PRO V&V	**ENGINEER CHANGE ORDER (ECO) ANALYSIS FORM**
Manufacturer:	Election Systems & Software (ES&S)
System:	DS950 Hardware Versions 1.0 and 1.1
ECO Number:	ECO-1151
ECO Description:	Update DATAWIN Transporter Board Firmware to version C60_20221215_0300

Overview:
This ECO documents an update of the DS950 DATAWIN Transporter Board Firmware to version C60_20221215_0300. Per the submitted ECO:

With this update, the output tray now starts to lower sooner so in the event of a possible ballot jam, it will now give a greater opportunity of the next incoming ballots to lay flat over the jammed ballots. This allows the Customer to continue the scanning process without having a stop due to a ballot jam. Since this change is focused on tray movement, it should not alter reliability, functionality, or operation to the end user.

The reason for the change is the periodic release for performance enhancement of output module. DATAWIN, the manufacturer of the DS950, released the update to improve the product line. ES&S determined this is an important improvement to have distributed on the fielded DS950's.

This update will be applied on future production models. There is no impact to System TDP and no documentation impact to election officials.

Currently,

EVS 6.0.6.0, EVS 6.0.7.0, and EVS 6.2.0.0 have Transporter Board Firmware version C60_20210822_0294.

EVS 6.3.0.0, EVS 6.3.0.2, and EVS 6.3.1.1 have Transporter Board Firmware version C60_20210822_0299.

Systems Affected:
Federal: EVS 6.0.6.0, EVS 6.2.0.0, and EVS 6.3.0.0
State: EVS 6.0.7.0, EVS 6.3.0.2 (HW rev 1.1), EVS 6.3.1.1

Supporting Documentation:
ECO 1151 Signed 2023 03 01.pdf *(ES&S Engineering Change Order 1151)*
ECO 1151 ES&S Response.pdf *(ES&S Response to Initial Review)*
ECO 1151 DS950 Accuracy.pdf *(Pro V&V Accuracy Test Election*)
ECO 1151 V&S Election A.pdf *(Pro V&V Volume & Stress Test Election*)

Engineering Recommendation:
Pro V&V conducted a review of the submitted ECO and determined execution of an Accuracy Test and a Volume and Stress Test would be required to approve change. The test parameters are detailed in the following Pro V&V documents: ECO 1151 DS950 Accuracy and ECO 1152 V&S Election (attached as supporting documentation). Testing was conducted by Pro V&V personnel on each impacted system of the DS950.

Testing consisted of processing 13,100 ballots each for EVS 6.0.6.0, EVS 6.0.7.0, and EVS 6.2.0.0. Testing consisted of processing 13,199 ballots each for EVS 6.3.0.0, EVS 6.3.0.2, and EVS 6.3.1.1. A total of 78,897 ballots were processed.

No issues were noted during test performance. Based on successful testing, Pro V&V determined the change does not alter system reliability or functionality, or operation to the end user. Pro V&V deems the modification to be de minimis with no additional testing required.

Engineering Analysis: De Minimis – No additional testing required

Reviewer:	**Approver:**
Wendy Owens	**Michael Walker**
Printed Name	Printed Name
Wendy Owens	Michael L. Walker
Signature	Signature
03/07/2023	03/07/2023
Date	Date