



ENGINEER CHANGE ORDER (ECO) ANALYSIS FORM

Manufacturer: Unisyn Voting Solutions

System: OpenElect Voting Optical (OVO) Version 2.1

ECO Number: 17110, 17114

ECO Description: Software modifications for compliance with Iowa state and local statutes.

Overview:

Unisyn submitted two ECOs for review (17110 and 17114). The ECOs all relate to modifications of the system to meet Iowa state and local statutes. Each change was implemented based on the current end user utilization. Since the changes all relate to the state of Iowa, they were documented in one ECO submission as an all-encompassing package.

Products Affected: OVO Tabulator

This ECO documents the following modifications to the OVO Tabulator:

1. Write-In Image Extraction (OpenElect OVO tabulator device)

The following changes are intended to increase the accuracy of the write-in report function regarding the 3.25” inch ballots:

- Remove a check that stops the process once it has reached the number of write in selections on the ballot.
- Add a counter that causes the system to only process the first eight (8) characters of the line.
- Adding an additional criterion to the definition of a write in line.

2. Remove Disable before Re-Enable after Scanner Front Sensor Trigger (OpenElect OVO Module)

Removing the interim disable command in order to prevent it from interfering with a ballot that may be in process.

Supporting Documentation:

2.1.0.2 (IA) ECO_Form_Final.pdf (*Unisyn ECO*)

04-00432_Tabulator_User_Guide.pdf (*Updated TDP document*)

2.1.0.2_Di-Minimis_TestCases.xls (*Unisyn internal test cases*)

Engineering Recommendation:

Source code review, technical documentation review, and functional verification testing performed to approve change. Pro V&V generated Trusted Builds prior to evaluation. The evaluation was performed using QA Test Cases supplied by Unisyn. A sampling of the provided test cases for each change were performed to ensure that the functionality functioned as intended and did not introduce any errors into the system. The executed test cases found that the system functioned as intended. It was demonstrated that the modifications did not adversely impact the system’s reliability, overall functionality, accuracy, performance, accessibility, usability, safety, security or system operation.

Testing was deemed adequate to verify successful implementation. No additional testing required.

Engineering Analysis: No additional Testing Required

Reviewer:

Wendy Owens

Printed Name

Wendy Owens

Signature

08/07/2020

Date

Approver:

Michael L. Walker

Printed Name

Michael L. Walker

Signature

08/07/2020

Date