

## ENGINEER CHANGE ORDER (ECO) ANALYSIS FORM

Manufacturer:	Election Systems & Software (ES&S)
System:	EVS 6.5.0.0
ECO Number:	ECO-1188
ECO Description:	Electionware Additional Reporting

## **Overview:**

This ECO introduces a modification that moves C:\Program Files\Election Systems And Software\Electionware Additional Reporting 1.1.0.1\back-end\configuration.ini from the semi-static file list to the dynamic file list.

Per the submitted ECO, the configuration.ini file created during install of Electionware Additional Reporting module is a unique file for each customer install. Because this file is unique to each customer install, this file needs to be listed as a dynamic file in order for the hash verification results to match.

Products Affected: EVS 6.5.0.0 Electionware Additional Reporting

Per ES&S, the new software version for the Electionware Additional Reporting will be 1.1.0.1.

## **Supporting Documentation:**

ECO 1188 ORIGINAL (ES&S ECO)

ES&S Voting System 6.5.0.0, TDP Addendum, Addendum Date: 09/04/2024 (System Overview TDP Document) ES&S Voting System 6.5.0.0, System Overview, Document Revision 1.6 (System Overview TDP Document) ES&S Voting System Security, Verification Procedure: Overview, Document Revision 1.3 (System Security Specification TDP Document) ES&S Standards and Procedures, Validation File List: Election Management System – Client, Revision 1.3 (System

ES&S Standards and Procedures, Validation File List: Election Management System – Client, Revision 1.3 (System Security Specification TDP Document)

ES&S Standards and Procedures, Validation File List: Election Management System – Server, Revision 1.3 (System Security Specification TDP Document)

ES&S Standards and Procedures, Validation File List: Election Management System – Standalone, Revision 1.3 (System Security Specification TDP Document)

ES&S Voting System 6.5.0.0, Build Procedure: Electionware Additional Reporting Trusted Build 2 (ECO 1188), Document Revision 1.1 (*System Security Specification TDP Document*)

ES&S Voting System 6.5.0.0, EMS Client Workstation Secure Setup & Configuration Guide, Document Revision 1.3 (System Security Specification TDP Document)

ES&S Voting System 6.5.0.0, EMS Secure Setup & Configuration Guide, Document Revision 1.4 (System Security Specification TDP Document)

ES&S Voting System 6.5.0.0, EMS Standalone Workstation Secure Setup & Configuration Guide, Document Revision 1.3 (*System Security Specification TDP Document*)

## **Engineering Recommendation:**

Pro V&V utilized NOC 19-01 during the ECO review. Source Code Review, Technical Documentation Review, Trusted Build, and limited Functional Testing performed by Pro V&V for recommendation. Functional Testing consisted of test election being executed and the results brought back into the EMS. The Electionware Additional Reporting was used to verify that it functioned as expected. Based on testing performed, Pro V&V determined the change did not adversely affect the system functionality, performance, accessibility, usability, safety, or security of the system. The system tested was verified to be accurate during testing with the actual results matching the expected results. No issues were encountered during testing.

The Source Code Review was performed by doing a manual comparison review using ExamDiffPro software. The previously certified source code (version 1.1.0.0) was used as the baseline for the comparison against the newly updated source code with the fix incorporated (version 1.1.0.1). Pro V&V verified the only changes made to the newly submitted source code were the minor changes to two files, as described in the submitted supporting documentation, and updating the version number.

Pro V&V determined the modification was successfully implemented and no additional testing is required. Pro V&V determined the modification successfully addressed the issue.

This recommendation is based on the software change having the following general characteristics: (1) Update a discrete component of the system and do not impact overall system functionality; (2) Do not modify the counting or tally logic of a component or the system (formatting changes to reports are allowable); (3) Do not affect the accuracy of the component or system; (4) Do not negatively impact the functionality, performance, accessibility, usability, safety, or security of a component or system; (5) Do not alter the overall configuration of the certified system; and (6) Can be reviewed and/or tested by VSTL personnel in a short amount of time (approximately less than 100 hours).

All test artifacts (revised code, revised TDP, trusted build, and generated hash values of trusted build) were submitted to the EAC for review along with this ECO Analysis.

Engineering Analysis: De Minimis – No Additional Testing Required		
Reviewer:	Approver:	
Wendy Owens	<u>Michael Walker</u>	
Printed Name	Printed Name	
Wendy Owens	<u>Michael Walker</u>	
Signature	Signature	
09/10/2024	<u>09/10/2024</u>	
Date	Date	