision on the additional demonstration to the approval authority  
→ official document expected for GRSG-128 Oct. 2024.

# State of play - EDR Step 2

- The IWG received presentations by delegations concerning potential improvements, additions and amendments to UN R160 and 169, including:
  - new data elements and increased format requirements,
  - new triggering criteria (vehicle-to-vehicle and vehicle-to-VRU),
  - increased recording frequency,
  - increased durability requirements incl. data survivability during post-crash fires,
  - introduction of a number of bench tests, etc., etc.
- The IWG updated the inventory of all items under consideration for EDR Step 2, document EDR-DSSAD-IWG-24-05\_rev1.
- The IWG considered the support, feasibility and urgency of the proposed items and agreed to introduce them in multiple steps.
- The IWG will continue to work on the inventory and already start working on text proposals for the first Step 2 items.

# State of play - EDR for ADS

- Data collection for ADS is discussed in a broader perspective as part of the 'DSSAD performance elements for ADS' discussions.
- It need to be identified what elements are to be associated with DSSAD and with EDR.
- Then the data format requirements need to be developed and the EDR performance elements updated for ADS vehicles.



# IWG on EDR/DDSAD deliverables/timelines

ECE/TRANS/WP.29/2024/1/Rev.1 Table 6 Subjects under consideration by the Working Party on General Safety Provisions (GRSG)

Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline (GRSG adoption)	Timeline (WP.29 adoption)	Initiator	Comments
Priority	Event Data Recorder	EDR performance elements for ADS		GRSG in cooperation with GRVA, IWG on EDR/DSSAD	April 2024 Oct. 2025 (GRSG)	Nov. 2024 March 2026	WP.29	
Priority	Event Data Recorder	1) Common technical elements document for creation of a UN regulation on EDR for heavy duty vehicles (trucks and busses)  2) Supplement to the original version of the UN Regulation 169 addressing additional demonstration for vehicles with maximum mass 8,000-12,000 kg.		IWG on EDR/DSSAD	1) October 2023 GRSG  2) [April 2024 GRSG] Oct. 2024	1) Nov. 2023  2) [Nov. 2024] March 2025	WP.29	
Priority	Event Data Recorder	EDR Step#2 - consideration of amendments to Step #1 requirements with respect to VRU-triggering, increased recording frequency, additional data elements, durability considerations including potential fire resistance, potential test procedures and consideration of new triggering criteria (e.g. "jerk").  EDR Step#3 - consideration of further requirements.		IWG on EDR/DSSAD	Oct. 2024 2025 (GRSG)  Oct. 2026	March 2025 2026  March 2027	WP.29	

# For GRSG

GRSG is invited to consider:

- The proposed PoW as regards EDR deliverables/timelines.
- The subjects to be considered as part of the workstream 'Step 2', in its first phase (GRSG-130, Oct. 2025):
  - VRU triggering,
  - increased recording frequency,
  - data elements,
  - minor corrections/improvements.
- Extending the mandate of the IWG on EDR/DSSAD:
  - current mandate expires June 2024,
  - DSSAD concludes in 2025, EDR activities proceed beyond 2025.

**Thank you for your attention!**