



AOBRD to ELD

Fast Track Guide for Fleets

Get Ready for the ELD Full Compliance Deadline

When the United States Congress mandated the use of electronic logging devices (ELD), trucks with existing automatic on-board recording devices (AOBRDs) were grandfathered in for two years. That two-year extension will be expiring on December 16, 2019, at which time all commercial vehicle drivers who are required to prepare Hours of Service records of duty status (RODS) will have to do so using an ELD.

About This Guide

This guide is intended to help fleets make a smooth transition from AOBRDs to ELDs, by providing an overview of the technology and the changeover process. It will explain what needs to be done to get started down the path to full compliance.

What you'll learn:

- + Differences between AOBRDs and ELDs
- + ELD Technical Overview
- + Transition Plan
- + Proper Training

ELD Rule Implementation Timeline

December 16, 2015	ELD Final Rule Published	<ul style="list-style-type: none">+ ELD use is voluntary+ Paper logs, logging software and AOBRDs are also permitted+ Awareness and Transition Phase begins
December 18, 2017	ELD Final Rule Compliance Date	<ul style="list-style-type: none">+ ELD use is mandatory+ Existing AOBRDs can be used for 2 more years
December 16, 2019	Full Compliance Phase	<ul style="list-style-type: none">+ Mandatory ELD use for all drivers and carrier subject to the ELD rule+ ELDs must be self-certified and registered with the FMCSA

Why Transition Now?

Although the deadline requiring the switch from AOBRDs to ELDs isn't until December 2019, fleets should consider starting to switch now. Here are some reasons why:

- + **Take Time for Driver Training** — ELDs work differently than AOBRDs and additional driver training will be required, especially in the areas of unassigned logs, yard moves and data transfer, just to name a few.
- + **Get Ahead of the Pack** — Migrating to ELDs sooner rather than later could give a fleet a competitive advantage over those that choose to switch at the last minute. By the time the deadline hits, ELD fleets will have already worked out any issues their drivers may have experienced and will have determined how to offset any losses to productivity that may have resulted from the switch.
- + **Easier Roadside Inspections** — The FMCSA's eRODS software is designed to receive ELD data from any ELD vendor in a standardized format, to simplify the roadside inspection process. Having AOBRDs slows down inspections, and your drivers end up spending more time on the roadside, due to the lack of a standardized inspection process.

According to the *Journal of Commerce*, eight months into the use of ELDs, the biggest effect of the mandate wasn't a loss of drivers, but of driving hours.

The reality is that like it or not, ELDs will soon replace AOBRDs. Although there are some exemptions, electronic logging is now an industry standard and for many fleets, will become an integral part of their day-to-day operations.

The Good News

ELDs offer many benefits, the biggest being access to real-time data. Other key benefits include the ability to monitor fuel usage and manage driver safety, improve Hours of Service performance, and track arrival and departure times.

Like any technology solution there will be a learning curve with ELDs. Fleets need to take action today to get a transition process in place and devise a training program for drivers and office staff to ensure the smoothest transition possible.

AOBRD vs. ELD

An AOBRD, or automatic on-board recording device, is an electronic device that records a driver's Hours of Service (HOS) as laid out in the U.S. Hours of Service of Drivers Regulations [Section § 395.15](#) by the Federal Motor Carrier Safety Administration (FMCSA). As mentioned earlier, AOBRDs were grandfathered in as being compliant when the ELD mandate went into effect on December 18, 2017.

According to FMCSA, an ELD is:

“technology that automatically records a driver's driving time. This allows easier, more accurate Hours of Service recordkeeping. An ELD monitors a vehicle's engine to capture data on whether the engine is running, whether the vehicle is moving, miles driven, and duration of engine operation (engine hours). ELD manufacturers must certify that their products meet the technical standards in the ELD rule.”

Key Differences Between AOBRD and ELDs

While both AOBRDs and ELDs are designed to record a driver's duty status, ELDs have a number of important advancements:

- + Internal synchronization is more clearly defined in ELDs.
- + Records location information about the truck at each duty cycle change, plus every 60 minutes while the vehicle is in motion.
- + Provides a graph grid of the driver's duty status changes.
- + Warns driver of unassigned driver time/miles upon login.
- + Defaults to on-duty not driving status when the vehicle has stopped for five consecutive minutes and there is no driver response to prompt the ELD.
- + Synchronizes to Universal Coordinated Time.
- + Enhanced resistance to tampering.



Geotab Cloud ELD with Geotab GO fleet tracking device

AOBRD vs. ELD – More Differences

Data transfer	With ELDs, drivers have two electronic options for transferring data to law enforcement officers. The first is a telematics transfer in which data is transferred via wireless web services and email. The second is called a local transfer and involves transferring data via USB2.0 and Bluetooth. With both methods, records are sent directly to the FMCSA's eRODS software.
In-cab documents	The ELD must have records of the current day and the seven previous days. Drivers also need to have the user's manual and an instruction sheet that shows how to transfer data during a roadside inspection. A sheet that details malfunctions and contains appropriate actions the driver needs to take if the device malfunctions is necessary as well. The driver also needs a supply of blank paper logs to cover at least eight days in the event the device fails.
Special driving categories	There are two main special driving categories drivers need to be aware of: personal conveyance and yard moves. In November 2018, FMCSA issued a new guidance on personal conveyance. It said that the commercial motor vehicle may be used for personal conveyance even if it is laden, since the load is not being transported for the commercial benefit of the carrier at that time. Personal conveyance could mean moving a truck into a rest spot in a period of time that exceeded the limits on for on-duty hours. A yard move applies when the driver is driving the vehicle off of public roads. The status is considered on-duty but does not count toward the driver's driving time limit.
Unassigned driving time	This occurs when someone drives a vehicle without logging in to the ELD. Before the ELD mandate, there were no unassigned driving events. According to FMCSA all unassigned drive time records must be either annotated or reassigned to a driver. Both drivers and carriers are accountable for all unassigned drive time.
Editing logs	All edits to the logs have to be approved by the driver. Drivers also can enter missing information and make edits, but all edits made by a supervisor have to be approved by the driver. Edits must include an explanation of why the change is being made.
Speed threshold	ELDs have to be configured to have a maximum speed threshold of no greater than 5 mph. There is no distance or duration threshold that can be specified. Before the ELD mandate, many AOBRDs allowed customers to customize the threshold at which automatic drive logs would be created. This will be much tighter in the ELD realm.

Electronic Logging Devices — Technical Overview

ELDs have to capture more data than AOBDRs. This includes: date and time, location (accurate to within one mile in normal operation), engine hours, vehicle miles, driver information, vehicle information, and carrier.

On its website, FMCSA lists the [features](#) all ELDs are required to have.¹ Some key things to note include that the device must show the driver as driving when the vehicle reaches 5 mph and the device must automatically default to on duty when the vehicle is stopped, unless the driver takes action. The device also has to automatically generate vehicle location. Anyone using the ELD must have an account, and only one driver is allowed on each account.

FMCSA also requires ELD manufacturers to self-certify that their devices meet the ELD specifications contained in the rule.

The Geotab Cloud ELD platform interconnects the Geotab GO telematics device with a mobile device running the Geotab Drive app (available for Android and iOS) through a secured cloud-based server operating the [MyGeotab](#) fleet management software. Unlike hard-wired or Bluetooth paired solutions that use a time-based approach with periodic status checks, the GO device continuously records and transmits data to the cloud-based program to effectively monitor and record HOS, including RODS and Driver Vehicle Inspection Reports (DVIRs).

Geotab has registered its Geotab Cloud ELD with FMCSA indicating that it meets the necessary specifications.



Transition Plan for ELDs

When it comes to transitioning to ELDs, it does not have to be all or nothing. If a fleet begins now, it can complete a slow rollout by the December 2019 deadline.

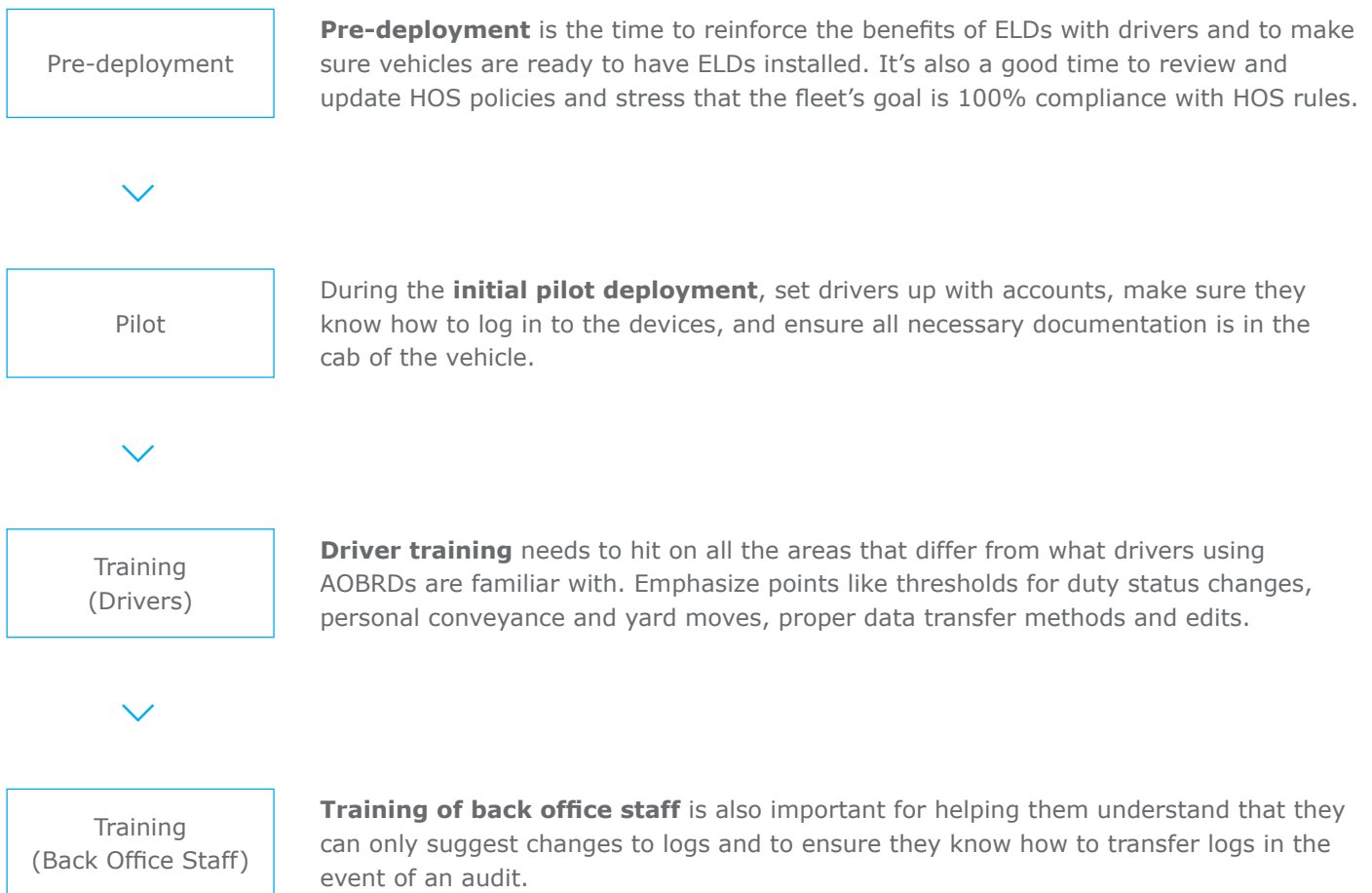
Conduct a Pilot Program

Start by reviewing the offerings from various ELD makers. Once the fleet has determined which ELD it is going to use, fleet management needs to ask for a pilot program.

Top drivers or those who are technology-savvy and enthusiastic are a good choice as the first users of the ELDs. Get them properly trained and allow them one to two weeks to practice using the ELDs. Once they are trained and successfully using the ELD, they will become champions for it and can help the fleet roll it out to the rest of the drivers.

What a Successful Transition Looks Like

Here is a quick overview of the steps to successful deployment:



Training Tips

To be successful in switching to ELDs, training is critical. The top areas to focus on during training are:

- + Making sure drivers understand the thresholds for automatic duty status
- + Teaching them how to successfully transfer data from the ELD to the law enforcement official via either the telematics or local transfer method
- + Explaining the various ways the ELD can malfunction. FMCSA has information on both the [types of malfunctions](#) and what drivers need to do [in the event of a malfunction](#).² Educate your back office staff about their responsibilities when malfunctions are reported by drivers.
- + Ensuring drivers understand how to edit logs and are aware that they must approve all edits made by supervisors.

Take a step-by-step approach when transitioning from AOBDRs to ELDs. Make sure the plan covers what needs to be done prior to deploying the ELDs, driver training and training for back office staff.

Giving drivers and ELD administrators ample time to learn and ask questions will result in the smoothest transition. Once the fleet has begun the transition from AOBDRs to ELDs, schedule ongoing training sessions with drivers and offer coaching where needed.



Putting It All Together

Although making the switch from AOBDRs to ELDs may seem daunting, it doesn't have to be. With some basic planning and training, ELDs can become a valuable part of your fleet management program for compliance and beyond.

The FMCSA web site (www.fmcsa.dot.gov/hours-service/elds/electronic-logging-devices) is a good source of information about ELDs. It provides definitions and technical information about ELDs, has an FAQ section, as well as a section for drivers and carriers in addition to a list of resources.

For more information and training tips on ELDs, please visit: www.geotab.com/eld

References

1. <https://www.fmcsa.dot.gov/hours-service/elds/choosing-electronic-logging-device-checklist>
2. <https://www.fmcsa.dot.gov/hours-service/elds/eld-malfunctions-and-data-diagnostic-events>

About Geotab

Geotab is advancing security, connecting commercial vehicles to the internet and providing web-based analytics to help customers better manage their fleets. Geotab's open platform and Marketplace, offering hundreds of third-party solution options, allows both small and large businesses to automate operations by integrating vehicle data with their other data assets. As an IoT hub, the in-vehicle device provides additional functionality through IOX Add-Ons. Processing billions of data points a day, Geotab leverages data analytics and machine learning to help customers improve productivity, optimize fleets through the reduction of fuel consumption, enhance driver safety, and achieve strong compliance to regulatory changes. Geotab's products are represented and sold worldwide through Authorized Geotab Resellers.

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