# Qualcomm Comments RE: FMCSA Pt 395 App A (subcommittee edits)

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- 1.2 A. <u>Comment:</u> The use of CSV may be useful if portable data storage media is used. However, Section 1.2 should first cover the basic data requirements.
  <u>Recommendation:</u> Delete section A. but include in requirements in suggested Section 2.13 if appropriate – see comments for Page 8 and Section 2.

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- 1.2 A. and B. <u>Comment:</u> Section 1.2 should first cover the basic data requirements.
  <u>Recommendation:</u> Delete sections B. and C. – also possibly include in suggested Section 2.13.

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- Table 2. <u>Comment:</u> Event Sequence ID has no real meaning or purpose unless a driver records everything on only one EOBR and does not have any records from other systems or paper RODS.
  <u>Recommendation:</u> Delete Event Sequence ID data field from Table 2.

- Table 2. <u>Comment:</u> Per recommendation for (i)(5), identification of record source would be useful.
  <u>Recommendation:</u> Add data field in Table 2 for record source with 1 character numeric value, with 1 = this EOBR, 2 = other EOBR, 3 = AOBRD, 4 = driver entry into EOBR support system, 5 = carrier staff entry of driver log data into EOBR support system. This would require a design review to specifically identify the data elements that would come from each particular source and acceptable content from the source being that of an EOBR, AOBRD or entry from back office support system. Comments will not be sufficient to solve the recommendation.

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- Table 2. <u>Comment:</u> Description of Place Distance Miles includes reference to "nearest" location that should be revised per comments and recommendations related to 395.16(f).
  <u>Recommendation:</u> Delete the word "nearest" from the description.

- Table 2. <u>Comment:</u> Place Name field description does not reflect recommendation of 395.16(f)(2) to use locations with population greater than 5,000.
  <u>Recommendation:</u> Update description of Place Name to be consistent with requirement of 395.16(f)(2)

- Table 2. <u>Comment:</u> Place Name field as a 5-character code does not necessariy translate for integration of records from AOBRD systems, entries of paper RODS, and driver entry of location description if GPS unavailable at change of duty status. Also, AOBRD systems may use a different set of codes for location place identificiation.
  <u>Recommendation:</u> Location description may be recorded in the remarks field or another field

may be added to Table 2 as "Location Description" that would be used in records when the Place Name code is not applicable. We would also need a design review for this and other related elements that require actions when GPS not available for proper location being reported when GPS or locations unavailable.

- Table 2. <u>Comment</u>: Location information of Table 2 does not include a direction to enable a relative position to a location name.
  <u>Recommendation</u>: Add a new data field to Table 2 as Place Direction with 3 alpha characters to indicate direction to place name, e.g., S, SE, SSE.

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- Table 2. <u>Comment</u>: The description for the field Event Update Text should reflect that this also includes driver remarks and other remarks.
  <u>Recommendation</u>: Note in description that this includes driver remarks and remarks relating to annotations.

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- Table 3. Comment: The information defined in <u>current</u> Table 3 is not generally related to the requirements of 395.16. Also, the location name field in Table 2 is a 5-character code, so driver entry of location must be a decription of location in the remarks sectiion – or a location description field is needed in Table 2 for this exception condition.
  Recommendation: Delete Table 3. as it current documented and replace it with the following:

| Event Code | Failure Event | Event Trigger | Driver Alert | Driver Requirements |
|---|---|---|---|---|
| AE | EOBR central processor or memory failure | EOBR is inoperable | Blank screen following power on or EOBR is unresponsive to any driver entry | Driver is required to prepare paper logs for the current day and continuing to do so until the EOBR is returned to normal service. A driver may also need to prepare paper logs for prior days subject to records availability as specified in 395.16(i)(5). |
| AB | EOBR display unit fails | EOBR is inoperable | Blank screen following power on | Driver is required to prepare paper logs for the current day and continuing to do so until the EOBR is returned to normal service. A driver may also need to prepare paper logs for prior days subject to records availability as specified in 395.16(i)(5). |
| DC | EOBR printer unit fails | EOBR failure of print operation | Audio and visual alert when vehicle at rest | Display unit may be used in lieu of printer. If printer is alternative to not having a display unit, then driver is required to prepare paper logs for the current day and continuing to do so until the EOBR is returned to normal service. A driver may also need to prepare paper logs for prior days subject to records availability as specified in 395.16(i)(5). |
| AH | EOBR clock fails | EOBR self test and failure in EOBR time recording | Audio and visual alert when vehicle at rest | Driver is required to prepare paper logs for the current day and continuing to do so until the EOBR is returned to normal service. A driver may also need to prepare paper logs for prior days |

| Event Code | Failure Event | Event Trigger | Driver Alert | Driver Requirements |
|---|---|---|---|---|
| | | function | | subject to records availability as specified in 395.16(i)(5). |
| AE | EOBR clock out of calibration threshold.  This assumes means and constant to calibrate against – GPS Time | EOBR self test | Audio and visual alert when vehicle at rest | Driver is required to prepare paper logs for the current day and continuing to do so until the EOBR is returned to normal service.  A driver may also need to prepare paper logs for prior days subject to records availability as specified in 395.16(i)(5). |
| AC | EOBR software error | EOBR self test and failure of a program operation | Audio and visual alert when vehicle at rest or EOBR is unresponsive to any driver entry. | Driver to restart EOBR system with power off/on to clear error.  If cleared, then driver enters annotation for prior duty status.  If error persists, driver is required to prepare paper logs for the current day and continuing to do so until the EOBR is returned to normal service.  A driver may also need to prepare paper logs for prior days subject to records availability as specified in 395.16(i)(5). |
| AG | EOBR keyboard failure | Keyboard inoperable for driver log-on or when manual entry is needed at change of duty status. | EOBR does not respond to driver's attempt to make an entry | Driver is required to prepare paper logs for the current day and continuing to do so until the EOBR is returned to normal service.  A driver may also need to prepare paper logs for prior days subject to records availability as specified in 395.16(i)(5). |
| AH | EOBR GPS unavailable for stopped vehicle | No GPS signal at stop /record last valid position within  2 minutes prior to CMV stopping. | Audio and visual alert when vehicle at rest. | Driver prompted to verify location name after vehicle stops if automatically applied with prior position, or prompted to enter location ~~name~~ description of an acceptable if GPS signal lost more than 2 minutes prior to stopping. |
| AJ | EOBR GPS unavailable for start of driving | No GPS signal at start of driving / record location based on prior stop | Audio and visual alert when vehicle at rest. | Driver prompted to verify location ~~name –~~ description  of an acceptable location~~at~~ after vehicle comes to next stop. |
| AK | EOBR GPS failure | No GPS signal for 60 or more minutes for a CMV in motion | Audio and visual alert when vehicle stops. | Driver prompted to verify location name at vehicle stop or prompted to enter location ~~name~~ description of an acceptable if GPS signal lost more than 2 minutes prior to stopping. |
| ED | ECM odometer sensor failure | Loss of ECM odometer signal for more than 5 minutes | Audio and visual alert when vehicle at rest. | Driver prompted to enter mileage at each change in duty status. |
| GP | System Self-test Pass | System startup and driver initiated self test | Audio and visual alert when vehicle at rest. | No action required. |
| GF | System Self-test Fail | System startup and driver initiated self test | Audio and visual alert when vehicle at rest. | Driver to respond to sensor failure alerts. |

- Section 2.  Comment:  Section 2 currently covers general requirements that no longer reflect the approach for electronic data transfer of driver logs.  This section needs to be completely rewritten to describe the technical requirements for electronic log file transfers.
  It may also be useful to describe technical requirements for data transfers from the EOBR support system using portable media and related data formatting requirements.
  Recommendation:  Delete content of Section 2. as it is currently written.  A preliminary outline of the approach – subject to a more detailed design to be defined in a joint working session of selected EOBR providers and selected FMCSA IT staff – includes the following:
  "2.0  Electronic Data Transfer of Driver Logs via Telematics Application Services
   2.1  Overview
   2.2.  EOBR Service Provider Application Requirements
   2.3  Authentication Certification Issuance and Management
   2.4  Security Requirements
   2.5  Testing Requirements
   2.6  Data Transfer File Naming and Formatting Requirements
   2.7  XML Schema for Driver Log Records
   2.8  EOBR Log File Transfer Initiation Requirements
   2.9  EOBR Host System Data Connection and Authentication Procedures
   2.10 Web Services Processing Approach
   2.11 Log File Transfer Exceptions Management
   2.12 Terms and Conditions for Electronic Data Transfer of Driver Logs"
   2.13 Data Transfers from EOBR Support Systems to Portable Media Devices

- 3.1.2.3.  Comment:   Reference is made to odometer and should be consistent with recommended revision to (g)(3).
  Recommendation:  Add – to CMV's odometer . . . "or other electronic device for recording mileage."

- 3.3.  Comment:  Faceplate marking requirement should be consistent with recommended requirement for (q)(2).
  Recommendation:  Revise requirement to – "EOBR must display the text "USDOT-EOBR" on the inspection display or print out as evidence that the device has been tested and certified as meeting the performance requirements of §395.16."

- Section 3. *New*  Comment:   Certification requirements as defined in 395.16 and Appendix A Sec. 3 are relatively weak.   While more thorough testing specifications are ultimately needed, a short term approach should at least outline key areas and EOBR system capabilities to be tested.
  Recommendation:  It is suggested that a broad checklist of testing requirements be included to improve the consistency of how EOBR providers conduct certification testing to assure system

performance and integrity of driver log data.  The following is suggested for new sub-section 3.4 -  "The EOBR system certification testing approach must be comprehensive, with testing coverage to include the following:

a. Verification of end-to-end system security measures, providing verification of security features for normal operations and identified security threat conditions. This includes effective authentication and security of wireless data transfers as described in Appendix A Section 2.

b. EOBR device synchronization with the vehicle, including functions for sensor failure detection and tamper detection.

c. EOBR system administration for access controls, driver identification management, and records management.

d. EOBR compliance management processes and controls for back office information reporting, log data management functions, and exceptions management including data corrections and device failures management.

e. EOBR system management processes and controls related to EOBR provisioning, EOBR device support including hardware repairs and software updates, back office application software updates, data backups and recovery, system and network downtime recovery, and updates to the technical infrastructure."