

DRAFT AGENDA

1st meeting of the Event Data Recorder (EDR) Drafting Subgroup

28 January 2020,
Tokyo (JASIC offices)

Time:

Tuesday 28, January 9:30 – 17:30

Venue:

Venue: Torakyo Hall, Yotsuya-sannchome 3rd Floor, Zennihon Truck Sogo Kaikan Buildingp
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https://www.jasic.org/e/03_location/location.htm

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The Netherlands: Mr. Tim Guiting

Secretariat:

OICA Ms. Lena Mensching

1. General:

1.1. Welcome and Introduction

The Chair reminds the group that 1st step for EDR should be the focus topic for the discussion for this drafting group meeting. The 2nd step of EDR will be considered during the meeting of the informal working group.

~~**1.2. Anti-trust rules**~~

1.3. Approval of the agenda

Document: SG-EDR-01-01-Agenda 1st EDR SG meeting Rev 2
The agenda is adopted, with the change that item 1.2 was deleted.

2. EDR for Nov 2020 delivery drafting activity.

2.1. Review input on EDR data elements

Documents: SG-EDR-01-03-Consolidated CP input EDR Data Elements-TRL
 SG-EDR-01-04 (KATRI) Standardized format (EDR)
 SG-EDR-01-05 FSD-CITA - EDR data elements and format
 SG-EDR-01-06 (China) Proposal for Standardized EDR Data Retrieval
 EDR-DSSAD-02-12 FSD, EVA, DEKTRA
 EDR-DSSAD-02-15 (J) UN EDR Comments

Document SG-EDR-01-03 is introduced by TRL:

- Each data element is numbered and has a description
- A coloured flag indicates the opinions of the stakeholders

- Column “U” indicates whether the recording of the data element should be mandatory or optional
- The top section (data element 1 – data element 47) are the data elements of the EDR as defined by USA CFR 49 Part 563
- Below that are additional data elements

The goal for this session of the SG EDR is to fill in the decision rows, to decide if a data element should be mandatory or optional. Today there shall be no discussions and no decision on the topic of data format.

The EC questioned if “optional” is defined in the US regulation on EDR.

USA explained that the term optional is not used, but the term “if recorded” is, which means that if this data element is being recording its format needs to comply with the regulation.

EC stressed that the group should clearly define what optional in the context of this group means:

- Optional for the OEM to record that data or
- Optional for a CP to request this data

EC questioned if the group wanted to leave the recording of optional data element up to the manufacturers.

USA informed that “if recorded” means that it is optional for the manufacturer to record this data elements.

EC questioned the consequences of changing the data elements that are currently required if recorder to either mandatory or to not required.

USA informed that their national legislation process requires NHTSA to conduct research and to present evidence for changing a regulation, which requires a lot of time.

The Chair proposed to proceed by defining the terms “optional for manufacturer”, “optional for CP”, and “mandatory”.

EC reminded that the 1958 agreement has the goal of mutual recognition and that this should be considered as a difference to the 1998 agreement. The EC recognized that some data elements cannot be mandated for the USA but questioned how this could be reflected in the work for the 1958 agreement.

USA pointed out that the goal of this group should be to define harmonized technical requirements not specific to an agreement. Further, the US pointed out that from their understanding research is needed to agree to new data elements and that the manufacturers need to be considered when discussing the feasibility of the data elements.

EC was keen to differentiate between the 1958 agreement and the 1998 agreement.

The Chair clarified that the group has the task to work on a general text for the 1998 agreement and in parallel to work on a text a regulation under the 1958 agreement, therefore the group should differentiate between the general text and the text for the regulation.

OICA informed that the addition of some data elements to the US EDR is feasible, but the introduction of several completely new data elements is not.

EC stressed that the EC cannot adhere to any solution that does not take into account the EU legislation, otherwise the EC cannot subscribe to this regulation.

USA question if the EC could provide a list with data elements required by EU legislation that the group could go through.

EC clarified that they wanted to have a general discussion on this issue before discussion specific data elements.

The Chair proposed to proceed by identifying which data elements should be mandatory for both agreements and which should be mandatory for the 1958 Agreement.

The group then started to review the data elements of SG-EDR-01-03.

- In the document, four new columns are introduced:
 - “Mandatory for UN regulation (1958 Agreement)”
 - “Optional for generic text”
 - “Future” => data element to be further discussed for 2nd step of EDR
 - “back to IWG/decision not yet made”
- The group agreed that data element no.1 to no.47 shall be mandatory for both agreements.

- Data element no. 48
 - USA stressed their position to reject all new data elements because of the need for research before deciding on new data elements.
 - Chair proposes to mark this data element as mandatory for UN regulation and as optional for the generic text.
- Data element no. 49
 - USA questioned the usefulness and feasibility of this data element.
 - EC informed their position is for this data element to be optional or to be discussed in the future for the 2nd step of EDR.
 - Chair concludes that this data element is not required unless some CP presents a strong argument to make this data element mandatory.
 - Conclusion: the group agrees not to require this data element to be recorder, this needs to be brought back to the IWG for decision.

EC questioned if USA would be able to change their position on the new data elements before November 2020 if they were provided with justifications and research evidence for these elements.

USA stressed that the position will not change before November 2020 because of on-going research activities.

USA stressed that the group should justify the need and usefulness of every data element that is discussed.

EC informed that the justification of the EDR required by the GSR is safety analysis.

OICA informed that new data elements for existing vehicle architectures could be challenging and might not be feasible.

EC was keen to first identify all data the CPs want to mandate and then to consider contributions from the industry on the feasibility of the data elements.

Chair informed that OICA should review the data elements and should deliver a detailed justification if they cannot record a data element.

USA stressed that manufacturers should be asked for feasibility of all data elements that are mandatory under any Agreement.

The Chair informed that every stakeholder will be able to review the data elements and to present good arguments at the next session.

USA questioned whether the cost of the consumer will be taken into account.

EC informed that this is part of the national legislation in the EU, at the UNECE the decision is based on the point of view from the public interest.

USA was keen for manufacturers to bring evidence to the next session.

- Data element no. 69
 - EC informed that the EU GSR requires the last four digits of the VIN not to be recorded for privacy reasons. The protection of data is necessary.
 - USA informed that in the USA the last 6 digits of the VIN are anonymized on the EDR report read out from the scan tool.
 - Chair concluded that the VIN should be explicitly excluded from the scope of the UN regulation and the general test so that it can be subject to national law.

TRL questioned if “mandatory” should always mean “mandatory, if equipped”, because the regulation for the EDR cannot prescribe what systems need to be fitted to a vehicle.

The group agreed on this.

The Chair concluded that this should be described in the introduction or the scope of the regulation.

- Data element no. 70
 - OICA questioned if there is a benefit in recording both data element no.70 and no.71 and questioned what the definition of no.71 is.

- USA informed that roll rate would be considered as sufficient.
- Hyundai explained that in some vehicles in Middle-Asia it is possible to switch off the roll-over system because of very steep mountain roads.
- US concluded that roll rate would be a duplicate to roll angle but roll-over system status would not be a duplicated data element
- TRL questioned what the benefit of recording roll angle (data element no. 12) and roll rate would be
- Chair concluded that every stakeholder should review this data elements to then discuss in the IWG
- Data element no. 72
 - ROK indicated this data element to be optional but was not attending the meeting to explain this position.
 - Hyundai informed that in ROK yaw-sensors are not required, therefore it was indicated at optional.
 - Chair informed that the EDR regulation will not mandate the fitting of any sensor or system, everything that is mandatory is considered as mandatory if fitted.
- Data element no.75/76
 - USA informs that their experience when introducing the EDR in the USA was that consumer acceptance of the system would be expected to be higher if GPS/GNSS position is not recorded, because it is sensitive information. The USA stressed that the GPS/GNSS position will not be recorded in the USA and that this data element should be excluded from the scope like the topic of the VIN.
 - OICA was keen not to record the GPS/GNSS position for critical privacy reasons.
 - EC informed that due to privacy reasons this data element is problematic.
 - Chair concluded that this data element should be discussed in the IWG with the CPs that want to mandate it.
- Data element no.77A-E
 - OICA informed that AEB functionality can brake on different targets but is typically realised into one function, therefore no need to split this up into different AEBS.
 - TRL informed that the reasoning for splitting the AEBS is to identify and record the collision threat. TRL questioned if AEBS do categorize targets like it is shown in the marketing of such systems, to be able to conduct malfunction analysis based on the EDR data.
 - OICA to deliver an explanation on the possibility to differentiate identified targets in categories.
 - Chair concluded that AEBS data element needs to be harmonized with the UN regulation for AEBS, the operating status of the system should be recorded. There is a need to have more views from CPs in a discussion in the IWG.
- Data element 78
 - OICA questions if the group should refer to the definitions of UN R79 to avoid confusions because of new terms
- Date element 80
 - There is no definition of such a system in the UNECE.
 - EC questions if this is a problem and if the regulation could introduce a general definition of the system.
 - USA informs that if a system is not standardised it is difficult to find a general definition.
 - The Chair proposes the definition of the system to refer to national law.
 - USA questions how valuable data is that is not comparable.
 - The Chair concludes that this data element needs to be discussed and defined in the IWG.
 - Allianz informs that ISA data might vary because some systems might have been introduced before an ISA will be regulated.
 - EC informs that information on vehicle type and what kind of systems are in the vehicle should be available in the EDR.
 - The Chair questioned whether this is possible.

- EVU informed that this data could not come from the EDR but the VIN.
- US stressed that this is based on the assumption of a static system, SW-Updates could change system functionality .
- OICA stressed that a clear definition of a system is necessary to know which data to record.
- USA informed that VIN-decoding could be a helpful tool but is not available in the USA.
- EVU informed that for optional equipment only the manufacturer can identify based on the VIN if it was fitted in a vehicle.
- Data element no.83/84/85
 - OICA questioned how the reliability of the data can be ensured if the function/system delivering the data is not defined.
 - Allianz informed that this data helps to evaluate efficiency of this systems
 - US questioned if this evaluation would be based on an extrapolation of a non-standardized data set.
 - OICA informed that BSD for HCV is also offered as a retrofit device.
 - TRL stressed that retrofit should be excluded from the scope of the regulation.
 - The group agreed to exclude retrofit devices from the scope of the regulation.
 - USA stressed that ACC is a convenience function and may not be as safety relevant, the priority of the group should be active safety systems.
 - OICA informed that EDR research should have the focus of crash performance.
 - EC stressed that this information is relevant because these systems can have an impact on safety.
 - Allianz informed that investigations in a European research project have shown that ACC systems lead to 30% accident reduction.
 - USA questioned if it is necessary to record this data in the EDR if there is already sufficient data available to conduct investigations.
 - Allianz informed that the data is based on a field-operational study.
 - The Chari concludes that convenience system will be included in the EDR if they are safety relevant.

In the column no. AK the entry “def.” indicates that a definition of the system and of the technical functionality of the system needs to be discussed in the IWG.

USA requests to reflect on storage capacity with regard to the amount of new data elements.

OICA informs that not only storage capacity is critical but also the power consumption necessary to write and store the data in case of a battery cut-off.

USA stressed that a general concern the group should focus more on what is technically feasible.

EC stressed that at first all the data required by the CPs should be defined and afterwards that can be reconsidered if there are justified technical concerns.

OICA stressed that there is also the issue of the cos-benefit-ratio of the data elements.

- Data element no. 87
 - Chair informs that the group needs to check if the scope of the UN regulation for LKAS will be extended to M1, N1
 - OICA proposes to only include systems into step1 of the EDR that are defined by UN regulations
 - EC disagrees with OICA position
 - Chair concludes to raise this issue in the IWG
- Data element no. 93
 - USA questioned if the trigger threshold will be met when the vehicle is reversing.
 - USA stressed that this system is not defined, a technical definition of the functionality is missing and that it is not clear if the situations in which these systems are active would cause an EDR trigger.
- Data element no. 97
 - USA stressed that this is monitoring of the driver and not of the vehicle.

- The Chair informed that the EU GSR only requires manufacturers to provide an interface for the installation of alcohol interlock and questioned if it is relevant to record this data in the EDR.
- Conclusion: discuss this in the IWG.
- Data element no. 98
 - The group came to the conclusion that at the moment there would be no EDR triggered in a situation where such a system works.
 - USA questioned if there is data available about such kind of situations.
 - The Chair summarized the group's consensus that that if it is a very rare situation it should not be included in the regulation.
- Data element no.101
 - USA stressed that this should be covered by the SW-Update regulation and questioned why this would need to be discussed in this group.
- Data element no. 102
 - The Chair stressed that the comparison table the IWG delivered to WP.29 stated that DSSAD should not record data that is recorded in the DSSAD.
 - EC stressed that a regulation not containing this data will not be adopted by the EC.
 - EVU questioned why storing the data in the DSSAD is not sufficient.
 - EC explained that referencing EDR and DSSAD data is not possible if EDR data is anonymized.
 - EC stressed that the need to store this data was discussed in previous sessions.
- Data element no. 119
 - The group concludes that it is necessary to harmonize the definition with the VRU-proxy group working on a regulation for this system.
- Data element no.127-132
 - USA questioned why UK wants to mandate information about data download time
 - TRL informs this is related to chain of custody of evidence
- Data element no.134
 - USA stressed that EDR is defined to not store video or audio data
 - Chair informs that in the comparison table delivered to WP.29 it was also decided not to store outside information.
 - Allianz informs they are preparing a paper on the necessity to store data on the vehicle surroundings
 - USA stressed that this was already discussed and decided at WP.29
 - EC informs the term is very vague and this data might pose privacy concerns
 - USA questioned what kind of data couldn't be obtained by being at the accident site that could be recorded by the EDR.
 - EVU stressed that pictures are valuable to identify objects a system reacted to.
 - EC stressed
 - Liability is not the purpose of the EDR
 - Data in the EDR is anonymized and cannot be cross referenced with other data
 - Surrounding information might be useful to substitute location/position data
- Data element no.140
 - USA stressed that this seems to be technically not feasible because V2X-data is a continuous stream of information
- Data element no.144
 - EC informs that this might already be covered by the regulation on cybersecurity
- Data element no.145
 - EVU stressed that it is not necessary to record this data element because this can be identified from other data elements, additionally this could be confusing and might lead to wrong conclusions.
 - Chair assessed that there was not consensus on this topic and further discussion in the IWG is necessary.

To proceed, the group agrees that data elements not discussed today that are indicated as rejected by the CPs will be marked as rejected in the table

In summary:

- Two new columns were introduced to identify data elements for the general text of the 1998 Agreement and the text of the EDR regulation under the 1958 Agreement.
- There are some data elements that need to be discussed in the IWG to reach a decision.
- Several issues were identified and discussed during the subgroup that need to be brought to the IWG (e.g. overlap of EDR and DSSAD data, definition of mandatory)

The document SG-EDR-01-06 (China) Proposal for Standardized EDR Data Retrieval will be discussed during the IWG meeting.

2.2. Draft EDR for Nov 2020 delivery performance element text

Documents: SG-EDR-01-02-EDR Working Draft-Rev 2

Based on the discussion on the data elements the group added some remarks to the scope section of the draft.

Allianz questioned if this regulation is for EDR for conventional vehicles and EDR for ADs?

USA stressed that EDR for ADs is step 2.

EC stressed that the group should first focus on data elements and not on differences in EDRs for conventional or automated vehicles.

The Chair agrees to the position of the EC and stressed that the EDR regulation can be amended in a step 2 to fit for ADs.

3. Summary of WG Progress/List of action items

Note:

Due to communication difficulties, the Chinese delegation was not able to participate in all of the SG-EDR discussions.

As a result, China has provided the following comments to clarify its position on a number of topics that were discussed and summarized in these notes. These comments were provided after the IWG met and have not necessarily been discussed by the IWG.

Scope – China proposes to move N1 vehicles into the EDR step 2.

Inclusion of data elements for 58 agreement and agreement agnostic “generic text” – China proposes to instead categorize the data elements into:

- Mandatory for UN regulation (1958 agreement)
- Mandatory for GTR (1998 Agreement)
- Mandatory if equipped

Data elements – China does not agree with the SG’s conclusion to include all data elements 1 – 47 as mandatory. China believes additional SG discussion and consideration about which elements should be mandatory needs to occur.

Data element no. 18 - China proposed renaming that element from (Frontal air bag suppression switch status, right front passenger (on, off, or auto) to Front Passenger air bag suppression switch status, (on, off).

They want to drop “right front passenger” since there are jurisdictions where the passenger is not seated on the right-hand side. Furthermore, they propose to drop the “auto” status since the “auto” status cannot be used for reconstruction of the crash event.

Data element no. 48 (Safety belt status, rear passengers) – China proposes that the rear passenger safety belt status should not be mandatory for EDR step 1.

The rear passenger seat safety belt reminder is not mandatory to be equipped in China and most N1 vehicle rear passenger seats are not equipped with a safety belt.

Data element no. 69 (VIN) – China recommends that the VIN be a mandatory element.

Data element no. 85 (Blind spot monitoring status) – China does not recommend that it be recorded in the EDR.

In China only a few vehicles are equipped with blind spot monitoring systems. Furthermore, China does not believe that such systems would be directly related to the traffic accident. When the ADAS systems are considered for EDR, the ADAS systems should be categorized into systems that intervene in driving tasks or systems that only give warnings or information to the driver. China does not believe that the systems that only provide warnings can be directly related to the traffic accident and thus don’t need to be recorded in the EDR.

Data element no. 98 (Parking Assist Status) – China does not recommend that it be recorded in the EDR.

Data element no. 101 (ADAS software version) - China does not recommend that it be recorded in the EDR, since it is not directly related to the traffic accident.

Data element no. 102 (Automated driving system – Change in status) - China does not recommend that it be recorded in the EDR, since it is already recorded in the DSSAD.

Data elements no. 127-132 (date and time) – China recommends that these elements be recorded since they believe these elements are helpful to analyse traffic accidents.

Data element no. 134 (Images outside) – China does not recommend that it be recorded in the EDR
Definition of “mandatory”

Definition of “mandatory” and “mandatory if-fitted” – China believes that the definition of “mandatory” is that it must meet the requirement however the EDR is equipped or not. “mandatory, if-equipped” means mandatory if the vehicle is equipped with the related devices/systems or is with related functions.

For agenda item 2.2 – China agrees to the position of the EC and stressed that the EDR regulation can be amended in a step 2 to address Ads.

NEXT STEPS:

Given the various opinions around the discussion, the group agreed to continue its work on a set of generic technical requirements that will address CP needs in both agreements. The group was also unable to reach consensus on VIN as proposed by China and other CPs,. If the group is unable to reach consensus at a future meeting, VINs may be regulated at a national level.

The group will meet again in March in Washington, DC.