

Electronic Logging Devices (ELDs) and Electronic Record of Duty Status (eRODS) Training

1. Introduction

1.1 Title Slide

Welcome to Electronic Logging Device (ELD) and Electronic Record of Duty Status (eRODS) training. This training is meant to provide you, the safety official, with the information you need to interact with a motor carrier or driver. It is not intended to take the place of regulatory or policy training.

1.2 Objectives

At the end of this course, you will be able to work with a carrier or driver to obtain records of duty status (RODS).

1.3 Intro ELD/eRODS

Before we get started, let's look at a brief introduction to ELDs and eRODS.

An ELD is intended to help create a safer work environment for drivers, and make it easier and faster to accurately track, manage, and share RODS.

ELDs synchronize with a vehicle engine to automatically record driving time, for easier, more accurate hours of service (HOS) recording. By holding drivers and their companies accountable to critical ELD regulations, ELDs help to create a safer work environment, ensuring that drivers take the breaks they need.

The eRODS software application presents data transferred from an ELD. eRODS will identify potential HOS violations to be reviewed by safety officials.

1.4 Implementation Timeline

ELDs are being implemented in three phases. Phase 1 was completed in December 2017 and brought awareness to the industry. Under Phase 2, until December 2019, carriers may use ELDs or automatic onboard recording devices (AOBRDs) that were installed and in use prior to December 18, 2017. Phase 3 will require that only ELDs be used after December 16, 2019.

While this training is focused on ELDs, during Phase 2 of implementation the first step to an inspection, safety audit, or investigation will be to determine if a carrier is using an AOBRD or ELD. To determine this, do the following:

- Ask the driver or carrier “Are you using an ELD or AOBRD?” To verify the response, you can check for the device on FMCSA’s lists of registered, self-certified ELDs and revoked devices.
- Check the device. You can look for an “About” or “Systems” tab to learn more about the device and the software it is running.
- Request additional device information. Drivers are required to have the instruction sheet for their device on hand. Make sure the information matches the device in use.

If you still can’t tell if the device is an AOBRD or ELD, treat it like an AOBRD subject to 395.15 and review the HOS compliance.

Remember: The number one priority is verifying a driver’s HOS compliance.

Now that we have learned a bit about AOBRDs, let’s move ahead with our ELD and eRODS training.

2. Background

2.1 Brief Background

Let’s take a brief look at some background information on ELDs and eRODS.

History

FMCSA aims to make highways safer for all drivers. One danger on the road is fatigued driving, which leads to hundreds of crashes and deaths each year. The ELD rule, which requires the adoption of ELDs, is the latest step to address fatigued driving among drivers of large trucks and buses. ELDs will make it easier to enforce existing HOS regulations, which remain unchanged.

Electronic Logging Devices

An ELD synchronizes with a vehicle’s engine to automatically record a driver’s off-duty and on-duty time and securely transfers HOS data to a safety official. ELDs are made by a variety of different manufacturers, and each one may function a bit differently. ELD providers must self-certify and register their devices with FMCSA.

eRODS

eRODS is a program developed by FMCSA to read files generated by ELDs. To help streamline HOS reviews, eRODS presents HOS data in a standard format, regardless of the device it came from or the method of data transfer. It provides the log data in a

graphical format and highlights areas of interest that enforcement personnel should investigate further.

How It Works

- 1) ELDs synchronize with the commercial motor vehicle's engine to automatically record the following data:
 - Engine power status
 - Vehicle motion status
 - Miles driven
 - Engine hours
 - Identification of driver/authorized user, vehicle, and motor carrier
 - Duty status
- 2) The driver will certify the records, making any necessary annotations.
- 3) Compliant ELDs support at least one complete option for data transfer that allows safety officials to open ELD files in eRODS. The safety official selects the method of transfer. Web services is FMCSA's preferred data transfer method.
- 4) The data file is sent to the safety official, with potential HOS violations flagged for review.

3. Inspectors

3.1 Steps for Inspectors

Roadside inspectors conduct well over 3 million inspections each year. Approximately two thirds of these have a driver component that includes a review of HOS compliance. As such, it's critical that roadside inspectors know how to ask for RODS and view them in eRODS.

Let's walk through how our inspector Maria might work with a driver to get their logs from the ELD and into eRODS for review.

3.2 Asking for RODS

To start, Maria will need to request the driver's RODS to confirm that the driver is following HOS regulations.

This is done by transferring data from the driver's ELD to eRODS to view the data.

Maria: "As part of this inspection I'll need to see your RODS."

Driver: "Ok. I'm using an ELD."

3.3 Determine Transfer Method

Next, Maria will need to work with the driver to transfer the files from the ELD to eRODS.

To be compliant, devices must support both telematic options or both local transfer options. Web services is FMCSAs preferred method of data transfer because it is the most efficient way to transfer files for both the inspector and the driver.

Let's continue with the conversation between Maria and the driver.

Maria: "Can you transfer the RODS via web services?"

Maria asked the driver to transfer data via web services first, since FMCSA prefers this method.

Driver: "I don't think my ELD can do that."

If the driver's device doesn't support web services, ask for another data transfer method.

Maria: "Can you transfer the RODS via another method, like Bluetooth or USB?"

Driver: "I don't think my ELD can do that."

Remember, the driver is required to have a data transfer sheet in the vehicle with them to help operate the ELD. You will also have access to ELD manuals from the registered, self-certified ELD list. If the driver still can't initiate the data transfer, use one of the backup methods to view the RODS.

3.4 What does the driver need to do?

Once the data transfer method has been determined, the driver will need to initiate the data transfer on his or her ELD.

Let's go back to Maria and the driver.

Maria: "Can you transfer the RODS via web services?"

Driver: "Sure."

While the driver should know how to transfer files from the ELD, if they're have trouble they can refer to the data transfer instruction sheet they are required to have in the vehicle with them.

Driver: "The device is asking me for an output file comment."

All compliant ELDs should prompt the driver to enter a code prior to transferring data via web services, email, or Bluetooth. This is where they'll enter your safety official code, which is used to tag ELD files for easy retrieval in eRODS. The driver should look for a field labeled file output comment, comment, notes, or something similar.

Maria: “Great, please enter TX1234.”

Remember, your safety official code is your SI Code or State/Badge number combination.

In the case of a local transfer:

- With Bluetooth, the carrier will use the Bluetooth connection to connect to the internet and transfer the file to the eRODS Web Service. You will still want to provide them with the safety official code.
- With a USB, the carrier transfers the file from the ELD to the USB. The safety official will then use the “Open from USB/Local” button in eRODS to navigate to the file.

If for some reason there is an issue with transferring the data, go ahead and proceed with a backup method to review the driver’s HOS compliance. Depending on the device, this can be done by either using the device screen or printout.

Remember: The number one priority is verifying HOS compliance.

3.5 Opening ELD File

If the carrier submitted RODS via web services, email, or Bluetooth—open eRODS, click on “Open from Web Services,” and search using the safety official code.

If the carrier used USB as the transfer option, open eRODS, click on “Open from USB/Local,” and then navigate to the file.

And finally, remember the ultimate goal is to verify HOS compliance.

4. Safety Auditors and Investigations

4.1 Steps for Auditors and Investigators

Whether conducting a roadside inspection, safety audit, or investigation, the safety official follows the same four basic steps to review HOS compliance.

Let’s walk through how our safety investigator Edwin might work with a motor carrier to get their RODS into eRODS for review.

4.2 Asking for RODS

When conducting an audit or investigation, you’ll need to request RODS within the previous six months in order to confirm that the drivers employed by the carrier are following HOS regulations.

4.3 Determine Transfer Method

Next, Edwin will need to work with the carrier to transfer the files to eRODS.

For simplicity, an ELD system will be referred to as an ELD. The ELD includes all components required to record, retain, and transfer data. The ELD must be capable of maintaining ELD records for at least six months from the date of receipt of the record, including edited and original records.

An ELD Support System refers to the central support system through which carriers manage and store records separate from the device. The ELD support system is not a required system.

When providing RODS, a motor carrier might provide them directly from the ELD or from an ELD support system, also referred to as a back office system.

A back office system may be run from a motor carrier's computer or via their service provider's website.

Regardless of the ELD set up, the motor carrier is responsible for providing you the RODS you need to review HOS compliance.

While the carrier should know how to transfer files, if they're having trouble they can refer to the ELD manual.

To be compliant, devices must support both telematic options or both local transfer options.

Web services is FMCSAs preferred method of data transfer because it is the most efficient way to transfer files for both the safety official and the carrier, therefore Edwin will request the RODS via web services first.

4.4 What does the carrier need to do?

If the motor carrier is using a telematic transfer method, you will want to provide the investigation code to the motor carrier. Not only will this make it easier for you to locate the file in eRODS, it will also result in the record being retained for a longer period of time within the eRODS web service. The investigation code can be found in NEWS for a safety audit, and in ACE for an investigation.

In the case of a local transfer:

- With Bluetooth, the carrier will use the Bluetooth connection to connect to the internet and transfer the file to the eRODS Web Service. You will still want to provide them with the investigation code.
- With a USB, the carrier generates the file locally and provides it to you either on the USB drive or the carrier manually uploads the file to NEWS or ACE.

4.5 Opening ELD File

If the carrier submitted RODS via web services, email or Bluetooth—open eRODS, click on “Open from Web Services,” and search using the safety official code.

If the carrier used USB as the transfer option, open eRODS, click on “Open from USB/Local,” and then navigate to the file.

Also note that for offsite safety audits and investigations, you might find the RODS already in NEWS or ACE.

And finally, remember the ultimate goal is to verify HOS compliance.

5. Using eRODS

5.1 Using eRODS

Refer to the eRODS user guide within the eRODS application.

6. How to Get Help

6.1 Got Questions?

We hope you found this overview of ELDs and eRODS helpful. If you need help or have questions, please contact:

- ELD policy or implementation of the rule: ELDEnforcement@dot.gov
- eRODS installation help: FMCTechSup@dot.gov or 617-494-3003
- Using eRODS: ELDTech@dot.gov or 877-688-2984 (option 6)