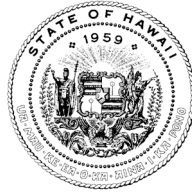


Josh Green, M.D.
GOVERNOR



DOUGLAS MURDOCK
CHIEF INFORMATION
OFFICER

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

P.O. BOX 119, HONOLULU, HAWAII 96810-0119
Ph: (808) 586-6000 | Fax: (808) 586-1922
ETS.HAWAII.GOV

June 30, 2023

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


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

Aloha Senate President Kouchi, Speaker Saiki, 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,


Douglas Murdock (Jul 3, 2023 09:45 HST)

Douglas Murdock
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: March 1 – 31, 2023

Submitted: April 17, 2023

Overview

- [Executive Summary](#)
- [IV&V Findings and Recommendations](#)
- [IV&V Engagement Status](#)
- [Appendices](#)
 - [A – IV&V Criticality Ratings](#)
 - [B – Risk Identification Report](#)
 - [C – Acronyms and Glossary](#)
 - [D – Background Information](#)



Solutions that Matter

The background is a solid blue color. It features several decorative elements: a cluster of overlapping squares and rounded rectangles in various shades of blue (light, medium, and dark) on the left side; a single large rounded rectangle with a white outline in the center-left; and a few more squares and rounded rectangles on the right side, some with white outlines and some with solid blue fills.

Executive Summary

Executive Summary



The BES Project is now halfway through the development of the first of two planned releases. While the pace has been increasing throughout the month of March, DHS and IV&V expressed concerns with the ASI on the limited number of BES software demonstrations conducted for a larger DHS and IV&V audience. These demonstrations are a key part of the ASI's Design, Develop, and Implementation (DDI) approach, intended to show the actual working software to DHS to confirm requirements and expectations are being met. In discussions with the ASI, they plan to conduct several demonstrations in the next reporting period.

The DHS and ASI project teams are adapting to the agile software development approach. While IV&V reported a slow start after the restart, IV&V observed an increase in momentum. IV&V notes the ASI is reporting all activities and tasks are on schedule.

The Project continues to make good progress in building the BES Security Plan. The submission and approval of the Security Plan shifted from March 2023 to November 2023 - allowing for the inclusion of implemented security and privacy controls versus planned controls as originally decided.

IV&V is closely monitoring the DHS and ASI preparation activities for UAT and the Pilot. Planning for these significant events is underway, and the importance of effectively using the available time to prepare cannot be overstated.

Jan	Feb	Mar	Category	IV&V Observations
			Project Management	The ASI continued elaborating the project schedule, which now includes Dev Ops tasks. DHS added a Project Manager to help manage the BES workload.

Executive Summary



Jan	Feb	Mar	Category	IV&V Observations
M	M	M	System Design	The design sessions that occurred in this reporting period were ASI-internal or ad-hoc meetings with specific DHS Subject Matter Experts. The ASI is planning to expand demonstration participation with more DHS and IV&V staff to ensure the requirements are thoroughly met.
M	L	L	Configuration and Development	The ASI added senior resources to the development team to improve productivity. The ASI continued to evaluate Configuration Management tools.
M	M	L	Integration and Interface Management	The ASI completed work on the interface partner dashboard in Confluence. The ASI obtained a commitment from the task management system vendor to complete all required work in alignment with BES schedule requirements.
M	M	M	Testing	The ASI determined that the currently licensed ADA compliance tool within DHS will not work for BES. The ASI is re-evaluating a tool that was previously under consideration to verify that it will meet all contract requirements.
H	M	M	Security and Privacy	Project work on the BES Security Plan is progressing well, although significant work remains. DHS decided not to purchase an Enterprise Governance, Risk Management, and Compliance (eGRC) tool and will instead leverage an existing Excel-based process used with other DHS systems.

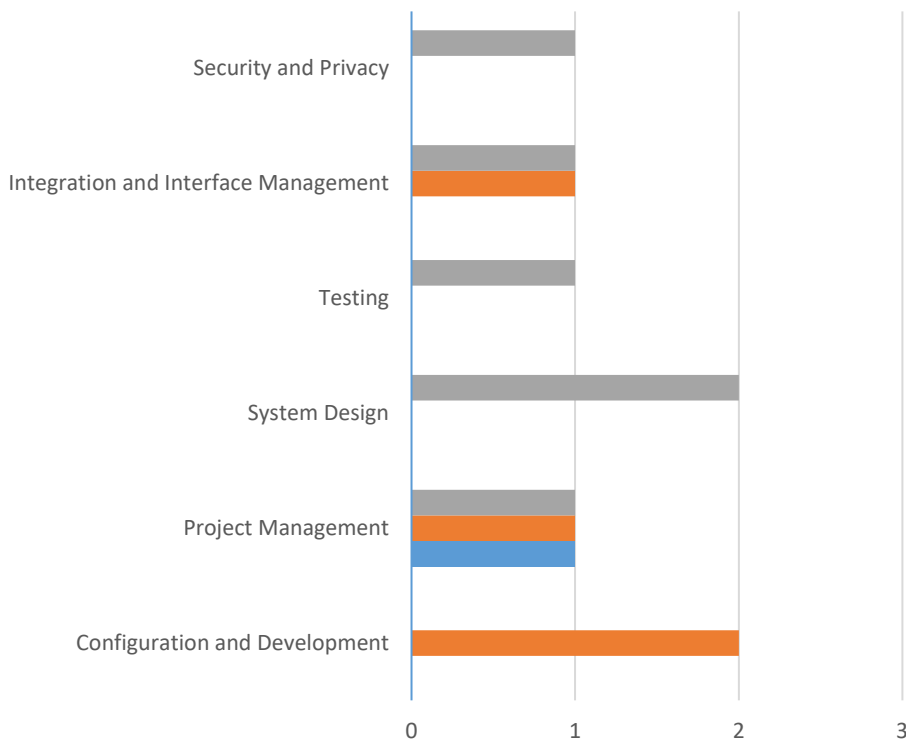
IV&V Findings and Recommendations

IV&V Findings and Recommendations

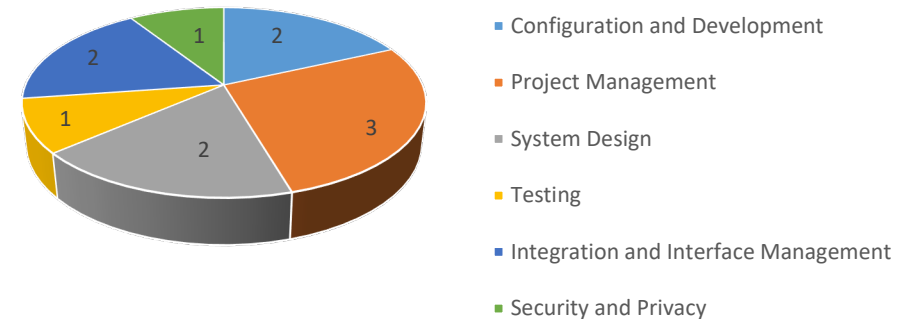


As of the March 2023 reporting period, PCG is tracking 11 open findings (6 risks, 5 issues) and has retired a total of 64 findings. All these findings were opened during the tenure of the prior ASI. Of the 11 open findings, 1 is a High criticality rating, 6 are Medium, and 4 are Low.

Open Risks & Issues



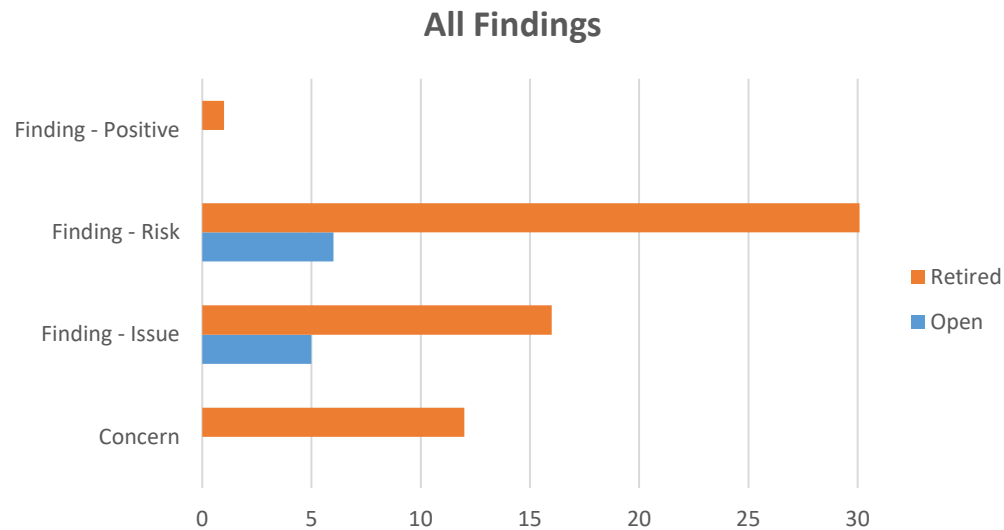
Open Risks & Issues by Category



IV&V Findings and Recommendations



The following figure provides a breakdown of the 75 IV&V findings (positive, risks, issues, concerns) by status (open, retired).



IV&V Findings and Recommendations



Findings Retired During the Reporting Period

#	Finding	Category
76	<p>Risk - Volunteer DHS resources leaving the Project may lead to schedule delays, lowered morale, and burnout.</p> <p>With the BES project restart in progress for nearly three months, IV&V observed no impact to the project from DHS resources leaving. Also, the ASI has made a conscious effort to reduce the number of DHS resources needed for design review. IV&V has retired this finding.</p>	Project Management

IV&V Findings and Recommendations



Preliminary Concerns Investigated During the Reporting Period

#	Finding	Category
	None	

IV&V Findings and Recommendations



Findings Opened During the Reporting Period

#	Finding	Category
	None	

IV&V Findings and Recommendations



Project Management


#	Key Findings	Criticality Rating
29	<p>Issue – Uncertainty and/or a lack of communication around long-term architecture decisions could impact the project budget, schedule, system design, and planning decisions.</p> <p>The ASI continues to re-evaluate previous infrastructure decisions and is recommending other tools they have deemed a better fit for this project. Uncertainty remains around the use of some tools including ServiceNow (SN), Splunk, and Chronicle. The ASI will go live with their interlinked portals (BES and KOLEA) strategy but may initially go live with less functionality than originally planned and/or communicated.</p>	

Recommendations	Progress
<ul style="list-style-type: none"> The ASI should continue to update the BI-12 System Architecture Deliverable with additional details as they become available and with any finalized architectural changes. 	In process
<ul style="list-style-type: none"> DHS should continue to ask the ASI to perform due diligence in any recommendation for foundational architecture change decisions and continue to review with appropriate DHS stakeholders to assure a common understanding of the implications of these decisions. 	In process
<ul style="list-style-type: none"> The Project should continue to ensure communication between development leads and architecture leads to assure optimal collaboration on possible architecture changes that could impact decisions in each area. 	In process

IV&V Findings and Recommendations



Project Management

#	Key Findings	Criticality Rating
43	<p>Issue – DHS PMO project team members have transitioned off the Project, which may cause gaps in knowledge transfer and leadership on the Project.</p> <p>DHS continues to advertise and accept applications for three open PMO positions. To date, DHS has struggled to attract qualified candidates and offer competitive pay scales for experienced applicants. IV&V continues to monitor the impact of the DHS PMO vacancies on the BES Project.</p>	

Recommendations	Progress
<ul style="list-style-type: none">DHS continue to work with the appropriate organizations to identify the funds necessary to fill these positions.	In process
<ul style="list-style-type: none">DHS consider other options (Contractors, State employees borrowed from other agencies) to fill these positions if there is ongoing difficulty in finding permanent hires.	In process

IV&V Findings and Recommendations



Project Management

#	Key Findings	Criticality Rating
74	<p>Issue – A BES Project schedule based on inaccurate estimations diminishes effective planning and resource management, which could result in late deliverables, cost increases, and a late go-live.</p> <p>The ASI continues to incorporate details into the project schedules (Primary and DDI) to track all the activities in progress, including dev ops tasks. IV&V will continue to validate that the schedules accurately capture the tasks and timing observed in the correlated workstreams and tools, such as Jira.</p>	

Recommendations	Progress
<ul style="list-style-type: none">Monitor, evaluate and revise scheduling estimates for accuracy.	In process
<ul style="list-style-type: none">Confirm current assumption that a delay with the current go-live date will not result in major implications.	In process
<ul style="list-style-type: none">Leverage velocity and burn-down charts to adjust development task estimates if needed.	Not Started

IV&V Findings and Recommendations



Integration and Interface Management

#	Key Findings	Criticality Rating
63	<p>Risk – The lack of early planning and coordination with interface partners may result in schedule delays.</p> <p>Interface design began in March with the HI Department of Health (DOH) vital records data exchange. The ASI created an interface dashboard in Confluence which shows several near-term Epic start dates, but key details are not yet completed for all interfaces. The interfaces are also included in the DDI schedule under Release 12. The ASI will assess the IV&V recommendations as interface work proceeds.</p>	

Recommendations	Progress
<ul style="list-style-type: none">• Complete all MOAs and obtain approval.	In process
<ul style="list-style-type: none">• Confirm testing dates with interface partners in writing.	In process
<ul style="list-style-type: none">• Complete early proof of concept interfaces to avoid unexpected delays due to external organization miscommunications or their own internal delays in assisting the BES project.	Not started

IV&V Findings and Recommendations



Integration and Interface Management

#	Key Findings	Criticality Rating
79	<p>Issue – External vendor delays in the development of the BES task management system interface have impacted the project schedule.</p> <p>The ASI met with the task management system vendor and received commitments that system updates will be made on a timely basis to avoid impacting the BES project schedule. IV&V will continue to monitor the subject of this finding and the related project activities.</p>	

Recommendations	Progress
<ul style="list-style-type: none">The ASI re-establish regular collaboration meetings with CIA to assure strong communication and brainstorm optimal solutions for BES integration with Current.	In process
<ul style="list-style-type: none">The ASI provide test results from the task management integration to ensure that the interface works.	Not Started

IV&V Findings and Recommendations



Configuration and Development

#	Key Findings	Criticality Rating
70	<p>Risk – Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution.</p> <p>The ASI is currently evaluating which Service Now (SN) modules will be the best fit for the Project and for DHS going forward. Details of exactly how they'll be using SN and the level of configuration management they intend to perform has yet to be determined.</p>	

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
<ul style="list-style-type: none">DHS and ASI work to clarify/solidify plans for the potential use of configuration management tools and DHS work to fund and procure a CM tool, as required, to avoid any negative impacts to the project.	In process

IV&V Findings and Recommendations



Configuration and Development

#	Key Findings	Criticality Rating
80	<p>Risk – Development delays could negatively impact the project schedule and delay go-live.</p> <p>The ASI is taking multiple actions to mitigate potential delays to development, including:</p> <ul style="list-style-type: none">• Monitoring the capacity of each development team, adding resources needed to complete work as scheduled.• Adding three highly skilled, veteran business analysts to improve system design that development teams will leverage.• Developing a dashboard view of Epics in progress showing status and progress as well as burndown and velocity charts to show team productivity. <p>The project is halfway through release 0.11, and the ASI has demonstrated only two of the twenty-six Epics in scope for R0.11. It remains unclear if the project team can complete and demonstrate the remaining twenty-four Epics in the remaining three months of the release.</p>	

Recommendations	Progress
<ul style="list-style-type: none">• DHS request the 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.	In process
<ul style="list-style-type: none">• ASI effectively track and regularly provide DHS (potentially via the weekly DDI status meeting) with an accurate velocity (e.g., story points per day/week/month) and assure that the current velocity is accurately and consistently reflected in the project schedule.	In process

IV&V Findings and Recommendations



System Design

#	Key Findings	Criticality Rating
61	<p>Issue – Poorly executed JAD and "design sessions" could lead to inaccurate design and rework.</p> <p>Due to the small number of design sessions IV&V observed this month, we could not measure any progress toward mitigating this finding. The ASI is increasing efforts on processes, usage of new tools, and different workflows – which included a major cleanup effort in Jira. The ASI expects the number of Epics in the design stage to significantly grow in the coming weeks, leading to more design sessions where IV&V can assess improvements.</p>	

Recommendations	Progress
<ul style="list-style-type: none">The facilitator should use their expertise to drive discussions through leading questions.	In process
<ul style="list-style-type: none">BAs should come to design sessions fully prepared to facilitate discussion on the topic(s) of the design session.	In process
<ul style="list-style-type: none">The ASI to bring User Experience (UE) designers to engage with DHS and review the currently built BES solution.	Complete
<ul style="list-style-type: none">ASI to quickly gain lessons learned to apply to future sessions.	In process

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>The ASI is making updates to the BI-12 System Architecture deliverable to reflect recent changes and expects more changes soon. The ASI made good progress on the buildout of their DevOps automation scripts that will allow them to manage the cloud environments more easily. Additional BES infrastructure tasks are being added to the project schedule and should be evaluated to determine if the impact on the critical path.</p>	

Recommendations	Progress
<ul style="list-style-type: none"> ASI clearly communicates the potential costs and schedule impacts to implementing the planned infrastructure. The architecture process should include steps to provide a detailed impact of DHS architectural decisions including the integration activities, support required, and maintenance and operations impacts. 	In process
<ul style="list-style-type: none"> DHS work with the ASI to assess the potential challenges of maintaining a complex environment and consider scaled-back options that could reduce this risk and reduce long-term maintenance challenges and costs. 	In process
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> The project team work to establish strong governance over the utilization and maintenance of various tools/components. 	Not started
<ul style="list-style-type: none"> ASI allot time in the schedule to conduct proof of concepts to assure infrastructure components work as expected. 	Not started
<ul style="list-style-type: none"> 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



Testing

#	Key Findings	Criticality Rating
67	<p>Risk - The Americans With Disabilities Act (ADA) Section 508 compliance tool has not been installed for the Project, which may cause significant rework.</p> <p>The ADA compliance tool currently used within DHS does not work the BES architecture. The ASI is evaluating an ADA Compliance tool and is working with DHS to validate it will meet all requirements. In the interim, the ASI implemented automated testing to check for screen reading compatibility.</p>	

Recommendations	Progress
<ul style="list-style-type: none">The ADA tool meets contractual and project requirements.	In process
<ul style="list-style-type: none">The ASI communicates a plan for ADA test execution.	In process
<ul style="list-style-type: none">The ASI communicates how the tool will be used to report compliance and non-compliance and how non-compliance will be addressed/corrected	In process
<ul style="list-style-type: none">The ASI communicates how and when DHS/IV&V will be provided the reports from the ADA tool execution and how to interpret the results.	In process

IV&V Findings and Recommendations



Security and Privacy

#	Key Findings	Criticality Rating
68	<p>Risk - Incomplete implementation statements in the BES Security Plan activities may lead to delays in gaining Federal Partner approval for the BES Project to begin the Pilot Phase.</p> <p>The security meetings continue and have been productive. The ASI and DHS are identifying the controls for the BES Security Plan based on NIST 800-53 r5. The control selection is expected to complete in April and has progressed faster than expected. The option to use an electronic Governance, Risk, and Control (eGRC) is not currently viable for DHS; the BES project team will continue to use legacy tools.</p>	M

Recommendations	Progress
<ul style="list-style-type: none">The ASI continues to develop the BI-13 Security Plan in close collaboration with DHS.	In process
<ul style="list-style-type: none">DHS and the ASI agree upon the tools and process that will be used to document and track security control implementation, such as security governance, risk, and control (GRC software). The process should define the level of detail needed to track progress (estimates, target dates, risks, issues, evidence) along with the Requirement Traceability Matrix, and plans of actions and milestones (POAM).	Complete
<ul style="list-style-type: none">An eGRC system be included in a future Advanced Planning Document to seek federal funding assistance for licensing and implementation.	Not Started



IV&V Status

IV&V Engagement Status



IV&V Engagement Area	Jan	Feb	Mar	Comments
IV&V Budget				
IV&V Schedule				
IV&V Deliverables				PCG submitted the final February 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 March reporting period:
 - Completed – February Monthly Status Report
 - Ongoing – Review the BES Project Artifacts and Deliverables
 - Ongoing – Attend BES Project meetings, (see [Additional Inputs](#) pages for details)
 - Reviewed available ASI contracts and contract amendments documentation
- Planned IV&V activities for the April 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-5 Project Schedule - BES 2023 Primary	03/25/2023 03/18/2023 03/11/2023	N/A
BI-5 Project Schedule - BES 2023 DDI	03/25/2023 03/18/2023 03/11/2023	N/A
BI-08 Technology Environnements Specifications - DEV1	03/24/2023	V0.2

Additional Inputs – Artifacts



Artifact Name	Artifact Date	Version
BES 2023 Design Kanban board	N/A	N/A
R0.11 Epic Assignment	N/A	N/A
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
One RTM (Aha)	N/A	V1
Interface Dashboard – Confluence page	N/A	N/A
BES 2023 Implementation Planning – Confluence page	N/A	N/A



Meetings and/or Sessions Attended/Observed:




1. Weekly Platform Status Meeting – 3/7/2023, 3/14/2023, 3/21/2023, 3/28/2023
2. IV&V Team Meeting – 3/2/2023, 3/6/2023, 3/9/2023, 3/13/2023, 3/16/2023, 3/21/2023, 3/23/2023, 3/27/2023
3. IV&V February 2023 Pre-Draft MSR Findings Review – 3/2/2023
4. IV&V March 2023 Pre-Draft MSR Findings Review – 3/31/2023
5. HI DHS BES February Draft IV&V Report Review – 3/13/2023
6. IV&V March Findings Roast – 3/31/2023
7. PMO End of Day Huddle – 3/1/2023, 3/2/2023, 3/7/2023, 3/9/2023, 3/14/2023, 3/15/2023, 3/16/2023, 3/21/2023, 3/23/2023, 3/30/2023
8. Bi-Weekly DHS and IV&V Touch Base - 3/7/2023, 3/21/2023
9. Weekly BES Infrastructure meeting – 3/3/2023, 3/10/2023, 3/17/2023, 3/24/2023, 3/31/2023
10. DHS/IV&V Check-in – 3/9/2023, 3/23/2023
11. Weekly Client BES 2023 Project Status Meeting – 3/1/2023, 3/8/2023, 3/15/2023, 3/22/2023
12. (External) Epic 110 Alerts and Special Indicators - Design Meeting- 3/1/2023
13. BES Exec Meeting Topics – 3/6/2023
14. Security Touchpoint – 3/2/2023, 3/8/2023, 3/15/2023, 3/22/2023, 3/29/2023
15. BES Touchbase Prep – 3/7/2023, 3/21/2023
16. (External) BES 2023 Project - Meet & Greet with OIT – 3/7/2023
17. (External) IBM Aspera SFTP– 3/10/2023
18. (External) ServiceNow for BES– 3/13/2023
19. March Mid-Month ASI/IV&V Findings Review – 3/15/2023
20. BES Security Controls tailoring – 3/3/2023, 3/7/2023, 3/10/2023, 3/14/2023, 3/23/2023, 3/24/2023, 3/28/2023
21. External - BES Data Conversion – Discuss FIS Data Extract – 3/15/2023
22. HI Testing and Implementation– 3/15/2023
23. Executive Steering Committee Meeting– 3/16/2023
24. Koolau Pilot Meeting & visit – 3/22/2023
25. (External Epic Demo) Epic 123 Client Management, Demographics, Citizenship (Manage Alias) – 3/22/2023

The background is a solid blue color. It features several decorative elements: a cluster of overlapping squares and rounded rectangles in the top-left corner, some with white outlines and others as solid light blue shapes; a single large white-outlined rounded square in the middle-left; and a few more squares and rounded rectangles scattered in the bottom-right area, some with white outlines and some as solid light blue shapes.

Appendices



Appendix A – IV&V Criticality Ratings

Criticality Rating	Definition
 H	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.
 M	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.
 L	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
- Requirements Analysis & Management
- System Design
- Configuration and Development
- Integration and Interface Management
- Security and Privacy
- Testing
- OCM and Knowledge Transfer
- Pilot Test Deployment
- Deployment

Ending Slide



Solutions that Matter

ID	Title	Reporter	Finding Type/Concern	Identified Date	Category	Description	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Client Comments	Vendor Comments
81	Gaps in test coverage and slower-than-expected progress in integration testing (IAT) may result in schedule delays if subsequent test phases uncover a higher volume of defects and user feedback than initially anticipated.	Ryan, Ryan	Testing Concern	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 epics 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 IAT exit criteria by June 16, 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 slower-than-anticipated progress throughout the project lifecycle increases the risk of encountering significant delays, extensions, or the introduction of defects into the production environment during the final testing stage, known as Final Acceptance Testing (FAT).	Monitor SIT closely for both breadth of depth of testing to ensure the system IAT is adequately tested. Develop and implement strict SIT exit criteria to ensure IAT begins with the best system possible.					Open		
82	The lack of technical documentation may lead to incorrect implementation statements or delay the System Security Plan	Heath, Dustin	Finding - Risk	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 1, 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.	Determine when the infrastructure design baseline will be completed. Determine when documentation will be created, updated, and available for the SSP authors. Collaborate and communicate with SSP authors about when relate and correct documentation will be available.	August 1st, when the full draft of the SSP is scheduled for completion.	3	3	Med	Open	5/31/2023 - The ASI is meeting in early June to develop a plan to complete the recommendations of this finding.	
80	Development delays could negatively impact the project schedule and delay go-live.	Fors, Michael	Finding - Risk	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 was challenged 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 BAAs lacking the expertise required to create optimal designs and system specifications that developers could consume without requiring extensive clarification from the ASI BAAs team. DHS and IVV observed instances where ASI BAAs/BAAs have presented less than optimal designs and left 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 - DHS request the 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 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 accurately and consistently reflected in the project schedule. + The ASI should provide DHS with the time needed to effectively evaluate the software demonstrations	Immediate	3	1	Low	Open	5/31/23 - The ASI is experiencing development delays. Two BES modules that had been completed by the previous ASI need unexpected rework (e.g., Self-Service Portal (SSP), Administrative Hearings). The ASI also decided to rewrite the SSP rather than upgrade the version of the software used to develop the module, which resulted in an unanticipated level of effort. The ASI intends to mitigate the Release 11 BES SSP development delay risks by deploying a planned late July dot release (Release 11.01) to User Acceptance Testing (UAT) after Release 11. This release will overlap with System Integration Testing and most of UAT but is planned to be tested before UAT ends to avoid impacts to the overall schedule and go-live. 4/30/23 - The ASI delayed six planned demonstrations of BES functionality to DHS. Release 0.11 (R11) development work is planned to be completed on June 1, 2023. The ASI should provide DHS with the time needed to effectively evaluate the demonstrations. Additionally, without transparency on the root cause of the delay and lack of accurate velocity reports, there may be downstream impacts. If ASI resources remain allocated to R11 while developing R12, they may experience unexpected delays for R12. 3/31/23 - The ASI is taking multiple actions to mitigate potential delays to development, including: - Monitoring the capacity of each development team, adding resources needed to complete work as scheduled. - Adding three highly skilled, veteran business analysts to improve system design that development teams will leverage. - Developing a dashboard view of Epics in progress showing status and progress as well as burndown and velocity charts to show team productivity. The project is halfway through release 0.11, and the ASI has demonstrated only two of the twenty-six Epics in scope for R0.11. It remains unclear if the project team can complete and demonstrate the remaining twenty-four Epics in the remaining three months of the release. 2/28/2023 - Though the Project transitioned to the new ASI, 5/31/2023 - The IVV team continues to assess current activities and timing for development and testing, verifying they align with the current schedule. The ASI published a calendar for the remaining Epic demos, as requested by DHS. However, both DHS and IVV remain concerned that most of the demos have either been pushed back or cancelled, which could lead to significant rework and schedule delays. IVV continues to evaluate the schedule and activities, focusing on consistency between these two gauges of the project progress. 4/30/2023 - Late in the month, the ASI committed to providing DHS and IVV a walkthrough of Jira, which is used to manage and report information to track the progress of testing and development work. With this additional knowledge, both DHS and IVV can validate the schedule(s) accurately reflect the project's effort and timing. 3/31/2023 - The ASI continues to incorporate details to the project schedules (Primary and DOI) to track all the activities in progress, including dev ops tasks. IVV will continue to validate that the schedules accurately capture the tasks and timing observed in the correlated workstreams and tools, such as Jira. 2/28/2023 - The BES Project schedule was approved on 2/15/23 and its development included DHS and ASI input to estimate the remaining work. Therefore, IVV changed the criticality rating from high to medium. 1/31/2023 - The new ASI submitted a draft schedule for review and is receiving comments from stakeholders. The schedule continues to be revised so that it can be approved and baselined. The current proposed go-live date could be delayed if there are substantial adjustments made to address feedback. 12/31/2022 - The Project completed transition activities and is preparing for a Project restart kick-off on January 17th. The new ASI plans to present an updated schedule during the kick-off. However, without prior review from stakeholders, the proposed schedule may cause further questions and discussions which may impact restart activities creating 5/31/2023 - The ASI made significant progress in mitigating this risk and has remedied many issues and complexities introduced previously. IVV continues to observe productive discussions and details of architecture progress while participating in the weekly project architecture meetings. Therefore, IVV has lowered the Criticality Rating from 'Medium' to 'Low'. 4/30/2023 - The ASI reports the Architecture & Infrastructure activities at 19 percent complete. ASI also reported that all the required BES infrastructure components have been acquired or licensed. The ASI carried out Proof of Concepts (POCs) for components such as Big Query and the audit framework. However, it is unclear whether other POCs will be performed to mitigate the potential complexities of implementing multiple components which may interact with one another. 3/31/2023 - The ASI is making updates to the B-12 System Architecture deliverable to reflect recent changes and expects more changes soon. The ASI made good progress on the buildout of their DevOps automation scripts that will allow them to manage the cloud environments more easily. Additional BES infrastructure tasks are being added to the project schedule and should be evaluated to determine if they impact the critical path. 2/28/2023 - Though the new ASI intends to simplify the BES infrastructure, it remains unclear whether that will be possible in a timely manner and avoid impacting the critical path. The new ASI also intends to expand on the previous ASI scope of DevOps by adding more automation. While this has the potential to simplify environment management, it could also present challenges without impacting the schedule. 1/31/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once related project activity has begun. 12/31/2022 - No material update in the reporting period as the work stoppage continued and the new ASI conducted restart planning. IVV will reassess this finding and our associated	
74	A BES Project schedule based on inaccurate estimations diminishes effective planning and resource management, which could result in late deliveries, cost increases, and a late go-live.	Molina, Brad	Finding - Issue	11/29/2021	Project Management	DHS and the ASI have tried multiple times to rework the schedule with results that have not yielded improvement. Concerns with the structure, estimating practices, and ability to manage to the schedule persist. The use of multiple tools to track resources obfuscate resource management. Previous IVV findings focused on specific schedule components such as resource management and critical path analysis, all of which were addressed and closed.	If estimates for project schedule activities are not accurate, this can lead to constant schedule changes, resources not being available when needed, rushed activities, and general frustration which can lead to schedule delays, low quality output, scope changes, and budget issues.	OPEN Monitor, evaluate and revise scheduling estimates for accuracy. Confirm current assumption that a delay with the current go-live date will not result in major implications. Add key milestones to the project schedule, such as sprint and epic demos, to show key progress towards completion of Epics. ASI plan and execute Epic development so that Epic Demos can occur earlier in the release schedule and allow time for possible revisions. COMPLETE DHS and the ASI agree to a revised schedule against which project deliverables can be managed. 1/28/2023 - completed CLOSED Leverage velocity and burn down charts to adjust development tasks estimates if needed. Leverage velocity and burn down charts to adjust development tasks estimates if needed. 4/30/2023 - ASI using Jira (Using the available tools, review the current estimates to complete each activity compared to past actual hours 1/31/2023 - new ASI - Not Started) Update as necessary and provide the DHS/ASI Project Managers with reports and data that accurately reflect the DHS/ASI resource needs along with over/under allocations of staff for the duration of the Project 1/31/2023 - new ASI - Not Started) Develop mitigation and contingency plans that are tracked/managed by DHS/ASI for all tasks that are behind schedule or are at risk of being behind schedule which includes resource management. 1/28/2023 - new ASI) Discuss, validate and address additional concerns within the project processes that may cause the project delays other than inaccurate estimates such as over reliance on POCs, slow design sprints, and cadence of development teams. 12/28/2023 - new ASI) The new ASI presents a draft schedule for DHS review/feedback in advance of the project restart kickoff. 1/13/2023 - Not Completed)	Immediate	4	2	Med	Open	5/31/2023 - The IVV team continues to assess current activities and timing for development and testing, verifying they align with the current schedule. The ASI published a calendar for the remaining Epic demos, as requested by DHS. However, both DHS and IVV remain concerned that most of the demos have either been pushed back or cancelled, which could lead to significant rework and schedule delays. IVV continues to evaluate the schedule and activities, focusing on consistency between these two gauges of the project progress. 4/30/2023 - Late in the month, the ASI committed to providing DHS and IVV a walkthrough of Jira, which is used to manage and report information to track the progress of testing and development work. With this additional knowledge, both DHS and IVV can validate the schedule(s) accurately reflect the project's effort and timing. 3/31/2023 - The ASI continues to incorporate details to the project schedules (Primary and DOI) to track all the activities in progress, including dev ops tasks. IVV will continue to validate that the schedules accurately capture the tasks and timing observed in the correlated workstreams and tools, such as Jira. 2/28/2023 - The BES Project schedule was approved on 2/15/23 and its development included DHS and ASI input to estimate the remaining work. Therefore, IVV changed the criticality rating from high to medium. 1/31/2023 - The new ASI submitted a draft schedule for review and is receiving comments from stakeholders. The schedule continues to be revised so that it can be approved and baselined. The current proposed go-live date could be delayed if there are substantial adjustments made to address feedback. 12/31/2022 - The Project completed transition activities and is preparing for a Project restart kick-off on January 17th. The new ASI plans to present an updated schedule during the kick-off. However, without prior review from stakeholders, the proposed schedule may cause further questions and discussions which may impact restart activities creating 5/31/2023 - The ASI made significant progress in mitigating this risk and has remedied many issues and complexities introduced previously. IVV continues to observe productive discussions and details of architecture progress while participating in the weekly project architecture meetings. Therefore, IVV has lowered the Criticality Rating from 'Medium' to 'Low'. 4/30/2023 - The ASI reports the Architecture & Infrastructure activities at 19 percent complete. ASI also reported that all the required BES infrastructure components have been acquired or licensed. The ASI carried out Proof of Concepts (POCs) for components such as Big Query and the audit framework. However, it is unclear whether other POCs will be performed to mitigate the potential complexities of implementing multiple components which may interact with one another. 3/31/2023 - The ASI is making updates to the B-12 System Architecture deliverable to reflect recent changes and expects more changes soon. The ASI made good progress on the buildout of their DevOps automation scripts that will allow them to manage the cloud environments more easily. Additional BES infrastructure tasks are being added to the project schedule and should be evaluated to determine if they impact the critical path. 2/28/2023 - Though the new ASI intends to simplify the BES infrastructure, it remains unclear whether that will be possible in a timely manner and avoid impacting the critical path. The new ASI also intends to expand on the previous ASI scope of DevOps by adding more automation. While this has the potential to simplify environment management, it could also present challenges without impacting the schedule. 1/31/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once related project activity has begun. 12/31/2022 - No material update in the reporting period as the work stoppage continued and the new ASI conducted restart planning. IVV will reassess this finding and our associated	
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 remains 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. Delay 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). IVV 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 tools they may not be familiar with in a complex infrastructure environment.	+ ASI develop a process to closely monitor cloud and other product changes (software updates/new releases), manage changes, and regression test once months updates are applied. - The project team work to establish strong governance over the utilization and maintenance of the various system tools/components. + ASI allot time in the schedule to conduct proof of concepts 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	2	2	Low	Open	5/31/2023 - The ASI made significant progress in mitigating this risk and has remedied many issues and complexities introduced previously. IVV continues to observe productive discussions and details of architecture progress while participating in the weekly project architecture meetings. Therefore, IVV has lowered the Criticality Rating from 'Medium' to 'Low'. 4/30/2023 - The ASI reports the Architecture & Infrastructure activities at 19 percent complete. ASI also reported that all the required BES infrastructure components have been acquired or licensed. The ASI carried out Proof of Concepts (POCs) for components such as Big Query and the audit framework. However, it is unclear whether other POCs will be performed to mitigate the potential complexities of implementing multiple components which may interact with one another. 3/31/2023 - The ASI is making updates to the B-12 System Architecture deliverable to reflect recent changes and expects more changes soon. The ASI made good progress on the buildout of their DevOps automation scripts that will allow them to manage the cloud environments more easily. Additional BES infrastructure tasks are being added to the project schedule and should be evaluated to determine if they impact the critical path. 2/28/2023 - Though the new ASI intends to simplify the BES infrastructure, it remains unclear whether that will be possible in a timely manner and avoid impacting the critical path. The new ASI also intends to expand on the previous ASI scope of DevOps by adding more automation. While this has the potential to simplify environment management, it could also present challenges without impacting the schedule. 1/31/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once related project activity has begun. 12/31/2022 - No material update in the reporting period as the work stoppage continued and the new ASI conducted restart planning. IVV will reassess this finding and our associated	

ID	Title	Reporter	Finding Type	Identified Date	Category	Description	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Initial Update	Client Comments	Vendor Comments
70	Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution	Fors, Michael	Risk	8/23/2021	Configuration and Development	The BI-6 DOI Plan Deliverable, Section 5.2 establishes the framework for the Configuration Management Plan, however, it remains unclear if sufficient progress has been made toward establishing CM processes and governance, selecting CM tools (e.g., CMDB), and building out the CM infrastructure. The project's Security Plan has yet to be finalized which may include additional requirements or decisions that could impact CM. The project currently relies on GitHub for tracking of source code configurations.	Configuration Management is a set of processes and procedures that ensures the BES is understood and works correctly. The BES solution includes tools that may provide a level of automation for Configuration Management that may reduce errors and should provide the project team with accurate, dynamic and timely information on some of the configuration items. However, it is critical that DHS/ASJ agree to the full list of items that are included in the configuration plan along with the details regarding the management of the configuration items, reporting and audit features.	OPEN - ASJ adhere to plans for configuration management as documented in BI-6 DOI Plan, Section 5.2 and clarify details and/or any changes with DHS. ASJ validates plans for configuration management with DHS and agree on a meaningful set of configuration items or settings they will track. DHS and ASJ work to clarify/validate plans for the potential use of configuration management tools, (CMDB/ETES) identify the DHS POC for the Configuration Management Activities that would provide oversight of configuration management activities and assure defined CM steps and plans are being followed, are effective, and are achieving DHS objectives for CM. 7/31/2022	ASAP	2	2	Low	Open	9/31/2023 - The ASJ continues to make progress with its utilization of the ServiceNow Configuration Management (CM) tool. They have recently performed an initial import of Google Cloud Platform server details into the ServiceNow Configuration Management Database. 4/26/2023 - The ASJ finalized the ServiceNow (SN) modules they will utilize for the project. 3/31/2023 - The ASJ is currently evaluating which Service Now (SN) modules will be the best fit for the project and for DHS going forward. Details of configuration management and the level of configuration management they intend to perform has yet to be determined. 2/28/2023 - The new ASJ intends to utilize ServiceNow (SN) for most configuration management tracking. Details of exactly how they'll be using SN and its multitude of modules and capabilities remain unclear. 1/31/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once related project activity has begun. 12/31/2022 - No material updates in the reporting period as the work stoppage continues and the new ASJ conducted restart planning. IVV will reassess this finding and our associated recommendations once more is known. 11/30/2022 - No material updates in the reporting period as the work stoppage continues and the new ASJ conducts restart planning. 10/31/22 - No work has been performed regarding this finding due to the work stoppage and ongoing transition to the new ASJ. IVV will reassess our recommendations for this finding once more is known. 09/29/22 - The ASJ announced the departure of key resources including their lead CM strategists, which could exacerbate this risk. With the recent work stoppage and planned management, IVV is not aware of the plans to mitigate this risk. 08/30/22 - The ASJ updated the Configuration Management Plan (CMP) with additional configuration management details. 07/27/22 - DHS has identified technical and functional primary points of contact for ASJ to work with for configuration	9/9/2021 - RAP: We look forward to receiving specific inquiries from the IVV team on configuration management and having conversations. We do acknowledge that the plan likely will be updated to reflect the processes in place on the project for configuration management.	
67	The Americans With Disabilities Act (ADA) section 508 compliance has not been installed for the Project, which may cause significant rework.	Tan, Ryan	Finding - Risk	7/22/2021	Testing	While R0.3 and R0.4 reported that Section 508 compliance had been successfully completed the ASJ confirmed that there is currently no working tool installed and that Section 508 compliance has not been performed. This risk has been discussed with the ASJ over the past several months, but there have been evidence of results. The ASJ did state that they are coding to some of the ADA requirements and are using a desk top tool to ADA compliance as an interim solution. IVV has not received any data to demonstrate the desk top tool results nor if it provides coverage for ADA compliance items.	There is a contractual obligation and requirement for BES to be ADA compliant to obtain State and Federal funds for the development of the BES. The ADA Section 508 intent is to make electronic and information technology accessible to people with disabilities (e.g., color blindness, vision and hearing disabilities), in a way that is comparable to the access available to others. Part of the system acceptance criteria for BES is to meet all applicable State and federal policies, laws, regulations, and standards, including without limitation the Electronic and Information Technology Accessibility Standards associated with Section 508 of the Rehabilitation Act, which was verified in the ASJ proposed Technical Requirements Approach that states "The system complies with DHS branding standards as defined by DHS and adheres to W3C level 2 accessibility guidelines, sub-parts of Section 508 of the Americans with Disabilities Act (ADA), nondiscrimination safeguards in 45 CFR 85", if the Hawaii guidelines (https://www.hawaii.edu/access/uh-guidelines-for-accessibility/), FNS Guidelines from the 901 Handbook, and contractual obligations to adhere to the Section 508 compliance guidelines (https://section508.gov/); there may be a significant amount of rework to the solution.	1/31/2022 - The following recommendations will be evaluated for this finding. The ADA tool meets contractual and project requirements. The ASJ communicates a plan for ADA test execution. The ASJ communicates how the tool will be used to report compliance and non-compliance and how non-compliance will be addressed/corrected. The ADA communicates how and when DHS/IVV will be provided the reports from the ADA tool execution and how to interpret the results. Supersedes 02/30/2022 - The ASJ should gain DHS' approval on the tool selected after the ADA validates it will perform as expected within the BES architecture, meeting all contractual and project requirements. The ASJ create and communicate the plan for when the ADA compliance tool will be put into action, how the tool will report compliance or non-compliance, how non-compliance will be corrected, and how and when DHS/IVV will be provided the reports from the ADA compliance tool and how to interpret those reports for the code from previous, current and future releases.	As soon as possible	3	3	Med	Open	5/31/2023 - The ASJ is preparing to assess the BES system using the selected ADA compliance tool and plans to establish the first preliminary results on June 7, 2023. 4/30/2023 - The Project adopted Usability.net to perform ADA compliance testing. In addition, the ASJ continues to enhance automated compliance testing. 3/31/2023 - The ADA compliance tool currently used within DHS does not work the BES architecture. The ASJ is evaluating an ADA compliance tool and is working with DHS to validate it will meet requirements. In the interim, the ASJ implemented automated testing to check for screen reading compatibility. 2/28/2023 - The Project is evaluating different ADA compliance tools. DHS currently uses Site Improbe in other areas and the ASJ is reviewing its feasibility for this project. The ASJ requested access to the Site Improbe tool for a Proof of Concept (POC) Additionally, the ASJ previously evaluated Usability.net and will use it if the Site Improbe POC is unsuccessful. 1/31/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once related project activity has begun. 12/31/2022 - No material updates in the reporting period as the work stoppage continues and the new ASJ conducted restart planning. IVV will reassess this finding and our associated recommendations once more is known. 11/30/2022 - No material updates in the reporting period as the work stoppage continues and the new ASJ conducts restart planning. 10/31/2022 - No work has been performed regarding this finding due to the work stoppage and ongoing transition to the new ASJ. IVV will reassess our recommendations for this finding once more is known. 9/30/2022 - DHS issued a work stoppage, and no progress was made to move forward with purchasing the ASJ recommended ADA compliance tool. 8/30/2022 - No change in status. Waiting on DHS acceptance/approval to move forward with purchase, installation, configuration, and implementation of the ASJ recommended	9/9/21 - RAP: The ASJ has invited the IVV to make contact with the IVV to review the results of the desk top tool and the IVV has not contacted the development team to have further discussions on this topic.	
63	The lack of early planning and coordination with interface partners may result in schedule delays.	Reynolds, Mark	Finding - Risk	1/21/2021	Integration and Interface Management	The following planning and execution items have not yet been addressed and determined by the ASJ - Connectivity is planned to utilize a presently undefined ETS AP gateway; however, there is no evidence that details have been determined or documented in this regard - There is little evidence of active and sufficient communication with interface partners for coordination, design, and testing activities (DHS Test, SIT, UAT). Interface planning and execution tasks and activities, including those for interface partners, are neither resident nor managed within the Project Schedule.	DOI project often underestimate the time needed to effectively manage all the tasks and activities to successfully implement data sharing. 6. Confirm testing dates with interface partners in writing. 7. Complete early proof of concept interfaces to avoid unexpected delays due to external organization miscommunications or their own internal delays in assisting the BES project. COMPLETE 1. Establish a communication plan for each interface partner for the duration of the BES DOI activities. COMPLETED 10/29 - Identify and document all interface partners' contracts. COMPLETED 3/3/2022 3. Define a release schedule for each interface to include milestone dates, coordination, and execution and share with the interface partners. COMPLETED 01/04 4. Determine which deliverable will include the details associated with the planned connectivity and detailed technical designs of all interfaces. COMPLETED 01/04	OPEN 5. Complete all MOAs and obtain formal approvals. 6. Confirm testing dates with interface partners in writing. 7. Complete early proof of concept interfaces to avoid unexpected delays due to external organization miscommunications or their own internal delays in assisting the BES project. COMPLETE 1. Establish a communication plan for each interface partner for the duration of the BES DOI activities. COMPLETED 10/29 - Identify and document all interface partners' contracts. COMPLETED 3/3/2022 3. Define a release schedule for each interface to include milestone dates, coordination, and execution and share with the interface partners. COMPLETED 01/04 4. Determine which deliverable will include the details associated with the planned connectivity and detailed technical designs of all interfaces. COMPLETED 01/04	Q3 2023	4	1	Low	Open	05/31/2023 - Interface definitions and partner agreements incomplete for the following interfaces: NDM (National Directory of New Hires) DOI (Department of Justice), DSH (Department of Social and Industrial Relations) HYCF (Hawaii Youth Correctional Facility) DoTA (Department of Taxation) AVS (Asset Verification Services) Hawaii Child Support Enforcement Agency. Completing these open items will support the ASJ in completing the interface development in Release 12. 04/27/2023 - The ASJ took positive action on this risk during this reporting period. The interface dashboard was revised and updated to provide the information necessary to manage this activity. The MOA's continue to be reviewed and updated, if needed. 03/31/2023 - Interface design began in March with the Department of Health (DOH) vital records data exchange. The ASJ created an interface dashboard in Confluence which shows several near-term Epic start dates, but key details are not yet completed for all interfaces. The interfaces are also included in the DOI schedule under Release 12. The ASJ will assess the IVV recommendations as interface work proceeds. 02/28/2023 - The new ASJ is reviewing all the BES interfaces and is building a Confluence dashboard to track and progress and status of each interface. 01/31/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once related project activity has begun. 12/31/2022 - No material updates in the reporting period as the work stoppage continued and the new ASJ conducted restart planning. IVV will reassess this finding and our associated recommendations once more is known. 11/30/2022 - No material updates in the reporting period as the work stoppage continues and the new ASJ conducts restart planning. 10/31/22 - No work has been performed regarding this finding due to the work stoppage and ongoing transition to the new ASJ. IVV will reassess our recommendations for this finding once more is known. 09/29/22 - No	7/20/21 - RAP: The ASJ team requests that the IVV reassess the schedule metrics in light of the following reasons: a) the ATC schedule extension has made the urgency for tackling these tasks less than it was before that started lessening the schedule risk b) the increase from Medium to High in May was based on a misunderstanding of the MOA's and contract metrics; c) substantial progress has made against each of the In Progress recommendations, and it continues to trend in the right direction. In regards to	
29	Uncertainty and/or a lack of communication around long-term architectural decisions could impact the project budget, schedule, system design, and planning decisions.	Fors, Michael	Finding - Issue	5/28/2019	Project Management	Throughout the last several year since project initiation, platform and BES system architecture decisions have not always been clearly communicated and socialized to all relevant project stakeholders. For example, the ASJ and DHS had not broadly communicated their decision implementing two Sabel instances (one for KOLLA, one for BES) in a timely manner, and the decision was not immediately reflected in the project change log or the project decision log. Further, the details of the rationale for this decision or the plan for integrating the two instances were not immediately and/or broadly communicated.	The current project architecture and design should be as representative and inclusive of all known future solution plans as soon as details become available. These architecture plans and future state designs and capabilities should be thoroughly vetted by a broad base of relevant stakeholders and available experts and broadly communicated to relevant stakeholders as soon as possible. Architecture plans and changes that are not effectively communicated can lead to confusion and rework. For example, if infrastructure tools, governance for these tools, and important capabilities/features of these tools are not clearly communicated to development teams, they may have to rework their designs once they realize more advanced platform capabilities/features are available after development planning has completed.	- The ASJ continue to make updates to the BI-6 System Architecture Deliverable with additional details as they become available and with any finalized architectural changes - DHS should finalize the Portal strategy and implementation details and clearly communicate out to stakeholders and project teams. Complete 3/11 - The Project should continue to vet possible architectural change impacts to the platform (e.g., ADA, Configuration Management tools), and M, D, MGD, and BES systems before finalizing architectural decisions. - DHS continue to request ASJ perform due diligence in any recommendation for foundational architecture change decisions and continue to review with appropriate DHS stakeholders to assure a common understanding of the implications of these decisions. - The Project should continue to ensure communication between development leads and architecture leads to assure optimal collaboration on possible architecture capabilities/features and changes that could impact planning and decisions in each area. - Maintain current communication processes to ensure regular communication between the architecture team and the rest of the project team to assess impacts of architecture decisions to the Project. CLOSED 11/30/2022	ASAP	2	2	Low	Open	5/31/2023 - Met QUEST Division (MQD) leadership expressing there is ambiguity on the 2-portal scope-of-work and features (COLLA) migration with BES). The ASJ plans to meet with MQD and other stakeholders to resolve any confusion and will include a broader MQD audience in future MQD/Benefit, Employment, and Support Services Division (BES03) collaboration efforts. 4/30/23 - No material updates in the reporting period. 3/31/2023 - The ASJ continues to reevaluate previous infrastructure decisions and is recommending other tools they have deemed a better fit for this project. Uncertainty remains around the use of some tools including ServiceNow (SN), Splunk, and Chronicle. The ASJ will go live with their identified 2-portal (BES and KOLLA) strategy but may initially go live with less functionality than originally planned and/or communicated. 2/28/2023 - The ASJ has made efforts to clarify the scope of BES 2023 in the recent Agile training sessions. There remains some uncertainty around the use of ServiceNow (SN) and the tools that will be utilized for eSIC. 01/31/23 - It remains unclear if the scope of the BES 2023 phase 1 has been clearly communicated to stakeholders. For some, the understanding is that the ASJ is developing a lift-and-shift of their existing legacy system (HAWM) with little to no improvements (to avoid scope creep) and have labeled it HAWM 2.0. Others seem to think the ASJ will continue the work of the previous ASJ that include improvements based on previous ASJ design sessions. 12/31/22 - IVV and some DHS stakeholders remain concerned with the lack of clarity and lack of communication around the plans for and capabilities of the BES public portal. 11/30/22 - The new ASJ is developing its communication plans so its unknown at this time if their process will improve this issue. IVV notes one specific area that does need additional communication to the project team is the plan and future use of the BES portal. The previous ASJ had built the bulk of the portal (based on iKefay)	06/30/2020 - Combined application is still planned. App still not finalized by DHS. From Arch perspective, we are building in library. Future integration with BES of the portals is still to be determined, but is not more complex than originally planned for data sharing. If change is made to Adobe, this would require a CR. We expect that final decisions will likely be made during this reporting period and communicated to the project. The ASJ refers the IVV to our February update regarding Recommendation #3. From our perspective all necessary actions are complete. If the IVV does not believe it is Complete we request supporting detail. 4/23/21 rap - The ASJ and DHS continue to refine the final plan for the two portal project. We expect that	