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

<table>
<thead>
<tr>
<th>Projects Completed</th>
<th>Current Work</th>
<th>Future Work</th>
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<tr>
<td><strong>Comparison between EDR and DSSAD</strong>&lt;br&gt;(WP29-179-19, Nov. 2019)</td>
<td>• Review of purposes of DSSAD&lt;br&gt;• Prioritization of discussion topics&lt;br&gt;• Updating consolidated document of domestic activities on DSSAD&lt;br&gt;• Review of DSSAD requirements for the extension of the Lane change function in ALKS (UNR 157). GRVA/2022/16</td>
<td>• DSSAD performance elements for ADS (Jun. 2024)</td>
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<tr>
<td><strong>DSSAD</strong>&lt;br&gt;DSSAD requirements (within ALKS (UNR157))&lt;br&gt;(181st WP.29, June 2020)</td>
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<tr>
<td><strong>EDR</strong>&lt;br&gt;EDR requirements (UNR 160 00/01 series)&lt;br&gt;(183rd WP.29, Mar. 2021), and Amendments (186th WP.29 Mar. 2022)</td>
<td>• EDR for HDV&lt;br&gt;• Common performance elements for 1958/1998 CPs</td>
<td>• EDR for HDV (Mar. 2023)&lt;br&gt;• Common performance elements (Mar. 2023)&lt;br&gt;• EDR Step 2 (Mar. 2024)&lt;br&gt;• EDR for ADS (Jun. 2024)</td>
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</table>
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)
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)

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

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

<table>
<thead>
<tr>
<th>Title</th>
<th>Tasks / Deliverables</th>
<th>References</th>
<th>Timeline (GRSG adoption)</th>
<th>Timeline (WP.29 adoption)</th>
<th>Comments</th>
</tr>
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<tbody>
<tr>
<td>Event Data Recorder</td>
<td><strong>EDR performance elements for ADS</strong></td>
<td>Oct 2023</td>
<td>June 2024</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Thank you for your attention!