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

Informal document **GRVA-07-58**7th GRVA, 21-25, September 2020
Agenda item 4(c)

IWG on EDR/DSSAD Status Report

September 2020

Background IWG on EDR/DSSAD

In accordance with the 'Framework Document' as adopted by WP.29-178, June 2019:



TASKS:

- Define the scope and specific objectives of, and differences between, EDR (Event Data Recorder) and DSSAD (Data Storage System for Automated Driving)
- Define EDR and DSSAD technical requirements

DELIVERABLES:

- WP.29 Nov. 2019 Identification of differences between DSSAD and EDR
- WP.29 Mar. 2020 Requirements for DSSAD for Automated Lane Keeping Systems
- WP.29 Mar. 2020 Review of the existing national/regional actives & a proposed way forward for EDR/DSSAD
- WP.29 Nov. 2020 Requirements for EDR

IWG Activities - since GRVA (September 2019)

Established a sub-group on EDR.

- IWG EDR/DSSAD-3: December 2019 (Paris, OICA)
- IWG EDR/DSSAD-4: January 2020 (Tokyo, JASIC)
- IWG EDR/DSSAD-5: March 2020 (Washington → first web session due to COVID-19)
- SG-EDR: More than 25 web sessions between March and September 2020
- In additional many other activities in smaller groups

Participation by up to 70 people (representatives from many contracting parties to the 1958 and 1998 Agreements and experts from Industry and organizations for PTI, insurance, accident analysis, etc.).

Activities on EDR – two-step approach & two deliverables

- Step 1: for WP.29 November 2020basic requirements for EDR.(based on existing well-known standard)
- Step 2: after WP.29 November 2020
 new, advanced requirements for EDR.
 (based on new national legislation, safety benefits, technological progress, etc. to be identified)

Deliverables for Step 1:

<u>GRVA doc.</u> EDR Common Technical Requirements appropriate for adoption in the 1958 and 1998 Agreements.

<u>GRVA--XX</u>, <u>doc. 2</u> UN Regulation on EDR, containing the same common technical requirements as doc. 1.

doc. 1: EDR Common Technical Requirements

- Capturing, recording and locking of data,
- Data elements and format,
- Survivability testing.
- Data retrieval is excluded.

doc. 1: EDR Common Technical Requirements

Open issues:

- Overwriting
 - The EDR non-volatile memory buffer shall accommodate the data related to at least [two]/[three] different events.
- Additional test elements:
 Do we need to include, in step 1, additional test items like on triggering, storage capacity, overwriting mechanism and/or power failure?
- Triggering of Vulnerable Road User secondary safety systems.
- Specific description on triggering of rear impact events.
- Data elements.

doc. 2: UN Regulation on EDR

In addition to doc.1 on Common Technical Requirements:

- All elements relevant for type-approval (application, CoP, marking, templates, etc.),
- Scope referencing to national law on privacy and data protection (as for UNECE R144),
- The EDR shall record the captured data in the vehicle,
- Definition on "vehicle type with regard to its EDR".

GRVA Review

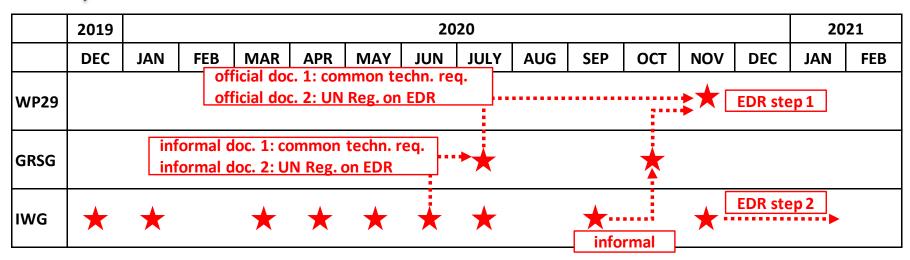
GRVA and GRSG are invited to consider the *provisional* endorsement of the proposals for doc. 1: Common Technical Requirements on EDR, and doc. 2: UN Regulation on EDR, to submit both documents as official documents to the November session of AC.1 and WP.29,

to take a decision during GRVA's September and GRSG's October session on the endorsement of both documents and in addition an informal document (to be submitted by the IWG in Sept.) with further improvements.

Next schedule

The IWG on EDR/DSSAD continues to work on the EDR step 1 requirements. These informal documents have been submitted to GRVA and GRSG.

WP.29 Nov. session will be invited to adopt the official doc. 1 and 2 amended by the informal doc. from GRVA and GRSG Sept- Oct. sessions.



From November the IWG on DSSAD/EDR had hoped to turn its attention to the advanced EDR Step 2 requirements, but work on Step 1 is progressing slowly.

Next Steps / Questions

- The working group is working almost exclusively today on EDR activities. Group is reviewing submissions from several Contracting parties about work underway in their countries on data storage to prepare its 2021 workplan.
- Are there specific other AV related data storage activities the group should consider moving forward?
- Is GRVA prepared to *provisional* endorsement of the proposals for doc. 1: Common Technical Requirements on EDR, and doc. 2: UN Regulation on EDR, and support submission of both documents as official documents to the November session of AC.1 and WP.29.
- Does GRVA believe the focus on DSSAD and EDR should continue to be on development of a set of common technical requirements?

Thank you!