PIT Group ELD
Verification Summary

Introduction

To ensure that our ELD solution is fully compliant by the December 18, 2017 mandate deadline, EROAD employed the services of transportation research and engineering experts, PIT Group, to provide third-party verification. While ELD suppliers can self-certify their technologies, given that the FMCSA does not require independent verification, EROAD elected to take this approach because we realize the added value of unbiased verification. In addition, EROAD engaged the PIT Group to review our user manual and the user experience design of our solution.

This report summarizes the verification methodology, test results, and key findings from the verification process of EROAD's ELD solution.

Verification Approach

PIT Group's methodology was to test and document results against the FMCSA's test procedures and mimic the approach that would be taken by the FMCSA if the ELD provider is subject to an investigation or audit.

PIT Group tested EROAD's ELD in a live operational environment with a motor carrier. The test duration included the time for initial testing, improvements, and regression tests. To facilitate the verification of EROAD's web application, Depot, EROAD provided detailed process explanations, flow charts, code excerpts, and screen shots as supporting material to further demonstrate that the EROAD ELD solution meets the FMCSA's technical and functional requirements.

Results

Below is a summary of PIT Group's test based on the FMCSA test plan, functional requirement area and final test results for each functional area. The complete results, which show the entire test process and supporting documentation obtained from EROAD for each test, were retained by PIT Group.

FMCSA Test Plan	Functional Requirement Area	Test result
1.3 **Vehicle Interface**	4.1 **ELD - Vehicle interface**	**Pass**
1.1 **Accounts**	4.1 **End User Accounts** 4.1.1 Account Types Pass 4.1.2 Account Creation Pass 4.1.3 Account Security Pass 4.1.4 Account Management 4.1.5 Non-Authenticated Operation	**Pass** **Pass** **Pass** **Pass** **Pass**
1.2 **Inputs**	4.3 **ELD Inputs** 4.3.1 ELD Sensing Pass 4.3.2 Driver's Manual Entries Pass 4.3.3 Motor Carrier's Manual Entries	**Pass** **Pass** **Pass** **Pass**

FMCSA Test Plan	Functional Requirement Area	Test result
2.1 **Processing**	4.4 **ELD Processing and Calculations**	**Pass**
	4.4.1 Conditions for Automatic Setting of Duty Status	**Pass**
	4.4.2 Geo-Location Conversions	**Pass**
	4.4.3 Date and Time Conversions	**Pass**
	4.4.4 Setting of Event Parameters in Records, Edits, and Entries	**Pass**
	4.4.5 Data integrity Check Functions	**Pass**
	2.2 **Monitoring**	**Pass**
	4.6 ELD's Self-Monitoring of Required Functions	**Pass**
	4.6.1 Compliance Self-Monitoring. Malfunctions and Data Diagnostic Events	**Pass**
	4.6.2 ELD Malfunction Status Indicator	**Pass**
	4.6.3 ELD Data Diagnostic status indicator	
2.3 **Recording**	4.5 **ELD Recording**	**Pass**
	4.5.1 Events and Data to Record	**Pass**
3.1 **Outputs**	4.8 **ELD Outputs**	**Pass**
	4.8.1 Printout or Display	**Pass**
	4.8.2 ELD Data File	**Pass**
	4.7 **Special Purpose ELD Functions**	**Pass**
	4.7.1 Driver's ELD Volume Control	**Pass**
	4.7.2 Driver's Access to Own ELD Records	**Pass**
	4.7.3 Privacy Preserving Provision for Use During Personal Uses of a CMV	**Pass**
3.2 **Data Transfer**	4.10 **Communications Standards for the Transmittal of Data Files from ELDs**	**Pass**
	4.10.1 Data Transfer Mechanisms	**Pass**
	4.10.2 Motor Carrier Data Transmission	**Pass**
Code Verification	**Code Verification - Security and Event Sequence Coding**	**Pass**
	4.4.4-1-6. 4-4.4.1-7. 4.10.1.1-5	**Pass**

Conclusion

After thorough and rigorous testing and verification of the EROAD ELD according to the FMCSA's test procedure, PIT Group confirms that EROAD's ELD meets the FMCSA's functional requirements.

About PIT Group

PIT Group, a division of FPInnovations, is a neutral, third-party organization that focuses on testing technologies and evaluating operational effectiveness for member fleets. PIT Group's four main areas of focus are: testing fuel efficiency of technologies using its Energotest, verifying that ELD solutions meet the US and/or Canadian requirements, assessing fleet operations for areas of improvements and research, testing and development of smart mobility solutions.

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