**Differences between EDR & DSSAD (EU)**

|  |  | **EDR for conventional vehicles** | **EDR for ADS** | | **DSSAD for ALKS** |
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| **System** |  |  |  | |  |
|  | **Purpose** (why do the contracting parties want to introduce this function into the vehicle?) | * Accident reconstruction through: * Assessment of the dynamic behaviour of the vehicle before and after an impact and * Assessment of the behaviour of the occupant protection systems * Assessment of the behaviour of vulnerable road user protection systems * Assessment of the status and performance of vehicle safety systems (including assistance systems) and warnings and driver response. * For ADS: is the driver or the system in dynamic control of the vehicle or was requested to be in dynamic control and driver response | | | DSSAD is not specifically mandated in GSR.  We understand that the main purpose of GSR is to clarify if the system or the driver:   * Was in dynamic control of the vehicle and/or * Was requested to be in dynamic control of the vehicle,   at a certain time  Other possible purpose:   * Monitoring of the status and performance of vehicle safety systems (including assistance systems) and warnings * During the crash or driving code violation by a human driver or * Continuously, throughout driving experience, for the purpose of improving their performance and reporting on residual risks to authorities (see discussions on in- service monitoring in VMAD). |
| **What it should not do** | * Detect who is driving   [i.e. Identifying the user/owner/holder of the vehicle on the basis of the stored data.] | | | Noting that DSSAD is not required by the GSR, we consider this an open question (see above). |
| **PTI** | No need | | | No need |
| **Recording Period** | Just before & during crash. May be longer for ADS than for conventional vehicles.  *Reference: “5s before events*  *300ms after event” in Part 563* | | | Is DSSAD meant to record during the accident?  Time stamp on and continuous recording of information on the performance of vehicle safety systems (including assistance systems) and warnings (see above) |
| **System storage capabilities** | 1+ 1 subsequent “EDR event”  (multi event during 5 sec only if main (12V) battery not out of order) | | | What do we mean by “system capabilities”? does it include external storage? If so, is it within the scope? |
| **System** ~~crash~~ **survivability** | For vehicles in the scope of R94: Resistance to R94 crash test for a minimum of 300 milliseconds.  For other vehicles: should be defined in the Regulation, so as to avoid discrepancies. Why not 300 ms? | | | Not relevant (i.e. it means that the system will not record during a crash) |
| **Data survivability after a crash event** | Mandatory data must be stored and retrievable after R94 crash test. | | | not relevant if no crash relevant data is recorded and if external storage.. |
| **“event” definition** | “Event” means a crash or other physical occurrence that causes the trigger threshold to be met or exceeded (e.g. physical contact trigger in the bumper), or an airbag to be deployed, whichever occurs first. | | | Not relevant. However “triggering events” for time stamps shall be defined. |
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| **Data technique** | **Where to store (in the vehicle vs. the cloud)** | Always in the vehicle | | | We understand that this depends on the function of DSSAD. If it collects continuously data on the performance of the systems, then external storage might be necessary. If only vehicle/system status is recorded, can storage be on-board? |
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| **Data format** | Regulation shall regulate the format. | |  | |
| **Data element** | See table. | | |  |
| **Storing duration** | not less than 10 days after EDR is triggered | | | Depends where. In any case: no longer than justified by the purpose of processing (GDPR) |
| **Data identification (this data really belongs to that vehicle)** | Vehicle type and characteristics must be possible to determine.  VIN cannot be stored in the EDR, nor any data permitting to identify the specific vehicle. | |  | |
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| **Data usage** |  |  |  | |  |
| **Data ownership** | Out of the scope of a technical regulation | | | |
| **Data protection (privacy)** | Out of the scope as concerns data processing after retrieval, but not as concerns the collection. According to the GSR, data must be “anonymised” after collection. | |  | |
| **Information to the user (driver, vehicle owner)** | Data subject must be informed about the purpose of collection. | | |  |
| **Who must access which data?** | Out of the scope | |  | |
| **How fast to deliver the data to a third party** | Out of the scope (it will be covered by the same national law that will establish “who is authorized to get the data”) | |  | |
| **Cybersecurity** | Covered by another Technical Regulation under establishment | | | |