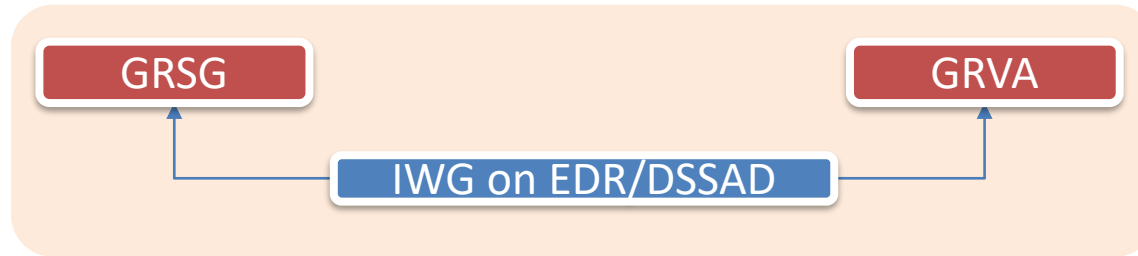


IWG on EDR/DSSAD Status Report

July 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 GRSG-117 (October 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: 8 web sessions between March and July 2020
- In addition 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 2020

basic 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:

GRSG-118-XX, doc. 1 EDR Common Technical Requirements appropriate for adoption in the 1958 and 1998 Agreements.

GRSG-118-XX, doc. 2 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, in case the buffer is full:
option 1: OEM's choice,
option 2: as 1, except for certain 'mandatory event slots',
option 3: chronological order with some flexibility for OEM.
(data of frontal, side or curtain/tube airbag deployment-events will not be overwritten)
- Additional test elements:
Currently only survivability included.
Do we need to include, in step 1, additional test items like on triggering, storage capacity, overwriting mechanism and/or power failure?

GRSG is invited to provide guidance to the IWG.

doc. 1: EDR Common Technical Requirements

Other open issues:

- The EDR non-volatile memory buffer shall accommodate the data related to at least [two]/[three] different events.
- 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”.

Schedule

GRSG is 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 *final* decision during 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 will continue to work on the EDR step 1 requirements.

An informal document will be submitted to the GRSG October session amending the current doc. 1 and doc. 2.

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

	2019	2020												2021	
	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC	JAN	FEB
WP29			official doc. 1: common techn. req. official doc. 2: UN Reg. on EDR									★	EDR step 1		
GRSG			informal doc. 1: common techn. req. informal doc. 2: UN Reg. on EDR					★			★				
IWG	★	★		★	★	★	★	★			★	informal	★		EDR step 2

From November the IWG on EDR/DSSAD will request the mandate to work on the advanced EDR Step 2 requirements!

Thank you!