Minutes
State Election Commission Meeting
January 31, 2023

The State Election Commission meeting was called to order by Chairman Younce, at 11:01 a.m. Central Daylight Time, January 31, 2022. The following members and staff were telephonically connected: Commissioners Barrett, Blackburn, Duckett, Eldridge, McDonald, Wheeler and Younce; Coordinator of Elections Mark Goins and Kathy Summers, Elections Specialist.

Pursuant to TCA § 8-44-108(a)(3), the determination of necessity for conducting the State Election Commission meeting by phone was to make county election commission appointments and to discuss de minimis ECO changes to Unisyn Voting Systems Open Elect 2.2.

Commissioner Eldridge made a motion to adopt the statement of necessity, seconded by Commissioner McDonald. (Roll call vote: Aye votes: Barrett, Blackburn, Duckett, Eldridge, McDonald, Wheeler and Younce; No votes: None; Abstention: None.)

Commissioner Eldridge made a motion pursuant to TCA § § 2-12-102(b), to accept and approve the nomination(s) for appointment as submitted and to leave the nomination process open until the close of business 4:30 p.m. Central Daylight Time, seconded by Commissioner Duckett. (Roll call vote: Aye votes: Barrett, Blackburn, Duckett, Eldridge, McDonald, Wheeler and Younce; No votes: None; Abstention: None.) **(See attached list of county election commission appointments made.)**

Coordinator Goins discussed the ECO changes requested by Unisyn. **(See attached information from Unisyn.)**

Commissioner Barrett asked if the vendor was on the line and if they could confirm improvements did not allow wireless connection of the voting equipment to the internet. No one from Unisyn was available to respond to the question.

Commissioner Barrett made a motion to defer approval of the de minimis changes for Unisyn and to have the items placed on the next State Election Commission meeting agenda, seconded by Commissioner McDonald. (Roll call vote: Aye votes: Barrett, Blackburn, Duckett, Eldridge, McDonald, Wheeler and Younce; No votes: None; Abstention: None.)

Chairman Younce adjourned the meeting at 11:10 a.m. Central Daylight Time.

Respectfully submitted,

Greg Duckett - Secretary
State Election Commission

State of Tennessee

State Election Commission
312 Rosa L. Parks Avenue, 7th Floor
Nashville, Tennessee 37243-1102

Vacant Status

January 31, 2023

Campbell	R Kent Younce / D Tom Wheeler	
D		
Claiborne	R Kent Younce / D Tom Wheeler	
R		
Dyer	R Jimmy Eldridge / D Greg Duckett	
D		
Lawrence	R Donna Barrett / D Greg Duckett	
R		

Total Vacancies: 4

State of Tennessee

State Election Commission
312 Rosa L. Parks Avenue, 7th Floor
Nashville, Tennessee 37243-1102

New Appointment Status

January 31, 2023

		Appointment
Campbell	R Kent Younce / D Tom Wheeler	
	D Geraldine (Dean) Sexton	1/31/2023
Claiborne	R Kent Younce / D Tom Wheeler	
	R Brian Michael Pendleton	1/31/2023
Dyer	R Jimmy Eldridge / D Greg Duckett	
	D Louis Toombs	1/31/2023

Total New Commissioners: 3

Unisyn
Voting
Solutions

2310 Cousteau Court
Vista, CA 92081, USA
Telephone: 1 (760) 734-3233
Fax: 1 (760) 598-0219

January 23, 2023

Mark Goins
Director of Elections
Office of Tennessee Secretary of State Tre Hargett
Wm R. Snodgrass - Tennessee Tower, 7th Floor
312 Rosa L. Parks Ave
Nashville, TN 37243-1102

Please accept this letter as Unisyn Voting Solutions requests for approval on the following Deminimus changes on the OpenElect voting system.

This table depicts new ECO's approved with the voting system since the testing of the OpenElect 2.2 was approved by the EAC. The new version is OpenElect 2.2.2.

Change ID	Date	Component	Description
1025	2/24/22	OVO	New USB Drive as other unit was End of Life (EOL)
1026	2/24/22	FVS	New fan on Freedom Vote Scan (FVS) as prior model was End of Life (EOL)
17059	2/24/22	FVS	Ballot Diverter
17050	5/17/22	OVO	Concurrent Close Process
1027	7/26/22	FVS	New USB Drive and Memory as other unit was End of Life (EOL)
3476	7/28/22	OVO (Software)	Scanner Enable / Disable

Thank you in advance for your assistance with this matter.

Sincerely,

Chris Ortiz
Director of Operations

Attachments:
- ECO Write-Ups
- ECO Approvals

February 24, 2022   <u>**Sent via e-mail**</u>

Chris Ortiz, Director, Business Development & Certification
Unisyn Voting Solutions
2310 Cousteau Court
Vista, CA 92081

Re: ECO 1025

Dear Mr. Ortiz,

This correspondence is to inform you that Unisyn ECO UNS 1025 is approved.

Sincerely,

Paul Aumayr
Senior Election Technology Specialist

Cc: Pro V&V

PRO V&V

ENGINEER CHANGE ORDER (ECO) ANALYSIS FORM

Manufacturer:	Unisyn Voting Solutions
System:	OpenElect 2.2 Voting System
ECO Number:	1025
ECO Description:	Updated Transport Media to next generation flash drive to 4GB from 1GB, which is no longer commercially available.

Overview:

Added new 4GB USB Flash Drive (Model 3SE-4GB) as a replacement for the current 1GB part (Model 2SE-1GB) due to the current model no longer being commercially available for purchase.

Added Innodisk Model 3SE-4GB, Vendor Part Number DEUA1-04GI61SCASB-B088
Removed Innodisk Model 2SE-1GB, Vendor Part Number DEUA1-01GI72AC1SB-B088

Update part number description:
from: Flash Drive, USB, Industrial, 1GB
to: Flash Drive, USB, Industrial, 4GB

Products Affected: OpenElect 2.2 Voting System

Supporting Documentation:

20220111104946010.pdf *(Unisyn ECO)*

Engineering Recommendation:

Technical Documentation Review performed for recommendation. Pro V&V determined replacement component is comparable to current component in form fit, and function; therefore, modification should not adversely affect system reliability, functionality, capability, or operation.

Engineering Analysis: De Minimis – No Testing Required

Reviewer:	Approver:
Wendy Owens	*Michael L Walker*
Printed Name	Printed Name
Wendy Owens	*Michael L Walker*
Signature	Signature
02/14/2022	02/14/2022
Date	Date

U.S. ELECTION ASSISTANCE COMMISSION
633 3rd St. NW, Suite 200
Washington, DC 20001

February 24, 2022

Chris Ortiz, Director, Business Development & Certification
Unisyn Voting Solutions
2310 Cousteau Court
Vista, CA 92081

Re: ECO 1026

Dear Mr. Ortiz,

This correspondence is to inform you that Unisyn ECO UNS 1026 is approved.

Sincerely,

Paul Aumayr
Senior Election Technology Specialist

Cc: Pro V&V

PRO V&V

ENGINEER CHANGE ORDER (ECO) ANALYSIS FORM

Manufacturer:	Unisyn Voting Solutions
System:	OpenElect 2.2 Voting System
ECO Number:	1026
ECO Description:	Updated current fan manufacture to alternate manufacturer due to current model becoming unavailable for purchase.

Overview:

Added new fan (Anode JZ-0001) as a replacement for the current part (Intel E97379-003) due to the current model no longer being commercially available for purchase.

Added Anode JZ-0001
Removed Intel E97379-003

Update part number description to: FAN and Heatsink, CPU G5400 LGA115x

Products Affected: OpenElect 2.2 Voting System, Freedom Vote Scan (FVS) Component

Supporting Documentation:

20220120082158365.pdf *(Unisyn ECO)*

Engineering Recommendation:

Technical Documentation Review performed for recommendation. Pro V&V determined replacement component is comparable to current component in form fit, and function; therefore, modification should not adversely affect system reliability, functionality, capability, or operation.

Engineering Analysis: De Minimis – No Testing Required

Reviewer:	Approver:
Wendy Owens	Michael L. Walker
Printed Name	Printed Name
Wendy Owens	*Michael L. Walker*
Signature	Signature
02/14/2022	02/14/2022
Date	Date

U.S. ELECTION ASSISTANCE COMMISSION
633 3rd St. NW, Suite 200
Washington, DC 20001

May 17, 2022

Chris Ortiz, Director, Business Development & Certification
Unisyn Voting Solutions
2310 Cousteau Court
Vista, CA 92081

Re: ECO 17050

Dear Mr. Ortiz,

This correspondence is to inform you that Unisyn ECO UNS 17050 is approved.

Sincerely,

Paul Aumayr
Senior Election Technology Specialist

Cc: Pro V&V

ENGINEER CHANGE ORDER (ECO) ANALYSIS FORM

PRO V&V

Manufacturer:	Unisyn Voting Solutions
System:	OpenElect Voting Optical (OVO)
ECO Number:	17050
ECO Description:	Prevent Concurrent Close processes

Overview:

This OVO modification addresses the following field issue detected on the OVO module of the OpenElect version 2.2: It was observed that when "Close" cards are used to initiate the close session process on the OVO that when the "Close" card was returned to the operator, the scanner was not disabled. This opened the possibility for the "Close" card to be entered a second time and the potential of starting a second close process. Depending on the timing of these processes, if they occur concurrently (as opposed to sequentially) the close session process will generate a report which shows doubled vote counts and produces a tally.xml file that cannot be uploaded into the central tabulation system. This change will disable the scanner after the "Close" card is returned, preventing the opportunity of creating a secondary close session process. To address the issue, Unisyn is recommending two changes in ReaderClient.java in a single method: processData(). The first change is the addition of a single line of code that sets an existing system flag that tells the OVO to leave the scanner disabled after the current document is ejected. The second change is the addition of a single line of code that re-enables the scanner in the event that the operator does not confirm the start of the close process, so that the voting session can continue.

Products Affected: OpenElect Voting Optical (OVO)

Per Unisyn, the new Software version for the OVO will be 2.2.1.

Supporting Documentation:

2.2.1 ECO_17050.pdf *(Unisyn ECO)*
Anomaly_Report_Unisyn Voting_04_11_2022.pdf *(Unisyn Anomaly Report)*
OE2.2_OVO_RCA_CONCURRENT_CLOSE_4.19.22.pdf *(Root Cause Analysis)*
OVO Close poll worker_2.2.pdf *(OVO Quick Reference Guide)*
2.2.1_Close_Voting_Di-Minimus Test Cases ECO_17050.xls *(QA Test Cases)*
04-00460 OVS System Operations Guide Warehouse.pdf *(updated TDP document)*
04-00469 OVS_Final_QA_Report.pdf *(Final QA Report)*
04-00594 OpenElect 2.2.1 Release Notes.pdf *(Submitted Release Notes)*
2.2.1_Close_Voting_Di-Minimus Test Cases ECO_17050 - AS RUN.xls *(As-run test cases)*

Engineering Recommendation:

Source Code Review, Technical Documentation Review, Functional Testing and Accuracy Test performed by Pro V&V for final recommendation. Pro V&V reviewed and sampled Unisyn-submitted test cases for functional testing. Pro V&V modified the submitted test cases as needed to efficiently analyze the changes to the system. 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 2.2) was used as the baseline for the comparison against the newly updated source code with the fix incorporated (version 2.2.1). Pro V&V verified the only changes that were made to the newly submitted source code were the two single line code additions and updating the version number.

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

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).

Engineering Analysis: De Minimis – No Additional Testing Required

Reviewer:	Approver:
Wendy Owens	*Michael L Walker*
Printed Name	Printed Name
Wendy Owens	*Michael L. Walker*
Signature	Signature
05/06/2022	05/06/2022
Date	Date

U.S. ELECTION ASSISTANCE COMMISSION
633 3rd St. NW, Suite 200
Washington, DC 20001

July 13, 2022   <u>**Sent via e-mail**</u>

Chris Ortiz, Director, Business Development & Certification
Unisyn Voting Solutions
2310 Cousteau Court
Vista, CA 92081 .

Re: ECO 17059

Dear Mr. Ortiz,

This correspondence is to inform you that Unisyn ECO UNS 17059 is approved.

Sincerely,

Paul Aumayr
Senior Election Technology Specialist

Cc: Pro V&V

PRO V&V

VERIFICATION VALIDATION

ENGINEER CHANGE ORDER (ECO) ANALYSIS FORM

Manufacturer:	Unisyn
System:	OpenElect Freedom Vote Scan (FVS)
ECO Number:	17059
ECO Description:	FVS Ballot Diverter

Overview:

The current ballot diverter is made from flat plastic. The process of repeatedly adding the designed curvature was not perfected; therefore multiple vendors reported to Unisyn they were not able to reproduce it repeatedly. To eliminate the issue, Unisyn is implementing replacing the heat formed ABS plastic sheet part with a precision bent aluminum part that is more easily repeated during manufacturing and is an exact match to the designed plastic piece. It is a drop in part replacement with no other changes required to implement.

Products Affected: Freedom Vote Scan (FVS) , P/N 2003-10519

Parent P/N 2003-93282 Sub Assy, Ballot Diverter FVS:
Delete: P/N 8133-0071 Guide, Ballot Diverter, FVS
Add: P/N 8053-93325 Guide, Ballot Diverter, Aluminum, FVS

Supporting Documentation:

ECO 17059 Guide Ballot Diverter Aluminum.pdf *(Unisyn ECO)*
8133-00071 Rev A2 Guide Ballot Diverter FVS.pdf *(Current Part)*
8053-93325 Rev A Ballot Diverter Aluminum FVS.pdf *(Replacement Part)*
McMaster 87265K13.pdf *(Current Part Material)*
FVS_Aluminum piece_Scan_Test Jue29_June30_2022.xlsx *(Unisyn Test Cases)*

Engineering Recommendation:

Technical documentation review performed to approve change. Upon review of provided technical documentation, it was determined that the new ballot diverter should not negatively impact system functionality. Furthermore, due to the location of the diverter, the upgrade does not warrant a hardware evaluation. The replacement component will not adversely impact the certified systems; therefore, no testing is required.

Engineering Analysis: De Minimis

Reviewer:	Approver:
Wendy Owens	Michael L. Walker
Printed Name	Printed Name
Wendy Owens	*Michael L. Walker*
Signature	Signature
07/06/2022	07/06/2022
Date	Date

U.S. ELECTION ASSISTANCE COMMISSION
633 3rd St. NW, Suite 200
Washington, DC 20001

July 26, 2022   <u>**Sent via e-mail**</u>

Chris Ortiz, Director, Business Development & Certification
Unisyn Voting Solutions
2310 Cousteau Court
Vista, CA 92081

Re: ECO 1027

Dear Mr. Ortiz,

This correspondence is to inform you that Unisyn ECO UNS 1027 is approved.

Sincerely,

Paul Aumayr
Senior Election Technology Specialist

Cc: Pro V&V

Manufacturer:	Unisyn Voting Solutions
System:	OpenElect Freedom Vote Scan (FVS)
ECO Number:	Engineering Approval Change (EAC) 1027
ECO Description:	Update to alternate COTS components (memory module and USB flash drive) due to current parts no longer commercially available.

Overview:

Update to alternate COTS components (memory module and USB flash drive) due to current parts no longer commercially available.

- Added DDR4-2400 Memory Module (Vendor Part Number CT4G4SFS8266/ASI#227313) as an alternative component for CT4G4SFS824A
- Added USB Flash Drive (Model 2SE-1GB, Vendor Part Number DEUA1-01GDQ1AC1SB-B088) as an alternative component to Model 3SE-4GB

Both alternative components are same manufacturer, same form, fit, and function.

Note: Storage capacity for USB Flash Drive changes; however, Unisyn has stated that it is not critical to product operation.

Products Affected: Freedom Vote Scan (FVS)

Supporting Documentation:

EAC 1027.pdf *(Unisyn ECO)*
Specification 4GB DDR4-2400 (1).pdf *(Memory Module Specification Sheet)*

Engineering Recommendation:

Technical Documentation Review performed for recommendation. Pro V&V determined replacement components are comparable to current components in form fit, and function; therefore, modifications should not adversely affect system reliability, functionality, capability, or operation.

Engineering Analysis: De Minimis – No Testing Required

Reviewer:	**Approver:**
Wendy Owens	Michael L. Walker
Printed Name	Printed Name
Wendy Owens	*Michael L. Walker*
Signature	Signature
07/16/2022	07/16/2022
Date	Date

U.S. ELECTION ASSISTANCE COMMISSION
633 3rd St. NW, Suite 200
Washington, DC 20001

July 28, 2022   <u>**Sent via e-mail**</u>

Chris Ortiz, Director, Business Development & Certification
Unisyn Voting Solutions
2310 Cousteau Court
Vista, CA 92081

Re: ECO 3476

Dear Mr. Ortiz,

This correspondence is to inform you that Unisyn ECO UNS 3476 is approved.

Sincerely,

Paul Aumayr
Senior Election Technology Specialist

Cc: Pro V&V

PRO V&V

ENGINEER CHANGE ORDER (ECO) ANALYSIS FORM

Manufacturer:	Unisyn Voting Solutions
System:	OpenElect Voting Optical (OVO), Version 2.2.1
ECO Number:	SCO-3476
ECO Description:	Scanner Enable/Disable

Overview:

This OVO modification addresses the possibility of inserting a ballot during the transition to jammed ballot handling on the OVO. This introduces a potential race condition that can result in a cast ballot being returned to the user.

This proposal encompasses minor changes to 6 files, extending the implementation of methods that remove and restore the reference to the module that accepts ballot data in the event of jam error code from the scanner and restoring it when the jam condition is no longer active. Per Unisyn, this was originally implemented in the AbstractReaderClient.java file but was reimplemented as two methods in ReaderDriver.java (hideReadListener() and restoreReaderListener()) so that it could be used by multiple modules. An additional flag and delay were added to ensure that no data is sent from the scanner to the software while the jam is being handled.

Products Affected: OpenElect Voting Optical (OVO), Version 2.2.1

Per Unisyn, the new Software version for the OVO will be 2.2.2.

Supporting Documentation:

2.2.2 SCO *(Unisyn ECO)*
04-00594 OpenElect 2.2.2 Release Notes *(Change Release Notes)*
04-00469 OVS_Final_QA_Report_QAUpdate *(QA Report)*
04-00460 OVS System Operations Guide Warehouse *(TDP Document)*
03-00456_2.2.2_OVO_QA_TestPlan *(QA Test Cases)*
OE2.2.2_OVO_RCA Scanner Enable_Disable .pdf *(Unisyn Root Cause Analysis)*

Engineering Recommendation:

Pro V&V utilized NOC 19-01 during the ECO review. Source Code Review, Technical Documentation Review, Functional Testing and Accuracy Test performed by Pro V&V for final recommendation. Pro V&V reviewed and sampled Unisyn-submitted test cases for functional testing. Accuracy Testing was performed utilizing each supported ballot size.

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 2.2.1) was used as the baseline for the comparison against the newly updated source code with the fix incorporated (version 2.2.2). Pro V&V verified the only changes made to the newly submitted source code were the minor changes to six 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, generated hash values of source code and trusted builds, and as-run test cases) were submitted to the EAC for review along with this ECO Analysis.

Engineering Analysis: De Minimis – No Additional Testing Required

Reviewer:	**Approver:**
Wendy Owens	Michael L. Walker
Printed Name	Printed Name
Wendy Owens	*Michael L. Walker*
Signature	Signature
07/25/2022	07/25/2022
Date	Date

Tennessee Secretary of State

Tre Hargett

Elections Division
312 Rosa L. Parks Avenue, 7th Floor
Nashville, Tennessee 37243-1102

Mark Goins
Coordinator of Elections

615-741-7956
Mark.Goins@tn.gov

January 31, 2023

Mr. Robert Greene, Director
Office of the Secretary of State – Publications Division
312 Rosa L. Parks Avenue
Nashville, TN 37274

Dear Mr. Greene,

The State Election Commission met by teleconference at 11:00 a.m., Central Time on Tuesday, January 31, 2023, in the Elections Division, 7th Floor, William R. Snodgrass - Tennessee Tower. The notice requirements of TCA § 8-44-108 (b) were fully complied with. A quorum of the Board was not physically present at the location from which the teleconference originated, although a quorum did participate electronically.

In accordance with TCA § 8-44-108 this constitutes the Board's notice of the occurrence of this meeting and the Statement of Necessity.

A telephonic meeting of the Board was required to make county election commission appointments and to discuss de minimis ECO changes to Unisyn Voting System Open Elect 2.2.

A Statement of Necessity to that effect was formally adopted by the Board at the beginning of the teleconference, and the Statement of Necessity was included in the Board's minutes.

Sincerely,

Mark Goins
Coordinator of Elections

Enclosure(s): Meeting Notice and Call Instructions