Understanding the ELD Final Rule

A Look at the Details
Contrary to what some believed, a mandate for installing and using electronic logging devices (ELDs) in commercial vehicles did become a reality. On December 16, 2015, the Federal Motor Carrier Safety Administration (FMCSA) published the “Electronic Logging Device and Supporting Documents Final Rule.”

The final rule covers four core areas:

1. Who must use an ELD
2. ELD technical specifications
3. Prevention of driver harassment
4. Supporting documents

As well as explaining who must use an ELD, the final rule also includes the compliance deadlines.

The final rule closely matches the ELD proposal published in March of 2014. If you understood the ELD proposal, you have a head start in understanding the majority of the final rule. Significant changes between the proposal and the final rule include:

- Adding two exemptions to the mandatory use requirement.
- Streamlining the roadside inspection requirements.
- Providing a due process for vendors who are in danger of having their ELD removed from the approved device list.
- Lowering the maximum number of supporting documents required to be retained for each 24-hour period down to eight supporting documents.

**Who must use an ELD**

The final rule requires most drivers that presently complete paper logs to be switched over to an ELD by December 18, 2017. There are a few exceptions:

- Drivers that are required to complete paper logs on eight or fewer days out of the last 30 days. This includes short-haul drivers and intermittent drivers.
- Drivers operating a power unit that is part of a driveaway/towaway shipment.
- Drivers that are operating vehicles older than model year 2000 (verified through the vehicle’s VIN number).
The exempted drivers will be allowed to continue using paper grid-graph logs. All other drivers that presently complete paper logs would have to be switched over to an ELD by December 18, 2017. Despite comments to the proposal and lobbying efforts, there are no exceptions in the final rule for:

- Drivers that drive for small fleets and owner-operators
- Drivers that drive non-CDL commercial vehicles
- Driver for small passenger carriers
- Drivers that drive leased or rented vehicles
- Lease or temp drivers
- Drivers at "non-trucking" motor carriers

There are very few drivers exempted from the ELD mandate!

To prepare for the mandate, carriers and drivers can continue to voluntarily install and use automatic electronic logging devices — referred to as automatic onboard recording devices (AOBRDs) — that meet the current technical standards up until the compliance date (December 18, 2017) for the final rule. The requirements that these devices must meet can be found in the regulations at §395.2 and §395.15. On and after December 18, 2017, all devices that are newly installed for use must meet the ELD specifications found in Subpart B to Part 395 and in the Appendix to Part 395.

Any §395.15-compliant AOBRDs that are installed before December 18, 2017, can be used until December 16, 2019. At that time, the AOBRDs must have been either updated to the ELD specifications or removed from service and a new device installed that meets the ELD technical specifications. However, this may not be an issue as some AOBRDs (including the Encompass® E-Log system offered by J. J. Keller & Associates, Inc.) can be updated over the air to meet the ELD technical specifications.

**ELD technical specifications**

Before we go any further, we need to clarify the terminology. Over the years, automatic electronic logging devices have had several names. Here is a rundown of the device names, their origin, the performance characteristics and key requirements for them, and how they apply today.

Automatic onboard recording device (AOBRD): These are the “original” automatic electronic logs and their use is completely voluntary. They date back to 1988 and are regulated under §395.2 and §395.15. The device must use engine data to determine when the driver is driving. All other duty changes can be made by the driver. Locations can be automatically generated or entered by the driver. The vendor must provide the carrier with a letter certifying that the device meets the regulatory requirements. These devices are presently in use and will eventually need to be replaced (or updated) by ELDs.

Electronic onboard recorder (EOBR): These devices were to have replaced AOBRDs in 2012. The technical specifications for them were in the now-removed §395.16 and related Appendix. Their use would have been voluntary initially, with the exception of carriers with Hours-of-Service issues, who would have been required to use them. Eventually, the use...
requirements for these devices would have spread to the entire industry. The device would
have used engine data to determine when the driver is driving and would have had to default
to on duty when the vehicle stopped (unless the driver indicated otherwise). Locations
would have been automatically generated by the device. These devices were to have replaced
AOBRDs, but the rulemaking was ordered to be withdrawn. In the final rule, FMCSA makes
it clear that the term EOBR is no longer to be used to refer to automatic logging systems.
Present systems are either the older AOBRD or the newer ELD.

**Electronic logging device (ELD):** These are the devices that are mandated in the final
rule. The technical specifications for them can be found in Subpart B to Part 395 and in the
Appendix to Part 395. The use of these devices is becoming mandatory. The device must use
engine data collected from the vehicle's engine control module (ECM) to determine when
the driver is driving. The device must default to on duty when the vehicle is stopped (unless
the driver indicates otherwise). Locations must be automatically generated by the device. The
device must be on FMCSA's list of approved devices as of December 18, 2017. These devices
are the official replacement for the AOBRDs.

**Going forward it will be very important that carriers know what type of system they are buying and if it can be updated to meet the ELD system requirements.**

**Vendor list**

In the future, only devices on the list of approved devices published by FMCSA can be
installed and used. To get onto the list, vendors must test and “self-certify” the device, send
the self-certification information to FMCSA, and FMCSA (if it approves) will place the
vendor's device on the list of approved devices. Carriers (on and after December 18, 2017)
can only install devices that are on this list. Once the grandfathering period for AOBRDs is
over (December 16, 2019), all drivers must be using a device that is on the FMCSA-approved
device list.

**User accounts**

All “users” in the system must have an “account” and user ID. This includes all supervisors,
support personnel, and drivers. One reason for this is to track entries and changes made
within the system. An individual who is both a driver and a supervisor — such as an
owner-operator — would have to have two separate accounts, one as a driver and one as a
supervisor.

**Driver accounts**

All drivers' accounts must include the driver’s license information (license number, state of
issue, along with other information). This will not be displayed in the system or used as part
of the login for the driver. It is only to validate that the account belongs to an actual driver
at the company. This is to discourage the creating of “ghost” accounts. These are “dummy”
accounts that can be used to “hide” driving time.

**In-cab requirements**

All portable devices must be mounted in the vehicle, within the driver's view while sitting in
the driver's seat. The device must not allow entries to be made while the vehicle is in motion.
Whenever the vehicle is in operation, the driver must have with him/her:

- Records for the current day and the previous seven days in the ELD
- A user's manual
- An instruction sheet on data transfer during roadside inspections
- An instruction sheet detailing malfunctions and actions to take in case of certain malfunctions
- A supply of blank paper logs (at least eight days) to be used if the device fails

If the device fails, the driver will need to manually log the current day and reconstruct the previous seven days, or have records provided by the carrier showing the previous seven days. The exception is if the device can provide records for the previous days. In this case, the driver would be able to use the device to provide the previous seven days and show the officer a log for the current day.

A word of warning: The regulations require a driver to have the required records at a roadside inspection. There is a misconception that if a logging device fails, the driver can simply ask the company to send the records to the officer if he/she is inspected, and if that is done there is no violation. This is not true. If the driver cannot present the records in the required format at the time of the inspection, the driver is in violation of the regulations. This is true today and it will be true in the future.

Drivers using ELDs will still have to carry paper logs and know how to use them!

Data capture

The ELD must automatically capture a "data set" at vehicle startup and shutdown, at all duty changes, once per hour while the vehicle is in operation, and when entering or ending a "special driving period." The data set must include:

- Date and time
- Location (accurate to within one mile in normal operation, 10 miles during personal use)
- Engine hours
- Vehicle miles
- Driver
- Vehicle
- Carrier

The carrier’s fleet management system (FMS) can be more accurate than one or 10 miles, but ELD system records must meet requirements.
Duty changes and driver entries

When the vehicle stops, the default duty change will be to On duty, not driving. After being stopped for five minutes, the device will prompt the driver for a duty change. If the driver does not specify a duty change, the device will keep the driver on duty. This is the only non-driving duty change that can be done automatically. All other non-driving duty changes must be entered by the driver. Duty changes to the driving line will be done automatically when the vehicle reaches five miles per hour, unless the driver has indicated in advance that he/she is entering one of the “special driving categories.”

To deal with yard movements and personal use, the final rule includes two “special driving categories.” The categories are:

- Personal use: To be used when the driver is using the commercial vehicle as a personal vehicle to commute to a purely personal destination. The driving will be recorded by the device as off-duty time. Warning: Watch for misuse of this category, in which a driver could lower his/her daily and weekly hours by falsely recording driving time as off-duty time. This category needs to be monitored closely for falsification.

- Yard time: To be used when the driver is operating the vehicle off of the public roadway. The driving is captured as on-duty time and does not count toward the driver’s driving limit. Warning: Watch for misuse of this category, in which a driver could falsely record driving time as on-duty time, allowing for more driving hours. This category needs to be monitored closely for falsification.

As well as duty changes, drivers will have to log in at the beginning of the day, enter trailer and shipment numbers, and log out at the end of the day. The driver may also need to occasionally enter a location, if prompted.

If at any time the vehicle moves without a driver being logged into the ELD, the ELD must prompt the driver to log in. Also, when the driver logs into the device, if there is unassigned driving time in the device, the device must prompt the driver and ask the driver if the driving time should be assigned to him/her. If the driver does not claim the unassigned driving time, it will remain displayed on the device. The company will then become responsible for either assigning the unassigned driving time to the correct driver or leave it unassigned and add an explanation about why it is unassigned.

Creating the record

As the day progresses, the device will merge the automatically-collected data and the driver entries to create the ELD record for the day — the “log.” The record for each 24-hour period must be certified and submitted by the driver. Much like paper logs, the system can allow the driver to provide one certification for all of the off-duty days in the case of multiple days off.

Edits

Under this final rule, drivers are allowed to enter missing information and make edits to the records. Supervisors can request edits, but all supervisor edits must be approved by the
driver. This was put into the rule to deal with the harassment issue and to reduce the chances of supervisors forcing drivers to drive — by changing the driver’s hours in the back office to “create” available hours — when they are actually out of hours.

All edits must include an explanation of why the change was made. The system must also indicate which user made the change. If an edit is made, the record in the system must include the original record, the updated record, and the details of the change.

If the record has already been submitted and it was edited, the driver will need to recertify and resubmit the record.

**It’s critical that drivers and supervisors understand that they can only use the edit option to make corrections; they cannot use the edit option to create false records!**

**Record retention**

Once the record is submitted, the carrier must maintain a copy of the record, including the original, any changes, and any comments for six months. The carrier must also maintain a backup copy of all records. The backup records must be stored separately.

**Roadside inspections**

During a roadside inspection, the driver will need to be able to present a “device” or “printout” showing the current day and the previous seven days to the officer. If the officer requests it, the driver must be able to provide the officer with a copy of the electronic record.

The final rule provides two general methods for doing this:

- Telemetric method: Be able to electronically transfer data to an authorized safety official on demand via wireless web services and email, OR
- Local transfer method: Be able to transfer data to an authorized safety official on demand via USB2.0 and Bluetooth

**It will be the driver’s responsibility to provide the requested records at the time of the inspection.**

The device must only be able to use one of the two general methods, not both. However, within the selected general method, the device must be able to use both of the methods. As an example, if the device uses the local transfer method, the driver must be able to provide the records using both USB2.0 and Bluetooth. The officer will get to choose the specific method that the driver is to use to provide the logs.

Once the officer’s computer has received the data, it will be imported into a program called “eRODS.” This program will take the data and display it using the standard grid-graph display and do an automatic audit of the information. If there is a potential violation, the officer will investigate and determine if the violation should be written up.

**Prevention of driver harassment**

The regulations provide several provisions to prevent carriers from using the ELDs to “harass” drivers into driving when they are ill or fatigued or when out of hours (the
“harassment” that some believe these systems will lead to). First, FMCSA added a definition of “harassment.” Harassment is defined in the regulations at §390.36 as an action by a motor carrier toward a driver employed by the motor carrier (including independent contractors operating on behalf of the motor carrier) involving the use of information available to the motor carrier through an ELD that the motor carrier knew, or should have known, would result in the driver violating §392.3 (the prohibition against driving when ill or fatigued) or part 395 (the Hours-of-Service regulations).

Second, the rule provides specific harassment complaint and investigation processes that are to be used to deal with harassment complaints submitted to the FMCSA. The specific process for filing and investigating complaints of harassment is detailed in the regulation at §386.12. Also:

- Drivers must approve all records (including edits and related comments)
- Drivers must have access to all records in the ELD system
- The device must have mute or volume control so it can be silenced during sleeper periods

**Supporting documents**

A supporting document is defined in the final rule as “a document, in any medium, generated or received by a motor carrier in the normal course of business as described in §395.11 that can be used, as produced or with additional identifying information, by the motor carrier and enforcement officials to verify the accuracy of a driver’s record of duty status.”

Here are the “five categories” of supporting documents the carrier must retain and have available during an audit:

- Shipment paperwork (bills of lading, shipment invoices, delivery receipts, etc.)
- Dispatch and trip records, or the equivalent document
- Expense receipts related to any on-duty not-driving time (such as fuel receipts, lumper receipts, etc.)
- Electronic mobile communication/tracking system records
- Payroll and settlement records, or an equivalent document that indicates payment to a driver

To qualify as a supporting document that must be retained, the document must meet the definition of a supporting document, fall into one of the five categories, and contain certain elements — driver (or the ability to identify the driver), location, date, and time.

The regulation requires that the carrier retain up to a maximum of eight of the documents that match the list above for each 24-hour period. All records from the company’s communication/tracking system for the 24-hour period only count as one document. If less than eight documents are available, time can be missing and the document would still be considered a supporting document. The eight must include the first and last for the 24-hour period. If the carrier/driver generates less than eight, they will need to retain all that are generated.
Carriers must also retain all toll receipts/toll billing statements for all drivers that are allowed to use paper logs rather than an ELD, in addition to the ones listed above. The toll receipts/billing statements do not count toward the eight in 24-hour period requirement.

**Are you going to be ready?**

One of the things this final rule does is remove the uncertainty surrounding the ELD mandate. The publication of the final rule started the clock ticking. Carriers are now on notice that within two years they will have to be switched over to ELDs. Step one for most carriers should be getting familiar with the regulation and the requirements it creates.

The next step is beginning the process of transitioning to electronic logs. While this sounds fairly straightforward and easy, it is not. Making the transition requires a lot of time and effort in advance.

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**About the Author**

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Tom Bray is a Senior Editor at J. J. Keller & Associates, Inc. He specializes in motor carrier safety and operations management. In addition to the many publications he supports at J. J. Keller, Tom has been a frequent contributor to industry publications and websites, including *Heavy Duty Trucking*, truckinginfo.com, *Transport Topics*, *Fleet Maintenance* and *Work Truck*, among others. He has authored whitepapers and presented webinars on a number of key transportation subjects. He is also a frequent speaker at transport safety seminars and conferences on topics such as hours of service, vehicle maintenance, cargo security, and driver fatigue. Prior to joining J. J. Keller, Tom worked in the trucking industry for 22 years, with responsibility for DOT compliance, policy development, driver human resources, driver training, training program development, CDL testing, claims management, and accident and injury prevention. Tom is active in the Wisconsin Motor Carriers’ Council of Safety Supervisors and the Wisconsin Motor Carriers’ Safety Supervisor Certification program.

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Using J. J. Keller's electronic logging devices (ELDs) — which will comply with the new ELD rule without a hardware swap out — the Encompass system allows fleets to comply with the new ELD rule, while eliminating some of the most common Hours-of-Service violations. Plus, the electronic DVIR function helps drivers conduct complete vehicle inspections to prevent related violations. The system also offers back-office compliance and performance reporting and works with virtually any smart device, including our J. J. Keller® Compliance Tablet™.

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