

June 2002

IEEE P1616

TO: IEEE P1616 Participants
FROM: Tom Kowalick
DATE: June 24, 2002
RE: Responses to June Meeting Task

Received from 11 individuals:

Tom Kurihara
Deborah Freund
Jeff Hegarty
Scott Kidd
Roger Boyell
Jim Keller
Niranjan Kulkarni
David McKendry
Dan Selke
Barb Wendling
Sarah McComb

The following inserts were cut-and-paste...

1. Tom Kurihara,

Mr Kowalick, after reviewing the the proposed wording of the scope and purpose, I withdraw all of my previously submitted comments on "scope and purpose." I accept the restatement of the Scope and Purpose as a starting point for discussion and acceptance.

[\\TomK//](#)

2. Deborah Freund

Comments, P1616 Draft 0.2

Submitted by D.M. Freund as input to June 2002 meeting.

Freund; 1.1; T; I concur with J. Hinch's comment concerning including motorcycles as well as a performance-oriented direction of the proposed standard.

Freund; 1.1; T; powered vs. non-powered vehicles; I also believe, given the current state-of-the art and challenges of instrumenting and obtaining data from non-powered vehicles, that EDRs provide for the potential collection of data from non-powered commercial motor vehicles (CMVs; such as converter dollies and trailers) that make up a single vehicle, but not necessarily to require full-featured EDRs on those non-powered units.

Freund; 1.1; T; MMUCC. I concur with J. Hinch's comment that the proposed standard not cite the Model Minimum Uniform Crash Criteria as serving as a source subset of data elements. The scope of data described in the MMUCC is far broader range of data elements than is feasible or reasonable to include in an EDR, yet it does not necessarily include the level of detail of many elements that may be of interest to the highway vehicle safety communities. It might be worthwhile to reference various other recommended practices discussed in the Committee's deliberations (such as the MMUCC, NHTSA EDR Working Group reports, and so on) in the Introduction rather than the body of the draft standard.

Freund; 1.2; T and E; suggested rewrite. Purpose: To provide engineering guidance for the development of performance-oriented standards for EDRs intended for use on motorized vehicles designed to operate on roadways.

Freund; 1.4.1; T and E; suggested revision. Add phrase "performance oriented" before "standard;" substitute "standards" for "standard." Delete "except motorcycles."

Freund; 1.5.1, T and E; suggested revision. Substitute "prescribe" for "address." Delete paragraph dealing with non-applicability to military vehicles.

Freund; 1.5.2.; T; suggested revision or deletion. I'm not sure of the purpose of this paragraph, but it does not read as an acknowledgement. I recommend it be deleted for the time being, and a shorter and more direct FMVSS applicability statement be included during later drafting if we decide that it is needed. Also, for the benefit of the reader, include the listing of FMVSSs in an Appendix rather than in the main text (again, if the Committee decides it is appropriate to retain the listing).

Freund; 1.6; T and E; suggested future revision. I recommend that the drafting of this paragraph be deferred until the process is nearing completion.

Freund, 3.0; T and E; suggested future revision. Much of this section will need to be revised. Many items appear to be superfluous given the scope of the proposed standard. Others describe specific types of vehicles because they are included or excluded from various safety, fuel efficiency, or emissions regulations that are not necessarily germane to the classes of vehicles to which this draft standard might be applied. In addition, I recommend that, when motor vehicle regulatory terms are used, the definitions from the Code of Federal Regulations be cited instead of Bureau of Transportation Statistics definitions.

Freund; 3.1.1; T and E; definition. This needs to combine the appropriate language of the regulatory definitions used by NHTSA (part 571) and FMCSA (part 390). As it stands, it covers only commercial motor vehicles in interstate commerce.

Freund; 3.1.2.; T; definition. Recommend deleting.

Freund; 3.1.3.; T; definition. Recommend deleting.

Freund; 3.1.4 through 3.1.6; T; definitions. Recommend deleting. It does not appear to be necessary to describe these specific classes, since “motor vehicle designed to be operated on roadways” covers them. These vehicles are defined in connection with applicability to the CAFE standards, and the subcategory does not appear to be germane in the context of this proposed standard. I offer the same comment concerning the definitions 3.1.40, 3.1.41, 3.1.42, 3.1.44, 3.1.45, 3.1.47, 3.1.48, 3.4.49, 3.1.53, 3.1.55, 3.1.65, 3.1.66, 3.1.67, 3.1.69, 3.1.75, 3.1.76, and 3.1.79 through 3.1.88.

Freund; 3.1.13 and 3.1.14; T; definitions. It would be appropriate to review these to ensure that they cover the definitions included in Parts 571 and 390.

Freund; 3.1.15; T; definition. The part 390 definition was revised in September 1999. The revision extends the applicability of certain Federal Motor Carrier Safety Regulations (FMCSRs) to passenger vehicles designed to transport between more than 8 passengers in interstate commerce, including the driver, for compensation. There is also Notice of Proposed Rulemaking that concerns the potential application of additional FMCSRs to a specific operational subcategory of these particular motor carriers.

Freund; 3.1.25; T; definition. Revise so it applies to motor vehicles.

Freund; 3.1.27, 3.1.30, 3.1.56, 3.1.57, 3.1.59; T; definitions. I’m not clear as to why these definitions are necessary in the body of a technical standard. Would a listing in an Appendix be more appropriate? And, if the Committee determines it is necessary to retain the definitions of agencies whose regulations are cited, please add the Federal Motor Carrier Safety Administration.

Freund; 3.1.50; T; definition. This appears to be a solid and comprehensive definition for “motor vehicle.”

Freund; 3.1.54; T; definition. This definition adds the “licensing” aspect discussed during the May 2002 meeting.

Freund; 3.1.58; T; definition. I believe that this definition may have led to the “highway vs. road” discussion. The National Highway System (NHS) is defined for statutory reasons, and many vehicles operated on “highways” before the NHS Designation Act of 1995 and still operate on “highways” today. I recommend the definition be deleted.

Freund; 3.1.89; T; definition. Consider adding this to the standard’s comprehensive definition, if the Committee determines that these vehicles would not be included.

Freund; 3.1.90 through 3.1.92; T; definitions. Recommend deleting, these vehicles would be included in broader covered categories.

Freund; 3.1.93 through 3.1.95; T; definitions. Refer to part 571 and part 390 definitions.

Freund; 3.1.97 and 3.1.98; T; definitions. Both would appear to be covered classes of vehicles. For 3.1.98, see the part 571 definition.

Freund; 3.1.100; T; definition. Since this proposed standard would not be likely to classify vehicles according to applicability of DOE regulations, delete. If size classifications are necessary, there is an 8-class definition in USDOT regulations (part 567 ?? xxx DMF: check).

Freund; 3.1.101; T; definition. Consider combining this with 3.1.98.

Freund; 3.1.102 and 3.1.103; T; definitions. Vehicle classes are covered. Consider deleting.

Freund; 3.1.104; T; definition. I recommend deleting this. This particular definition does not appear to be appropriate for this proposed standard, it is far too limited. The definition in 3.1.50 is more inclusive.

Freund; 3.1.107, 3.1.108, 3.1.109; T; definitions. I recommend deleting, they do not contribute to clarity or comprehensiveness of the proposed standard.

Freund; 3.2; T; abbreviations and acronyms. I recommend this list be developed as work on the standard progresses. At this stage, it is probably too early to tell what should be retained, what should be deleted, and what will need to be added.

3. Jeff Hegarty

1.3
Purpose
General

There is, rightly so, a great deal of concern about the cost associated with utilization of an EDR. If we are moving towards use of an EDR and the related benefits, standardization will lower the cost.

Adoption of the standard will, therefore, simplify the task of system developers and lower the cost of implementation while making the resulting data more accessible and useful to end users.

4. Scott Kidd

Tom,

I could not get the table to allow entry. Below is a similar table which hopefully will help your task. Should we review sections other than the scope and purpose for the meeting? We discussed trying to go through the first 3-4 sections of the draft document. Thanks.

SCOPE:	Reason for Change	Suggested Change

This project defines a minimum standard protocol for the provision and utilization of Motor Vehicle Event Data Recorders (MVEDRs), electronic recording systems used to capture data related to motor vehicle crashes.	Eliminate the requirement for minimum standards based on the discussion from the last meeting	This project defines a standard protocol for the collection and provision of Motor Vehicle Event Data Recorders (MVEDRs), electronic recording systems used to capture data related to motor vehicle crashes.
New	Further definition of what is being specified	Specifications are included for the format and units of the data elements.
PURPOSE:		
These systems are designed and produced by individual automobile manufacturers and component suppliers and, with no independent standards being in place, the devices are diverse in function, and proprietary in nature.	Further define issue	These systems are designed and produced by individual automobile manufacturers and component suppliers and, with no independent standards being in place, the devices are diverse in function and data collected, and are proprietary in nature.
This standard provides a minimum dataset of device characteristics.	Eliminate minimum requirement	This project provides a standard dataset of device data collection characteristics.
Adoption of the standard will, therefore, simplify the task of system developers, while making the resulting data more accessible and useful to end users.		Adoption of these standards will, therefore, simplify the task of system developers, while making the resulting data more accessible and useful to end-users.

Scott Kidd
Injury Sciences

5. Roger Boyell

Reason for Change	Suggested Change
SCOPE:	
PURPOSE: Minor grammatical correction.	...data collection frequency, AND the storage and data retrieval systems.

6. Jim Keller

Reason for Change	Suggested Change
SCOPE: 1) The term 'minimum' is redundant when laying out the scope of work. 2) As agreed in the May 28 meeting, the scope of this standard will not specify that certain data elements need to be captured. 3) As 'motor vehicle manufacturers', the motorcycle industry should understand what is being proposed, and should have the opportunity to share their thoughts about this	1) Remove the word 'minimum' in the first sentence. 2) Remove the words "data elements to be captured," from the 3rd sentence. 3) Comment: If the words "except motorcycles" will be removed from the scope, at a minimum, we should inform the American Motorcyclist Association (AMA) that their vehicles are covered by this P1616 activity.

Issue.	

PURPOSE:	

7. Niranjan Kulkarni

Reason for Change	Suggested Change
SCOPE:	Scope should be replaced by the changes suggested in document June2002TaskIEEE1616.doc comments #3 to #12
PURPOSE:	As suggested in the document June2002TaskIEEE1616.doc comments #25 to #42

8. David McKendry

1.0
Scope

E, T

Editorial cleanup and remove references to specific data being required to be recorded. Replaces scope as written by German.

Scope: This project will define a standard protocol for uniformity and retrievability of data elements stored in Motor Vehicle Event Data Recorders (MVEDRs), defined as electronic recording systems used to capture data related to motor vehicle events. Uniformity encompasses standardization of data output, while retrievability encompasses standardization of download protocols. This standard does not prescribe the type of data to be stored, nor how the data are to be captured by on-board vehicle systems. These specifications are also independent of the hardware and/or software employed for other vehicle systems. This standard is applicable to event data recorders for all types of motor vehicles licensed to operate on public roadways.

1.2
Purpose

E, T

Editorial cleanup and remove references to specific data being required to be recorded. Replaces purpose as written by German.

Purpose: Many light-duty motor vehicles, and increasing numbers of heavy commercial vehicles, are equipped with some form of event data recorder. These systems are designed and produced by individual motor vehicle manufacturers and component suppliers. These devices are diverse in function. The continuing implementation of EDR systems provides an opportunity to standardize data output and retrieval protocols to facilitate analysis and comparison of EDR data generated by multiple vehicle manufacturers. Adoption of the standard will therefore make EDR data more accessible and useful to end users

9. Dan Selke

Reason for Change	Suggested Change

SCOPE: Grammatical	This project will define a standard protocol for

| uniformity and retrievability |
| of data elements stored in |
| Motor Vehicle Event Data |
| Recorders (MVEDRs), defined as |
| electronic recording systems |
| used to capture data |
| related to motor vehicle |
| pre-defined events. |
| Uniformity encompasses |
| standardization of data output, |
| while retrievability |
| encompasses standardization of |
| download protocols. This |
| standard does not prescribe the |
| type of data to be stored, nor |
| how the data are to be captured |
| by on-board vehicle systems, |
| and is applicable to event data |
| recorders for all types of |
| motor vehicles licensed to |
| operate on public roadways, |
| whether offered as original or |
| aftermarket equipment. |

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PURPOSE: Grammatical	Many light-duty motor
	vehicles, and increasing
	numbers of heavy commercial
	vehicles, are equipped with
	some form of event data
	recorder. These systems, which
	are designed and produced by
	individual motor vehicle
	manufacturers and component
	suppliers, are diverse in
	function, and proprietary in
	nature. The continuing
	implementation of EDR systems
	provides an opportunity to
	voluntarily standardize data
	output and retrieval protocols
	to facilitate analysis and
	comparison of EDR data
	generated by multiple vehicle
	manufacturers. Adoption of the
	standard will therefore make
	EDR data more accessible and
	useful to end users.
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10. Barb Wendling

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Reason for Change	Suggested Change
<p>SCOPE: Revised to reflect the agreement reached by vote on the motion at teh last meeting.</p> <p>Data used to vehicle data standard data are to event motor as equipment.</p>	<p>Scope: This project will define standard protocol for uniformity retrievability of data elements stored in Motor Vehicle Event Recorders (MVEDRs), defined as electronic recording systems capture data related to motor pre-defined events. Uniformity encompasses standardization of output, while retrievability encompasses standardization of download protocols. This does not prescribe the type of to be stored, nor how the data be captured by on-board vehicle systems, and is applicable to data recorders for all types of vehicles licensed to operate on public roadways, whether offered original or aftermarket</p>
<p>PURPOSE: Calrified per the same discussion of data are</p>	<p>Purpose: Many light-duty motor vehicles, and increasing numbers heavy commercial vehicles, are equipped with some form of event recorder. These systems, which</p>

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individual	designed and produced by
	motor vehicle manufacturers and
	component suppliers, are diverse
in	function, and proprietary in
	The continuing implementation of
nature.	systems provides an opportunity
	voluntarily standardize data
EDR	and retrieval protocols to
	analysis and comparison of EDR
to	generated by multiple vehicle
	manufacturers. Adoption of the
output	standard will therefore make EDR
	more accessible and useful to
facilitate	users.
data	
data	
end	
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11. Sarah McComb

After looking through everything, German's re-write of the scope and purpose is fine. As a result, I think my comments (18-20 and 31-33) have been addressed and can be deleted