The EOBR Mandate and its Potential Impact on Safety, Claims Handling and Underwriting

Electronic on-board recorders (EOBRs), also known as Electronic Logging Devices (ELDs), are being mandated by the federal government as a way to ensure compliance with hours-of-service (HOS) rules. EOBRs currently on the market already provide several benefits to the industry, even without the looming mandate to install them. The following is a brief overview of the status of the mandate, a description of EOBR capabilities (drawing from Rand McNally’s Commercial Transportation products as an example), and how the technology can be used to mitigate risk and insurance costs.

Summary of MAP–21: Status of the EOBR Mandate

The Federal Motor Carrier Safety Administration (FMCSA) plans to issue a supplemental notice of proposed rulemaking in November that will mandate ELDs on commercial motor vehicles involved in interstate commerce and operated by a driver subject to the hours of service and record of duty status requirements. This comes after President Obama signed into law the Moving Ahead for Progress in the 21st Century Act, commonly known as MAP–21, on July 6, 2012. The law’s stated purpose is to improve the United States transportation system through achieving goals such as improving the national freight network and significantly reducing traffic fatalities and serious injuries on all public roads.

MAP–21 seeks to achieve these goals by mandating that the FMCSA make 29 new rules within 27 months, although that timeframe has now been extended due to recent delays.

In particular, MAP–21 included enactment of the Commercial Motor Vehicle Safety Enhancement Act of 2012 (Safety Enhancement Act), which requires the Secretary of Transportation to prescribe regulations requiring electronic logging devices in commercial motor vehicles (the EOBR mandate).

The purpose of the new EOBR mandate is to “improve compliance . . . with hours of service regulations,” but the regulations must also ensure that drivers will not be harassed with the information collected. The latter concern comes from the Seventh Circuit Court of Appeals’ decision striking down the FMCSA’s previous 2010 rule requiring EOBRs.

The FMCSA plans to compose the rule after a three-step process of information gathering. First, the Motor Carrier Safety Advisory Committee (MCSAC) will “develop materials that include technical specifications for ELDs, and . . . address the potential of using these devices to harass drivers.” Second, the FMCSA will hold two “public listening sessions” to receive opinions from drivers, carriers, enforcement officers, and stakeholders, about the issue of harassment. Third, the FMCSA will survey drivers, carriers, and vendors on the harassment issues, in an attempt to “draw the line between what encourages productivity and what amounts to harassment.”

On January 8, 2013, the FMCSA noted in its Semiannual Regulatory Agenda that its regulation regarding “Electronic Logging Devices and Hours of Service Supporting Documents” was in the “proposed rule stage,” which would establish the following:

1. Minimum performance standards for electronic logging devices (ELDs);
2. Requirements for the mandatory use of the devices by...
drivers required to prepare handwritten records of duty status (RODS); (3) requirements concerning HOS supporting documents; and (4) measures to ensure that the mandatory use of ELDs will not result in harassment of drivers by motor carriers and enforcement officials.\textsuperscript{14}

Anne S. Ferro, Administrator of the FMCSA, expects the mandate to be finalized in the September 2014 timeframe, making the ultimate goal for implementation of the rule in 2016, despite the requirement of MAP-21 to finalize the regulation by October 1, 2013, and to take effect two years thereafter.\textsuperscript{15} Thus, commercial motor vehicles will have two years from the publication of the final rule to ensure their trucks are in compliance.\textsuperscript{16}

The Safety Enhancement Act requires that EOBRs:

- accurately and automatically record commercial driver HOS;\textsuperscript{17}
- record the location of a commercial motor vehicle;
- be tamper resistant; and
- be synchronized to the operation of the vehicle engine or be capable of recognizing when the vehicle is being operated.\textsuperscript{18}

Further, the EOBR mandate will require a secure process for standardized and unique vehicle operator identification,\textsuperscript{19} and define a standardized user interface to aid vehicle operator compliance and law enforcement review.\textsuperscript{20} EOBRs will also be required to be certified and the regulations must establish the criteria and process for such certification.\textsuperscript{21} Electronic logging devices that are not certified will not be acceptable evidence of the hours of service and record of duty status requirements under federal regulations.\textsuperscript{22}

Finally, it seems certain that any new rule promulgated in accordance with MAP-21 will require the EOBR to have a direct connection with the truck’s engine, as it affords the most accurate and secure manner to capture and preserve data. Most EOBRs presently available plug into the engine diagnostics.

**EOBR Capability/Functionality**

EOBRs were in the market, and in use in fleets, long before there was a law requiring a federal mandate. Depending on the make and model of the EOBR unit, the following are the current types of data and functions that are available to the driver, safety director, or other company representatives:

- HOS logs and pre-trip/post-trip vehicle inspections.
- Truck specific navigation and routing, including low clearances, haz mat restricted areas, overweight prohibited areas, etc.
- Fleet safety monitoring, including the ability to monitor the location, speed, and movement of every truck in the fleet in real-time.
- Electronic Control Module (ECM) caliber data direct on the EOBR, without the need for expert download of the engine. Thus, EOBRs can capture detailed information, such as, the 90 seconds leading up to a hard brake event, the truck’s speed, throttle, brake position, rpm data, and direction.
- Driver performance modules, which monitor and report more than 200 metrics, including idling time, fuel efficiency performance, number of hard brake events, cruise control usage and gear shifting patterns.
- Mobile communication between the cab and back office, allowing the driver to interact with dispatch and/or the safety department.

With respect to HOS data, EOBRs make it far simpler for drivers to be compliant and allow a much easier, quicker, inspection by a DOT officer. As demonstrated in Figures 1 & 2, a Rand McNally unit, for example, has a screen dedicated to the driver’s HOS compliance status – listing the number of hours remaining within the 70 hour rule, along with the driver’s remaining driving time for the day. Anyone looking at that one screen will immediately know if the driver is within his/her HOS limits, without having to tally any numbers or review several pages of logs. See Figures 1 and 2 (page 50).

In all, the goal for many EOBR manufacturers is to eliminate paper in the cab, making the driver’s job much easier, and allowing the driver to focus on safely delivering loads.

As for fleet compliance monitoring, company safety directors are able to log in to a secure web portal and pull up a map to instantly know exactly where the entire fleet is, what route each truck took to get to its present location, and any location along the route where a particular truck traveled (displayed on some systems with arrows). See Figures 3 and 4 (page 50).

In the event of a loss, the company safety director can, from his/her office, immediately pull up ECM caliber data to help assess what may have occurred. For example, with a hard brake event and impact, it is possible to review second-by-second details leading up to and immediately following the event. The safety director, thereby, would immediately know if his driver was traveling in excess of the speed limit or how much braking, if any, there was pre-impact. Readily available ECM caliber data may ultimately prove critical to a liability defense team in compiling a complete picture of the likely cause of the impact, where fault may primarily lie, and the extent of the company’s exposure, if any.
EOBRs are also rapidly adapting to mobile technology. There are systems in which the route tracker connects wirelessly with a driver’s smart phone or tablet through Bluetooth technology. From the smart phone's cellular network, data can be sent to computers at the dispatch center. Fleet managers can then view the data in real time or retrieve past logs. A product that will be commercially available later this year will connect with the Wi-Fi® enabled truck navigation GPS device to create a fully functional electronic logging and mobile fleet management device.

Potential Advantages of EOBRs for Safety, Claims, and Underwriting

Bill Graves, President and CEO of American Trucking Associations, has observed that EOBRs are “potentially game-changing technology.” He is convinced that “Electronic logs improve safety by making compliance with the rules easier . . . [and] less time spent filling out, checking, rechecking, verifying, storing and retrieving paper logbooks.”

Modify Behavior and Improve CSA Scores

By being able to monitor speed, hard braking, engine idling, hours of service, and other data, more than one company director has reported “fewer accidents and safety violations, which in turn has saved the company money on insurance and has, in many ways, made life easier for drivers.” Further, the American Transportation Research Institute produced survey results indicating that “76% of fleets saw an improvement in driver morale after transitioning to electronic logging, and 19% found it easier to recruit and retain drivers after making the switch.” One company has even reported that posting driver performance results within the company has created competition among the drivers to be the most compliant.

Others are reportedly tying driver bonuses to their performance data.

Specifically, fleet managers can, with the EOBR data, seek to modify driver behavior by noting “red flags.” For example, for drivers with persistent hard brake events, repeated instances of traveling in excess of the speed limit (having nothing to do with whether a driver was caught speeding by local law enforcement), or prolonged idling time, a safety director can speak with the driver about the issue and provide the appropriate coaching. If the issue persists, management might decide that a driver retraining course is appropriate. In extreme cases, where the safety director observes from the data that the driver has been unable, or unwilling, to modify his/her behavior, the company can determine if it wants that type of risk on the payroll. Several companies have a system in place whereby a certain number of discussions with a driver will automatically result in retraining, and a subsequent number of offenses after retraining warrant termination. Some companies may even implement efficiency ratings of its safety director, based on the number of days it takes to speak to a driver about flagged issues, and whether there was a recurrence of the issue thereafter.

In all, by monitoring driver behavior, a safety director can improve driver habits and realize a positive impact on CSA scores.

Assist in Claims Handling

EOBR data can produce a significant benefit in the area of claims handling. With a wealth of data stored in an electronic file, company safety managers can easily hold onto the EOBR data for the length of the applicable statute of limitations. Thus, EOBR data may be especially helpful for those instances where, for example, a Plaintiff counsel, knowing that liability and/or the forces involved in the collision make a serious injury claim dubious, sits quietly for a few years before filing a closed claim just before the statute runs. The company safety director, in that instance, instead of scrambling to gather any scarce information still available to defend the company, readily has all of the engine data at his/her fingertips, just as if the company had borne the expense, even with a minor impact, to dispatch an accident reconstruction expert to the scene immediately after the occurrence to download the engine ECM. The company would also have proof that its driver was HOS compliant. With EOBR devices, litigation pertinent data is standardized, automatic, accurate, and more easily preserved.

Claims handling, in the final analysis, is about obtaining the best data possible as quickly as possible to assess exposure. With EOBR data easily stored and saved for any loss event, claims representatives and company safety directors will be able to more precisely determine the risk.

Potential Underwriting Benefits

The data collected by EOBRs also is useful for underwriters to more accurately rate the policy by determining exactly where a fleet operates and how frequently it operates in certain areas. Thus, underwriters will be able to readily determine such things as whether the fleet activities are as reported, whether company trucks are required to be in high crime areas and, if so, how frequently; and how often the fleet travels in congested areas where the collision incident rate is higher. The precision and detail of the data available through some EOBRs will provide underwriters the information that will allow for a policy premium that is more reflective of a fleet’s risk exposure. While that might result in higher premiums for some, it may result in lower premiums for others, depending on the activities reflected in the data.
Mike Stephenson is 'Trip info. (on-duty)'

Remaining 70hr: 67:32:41
Remaining driving: 11:00:00
Remaining on-duty: 11:32:41
Can use 16hr rule: No

On-duty status: Add Trip Info

Figure 1

Figure 2

Figure 3

Figure 4
Potential Evidentiary/Spoliation Issues

According to the Safety Enhancement Act, the EOBR Mandate must establish a secure process for standardized: data transfer for vehicle operators between motor vehicles;\(^\text{28}\) data storage for a motor carrier;\(^\text{29}\) and data transfer and transportability for law enforcement officials.\(^\text{30}\) The technical specifications will likely place the onus on the EOBR manufacturer to ensure compliance with FMCSA’s performance criteria regarding tampering.\(^\text{31}\)

Potential evidentiary issues regarding preservation and use of the data include the following:

- Will FMCSA’s electronic log preservation requirement remain at six months? Regardless, plaintiff’s counsel might press for an adverse inference and/or spoliation if EOBR collision data is not preserved, on the basis that it is easy and inexpensive to retain the data for all accident events for the duration of the applicable statute of limitations period, and failure to do so must mean that the data contained evidence damaging to the truck company’s defenses. The strict federal e-discovery guidelines may also govern the data.
- Much like with ECM data, there will be the question of “whose data is it”? Most EOBR manufacturers would seemingly consider the trucking company as the owner of the data, but that should be something addressed within the servicing agreement with the manufacturer.
- EOBR data could conceivably be used by plaintiff’s counsel to bolster negligent hiring/training/supervision claims. A pre-impact history of multiple hazardous brake instances or of exceeding the speed limit, for example, could hand claimants otherwise non-existent evidence to bolster the argument that the driver was an “accident waiting to happen.” On the other hand, if the data is used by trucking companies to identify potential problem drivers and have them retrained, the prior adverse EOBR data, and the fact it prompted driver retraining, might be used against the company in a subsequent event, regardless of the accident facts.\(^\text{32}\) That is, the company may be second guessed as to why it attempted retraining when termination was allegedly warranted.
- With the FMCSA apparently intent on placing the onus of ensuring the accuracy of the data on EOBR manufacturers, and ensuring that drivers or their companies have not tampered with the data, we might expect plaintiff counsel to subpoena the EOBR manufacturer in cases involving particularly large losses, seeking evidence on what the manufacturers do to ensure accuracy, what the success/failure rate is, whether tampering can be ruled out for the specific incident at issue, and what changes or upgrades have been made to the units to impede tampering since the loss at issue, regardless of whether the change/upgrade had anything to do with that particular incident. Plaintiff’s counsel may even retain their own EOBR experts to attempt to pry open the door for a tampering argument, if even slightly.
- As most manufacturers are developing, or already have available, smart-phone based applications to interface with the EOBR (or are developing EOBRs run entirely by smart phones and tablets), will plaintiff attorneys start demanding inspections of driver’s cell phone and/or demand the download of its data (i.e., they might do more than just obtain call historical records)?

Answers to these questions are beyond the scope of this article (and would be worthy of an entire article of their own), but these are issues that should be considered when instituting an EOBR compliance plan.

**Conclusion**

The FMCSA’s EOBR FAQs estimate a trucking company’s cost per vehicle to be in the neighborhood of $1,500 to $2,000 to become compliant with the eventual mandate (not including service fees).\(^\text{33}\) In anticipation of this mandate, some companies are already offering lower cost units (i.e., at a cost less than half that estimated by the agency) that will make the mandate requirement financially easier to meet. The bottom line, however, is that an EOBR mandate appears certain. With the advantages EOBRs afford in improving safety, CSA scores, claims handling, and underwriting, the units may quickly pay for themselves, prompting many to become compliant long before there is a mandate to do so.