Nero Electronic Logging Device (ELD)

On December 16, 2015, the U.S. Department of Transportation approved the final ruling for the use of Electronic Logging Devices (ELDs) for driver Hours of Service (HOS) and Driver-Vehicle Inspection Report (DVIR) logging.

The FMCSA regulations may be found at this web site: https://www.fmcsa.dot.gov/hours-service/elds/electronic-logging-devices

This document describes the components of the compliant Nero ELD solution, including configuration and usage information.

1. Introduction to ELD

The FMCSA regulations for Hours of Service (HOS) define two types of electronic logging: ELD (Electronic Logging Device) and AOBRD (Automated Onboard Recording Device).

An ELD is a portable display device that connects directly to the vehicle ECM, and logs driver duty status based on movement and location of the vehicle. Vehicle inspection reports are also logged electronically using the same device.

All Commercial Motor Vehicles (CMVs) that are required to maintain driver HOS logs, will need to perform this logging using a certified ELD solution.

Since many CMVs already have telematics devices installed in their vehicles, the FMCSA allows for the interim use of AOBRDs to supply the data for HOS logging. This will allow motor carriers a time period where they can adhere to the regulations without having to change existing telematics hardware.

Timeline for ELD Implementation

Phase 1 of the implementation process occurs from February 16, 2016 to December 17, 2017. New AOBRD or ELD installations may occur during this period. This time is allotted to allow motor carriers to prepare for compliance.

Phase 2 occurs between December 18, 2017 and December 15, 2019. During this two year transition period, all CMVs must have an AOBRD or ELD device installed. AOBRD implementations may continue to be used, but no new AOBRD installations may occur. All new installations must be ELD compliant.

Phase 3 begins December 16, 2019. From this date onwards, all CMVs must use a certified ELD for HOS logging. All AOBRD installations must be replaced by an ELD compliant system by this date.
2. Nero ELD Solution

There are two components to the Nero ELD solution:

1. The GPS beacon, connected directly to the vehicle ECM via the diagnostics port
2. The ELD, an Android device which connects to the GPS beacon via Bluetooth

GPS Beacon

For the ELD solution, the **Nero 6601** beacon must be installed and connected to the J1939 diagnostics port with the appropriate J1939 cable. Install the device in the vehicle following the instructions found in the **Nero 6601 Installation Guide** (Nero_Installation_and_Cable_Guide_6601.pdf).

ELD

The ELD is the device that the driver uses to perform all duty status logging and HOS tracking. Any Android device will work, but a tablet is recommended for the best viewing of the timers and the duty status log charts. The regulations specify that the minimum width of the viewing area for the log charts is 6”.

The Android device must meet the following minimum specifications:

- Android OS 4.4.2 and above
- minimum 8” viewing screen (diagonal) is recommended to meet FMCSA specifications
- connectivity to the internet for data synchronization with the data server
- in-cab power connectivity while communicating with the GPS device

For server data synchronization, the expected data usage is about 500 Mb per month.

The recommended hardware is a **Samsung Galaxy Tab E**. This device has been tested extensively with the required application.

For the ELD solution, a free app from the Google Play Store is required to be installed on the Android device. Instructions are provided later in this document for installing and configuring the app.

- **e-Track Certified**
  This app establishes a link via Bluetooth with the 6601 device, allowing data from the vehicle ECM port to be transmitted directly to the ELD device. The app displays the current duty status, timers and maintains the electronic logs.

  The e-Track Certified app is provided by ATS Fleet Management Solutions. [http://www.atsfleettracking.com/](http://www.atsfleettracking.com/)
3. Configuring the Client Account

Before configuring the in-cab portion of the solution, the system administrator must ensure the GPS device, vehicle record and driver information is correctly configured in the e-Track Client Account.

The e-Track administrator portal (Client Portal) is accessed from your Nero Portal by clicking on the “Login to ATS” button provided under the HOS tab. Note that the HOS tab only appears in the Nero Portal for the administrator user configured under the administration tab.

**Nero Portal – HOS Tab**

<table>
<thead>
<tr>
<th>Client Account</th>
<th>Portal Entity Details</th>
<th>ATS Entity Details</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: QA, beacon</td>
<td>Timezone: Pacific</td>
<td>-</td>
<td>No Issue</td>
</tr>
<tr>
<td>User Account</td>
<td>Name: qutree1 1</td>
<td>Email: <a href="mailto:qutree@comigo.com">qutree@comigo.com</a></td>
<td>No Issue</td>
</tr>
</tbody>
</table>

When the administrator clicks “Login to ATS”, another tab will open in the browser, and the user will be automatically logged in to the Client Portal. The Home page will be displayed.

**e-Track Administrator (Client) Portal**

Detailed User Guides and training materials for administrators may be found by clicking on the Training Resources link beneath the welcome message in the top left corner of the Client Portal.
These are some key steps to follow for the initial configuration of the Client account:

1. Begin by creating the locations for your company. Click on the **System Management** tab.

   **Client Portal – System Management Tab**

   Click on the **Locations** button to add the Main office location and any Satellite office locations. Later, when you enter Employee records, each employee will be assigned to a particular office location.

   **Client Portal – Add Location**

2. Next, create a unique Login ID for each driver and mechanic that will make use of the ELD system. Select the **Admin Tools** tab, and click on the **Manage Login Accounts** button. The Client admin Login ID will already appear in the list. When you add Login IDs for Drivers and Mechanics, they will initially have the same password (“etrack1”) which can be changed by the user the first time they log in to the system. Be sure to assign the correct Account Type (“Driver” or “Mechanic”) to match the role of that user. Check off “Access” permissions for Drivers and Mechanics to allow them to log in to their ELD device or web interface.
3. An Employee record must be created and associated with each Login ID. Under the System Management tab, click on the Employees button to create a record for each employee. Start with an Employee record for yourself (the Client administrator) and associate it with the admin Login ID. Next, add Employee records for each Driver and Mechanic, associating each record with a Login ID. Select a Location as the Home Terminal for each employee, and ensure the matching role is checked off for each Driver and Mechanic. The interface presented to the user when they log in (using the app or the web portal) is tailored specifically to their role.
4. Each vehicle in the fleet must have the correct GPS device recorded in its Vehicle Record. Under System Management, click on the Vehicles button to view the GPS device information (ESN), which is automatically updated in the Client Portal when the beacon is registered in the Nero Portal and the HOS add-on is enabled for that device. Assign at least one Driver to the Vehicle Record. Drivers must be assigned to a vehicle before they are able to log in to the ELD device. Other vehicle details may be updated by editing the vehicle record, but do not type in the VIN manually. The VIN will be updated automatically by the system once the ELD device is communicating with the GPS beacon.

4. Configuring the Nero ELD (In-cab)

For a first time configuration:

1. Check that the Nero 6601 has been installed in the vehicle with the appropriate cable, and is registered for use in the Nero system with the HOS add-on enabled
2. In the e-track Client Portal, under the System Management tab, click on the Trips button and add a new Trip with the Driver and Vehicle assigned

Preparing the ELD (Android device)

1. Make sure the Android OS version is 4.4.2 or above; earlier versions may not work correctly
2. Under Settings > Personal > Location, turn this option on and set to High accuracy
3. Under Settings > System > Date and Time, set Automatic date and time, and set Automatic time zone on
4. In order to ensure continuous data connectivity (as stipulated by the FMCSA regulations), the ELD device must be connected to an external power source while the device is in the cab

Connecting to the Nero 6601 Beacon

1. Make sure that the 6601 is plugged into the ECM (J1939 diagnostics port) and is powered on
2. On the ELD (Android device), go to Settings > Bluetooth
3. Select the 6601 device; the name of the device should begin with GENX_
4. If the ELD asks for a PIN, use 1234
5. The device should pause for a moment, then the 6601 should be listed under Paired Devices
6. If the devices fail to pair for any reason, restart the Android device and try again; if that doesn’t fix the problem, please contact Nero Support at support@neroglobal.com

 Installing the Application

1. Go to the Google Play Store, search for “ATS Fleet” and download the following app (note: you may need to create a free account if you do not have an existing one):
   - e-Track Certified (connects to the 6601 and provides the ELD logging and display features)
2. Log in to e-Track Certified using the driver login credentials; if you see a message about “records to certify” ignore it for now and tap Continue to Dashboard
3. If the Dashboard displays a red or yellow warning, there may be a problem with the connectivity to the 6601 (the device may be out of Bluetooth range or not paired properly). This must be corrected before using the e-Track Certified application. Tap on the menu icon in the top left corner of the screen and select ECM Link to check the connection status and correct errors.
4. On the e-Track Certified Dashboard, check the following to ensure the application is functioning properly:
   - The 17 character VIN number should appear on the Dashboard
   - The ECM Unit Time UTC on the Dashboard should show the current time

Note that User Guides and other training materials for drivers are available from the Training Resources section of the e-Track Client Portal.

5. Important Considerations

- The FMCSA requires that hard copies of the ELD documentation be kept in the cab with the ELD device at all times. The required documents are available from the Training Resources section of the e-Track Client Portal.

For further assistance with your ELD implementation, please contact Nero Support at support@neroglobal.com.