OICA

Event Data Recorder (EDR)

GRSG-116 Agenda item 17

Background

WP.29-177-19 : Priorities in Framework document on automated/autonomous Vehicles

i. Event Data Recorder: [Description: TBD]

j. Data *Storage System for Automated Driving vehicles (DSSAD):* The automated vehicles should have the function that collects and records the necessary data related to the system status, occurrence of malfunctions, degradations or failures in a way that can be used to establish the cause of any crash.

Data Storage System for Automated Driving vehicles (DSSAD)	First: GRVA Later: GRSG (in coordination with GRVA)	Automated / Autonomous vehicles	DSSAD are for autonomous vehicles (e.g. accident recoding). This work item should take into consideration of the discussion at GRVA and its Informal Working Group on Automatically Commended Steering Function (IWG on ACSF). Clear objectives, deadline and the identification of differences with EDR to be determined first before discussion on detailed data information.	[March 2020: DSSAD requirements for Lane Keeping systems of SAE levels 3/4 as New UN Regulation for contracting parties to the 1958 Agreement]
Event Data Recorder (EDR)	GRSG	Conventional and Automated / Autonomous vehicles	Existing systems - as road safety measure (e.g. accident recoding).	[November 2020: agreed technical requirements.]

Clear Differentiation DSSAD - EDR

Key:
- **ALKS**: Automated Lane Keep System
- **HCV**: Heavy Commercial Vehicles
- **DSSAD**: Data Storage System for Automated Driving

Function (GRXX)	AD vehicles	Non-AD vehicles
Who is driving (GRVA)	**DSSAD regulation** • No trigger • Continuous storage • Wide time-window OICA position: ➤ sufficient for ALKS ➤ All categories **Target: 03/2020**	**NA**
Accident reconstruction (GRSG)	**EDR regulation** • With trigger • Punctual storage • Narrow time window OICA position: ➤M1 N1 → based on US CFR **Target: [11/2020]** ➤HCV → to be defined **Target: TBD**	

International Backgound on EDR

➢ US: 2006(2012), 49 CFR 563, if fitted

➢ Korea: 2008(2019), KMVSS Art. 56-2 (MOLIT Ord. 534/2018), if fitted

➢ Japan: 2008(2015), J-EDR (Kokujigi 278/2008), if fitted for passenger cars <10 persons

➢ Switzerland: 2012 (2015), VTS Art. 102, mandatory for vehicles with blue light and sirene

➢ Uruguay: 2003 (2005), Decree 560/003 Art. 11, for dangerous goods vehicles

➢ China: DRAFT GB **mandatory for all passenger cars as of January 2021**: EDR or alternative of a video camera recorder (dashcam). EDR comes in two phases. 1st phase ~ US EDR, 2nd phase including more data elements

➢ EC: DRAFT GSR-2 as of ~2022 mandation of EDR

➢ Standardization: SAE J1698 (US)

Note: List may not be exhaustive!

OICA Position for EDR

➢ Support a GRSG/GRVA joint informal group on EDR/DSSAD

➢ Support approach to produce UN regulation and GTR

1. Delivery of a UN regulation at next GRSG session (117th, Oct. 2019), based on US/Korea/Japan EDR for passenger cars considering minimal data for accident reconstruction based on existing systems

2. Delivery of harmonized provisions per a GTR

➢ **This approach would allow both, readiness for automated vehicles as well pursuing harmonization**