

RED PAPER

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Weighing your  
options between  
AOBRDs and  
ELDs ahead of the  
December 18, 2017  
compliance date

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**EROAD**



# Weighing your options between AOBRDs and ELDs ahead of the December 18, 2017 compliance date

## Counting down to ELD compliance

By December 18, 2017, less than six months away, all commercial drivers required to keep a record of duty status (RODS) must transition to using Electronic Logging Devices (ELDs) for recording their hours of service.

A grandfathering provision was included in the ELD mandate that allows current users of Automatic On-Board Recording Devices (AOBRDs) to have an additional two years – until December 2019 – to complete the transition to ELDs.

It now goes without saying that it is no longer a matter of ‘if’ but rather ‘when’ you and your drivers should have an ELD. Especially for those drivers and carriers using, or contemplating the use of, longstanding AOBRDs on the market today, have you asked the provider of *what will need to change from AOBRDs to ELDs and how you should prepare for it?*

It is inevitable for growing and dynamic businesses that circumstances will change and your fleet size may increase. When you add vehicles to your fleet after December 2017, all those new vehicles – regardless of whether you have AOBRDs in your other vehicles – must be fitted with an ELD. With this requirement, the FMCSA clarified that the grandfathering provision applies on a per vehicle basis, and not on a carrier or fleet basis. Clearly, this can result in complications of managing multiple back-end support systems for AOBRDs and ELDs at the same time and risk complex compliance management.

## So, are you ready? Or are you just kicking an old can down the road?

A compliant ELD solution must meet all the functional requirements outlined in the recently published ELD mandate. There are specific requirements about how the automatic driving time must be recorded and assigned; how special driving categories such as Yard Move and Personal Conveyance are to be used; how the driver and the carrier are expected to annotate, edit and correct the driver’s logs; and how malfunctions and data diagnostics are raised and resolved.

The AOBRDs must adhere to a different set of requirements specified in 49 CFR 395.15, which were published in 1988. Any difference between these requirements and the ELD mandate is an indication that there will need to be changes to the AOBRDs. Have you asked yourself, *what impacts will these changes have for my operations?*

Effective change management starts with an understanding of the key changes and developing training to guide your employees who are directly impacted by the changes.



**Let's compare the key technical differences and requirements of AOBDRs and ELDs and consider what these mean for you.**



**ROADSIDE INSPECTIONS**

AOBRD	ELD
<p>Did not address the format for the transfer of driver's logs to enforcement officials.</p> <p>For the display on the device, the graph grid is not required; only the time and duty status change sequence is sufficient.</p>	<p>Must be able to transfer the ELD data via either Telematics (Web Services and Email) or Local (USB and Bluetooth) methods.</p> <p>As backup options, if the transfer is not available for whatever reason, the ELD must present the standardized driver's log information to the enforcement officials by either Display or Printout. For the Display, an ELD must be designed so that its Display may be reasonably viewed by the enforcement official without entering the vehicle.</p>

With AOBDRs, roadside inspections had varied processes and outcomes due to the lack of standardization across the devices and limited or minimal information available to the enforcement officials. The key intent of the ELD mandate sought to standardize the ELD data transfer process, formatting and backup inspection requirements to improve the consistency around roadside inspections for drivers using ELDs.

For an AOBDR to satisfy the ELD requirements, it could mean that you may be subject to upgrading the device so it can support the transfer requirements and the backup option of display or printout. Specifically, if the device cannot be untethered or be passed outside the vehicle, it may mean you will be required to install a printer or a different connection to satisfy the backup option requirement of either a Printout or Display.

Think about the following: *How important is it to your operations that the device is connected to the cab? What do you think a roadside enforcement will tell their inspectors about handling a driver's device without liability?*



## MALFUNCTIONS AND DATA DIAGNOSTICS

AOBRD	ELD
Must be, to the maximum extent practical, tamperproof and able to identify sensor failures.	Must have the capability to monitor its compliance (engine connectivity, timing, positioning, etc.) for detectable malfunctions and data inconsistencies. ELD must record these occurrences.  Responsibility is on the carrier to resolve malfunctions and data diagnostics within eight days.

ELD means a device or technology that automatically captures driving time and facilitates the recording of driver's hours of service information. The policy rationale behind ELDs was to reduce falsification around driving time and to ensure more accurate hours of service information. The integrity of the data from an ELD depends on the capability of the device to monitor for malfunctions and diagnose whether there has been any tampering with the records.

Unlike AOBRD requirements, which did not address the parameters that constituted tampering or sensor failures, the ELD mandate specifically outlines what must be monitored, detected and recorded. Further, the ELD mandate makes the carrier responsible for ensuring that malfunctions are resolved within eight days of discovery.

Given the short timeframe to fix the issue, it is important for you to obtain instructions from your ELD provider on the list of malfunctions and data diagnostics events that can occur and how they can be resolved. It will require training for your drivers and support personnel on identifying and raising these issues in a timely manner.

## LOCATION RECORDS



AOBRD	ELD
Required at each change of duty status.  Can be automatic or manually recorded.	Must automatically capture lat/long coordinates with accuracy (two decimal places) unless driver operates under personal conveyance when the precision is reduced (one decimal place).  The location must be retrieved at least once every five miles of driving. Recorded at change of duty status  The ELD must display the geo-location information indicating approximate distance and direction to the name of a nearby city, town, village of a State that has a population of greater than 5,000.

This is an area where the AOBRDs have been designed to meet legacy 1988 technical requirements and capabilities. Drivers may have to manually record the location on the AOBRD, which means it is no different from a paper logbook.

In contrast, the ELD intentionally requires more sophistication around location recordings in terms of the frequency, accuracy and the display of information, depending on the activity. For example, ELD must automatically record the location at duty status changes; and while in driving status, the location must be captured at least every 60 minutes to two decimal place accuracy. Further, the ELD must be able to automatically process and record location at a reduced precision and lower frequency when the driver selects Personal Conveyance.

For a driver, this means that when using a compliant ELD, they can rest assured that the records are up to date and ensure that their privacy is safeguarded when using Personal Conveyance.



### AUTOMATED DRIVING STATUS

AOBRD	ELD
Not required to record Driving status automatically. Some AOBRDs that automatically record Driving status may be at provider's discretion.	Must automatically record Driving status once the vehicle reaches 5mph unless the driver selects a special driving category of Yard Move or Personal Conveyance.

AOBRDs did not require driving status to be recorded automatically. The requirement was left open for the AOBRD provider to implement at its own discretion. This means that there are some AOBRD solutions that may automatically record Driving status but may not occur at 5mph but at 15mph.

A driver who is used to the higher speed threshold may find it difficult to adjust to a lower threshold of 5mph that triggers the change to Driving status. For instance, a driver may currently take a rest break in a yard and when asked to move, they are unaffected, but with the ELD they may have to maneuver the vehicle slowly to ensure that it does not trigger Driving status as per the ELD mandate.

You may need to work with your fleet managers and drivers to understand the impacts of the automated Driving status and adjust company policies and practices to ensure that the drivers stay compliant within their hours of service.



### EDITING DRIVER'S RECORDS

AOBRD	ELD
Not clearly addressed. Record of duty status maintained and generated by AOBRDs may be edited by a carrier to accurately reflect the driver's activity. Carrier must include an explanation of the mistake in the remark section.	Driver must be able to review, edit and annotate the driver's ELD record. However, restrictions around edits to driving time and other automatically recorded events such as login/logout, intermediate recordings, engine power up/shut down and malfunctions or data diagnostics. All edits by driver or carrier must have an annotation explaining the reason. Carriers may suggest edits on submitted driver's logs. Driver must accept or reject the proposed carrier edits and recertify.

With AOBRDs, once the driver submits the certified record of duty status to the carrier, they may not have seen the changes that have been made to their records.

The ELD mandate clarified that the driver must be able to review all changes and edits proposed to their logs. The driver reserves the right to accept or reject edits from the carrier, and where the edits are accepted, the driver must recertify the records to confirm it is true and correct.

If your company has been used to correcting the driver's logs with AOBRDs, then this may come as an adjustment. You will need to work with the drivers to actively review their records for any corrections or proposed carrier edits.



### SPECIAL DRIVING CATEGORIES (Yard Move and Personal Conveyance)

AOBRD	ELD
Not required. Some AOBRDs provide the Yard Move and Personal Conveyance statuses but record same information as Driving.	Requires that the carrier must control the permission on the support system to enable a driver to use Yard Move or Personal Conveyance statuses. Driver must select and deselect the Yard Move or Personal Conveyance and annotate the reason.

The ELD mandate introduced and offered definitions for two special driving categories of Yard Move and Personal Conveyance. A driver may be permitted to capture driving time around a yard as On-duty Yard Move and driving for personal use as Off-duty Personal Conveyance.

Certain AOBRDs have satisfied the market demand to enable drivers to select Yard Move and Personal Conveyance statuses. However, carriers need to be aware that these may not be designed to meet the specific requirements around recording of these special driving categories.

For example, a driver using an ELD must manually select and deselect Off-duty Personal Conveyance when permitted. If the driver forgets to select or deselect the status, they can only annotate against the records and cannot edit Driving time.

You'll most definitely need to work through scenarios that special driving categories can be used during operations and outline the best practices or expectations for your drivers. It's important to revisit your company policies and capture and reflect it in your driver change management training.



### UNIDENTIFIED DRIVING TRIPS

AOBRD	ELD
Not required.	Must record unidentified driving trips when the vehicle is driven without a driver logged in. Driver must be prompted to approve or reject unidentified driving trips at login. Carrier is also responsible for assigning the unidentified driving trips or annotate why the time is unassigned.

The ELD must record all driving time and trips for the vehicle. All of those driving trips must be assigned to drivers or be explained by the carrier. It is a new requirement that all the unidentified driving trip information is available to the enforcement officials to check that drivers in a fleet are operating within the hours of service rules.

With the unidentified driving trips, the carrier will get the visibility over the hours that the vehicle has been driven without a driver logged in. It is incumbent on the carrier to ensure that all the driving trips are assigned or explained as it will be an area that will be scrutinized during a Compliance Review of ELD records.

This may be a completely new operational requirement for you if you already use an AOBRD, because AOBRDs may not currently capture this information. You may have to work with your drivers to ensure that they are logging in and out correctly as well as designating some dedicated personnel to oversee the unidentified driving trips as part of reviewing the driver's logs.



### CERTIFICATION AND REGISTRATION

AOBRD	ELD
Self-certification.	Self-certification and registration with the FMCSA.

With ELDs, in addition to self-certifying that it meets the requirements of the ELD mandate, the provider must register the ELD with the FMCSA. This process of registration requires the ELD provider to prepare documentation of:

- the internal testing processes
- present a list of malfunctions and data diagnostics
- instructions on how roadside inspection process works
- ELD user manual for the driver.

FMCSA maintains a registry that publicly displays all the self-certified and registered devices on this website: <https://3pdp.fmcsa.dot.gov/ELD/ELDLList.aspx>.

While ELD suppliers will self-certify their technologies, given that FMCSA does not require independent verification, some have elected to go above and beyond and take this approach because they understand the added value of unbiased verification and the peace of mind it can add to your operations.

If you are using an AOBRD, you will need to ensure that before December 2019, the AOBRD solution appears on the FMCSA register. Because if not, you will risk being non-compliant.

### What’s in your future?

Now is your time to get ready. Prepare yourself and be armed with enough detail to actively add to the short-, mid- and long term decision making around your operations. It’s important to understand what you are using and what you need to watch out for, so that there are no surprises and hidden risks that surface after the compliance date rolls in.

The differences between a legacy AOBRD and an ELD will really demand your fundamental understanding. If you are evaluating the purchase of an AOBRD at this point, it is truly not a matter of ‘if’ but ‘when’ you will need to evaluate the areas where you need to adjust your company’s policies or practices. For each key difference in technical requirement between an AOBRD and an ELD, you may need to revise or develop new training programs for your drivers and staff to work with ELDs in your future.

Consider this. If you are carefully choosing a car that is safest for your family to operate, would you choose one designed to the latest safety standards or one designed to 1980s specifications? Inherently, you know that in choosing the latter, you are just delaying buying another car in a few years or quite possibly putting your family at risk.

### Choosing an ELD should be the same.

#### ABOUT EROAD, INC.

EROAD, Inc. is a leading transportation technology and services company, headquartered in Tualatin, Oregon. EROAD’s in-vehicle technology and global electronic platform enables carriers to efficiently utilize their capital and reduce the costs associated with fleet operations and management. EROAD offers a complete suite of user-friendly compliance and telematics solutions, including automated IFTA, electronic weight-mile tax, ELD-ready electronic logbook, support for driver safety, vehicle maintenance, fuel and fleet utilization reporting. EROAD’s independently proven, secure platform guarantees accurate data that you can rely on to provide insight and competitive advantage.