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OFFICE OF ENTERPRISE TECHNOLOGY SERVICES | KE'ENA HO'OLANA 'ENEHANA
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October 16, 2025

The Honorable Ronald D. Kouchi
President of the Senate
and Members of the Senate
Thirty-Third State Legislature
State Capitol, Room 409
Honolulu, Hawai'i 96813

The Honorable Nadine K. Nakamura
Speaker and Members of the
House of Representatives
Thirty-Third State Legislature
State Capitol, Room 431
Honolulu, Hawai'i 96813

Aloha Senate President Kouchi, House Speaker Nakamura, and Members of the Legislature:

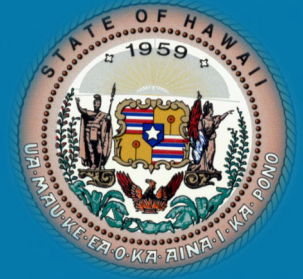
Pursuant to HRS section 27-43.6, which requires the Chief Information Officer to submit applicable independent verification and validation (IV&V) reports to the Legislature within ten days of receiving the report, please find attached the report the Office of Enterprise Technology Services received for the State of Hawai'i, Department of Human Services, Systems Modernization Project.

In accordance with HRS section 93-16, this report may be viewed electronically at <http://ets.hawaii.gov> (see "Reports").

Sincerely,

Christine M. Sakuda
Chief Information Officer
State of Hawai'i

Attachments (2)



Hawaii Department of Human Services Systems Modernization Project

Final IV&V Status Report
for Reporting Period: September 1 – 30, 2025

Submitted: October 14, 2025

Overview

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- [IV&V Findings and Recommendations](#)
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Solutions that Matter

The background is a solid blue gradient. It is decorated with several abstract geometric elements: white-outlined squares of various sizes, some of which are nested or overlapping; and solid, semi-transparent squares in different shades of blue. These shapes are scattered across the page, with a higher concentration on the left side and a few on the right.

Executive Summary



The BES project team continued to focus the majority of efforts on System Integration Testing (SIT), while continuing to ramp up work regarding Organizational Change Management (OCM), Implementation Readiness, and Training to prepare for the Pilot and Statewide go-live.

The IV&V team sees the current primary areas of risk for the project in the Requirements Management, Testing and Development areas:

Requirements Management:

- Significant work remains for both the ASI and DHS to complete their work to finalize all requirement refinement work
- Additional work required to complete the SIRT documentation for FNS, to meet new requirements, will also require the same resources to complete

Testing:

- As the testing team begins to focus on end-to-end testing, the overall velocity of testing has slowed
- DHS has raised concerns about the progress in testing the BES reports, with many test cases being blocked from execution
- The ASI remains confident that all testing will be completed during the scheduled SIT testing cycle

Development

- Two Change Requests required to be completed to meet Federal requirements will require significant work, which the ASI has said could impact the current schedule.

Executive Summary



Jul	Aug	Sept	Category	IV&V Observations
			System Design	The ASI hosted a meeting to review the Online Help process that leveraged Claude AI, including steps to develop the help content and how BES application will enable users to view the help material. More discussions are required for DHS to provide their approval for the new process, which will require significant effort by the ASI that could impact the schedule if not approved soon.
			Configuration and Development	The ASI's estimate for DDI work needed the BES solution to meet new Federal requirements is significant, which the ASI has said could impact the current project schedule.
			Integration and Interface Management	The ASI executed its first test case for technical interface testing. IV&V remains concerned that not all technical interface testing will be completed within the current schedule for SIT, which could impact UAT if all interfaces are not ready.
			Testing	With 80% of end-to-end test cases remaining to be executed, additional HANA integration test cases added in September, and significant test cases blocked from execution for reporting, the ASI continues to be confident that SIT testing will be completed in November.
			Security and Privacy	The System Security Plan (SSP) was completed by the ASI on September 30th, with all non-compliant control implementations having a corresponding Plan of Action and Milestone (POAM) logged.
			Requirements Analysis & Management	DHS and the ASI continued collaborating to refine all contractual requirements. This activity remains critical to ensuring that all BES functionality is fully developed, tested, and validated—thereby minimizing the potential for rework or schedule delays. The updated RTM is scheduled for delivery on December 23, 2025. However, there remains a risk that certain requirements needed for the Pilot may not be completed by the ASI prior to UAT initiation, which could adversely impact the project or quality of BES.

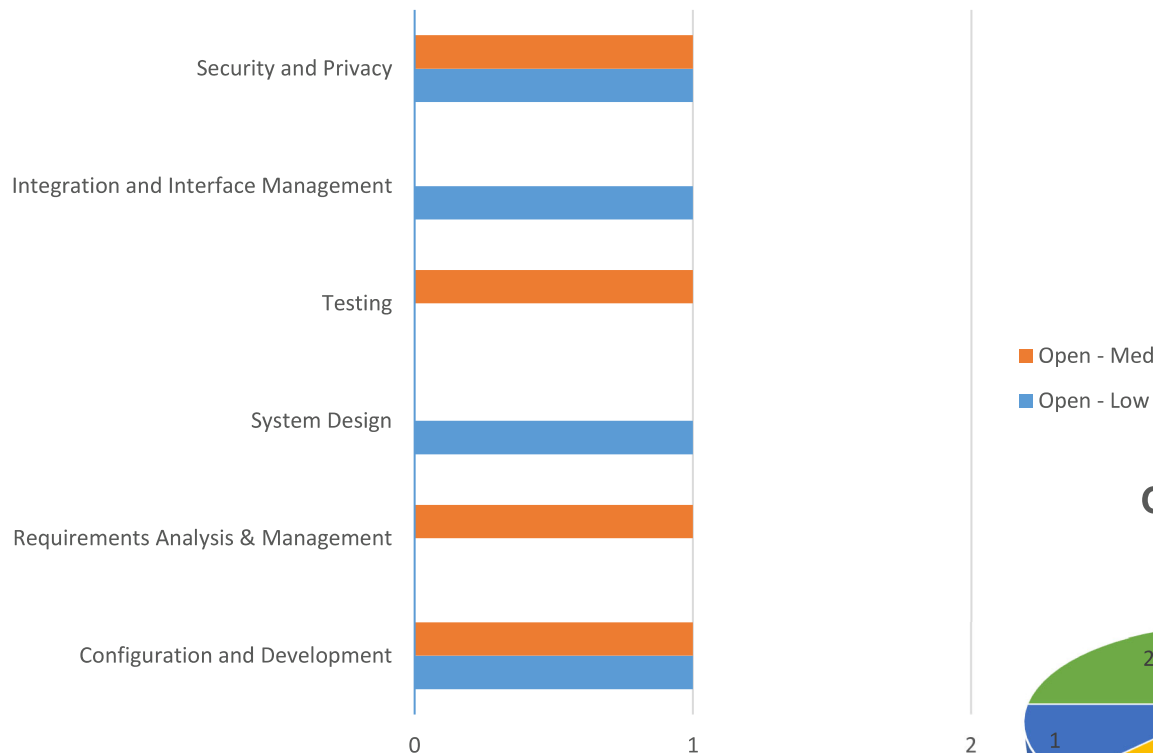
IV&V Findings and Recommendations

IV&V Findings and Recommendations

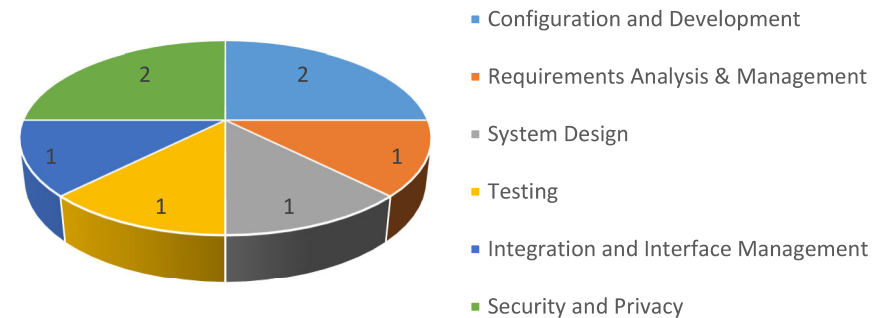


As of the September 2025 reporting period, PCG is tracking 8 open findings (5 risks, 3 issues) and has retired 83 findings. Of the 8 open findings, 4 are Medium, and 4 are Low.

Open Risks & Issues



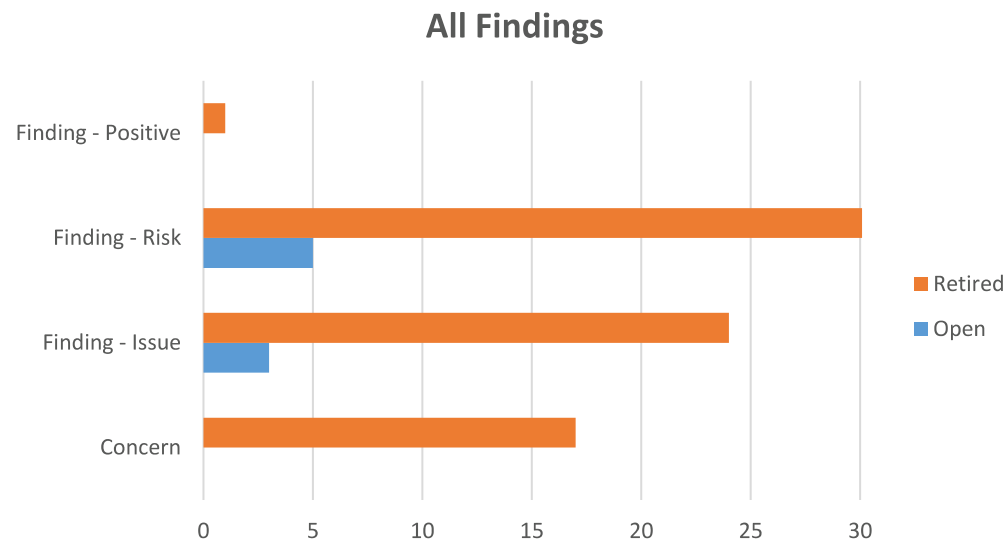
Open Risks & Issues by Category



IV&V Findings and Recommendations



The following figure provides a breakdown of the 91 IV&V findings (positive, risks, issues, concerns) by status (open, retired).



IV&V Findings and Recommendations



Findings Opened During the Reporting Period

#	Finding	Category
	None	

IV&V Findings and Recommendations



Findings Retired During the Reporting Period

#	Finding	Category
	None	

IV&V Findings and Recommendations




Preliminary Concerns Investigated During the Reporting Period

#	Finding	Category
108	<p>Preliminary Concern - Unplanned federally mandated system requirements could lead to project delays and increase the project budget.</p> <p>As of the end of the reporting period, DHS was still awaiting clarifications from the Food and Nutrition Service (FNS) on required changes needed to meet Federal Eligibility mandates.</p>	Requirements Analysis & Management

IV&V Findings and Recommendations



System Design


#	Key Findings	Criticality Rating
73	<p>Risk – The planned BES infrastructure is complex which could be difficult to implement and maintain and could lead to schedule/cost impacts.</p> <p>Work appears to be progressing on the full build out of the Secure Enclave. IV&V remains concerned that this build out adds additional complexity to the infrastructure environment which could further exacerbate this risk.</p>	

Recommendations	Progress
• ASI develop a process to closely monitor cloud and other product changes (software updates/new releases), manage changes, and regression test once updates are applied.	In Process
• The project team work to establish strong governance over the utilization and maintenance of various tools/components.	In Process
• ASI allot time in the schedule to conduct proof of concepts to assure infrastructure components work as expected.	In Process
• ASI maintain a detailed schedule for DevOps implementation tasks to avoid unexpected delays that could delay project milestones and the critical path.	In Process

IV&V Findings and Recommendations



Configuration and Development

#	Key Findings	Criticality Rating
70	Risk – Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution. No material update in this reporting period.	

Recommendations	Progress
<ul style="list-style-type: none">ASI adhere to plans for configuration management as documented in BI-6 DDI Plan, Section 5.2 and clarify details and/or any changes with DHS.	In Process
<ul style="list-style-type: none">ASI validate plans for configuration management with DHS and agree on a meaningful set of configuration items or settings they will track.	In Process

IV&V Findings and Recommendations



Configuration and Development


#	Key Findings	Criticality Rating
80	<p>Issue – Development delays have negatively impacted the project schedule and delayed go-live.</p> <p>The ASI has indicated its intent to leverage AI-based tools to support unit testing, which may increase developer productivity. However, IV&V remains concerned that the planned introduction of additional functionality during UAT could add complexity to the development lifecycle and hinder overall productivity.</p>	A yellow circle with a black border containing the letter 'M'.

Recommendations	Progress
<ul style="list-style-type: none">• ASI provides DHS with the time needed to effectively evaluate the software demonstrations (demos) and elicit productive design discussions with DHS attendees during each demo.	In Process
<ul style="list-style-type: none">• IV&V recommends the project closely monitor progress on the customer correspondence CR and create a mitigation strategy to avoid delays.	In Process

IV&V Findings and Recommendations



Integration and Interface Management

#	Key Findings	Criticality Rating
93	<p>Risk – Due to the lack of physical and technical (Transport Layer) testing of the interfaces and data transfer failure, conditions may exist with data format, boundaries, and dependencies. These failures may result in intermittent and hard-to-isolate problems or errors.</p> <p>The ASI reported that the interface test cases are established in Jira, but the board has not yet been made available to IV&V. The first interface test (CSEA/KEIKI) was executed, marking an initial step forward. Timely IV&V access is needed to evaluate test coverage, effectiveness, and results.</p>	

Recommendations	Progress
• API interfaces should be tested for failure conditions during connection and transfer operations.	In Process
• FTP and file interfaces should be tested for data and file integrity.	In Process
• Test data fields for system impacts resulting from data that is poorly formatted, out of range, or other unexpected data transmission errors.	In Process

IV&V Findings and Recommendations



Testing


#	Key Findings	Criticality Rating
83	<p>Issue – Gaps in test coverage and slower-than-expected progress in testing may result in schedule delays if subsequent test phases uncover a higher volume of defects and user feedback than initially anticipated.</p> <p>The ASI plans to complete all SIT (scripted tests) by the end of October; however, approximately 80% of end-to-end (E2E) tests remain unexecuted. The timely execution of these remaining tests is essential for detecting integration issues, validating system stability, and reinforcing stakeholder confidence.</p> <p>Mid-month, the ASI added additional SIT tests related to the HANA Integration, bringing the total of unexecuted SIT tests (including E2E) to 240. The ASI has expressed confidence in completing all tests on schedule. Key integration areas with pending execution include HANA Integration, Eligibility, and Mass Change.</p> <p>IV&V notes a decline in test execution velocity compared to the prior month, which may compress the schedule to meet the October completion target. Additionally, the Reports area shows a notable volume of blocked tests and unresolved defects, with approximately 50% of these defects created during the month.</p>	

Recommendations	Progress
<ul style="list-style-type: none">DHS and ASI revisit the testing approach to prioritize completion of remaining test activities and conduct comprehensive System Integration testing (SIT) to minimize defect leakage to User Acceptance Testing (UAT).	In Process
<ul style="list-style-type: none">ASI test team provide a visual of progress of test case execution compared to current testing schedule.	In Process

IV&V Findings and Recommendations



Security and Privacy


#	Key Findings	Criticality Rating
82	<p>Issue – The lack of technical documentation may lead to incorrect implementation statements or delay the System Security Plan (SSP).</p> <p>As a result of the SSP Control Implementation validation with DevOps, the ASI's Security Team completed its work at the end of June, and an updated System Security Plan was published on September 30th, 2025. Additionally, for the first time, control implementations that do not meet the NIST 800-53 r5 moderate baseline have corresponding Plans of Action and Milestones (POAMs) logged to bring those parts of BES into compliance with the baseline. IV&V will review the updated SSP in the next reporting period.</p>	

Recommendations	Progress
<ul style="list-style-type: none">Collaborate and communicate with SSP authors about when reliable and correct documentation will be available.	In Process

IV&V Findings and Recommendations



Security and Privacy

#	Key Findings	Criticality Rating
106	<p>Risk – Critical and high vulnerability and configuration scan findings are not remediated within the documented timeframes, potentially impacting the project schedule and causing delays.</p> <p>As of October 1st, 2025, BES had 10 critical findings in an open state outside the 15-day remediation timeframe, and 3 critical findings were within the timeframe. BES had 26 high-rated findings in an open state outside the 30-day remediation timeframe, and 18 high-rated findings were within the timeframe. In addition to the critical and high POAM findings listed above, 14 critical findings and 33 high findings from 2024 are listed as deferred, which are part of the Oracle Cloud Infrastructure that Oracle is responsible for patching on a quarterly basis.</p>	
Recommendations		Progress
<ul style="list-style-type: none">Implement an escalation process to involve senior leadership if deadlines are missed.		In Process

IV&V Findings and Recommendations



Requirements Analysis & Management

#	Key Findings	Criticality Rating
94	<p>Risk - The lack of an effective way to validate BES requirements could lead to project delays and unfulfilled user needs if DHS later identifies unmet contractual requirements.</p> <p>DHS and the ASI conducted three collaborative working sessions to continue reviewing contract requirements that remain untraced or unfulfilled. The objective is to ensure all project requirements are accurately mapped, supporting complete and reliable traceability within the JIRA tool used to generate the Requirements Traceability Matrix (RTM) deliverable. As of July 17, 2025, a total of 741 requirements have been identified. Of these, 228 have been reconciled, while 513 remain outstanding, primarily within the categories of Technical, Implementation, and Maintenance & Operations (M&O) requirements.</p> <p>The ASI has made progress by submitting documentation that was subsequently approved by DHS, formalizing agreements for a portion of the remaining contract requirements. Additional approvals are pending and are expected to resolve more of the outstanding items. Establishing a finalized set of mapped requirements is essential to confirm that all necessary BES functionality and supporting components have been developed and validated across past, current, and future testing phases. Any missed or misunderstood requirements could result in rework, new development, or delays to the project schedule. The RTM is currently scheduled for delivery by ASI to DHS on December 23, 2025.</p>	

Recommendations	Progress
<ul style="list-style-type: none">Develop a document that provides DHS with a feasible and effective way to map contract requirements to passed test cases, and, per the BI-19 (Complete and Final Test Plan), "Maps the implementation, functional and technical requirements to the test cases and test scripts".	In Process
<ul style="list-style-type: none">Ensure test scripts thoroughly and comprehensively test the system to assure each requirement is met.	In Process
<ul style="list-style-type: none">Develop a deliverable that provides an audit trail for changes to the requirements from the contract such as obsoleted requirements, when that decision was made, and the change requests.	In Process
<ul style="list-style-type: none">Weekly reporting on clean-up efforts in JIRA regarding incorrect statuses of epics, use case, and requirements.	In Process

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IV&V Status

IV&V Engagement Status



IV&V Engagement Area	Jul	Aug	Sept	Comments
IV&V Budget				
IV&V Schedule				
IV&V Deliverables				PCG submitted the final August IV&V Monthly Status Report.
IV&V Staffing				
IV&V Scope				

Engagement Status Legend		
The engagement area is within acceptable parameters.	The engagement area is somewhat outside acceptable parameters.	The engagement area poses a significant risk to the IV&V project quality and requires immediate attention.



- IV&V activities in the September reporting period:
 - Completed – August Monthly Status Report
 - Ongoing – Review the BES Project Artifacts and Deliverables
 - Ongoing – Attend BES Project meetings (see [Additional Inputs](#) pages for details)
 - Ongoing – Review available ASI contracts and contract amendment documentation
- Planned IV&V activities for the October reporting period:
 - Ongoing – Observe BES Design and Development sessions as scheduled
 - Ongoing – Observe Bi-Weekly Project Status meetings
 - Ongoing – Observe Weekly Architecture meetings
 - Ongoing – Observe Weekly Security meetings
 - Ongoing – Monthly IV&V findings meetings with the ASI
 - Ongoing – Monthly IV&V Draft Report Review with DHS, ETS, and ASI
 - Ongoing – Participate in Bi-Weekly DHS and IV&V Touch Base meetings
 - Ongoing – Review BES artifacts and deliverables

Deliverables Reviewed



Deliverable Name	Deliverable Date	Version
BI-05 Project Schedule	09/06/2025, 09/13/2025, 09/20/2025, 09/27/2025	N/A
BI-02 Project Status Report	09/06/2025, 09/13/2025, 09/20/2025, 09/27/2025	N/A

Additional Inputs – Artifacts



Artifact Name	Artifact Date	Version
FNS Handbook 901	01/2020	V2.4
NIST Special Publication 800-53 Security and Privacy Controls for Information Systems and Organizations	12/20/2020	Rev.5
R0.13 SIT Defect Dashboard	N/A	N/A
Interface Dashboard – Confluence page	N/A	N/A
Jira Requirements Details	N/A	N/A
Jira Testing Lists	N/A	N/A
BES R0.13 System Testing Results - CRs and Pending Epics	N/A	N/A
BES R0.13 System Testing Results - Core	N/A	N/A
Batch Defect Dashboard	N/A	N/A



Meetings and/or Sessions Attended/Observed:




1. IV&V Team Meeting – 9/8/2025, 9/15/2025, 9/22/2025, 9/29/2025
2. IV&V/ASI June Pre-draft Review – 9/5/2025
3. HI DHS BES June Draft IV&V Report Review – 9/11/2025
4. Bi-Weekly DHS BES PMO/IV&V Check-in – 9/11/2025, 9/25/2025
5. Bi-Weekly DHS and IV&V Touch Base – 9/2/2025, 9/15/2025
6. Weekly BES Infrastructure meeting – 9/5/2025, 9/12/2025, 9/19/2025, 9/26/2025
7. Weekly Client BES 2023 Project Status Meeting – 9/3/2025, 9/10/2025, 9/17/2025, 9/24/2025
8. Security Touchpoint – 9/3/2025, 9/10/2025, 9/17/2025, 9/24/2025
9. (External) Bi-Weekly Client BES Implementation Schedule Review Meeting – 9/10/2025
10. (External) Weekly Interfaces Touchpoint – 9/8/2025, 9/15/2025, 9/22/2025, 9/29/2025
11. (External) Bi-weekly BES CCB Meeting – 9/3/2025, 9/12/2025, 9/24/2025
12. (External) CIA Current Monthly Checkpoint – 9/2/2025
13. (External) BES M&O Working Group – 9/3/2025, 9/10/2025, 9/24/2025
14. (External) Weekly BES Testing Workgroup Meeting – 9/4/2025, 9/18/2025
15. (External) BES Readiness/BI-29 Updates – 9/8/2025, 9/25/2025
16. eWorld/IV&V Mid-Month Check-in – 9/17/2025
17. (External) BES: FNS Connect – 9/4/2025
18. (External) BES: OCM and Communications – 9/8/2025, 9/22/2025
19. (External) BES Data Conversion - DC Validation Issue Huddle – 9/2/2025, 9/9/2025, 9/23/2025
20. (External) BES SIT Health Check Meeting – 9/11/2025
21. (External) BES Deferred Epics Discussion Meeting - cont'd – 9/12/2025
22. (External) BES Online Help Prototype(s) Review Meeting – 9/19/2025

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Appendices



Appendix A – IV&V Criticality Ratings

Criticality Rating	Definition
	A high rating is assigned if there is a possibility of substantial impact to product quality, scope, cost, or schedule. A major disruption is likely, and the consequences would be unacceptable. A different approach is required. Mitigation strategies should be evaluated and acted upon immediately.
	A medium rating is assigned if there is a possibility of moderate impact to product quality, scope, cost, or schedule. Some disruption is likely, and a different approach may be required. Mitigation strategies should be evaluated and implemented as soon as feasible.
	A low rating is assigned if there is a possibility of slight impact to product quality, scope, cost, or schedule. Minimal disruption is likely, and some oversight is most likely needed to ensure that the risk remains low. Mitigation strategies should be considered for implementation when possible.

Appendix B – Findings Log



- The complete Findings Log for the BES Project is provided in a separate file.

Appendix C – Acronyms and Glossary



Acronym	Definition
APD	Advance Planning Document
ASI	Application System Integrator
BES	Benefits Eligibility Solution
CCWIS	Comprehensive Child Welfare Information System
CM	Configuration Management
CMMI	Capability Maturity Model Integration
CMS	Center for Medicare and Medicaid Services
CR	Change Request
DDI	Design, Development and Implementation
DED	Deliverable Expectation Document
DHS	Hawaii Department of Human Services
DLV	Deliverable
E&E	Eligibility and Enrollment
EA	Enterprise Architecture
ECM	Enterprise Content Management (FileNet and DataCap)
ESI	Enterprise System Integrator (Platform Vendor)
ETS	State of Hawaii Office of Enterprise Technology Services
FIPS	Federal Information Processing Standard
HIPAA	Health Information Portability and Accountability Act of 1996
IDM	Identity and Access Management (from KOLEA to State Hub)
IEEE	Institute of Electrical and Electronics Engineers
IES	Integrated Eligibility Solution
ITIL	Information Technology Infrastructure Library



Appendix C – Acronyms and Glossary

Acronym	Definition
IV&V	Independent Verification and Validation
KOLEA	Kauhale On-Line Eligibility Assistance
M&O	Maintenance & Operations
MEELC	Medicaid Eligibility and Enrollment Life Cycle
MEET	Medicaid Eligibility and Enrollment Toolkit
MOU	Memorandum of Understanding
MQD	Hawaii Department of Human Services MedQuest Division
NIST	National Institute of Standards and Technology
OE	Operating Environment
OIT	Department of Human Services Office of Information Technology
PIP	Performance/Process Improvement Plan
PMBOK®	Project Management Body of Knowledge
PMI	Project Management Institute
PMO	Project/Program Management Office
PMP	Project Management Plan
QA	Quality Assurance
QM	Quality Management
RFP	Request for Proposal
ROM	Rough Order of Magnitude
RMP	Requirements Management Plan
RTM	Requirements Traceability Matrix
SEI	Software Engineering Institute
SLA	Service-Level Agreement
SME	Subject Matter Expert

Appendix C – Acronyms and Glossary



Acronym	Definition
SOA	Service Oriented Architecture
SOW	Statement of Work, Scope of Work
VVP	Software Verification and Validation Plan
XLC	Expedited Life Cycle

Appendix D – Background Information



Systems Modernization Project

The DHS Enterprise Program Roadmap includes contracting with three separate vendors with the following high-level scope:

- ESI or Platform Vendor – responsible for the shared technology and services required for multiple Application vendors to implement and support functionality that leverages the DHS Enterprise Platform.
- ASI or ASI Vendor – responsible for the DDI of the Benefits Eligibility Solution (BES Project) enhancing the currently implemented Medicaid E&E Solution (KOLEA) and providing support for the combined Solutions.
- CCWIS Vendor – responsible for the DDI of the CCWIS Solution to meet the needs of child welfare services and adult protective services (CCWIS Project) and providing support for the Solution.

Systems Modernization IV&V Project

IV&V performs objective assessments of the design, development/configuration and implementation (DDI) of DHS' System Modernization Projects. DHS has identified three high-risk areas where IV&V services are required:

- Transition of M&O from DHS' incumbent vendor to the ESI and ASI vendors
- BES DDI
- CCWIS DDI

On the BES DDI Project, IV&V is responsible for:

- Evaluating efforts performed by the Project (processes, methods, activities) for consistency with federal requirements and industry best practices and standards
- Reviewing or validating the work effort performed and deliverables produced by the ASI vendor as well as that of DHS to ensure alignment with project requirements
- Anticipating project risks, monitoring project issues and risks, and recommending potential risk mitigation strategies and issue resolutions throughout the Project's life cycle
- Developing and providing independent project oversight reports to DHS, ASI vendors, State of Hawaii Office of Enterprise Technology Services (ETS) and DHS' Federal partners

Appendix D – Background Information



What is Independent Verification and Validation (IV&V)?

- Oversight by an independent third party that assesses the Project against industry standards to provide an unbiased view to stakeholders
- The goal of IV&V is to help the State get the solution they want based on requirements and have it built according to best practices
- IV&V helps improve design visibility and traceability and identifies (potential) problems early
- IV&V objectively identifies risks and communicates to project leadership for risk management

PCG's Eclipse IV&V® Technical Assessment Methodology

- Consists of a 4-part process made up of the following areas:
 1. **Discovery** – Discovery consists of reviewing documentation, work products and deliverables, interviewing project team members, and determining applicable standards, best practices and tools.
 2. **Research and Analysis** – Research and analysis is conducted in order to form an objective opinion.
 3. **Clarification** – Clarification from project team members is sought to ensure agreement and concurrence of facts between the State, the Vendor, and PCG.
 4. **Delivery of Findings** – Findings, observations, and risk assessments are documented in this monthly report and the accompanying Findings and Recommendations log. These documents are then shared with project leadership on both the State and Vendor side for them to consider and take appropriate action on.

IV&V Assessment Categories for the BES Project

- | | |
|--|------------------------------|
| • Project Management | • Security and Privacy |
| • Requirements Analysis & Management | • Testing |
| • System Design | • OCM and Knowledge Transfer |
| • Configuration and Development | • Pilot Test Deployment |
| • Integration and Interface Management | • Deployment |
| • Data Management and Conversion | |

Ending Slide



Solutions that Matter

ID	Title	Reporter	Finding Type	Identified Date	Category	Description	Synopsis	Recommendation	Event Horizon	Impact	Probability	Analyst	Finding Status	Starts Update	Client Comments	Vendor Comments	
108	Unplanned federally mandated system requirements could lead to project delays and increase the project budget.	Foris, Michael	Analysis & Management	9/9/2025	Requirements	As part of the OBBA, there are several new SNAP requirements of which some are awaiting INS implementation guidance. Examples include: new conditions for work requirements, prior ABANDW waivers, new exemption classes, and standard utility deductions. The project is currently in the Systems Integration Test (SIT) phase, and the new requirements have yet to be fully defined, developed, and tested.	In 2024, DHS and the ASI agreed to transition from an "Agile" to a "Waterfall" software development life cycle to reduce the risk of future schedule delays. The Waterfall approach requires all requirements to move through the development as a single set of program code, processes, and procedures, ensuring that functionality is tested holistically. Once testing is complete, DHS can be confident that the base system is stable, performs as intended, and that functional interactions operate correctly. As the BES system is currently in the testing phase, introducing new requirements at this stage could create several challenges for the BES Pilot Release: • New Requirements - Functionality previously tested may need to be retested as new code is introduced. Training materials, content, and operational processes may also require updates to reflect the changes; • Schedule Delay - If new requirements are added, the project team may defer testing of existing functionality until the new functionality is developed and ready, potentially delaying the Pilot and Statewide Implementation start dates. • Resources - Additional effort may be required to define, develop, and test new requirements. This could necessitate more ASI and DHS staff support, as well as technical adjustments (e.g., keeping development environments active longer than originally planned).		now	3	2	Med	Open	09/30/2025 - As of the end of the reporting period, DHS was still awaiting clarifications from the Food and Nutrition Service (FNS) on required changes needed to meet Federal Eligibility mandates.			
106	Critical and high vulnerability and configuration scan findings are not remediated within the documented timeframes.	Heath, Dustin	Finding - Risk	2/28/2025	Security and Privacy	The BES system does not currently remediate critical vulnerabilities and compliance issues within 15 days, and high vulnerabilities are not remediated within 30 days as required by the BES Vulnerability Management Procedure document.	The BES system faces elevated cybersecurity, operational, financial, and compliance risks if vulnerabilities are not remediated within the required timeframe. Prompt corrective actions are necessary to ensure timely vulnerability resolution and safeguard the BES system environment prior to going live. Un-remediated critical and high Nessus compliance scans can significantly hinder system development efforts by introducing security risks, compliance failures, and operational roadblocks. This lack of remediation of system configuration findings increases technical debt, disrupts development workflows, and diverts resources from core project objectives.	IN PROGRESS: Implement an escalation process to involve senior leadership if deadlines are missed. COMPLETE: Update the BES Vulnerability Management Procedures document with the Jira ticketing process and workflow from vulnerability and configuration scan remediation with who owns each step. Rate: Configuration scan result failures and how they impact the security of the BES system (Critical, High, Medium, and Low) instead of simple pass/failure results. In January 2025, 82 critical and high-finding POAMs were listed due to the Tenable configuration scan results. The POAMs for configuration scans are now listed as "Failed" due to the binary nature of the scan engine and does not rate the criticality of the system configuration on the business operation of how the hosts are used.	30 days prior to the IRS assessment or the next third-party assessment.	3	3	Med	Open	10/2/2025 - As of October 1st, 2025, BES had 10 critical findings in an open state outside the 15-day remediation timeframe, and 3 critical findings were within the timeframe. BES had 26 high-rated findings in an open state outside the 30-day remediation timeframe, and 18 high-rated findings were within the timeframe. In addition to the critical and high POAM findings listed above, 14 critical findings and 33 high findings from 2024 are listed as deferred, which are part of the Oracle Cloud Infrastructure that Oracle is responsible for patching on a quarterly basis. 8/28/2025 - As of August 27, 2025, BES had 28 critical findings in an open state outside the 15-day remediation timeframe, and 3 critical findings were within the timeframe. BES had 52 high-rated findings in an open state outside the 30-day remediation timeframe, and 42 high-rated findings were within the timeframe. 30 critical findings and 30 high findings are part of the Oracle Cloud Infrastructure, which Oracle is supposed to patch quarterly. 7/31/2025 - As of July 31st, 2025, BES had 18 critical findings in an open state outside the 15-day remediation timeframe, and 3 critical findings were within the timeframe. BES had 19 high-rated findings in an open state outside the 30-day remediation timeframe, and 24 high-rated findings were within the timeframe. IV&V notes that this month's number of vulnerabilities outside of the remediation timeframes for the critical and high categories is trending downward and is closer to compliance with the procedures outlined in the BES Vulnerability Management Procedures document. 6/30/2025 - As of June 30th, 2025, BES had 31 critical findings in an open state outside the 15-day remediation timeframe, and eight critical findings were within the timeframe. BES had 62 high-rated findings in an open state outside the 30-day remediation timeframe, and four high-rated findings were within the timeframe. As a side note, the ASI had noted that several environments have been shut down for cost savings. Currently,	9/12/2025 The number of critical/high issues being reported seem elevated compared to our numbers. It appears the numbers being reported include "deferred" along with "open". We distinguish between "open" and "deferred" because the "deferred" items are OCI vulnerabilities and thus not under our control to meet the target dates. This point is clarified at the end of the paragraph – however we have some concerns about reporting these items as "potentially impacting the project schedule and causing delays". We have an		
94	The lack of an effective way to validate BES requirements could lead to project delays and unfulfilled user needs if DHS later identifies unmet contractual requirements.	Morrill, Scott	Finding - Risk	4/25/2024	Requirements Analysis & Management	The Requirements Traceability Matrix (RTM (B-21) plays a vital role in ensuring the system's compliance with contractual commitments by associating each requirement with passed test cases). However, the approved project schedule shows the RTM completed on 6/26/24, which falls after the Core SIT exit decision on 5/10/24. The ASI provided the B-22a System Integrity Review Tool (SIRT) to DHS on April 26, 2024, but without the deliverable due to DHS concerns. This B-22a deliverable may help DHS validate requirements.	It is unclear to DHS and IVV how the ASI will trace requirement coverage for SIT completion. DHS may be unable to make an informed decision on SIT exit criteria. This could lead to DHS starting Final Acceptance Testing (FAT) and then realizing that not all requirements have been fully met, resulting in delays. • Ensure test scripts thoroughly and comprehensively test the system to assure each requirement has been fully met. • Develop a deliverable that provides an audit trail for changes to the requirements from the contract such as obsoleted requirements, when that decision was made, and the change requests. • Provide weekly updates about the clean-up efforts in JIRA regarding incorrect statuses of epics, use cases, and requirements. • Create a detailed plan outlining the timeline for completing the clean-up efforts for the requirements and describe the metrics that will be used to evaluate the final outcome.	IN PROGRESS • Develop a document that provides DHS with a feasible and effective way to map contract requirements to the passed test cases, and, per the B-19 (S-19 Complete and Final Test Plan), "Maps the implementation, functional and technical requirements to the test cases and test scripts." • Ensure test scripts thoroughly and comprehensively test the system to assure each requirement has been fully met. • Develop a deliverable that provides an audit trail for changes to the requirements from the contract such as obsoleted requirements, when that decision was made, and the change requests. • Provide weekly updates about the clean-up efforts in JIRA regarding incorrect statuses of epics, use cases, and requirements. • Create a detailed plan outlining the timeline for completing the clean-up efforts for the requirements and describe the metrics that will be used to evaluate the final outcome.	5/10/2024	3	3	Med	Open	9/30/25 - DHS and the ASI conducted three collaborative working sessions to continue reviewing contract requirements that remain untraced or unfulfilled. The objective is to ensure all project requirements are accurately mapped, supporting complete and reliable traceability within the JIRA tool used to generate the Requirements Traceability Matrix (RTM) deliverable. As of July 17, 2025, a total of 741 requirements have been identified. Of these, 228 have been reconciled, while 513 remain outstanding, primarily within the categories of Technical, Implementation, and Maintenance & Operations (M&O) requirements. The ASI has made progress by submitting documentation that was subsequently approved by DHS, formalizing agreements for a portion of the remaining contract requirements. Additional approvals are pending and are expected to resolve more of the outstanding items. Establishing a finalized set of mapped requirements is essential to confirm that all necessary BES functionality and supporting components have been developed and validated across past, current, and future testing phases. Any missed or misunderstood requirements could result in rework, new development, or delays to the project schedule. The RTM is currently scheduled for delivery by ASI to DHS on December 23, 2025. 8/28/25 - DHS and the ASI held four working sessions to continue to review and agree upon the remaining deferred, obsolete and in/out of scope contract requirements to ensure all requirements for the project are mapped correctly. This will help to verify the complete and accurate traceability of the contract requirements in the JIRA tool that is being used to generate the Requirements Traceability Matrix (RTM) Deliverable. A finalized set of mapped requirements must be established to be able to confirm that all necessary BES functionality and supporting components have been developed and have been validated during past, current and future testing phases. Missed or misunderstood requirements may lead to rework, new development, or delays to the project schedule. 9/30/2025 - The ASI reported that the interface test cases are established in Jira, but the board has not yet been made available to IV&V. The first interface test (CSA/NEIG) was executed, making an initial step forward. Timely IV&V access is needed to evaluate test coverage, effectiveness, and results. 8/31/2025 - Jira tickets are actively being created to define the specific tests required for each interface. As in the previous testing cycle, these tickets will outline test objectives and predefined scenarios rather than detailed, step-by-step scripts. Delays in initiating test execution are reducing the available time within the SIT window to complete testing, analyze defects, resolve issues, and conduct retesting. The late start further constrains efforts to address defects before UAT, increasing the risk that unresolved issues may impact downstream phases of the project. 7/30/2025 - The test script development has been assigned to a team. However, ASI attention to SIT defects has prevented significant progress. Testing is still intended to occur during System Integration Testing (SIT), which is currently underway. IVV reiterates that finalizing and executing interface test scripts during SIT compresses the testing timeline and may limit the opportunity to address defects before UAT. 6/30/2025 - The ASI SIT test team has begun test planning and test script development. Testing is intended to occur during System Integration Testing (SIT), which is already underway. While this represents progress, IVV notes that finalizing and executing interface test scripts during SIT compresses the testing timeline and may limit the opportunity to address defects before UAT. 5/31/2025 - No progress was made during this reporting period. Of the twenty-one interfaces, 7 are reported as complete with 14 outstanding. The ASI plans to create the test scripts in JIRA for the fourteen interfaces prior to SIT start (6/23/2025). There is little time left to prepare and perform the tests effectively. 4/30/2025 - No additional progress was observed during this	9/9/2024 Include information on interim version provided prior to IAT.	7/12/2024 I'm not sure if this is worth noting but eWorkBES did deliver an "interim" B-21 RTM to verify the requirement criteria for entering into BES 1.0 IAT.	06/14/2024 The B-21 RTM deliverable has been reviewed and discussed multiple times at the bi-weekly CCM meeting. Draft reports of the B-21
93	Due to the lack of physical and technical testing of the interfaces and data transfer failure, conditions may exist with data format, boundaries, and dependencies. These failures may result in intermittent and hard-to-isolate problems or errors	Reynolds, Mark Evan	Finding - Risk	4/29/2024	Integration and Interface Management	Aside from the functional testing accomplished during epic testing, specific data flow testing is usually part of an interface definition.	This testing is essential before initial deployment to prevent unexpected and difficult-to-resolve issues, such as scrambled or missing data – or the system may have a fault or exception. Since the Project has not established and tested the fault scenarios, we do not know how the system may react.	In Progress • API interfaces should be tested for failure conditions during connection and transfer operations. • FTP and file interfaces should be tested for data and file integrity. • Test data fields for system impacts resulting from data that is poorly formatted, out of range, or other unexpected data transmission errors. Removed • (Not applicable – No transactional interfaces, therefore no race conditions) API interfaces do not require race condition testing. • (Redundant with other recommendations) Testing for format, length, and other physical formatting errors in interface records and files is covered under existing test cases.	2024 2nd Qtr	3	2	Low	Open	9/30/2025 - The ASI reported that the interface test cases are established in Jira, but the board has not yet been made available to IV&V. The first interface test (CSA/NEIG) was executed, making an initial step forward. Timely IV&V access is needed to evaluate test coverage, effectiveness, and results. 8/31/2025 - Jira tickets are actively being created to define the specific tests required for each interface. As in the previous testing cycle, these tickets will outline test objectives and predefined scenarios rather than detailed, step-by-step scripts. Delays in initiating test execution are reducing the available time within the SIT window to complete testing, analyze defects, resolve issues, and conduct retesting. The late start further constrains efforts to address defects before UAT, increasing the risk that unresolved issues may impact downstream phases of the project. 7/30/2025 - The test script development has been assigned to a team. However, ASI attention to SIT defects has prevented significant progress. Testing is still intended to occur during System Integration Testing (SIT), which is currently underway. IVV reiterates that finalizing and executing interface test scripts during SIT compresses the testing timeline and may limit the opportunity to address defects before UAT. 6/30/2025 - The ASI SIT test team has begun test planning and test script development. Testing is intended to occur during System Integration Testing (SIT), which is already underway. While this represents progress, IVV notes that finalizing and executing interface test scripts during SIT compresses the testing timeline and may limit the opportunity to address defects before UAT. 5/31/2025 - No progress was made during this reporting period. Of the twenty-one interfaces, 7 are reported as complete with 14 outstanding. The ASI plans to create the test scripts in JIRA for the fourteen interfaces prior to SIT start (6/23/2025). There is little time left to prepare and perform the tests effectively. 4/30/2025 - No additional progress was observed during this	06/14/2024 As mentioned at the May pre-meet, a technical interface team plan does exist to address PGO's recommendations for this finding.		

ID	Title	Reporter	Finding Type	Identified Date	Criticality	Description	Significance	Recommendation	Event Horizon	Impact	Priority	Analyst	Finding Status	Current Update	Client Comments	Vendor Comments
81	Gaps in test coverage and slower-than-expected progress in testing may result in schedule delays. If subsequent test phases uncover a higher volume of defects and user feedback than initially anticipated.	Heath, Dustin	Finding - Issue	6/27/2023	Testing	After examining the Project's R11 QA Dashboards, R11 Traceability Dashboards, and Test Repository, gaps in testing coverage may exist and the progress of testing might be lagging. Concerning testing coverage, it appears that not all epic and use cases in R11 have associated test cases or are testing the correct use cases. In terms of progress, some test cases remain unexecuted, and not all defects have been resolved as the project commences System Integration Testing (SIT). The ASI has plans to complete the IVT exit criteria by June 30, 2023, about 2 weeks after SIT begins.	Identifying defects early is vital for effective testing, as it is more efficient and cost-effective to address issues during the early testing stages. If there is slow progress or incomplete testing in the early stages, it can result in more defects leaking into subsequent testing phases, necessitating more extensive and rigorous testing efforts. Insufficient testing coverage or slow progress of testing might be lagging. Concerning testing coverage, it appears that not all epic and use cases in R11 have associated test cases or are testing the correct use cases. In terms of progress, some test cases remain unexecuted, and not all defects have been resolved as the project commences System Integration Testing (SIT). The ASI has plans to complete the IVT exit criteria by June 30, 2023, about 2 weeks after SIT begins.	OPEN - ASI and ASI revisit the testing approach to prioritize completion of remaining test activities and conduct comprehensive System Integration Testing (SIT) to minimize defect leakage to User Acceptance Testing (UAT). - ASI test team provide a visual of progress of test case execution compared to current testing schedule. CLOSED ASI assesses the potential impact of the large number of unresolved defects on future development efforts, ensuring a more robust and efficient development process. - ASI develop and implement a revised testing approach to improve the completeness and thoroughness of future testing cycles. - The ASI should determine the root cause of the failure to identify simple defects in SIT and SIT and implement effective improvement processes to confirm early request is adequate before entering UAT/SIT (Closed) - ASI will continue to monitor the progress closely for both breadth and depth of testing to ensure the system is adequately tested (Closed 10/30/2024) - ASI utilize the two-week FAT testing pause to a substantial portion remains outstanding while blocking defects are being addressed. Timely execution of these tests will enable prompt detection of critical integration issues, validate system stability, and reinforce stakeholder confidence. Recent trends indicate that while the weekly rate of defect discovery remains higher than the rate of resolution, steady progress is observed, with approximately 60% of all high-severity and high-priority defects being resolved by month end. To date in the SIT phase, the highest defect volumes have been found in the following areas, with solid progress made toward resolving them in each: • Eligibility • Batches • ADA • Interview Data conversion validation testing is underway to proactively mitigate potential UAT issues. Adjustments are ongoing, and BES-conversion defects are being actively resolved. 7/30/25 - in mid July, the final set of 12 end-to-end (E2E) tests were approved for the ongoing SIT phase. As these tests were developed after SIT started and diverted ASI testine resources.	UAT	4	4	Med	Open	9/30/25 - The ASI plans to complete all SIT (scripted tests) by the end of October; however, approximately 80% of end-to-end (E2E) tests remain unexecuted. The timely execution of these remaining tests is essential for detecting integration issues, validating system stability, and reinforcing stakeholder confidence. Mid-month, the ASI added additional SIT tests related to the HANA Integration, bringing the total of unexecuted SIT tests (including E2E) to 240. The ASI has expressed confidence in completing all tests on schedule. Key integration areas with pending execution include HANA Integration, Eligibility, and Mass Change. IVV notes a decline in test execution velocity compared to the prior month, which may compress the schedule to meet the October completion target. Additionally, the Reports area shows a notable volume of blocked tests and unresolved defects, with approximately 50% of these defects created during the month. 8/31/25 - SIT testing continues to progress. While execution of E2E tests is underway, a substantial portion remains outstanding while blocking defects are being addressed. Timely execution of these tests will enable prompt detection of critical integration issues, validate system stability, and reinforce stakeholder confidence. Recent trends indicate that while the weekly rate of defect discovery remains higher than the rate of resolution, steady progress is observed, with approximately 60% of all high-severity and high-priority defects being resolved by month end. To date in the SIT phase, the highest defect volumes have been found in the following areas, with solid progress made toward resolving them in each: • Eligibility • Batches • ADA • Interview Data conversion validation testing is underway to proactively mitigate potential UAT issues. Adjustments are ongoing, and BES-conversion defects are being actively resolved. 7/30/25 - in mid July, the final set of 12 end-to-end (E2E) tests were approved for the ongoing SIT phase. As these tests were developed after SIT started and diverted ASI testine resources.		
82	The lack of technical documentation may lead to incorrect implementation statements or delay the System Security Plan	Heath, Dustin	Finding - Issue	4/27/2023	Security and Privacy	In April, the ASI/DHS system security plan (SSP) authors began writing implementation statements. Currently, the technical documentation supporting the SSP is unavailable, outdated, or in a draft form. During April, decisions on what tools support the SSP controls are still being decided on. Implementation statements are currently being written from the perspective of how the system should be designed from the SSP author's perspective instead of how the system is actually designed. The SSP authors need to know and use documentation such as System Architecture and Design, network topology, dataflow, ports and protocols, tools used for logging, etc.	Once the system architecture and design have been completed, the SSP authors may need to edit or rewrite implementation statements. A full draft of the SSP is scheduled to be published August 15th, 2023, and the final SSP (ready for federal partner review) is scheduled for September 15, 2023. The SSP is a large technical document with hundreds of controls and control enhancements, and each one requires an implementation statement of how the control or enhancement has been met.	In Progress - Collaborate and communicate with SSP authors about when reliable and correct documentation will be available. CLOSED - Include the Secure Enclave within the work breakdown structure along with the known tasks related to the IIS Assessment to continue receiving FFI in BES. 7/31/2025: COMPLETE - Interview when the infrastructure design baseline will be completed. (06/30/2024) - Perform a full review of all draft SSP controls for content and accuracy prior to the start of the Independent Security Controls Assessment. Assume the substance of the SSP submitted to federal regulators. This will allow the SSP authors to update controls to changes from Design through Implementation. (02/26/2024) - Begin monthly Plan of Action and Milestones update meetings between DHS Security and the ASI Security teams to inform each other of progress and updates made against each POAM. (03/31/2024) CLOSED - Moved to Risk #106 IV&V recommends prioritizing the S-C critical and High finding POAMs as a result of the Tenable Nessus Configuration scans. Implementing the security configuration later in development may cause the system to become unfunctional, and require additional development time to fix.	Prior to the start of the third-party assessment.	2	2	Low	Open	10/02/2025 - As a result of the SSP Control Implementation validation with DecVis, the ASI's Security team completed its work at the end of June, and an updated System Security Plan was published on September 30th, 2025. Additionally, for the first time, control implementations that do not meet the NIST 800-53 v5 moderate baseline have corresponding Plans of Action and Milestones (POAMs) tagged to bring those parts of BES into compliance with the baseline. IV&V will review the updated SSP in the next reporting period. 6/28/2025 - The ASI completed a security impact analysis (SIA) procedure for changes that are introduced to the BES system to prevent changes that might cause a compromised component of BES. The SIA is currently in a review will comment period, which will conclude on August 28, 2025. The ASI began testing the IIS Computer Security Evaluation Matrix (SCEM) by loading the SCEM profiles in Tenable Nessus to scan BES servers and other devices. Scanning the BES systems with the IIS SCEM will identify where a computing device is not compliant with the IIS requirements. The ASI is completing the updates to the System Security Plan (SSP) to ensure accuracy of the implementation statements. The ASI plans to have the new baseline SSP authored and published by the end of September 2025. 7/31/2025 - The ASI continued updating the SSP with information obtained during the SSP Control Implementation validation effort completed last month. The ASI has continued work on the Secure Enclave and has been reviewing options for a Data Loss Prevention (DLP) solution as required by Internal Revenue Service (IRS) Publication 1075. 6/30/2025 - The ASI completed all draft system-level policies and gave them to DHS. DHS and the ASI are currently progressing using the process created in April to review and prepare the policies for final signature. The ASI Security team completed the SSP Control Implementation validation with DecVis at the end of June. The ASI 9/30/2025 - The ASI has indicated its intent to leverage AI-based tools to support unit testing, which may increase developer productivity. However, IV&V remains concerned that the AI-based tools may not be able to detect functionality during UAT could add complexity to the development lifecycle and hinder overall productivity. 8/31/2025 The ASI is reporting System Integration Testing (SIT) is progressing as planned. IVV continues to monitor for potential development delays and/or code quality issues that may impact the effectiveness and timely completion of the SIT phase. The project team indicated they plan to introduce new functionality during UAT which may slow defect repairs, rework and add additional complexity for developers to manage resulting in the least impact to the project and project team. 7/30/2025 - The ASI appears to be making good progress with System Integration Testing (SIT). It remains unclear whether development delays will impact the successful completion of SIT. 6/30/2025 - It remains unclear to IVV whether there has been meaningful improvement in ASI's code quality. While the ASI stated that unresolved defect counts were low enough to meet the criteria (below 20% of all reported defects) for entering SIT, IVV raised questions regarding the inclusion of defects that existed prior to INT that were not answered by the end of June. The level of defects could elevate development and system stability risks, which could lead to slowed development and unexpected project delays. 6/31/2025 - DHS stated that the ASI had not accounted for the conversion of data for one legacy system (HARI) for Pilot and the new scope of work will need to be added to the baselined schedule. It remains unclear whether this scope of work will impact the critical path given previous challenges with development velocity. 6/30/2025 - The ASI reported they continue to address previous development challenges and improve their development velocity. However, now and the project has switched to a Waterfall methodology, the ASI has 9/30/2025 - Work appears to be progressing on the full build out of the Secure Enclave. IV&V remains concerned that this build out adds additional complexity to the infrastructure environment which could further exacerbate this risk. 8/31/2025 - The ASI indicated that communication between the DHS shared platform team and the BES project has improved, reducing the likelihood of unforeseen or unexpected issues arising from the shared platform moving forward. The project decided to add a new tool to its suite of tools to assist users with online help and user guides. During recent Maintenance and Operations (M&O) planning sessions, the project team identified areas such as Security and Incident Management where BES infrastructure operational processes may differ from those used in the legacy systems. How this added complexity will impact implementation schedules and the scope of M&O planning and support, is not yet known. 7/30/2025 - The project appears to be making efforts to improve communications between the shared platform team and the BES project. IVV remains concerned that changes to the DHS shared services platform could negatively impact the project schedule and budget. 6/30/2025 - IVV remains concerned that changes to the DHS shared services platform could negatively impact the BES project schedule. Governance over the platform has yet to be formalized. The project team has stated concerns about the recent lack of effective communication around the recent changes shared services. 6/31/2025 - The BES system currently relies on services provided by a shared DHS platform. Any changes to these services could increase the complexity of the overall infrastructure and require changes to the BES system, which could negatively impact the BES project schedule. The shared platform vendor has notified the project that they will be replacing both the identity management shared service (IDCS) as well as the postal address verification service (Liquix) which will require BES system changes. It		
83	Gaps in test coverage and slower-than-expected progress in testing may result in schedule delays. If subsequent test phases uncover a higher volume of defects and user feedback than initially anticipated.	Heath, Dustin	Finding - Issue	6/27/2023	Testing	After examining the Project's R11 QA Dashboards, R11 Traceability Dashboards, and Test Repository, gaps in testing coverage may exist and the progress of testing might be lagging. Concerning testing coverage, it appears that not all epic and use cases in R11 have associated test cases or are testing the correct use cases. In terms of progress, some test cases remain unexecuted, and not all defects have been resolved as the project commences System Integration Testing (SIT). The ASI has plans to complete the IVT exit criteria by June 30, 2023, about 2 weeks after SIT begins.	Identifying defects early is vital for effective testing, as it is more efficient and cost-effective to address issues during the early testing stages. If there is slow progress or incomplete testing in the early stages, it can result in more defects leaking into subsequent testing phases, necessitating more extensive and rigorous testing efforts. Insufficient testing coverage or slow progress of testing might be lagging. Concerning testing coverage, it appears that not all epic and use cases in R11 have associated test cases or are testing the correct use cases. In terms of progress, some test cases remain unexecuted, and not all defects have been resolved as the project commences System Integration Testing (SIT). The ASI has plans to complete the IVT exit criteria by June 30, 2023, about 2 weeks after SIT begins.	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The timely execution of these remaining tests is essential for detecting integration issues, validating system stability, and reinforcing stakeholder confidence. Mid-month, the ASI added additional SIT tests related to the HANA Integration, bringing the total of unexecuted SIT tests (including E2E) to 240. The ASI has expressed confidence in completing all tests on schedule. Key integration areas with pending execution include HANA Integration, Eligibility, and Mass Change. IVV notes a decline in test execution velocity compared to the prior month, which may compress the schedule to meet the October completion target. Additionally, the Reports area shows a notable volume of blocked tests and unresolved defects, with approximately 50% of these defects created during the month. 8/31/25 - SIT testing continues to progress. While execution of E2E tests is underway, a substantial portion remains outstanding while blocking defects are being addressed. Timely execution of these tests will enable prompt detection of critical integration issues, validate system stability, and reinforce stakeholder confidence. Recent trends indicate that while the weekly rate of defect discovery remains higher than the rate of resolution, steady progress is observed, with approximately 60% of all high-severity and high-priority defects being resolved by month end. To date in the SIT phase, the highest defect volumes have been found in the following areas, with solid progress made toward resolving them in each: • Eligibility • Batches • ADA • Interview Data conversion validation testing is underway to proactively mitigate potential UAT issues. Adjustments are ongoing, and BES-conversion defects are being actively resolved. 7/30/25 - in mid July, the final set of 12 end-to-end (E2E) tests were approved for the ongoing SIT phase. As these tests were developed after SIT started and diverted ASI testine resources.		
80	Development delays have negatively impacted the project schedule and delayed go-live.	Fors, Michael	Finding - Issue	6/30/2022	Configuration and Development	ASI had previously reported development activities have been slowed as they have been unable to achieve and/or maintain their expected development velocity. Previously, the development team could keep up with accurately estimating development task level of effort (i.e., story points) and the project has been challenged with producing a project schedule that accurately reflects realistic timelines (see Finding #74). The ASI continues to be challenged with finding qualified resources in a timely manner.	If the ASI is unable to achieve a velocity that enables them to meet planned milestones, schedule delays may lead to a delayed system go-live date. Failure to achieve a level of accuracy in estimating development tasks could lead to a project schedule that is flawed and unrealistic. Previously, DHS had indicated, and IVV agreed, that some of these delays were due to some ASI lack of the expertise required to create optimal designs and system specifications that developers could consume without requiring extensive clarification from the ASI BA/SA team. DHS and IVV observed instances where ASI BA/SA have presented less than optimal designs and left it to DHS (who may lack software or UI design expertise) to improve, which has contributed to unproductive design sessions (see Finding #61). It remains unclear if scope creep has contributed to these delays.	OPEN - ASI provides DHS with the time needed to effectively evaluate the software demonstrations (demos) and elicit productive design discussions with DHS attendees during each demo. • The project could monitor progress on development efforts that are complex and/or require a substantial level of effort and create a mitigation strategy to avoid delays. COMPLETE. CLOSED - ASI regularly report metrics that accurately track the total amount of remaining work to reach go-live and present a dynamic burn-down chart to clearly display progress to stakeholders. (closed 3/31/2025) • ASI effectively track and regularly provide DHS (potentially via the weekly DOI status meeting) with an accurate velocity (e.g., story points per day/week/month) and assure that the current velocity is accurate and consistently reflected in the project schedule (closed 2/28/2025) • DHS request that ASI strategically add the right project team resources to effectively increase velocity. Note that adding additional junior resources may not be as effective as staffing additional expert-level development, analysis, and other resources that can lead and mentor junior resources. • ASI reviews the development process and identifies and mitigates the challenges preventing them from incorporating fast demo activities into the project schedule. (9/29/23 - ASI will not be doing this, with DHS approval) • ASI consider taking steps to increase code quality, including enhancing the depth of developer unit testing, tracking and proactively preventing leakage, and enforcing effective coding standards and good governance. • The ASI should consider enhancing the depth of developer unit testing.	Immediate	3	3	Med	Open	10/02/2025 - As a result of the SSP Control Implementation validation with DecVis, the ASI's Security team completed its work at the end of June, and an updated System Security Plan was published on September 30th, 2025. Additionally, for the first time, control implementations that do not meet the NIST 800-53 v5 moderate baseline have corresponding Plans of Action and Milestones (POAMs) tagged to bring those parts of BES into compliance with the baseline. IV&V will review the updated SSP in the next reporting period. 6/28/2025 - The ASI completed a security impact analysis (SIA) procedure for changes that are introduced to the BES system to prevent changes that might cause a compromised component of BES. The SIA is currently in a review will comment period, which will conclude on August 28, 2025. The ASI began testing the IIS Computer Security Evaluation Matrix (SCEM) by loading the SCEM profiles in Tenable Nessus to scan BES servers and other devices. Scanning the BES systems with the IIS SCEM will identify where a computing device is not compliant with the IIS requirements. The ASI is completing the updates to the System Security Plan (SSP) to ensure accuracy of the implementation statements. The ASI plans to have the new baseline SSP authored and published by the end of September 2025. 7/31/2025 - The ASI continued updating the SSP with information obtained during the SSP Control Implementation validation effort completed last month. The ASI has continued work on the Secure Enclave and has been reviewing options for a Data Loss Prevention (DLP) solution as required by Internal Revenue Service (IRS) Publication 1075. 6/30/2025 - The ASI completed all draft system-level policies and gave them to DHS. DHS and the ASI are currently progressing using the process created in April to review and prepare the policies for final signature. The ASI Security team completed the SSP Control Implementation validation with DecVis at the end of June. The ASI 9/30/2025 - The ASI has indicated its intent to leverage AI-based tools to support unit testing, which may increase developer productivity. However, IV&V remains concerned that the AI-based tools may not be able to detect functionality during UAT could add complexity to the development lifecycle and hinder overall productivity. 8/31/2025 The ASI is reporting System Integration Testing (SIT) is progressing as planned. IVV continues to monitor for potential development delays and/or code quality issues that may impact the effectiveness and timely completion of the SIT phase. The project team indicated they plan to introduce new functionality during UAT which may slow defect repairs, rework and add additional complexity for developers to manage resulting in the least impact to the project and project team. 7/30/2025 - The ASI appears to be making good progress with System Integration Testing (SIT). It remains unclear whether development delays will impact the successful completion of SIT. 6/30/2025 - It remains unclear to IVV whether there has been meaningful improvement in ASI's code quality. While the ASI stated that unresolved defect counts were low enough to meet the criteria (below 20% of all reported defects) for entering SIT, IVV raised questions regarding the inclusion of defects that existed prior to INT that were not answered by the end of June. The level of defects could elevate development and system stability risks, which could lead to slowed development and unexpected project delays. 6/31/2025 - DHS stated that the ASI had not accounted for the conversion of data for one legacy system (HARI) for Pilot and the new scope of work will need to be added to the baselined schedule. It remains unclear whether this scope of work will impact the critical path given previous challenges with development velocity. 6/30/2025 - The ASI reported they continue to address previous development challenges and improve their development velocity. However, now and the project has switched to a Waterfall methodology, the ASI has 9/30/2025 - Work appears to be progressing on the full build out of the Secure Enclave. IV&V remains concerned that this build out adds additional complexity to the infrastructure environment which could further exacerbate this risk. 8/31/2025 - The ASI indicated that communication between the DHS shared platform team and the BES project has improved, reducing the likelihood of unforeseen or unexpected issues arising from the shared platform moving forward. The project decided to add a new tool to its suite of tools to assist users with online help and user guides. During recent Maintenance and Operations (M&O) planning sessions, the project team identified areas such as Security and Incident Management where BES infrastructure operational processes may differ from those used in the legacy systems. How this added complexity will impact implementation schedules and the scope of M&O planning and support, is not yet known. 7/30/2025 - The project appears to be making efforts to improve communications between the shared platform team and the BES project. IVV remains concerned that changes to the DHS shared services platform could negatively impact the project schedule and budget. 6/30/2025 - IVV remains concerned that changes to the DHS shared services platform could negatively impact the BES project schedule. Governance over the platform has yet to be formalized. The project team has stated concerns about the recent lack of effective communication around the recent changes shared services. 6/31/2025 - The BES system currently relies on services provided by a shared DHS platform. Any changes to these services could increase the complexity of the overall infrastructure and require changes to the BES system, which could negatively impact the BES project schedule. The shared platform vendor has notified the project that they will be replacing both the identity management shared service (IDCS) as well as the postal address verification service (Liquix) which will require BES system changes. It		
73	The planned BES infrastructure is complex which could be difficult to implement and lead to schedule/cost impacts.	Fors, Michael	Finding - Risk	10/28/2021	System Design	Current ASI infrastructure plans include a significant number of sophisticated components that make up a complex cloud infrastructure. Further, the Project Team has yet to finalize components that will make up the BES infrastructure and the additional costs and time to configure, test, and implement the planned complex environment remain unclear.	If the level of effort to implement and manage the complexities of the BES infrastructure is not accurately accounted for and staffed by the ASI, the project could be met with unexpected costs and schedule delays. Delays in finalizing the components being implemented could exacerbate this risk and lead to further delays. Complex platforms often present system maintenance and operations challenges as system changes can hold the increased potential for system failure (i.e., due to the significant number of "moving parts") and increase the level of time and effort to resolve infrastructure and application-level bugs. Further, some components remain in an immature state compared to their legacy counterparts. For example, the project recently experienced a system failure because Google Cloud failed to clearly communicate a change that led to failure in another component (i.e., Nexus). Google Cloud is generally viewed as a less mature product offering compared to their rivals (Amazon Web Services, Microsoft Azure). IV&V remains concerned that this could lead to failures at critical points in the project (including post-go live production failures) that could be difficult to resolve and lead to project disruption. If DHS intends to eventually reduce M&O outsourcing costs turning over M&O tasks to State employees, they could face challenges supporting tasks they may not be familiar with in a complex infrastructure environment.	• ASI develops a process to closely monitor cloud and other product changes, and regression test once changes/updates are applied. • The project team can establish strong governance over the utilization and maintenance of the various system tools/components. • ASI allot time in the schedule to conduct proof of concept to assure infrastructure components work as expected. • ASI maintain a detailed schedule for DevOps implementation tasks to avoid unexpected delays that could delay project milestones and the critical path.	Next several months	2	2	Low	Open	9/30/2025 - Work appears to be progressing on the full build out of the Secure Enclave. IV&V remains concerned that this build out adds additional complexity to the infrastructure environment which could further exacerbate this risk. 8/31/2025 - The ASI indicated that communication between the DHS shared platform team and the BES project has improved, reducing the likelihood of unforeseen or unexpected issues arising from the shared platform moving forward. The project decided to add a new tool to its suite of tools to assist users with online help and user guides. During recent Maintenance and Operations (M&O) planning sessions, the project team identified areas such as Security and Incident Management where BES infrastructure operational processes may differ from those used in the legacy systems. How this added complexity will impact implementation schedules and the scope of M&O planning and support, is not yet known. 7/30/2025 - The project appears to be making efforts to improve communications between the shared platform team and the BES project. IVV remains concerned that changes to the DHS shared services platform could negatively impact the project schedule and budget. 6/30/2025 - IVV remains concerned that changes to the DHS shared services platform could negatively impact the BES project schedule. Governance over the platform has yet to be formalized. The project team has stated concerns about the recent lack of effective communication around the recent changes shared services. 6/31/2025 - The BES system currently relies on services provided by a shared DHS platform. Any changes to these services could increase the complexity of the overall infrastructure and require changes to the BES system, which could negatively impact the BES project schedule. The shared platform vendor has notified the project that they will be replacing both the identity management shared service (IDCS) as well as the postal address verification service (Liquix) which will require BES system changes. It		

