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April 21, 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, Med-QUEST Division, Health Analytics Program.

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

Sincerely,

Douglas Murdock (Apr 21, 2023 12:30 HST)

Douglas Murdock
Chief Information Officer
State of Hawai'i

Attachment

Hawaii Department of Human Services Systems Modernization Project

Final IV&V Status Report
for Reporting Period: March 1 – 31, 2023

Submitted: ***April 17, 2023***

PUBLIC CONSULTING GROUP

Solutions that Matter

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

PUBLIC CONSULTING GROUP
Solutions that Matter

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
H	M	M	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.

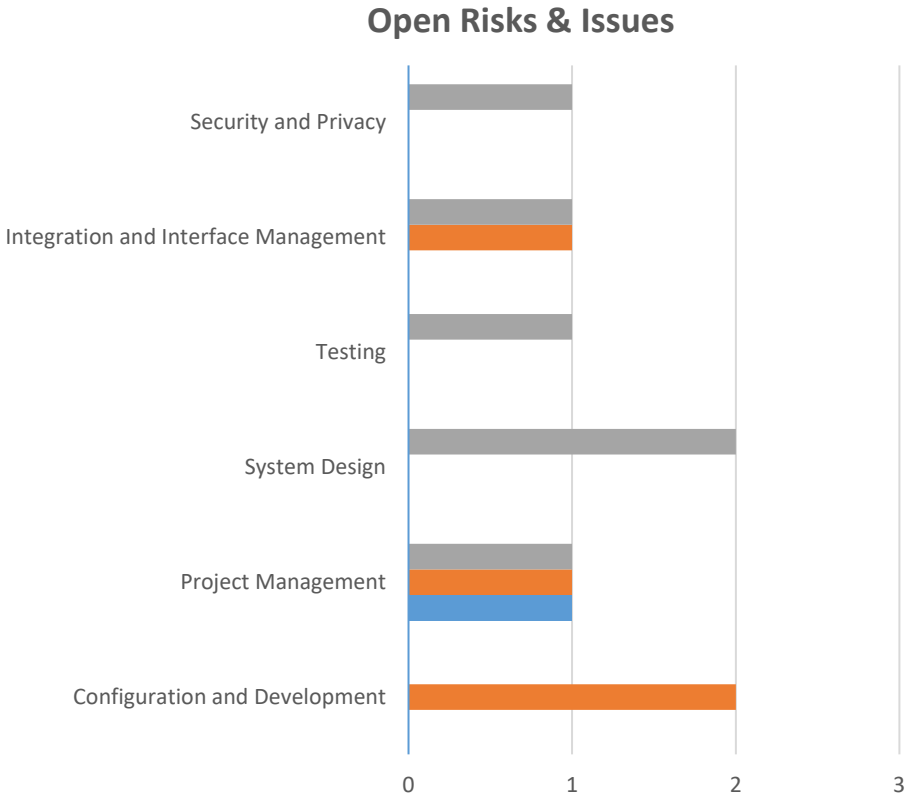
Executive Summary

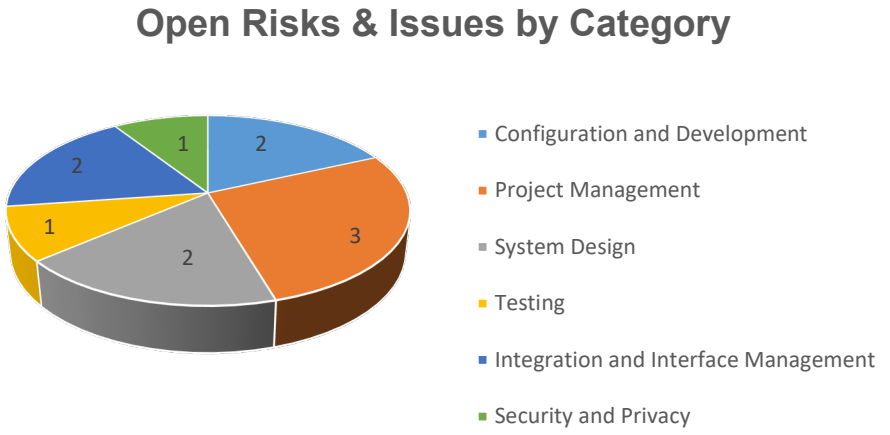
Jan	Feb	Mar	Category	IV&V Observations
M	M	M	System Design	The design sessions that occurred in this reporting period were ASI-internal or ad-hoc meetings with specific DHS Subject Matter Experts. The ASI is planning to expand demonstration participation with more DHS and IV&V staff to ensure the requirements 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

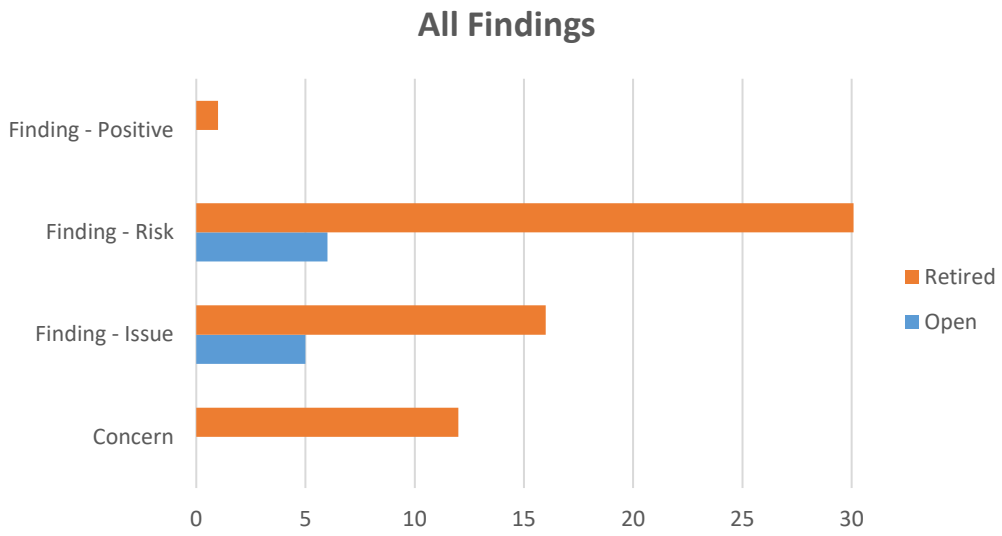
As of the March 2023 reporting period, PCG is tracking 11 open findings (6 risks, 5 issues) and has retired a total of 64 findings. All these findings were opened during the tenure of the prior ASI. Of the 11 open findings, 1 is a High criticality rating, 6 are Medium, and 4 are Low.





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	**Risk - Volunteer DHS resources leaving the Project may lead to schedule delays, lowered morale, and burnout.** 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.	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	**Issue – Uncertainty and/or a lack of communication around long-term architecture decisions could impact the project budget, schedule, system design, and planning decisions.** 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.	L

Recommendations	Progress
• 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
• 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
• 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	**Issue – DHS PMO project team members have transitioned off the Project, which may cause gaps in knowledge transfer and leadership on the Project**. 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.	H

Recommendations	Progress
• DHS continue to work with the appropriate organizations to identify the funds necessary to fill these positions.	In process
• 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	**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.** 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.	M

Recommendations	Progress
• Monitor, evaluate and revise scheduling estimates for accuracy.	In process
• Confirm current assumption that a delay with the current go-live date will not result in major implications.	In process
• 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	**Risk – The lack of early planning and coordination with interface partners may result in schedule delays.** 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.	L

Recommendations	Progress
• Complete all MOAs and obtain approval.	In process
• Confirm testing dates with interface partners in writing.	In process
• 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	**Issue – External vendor delays in the development of the BES task management system interface have impacted the project schedule.** 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.	M

Recommendations	Progress
• The ASI re-establish regular collaboration meetings with C!A to assure strong communication and brainstorm optimal solutions for BES integration with Current.	In process
• 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	**Risk – Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution.** 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.	L

Recommendations	Progress
• 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
• ASI validate plans for configuration management with DHS and agree on a meaningful set of configuration items or settings they will track.	In process
• 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	**Risk – Development delays could negatively impact the project schedule and delay go-live.** 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.	

Recommendations	Progress
• 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
• 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	**Issue – Poorly executed JAD and "design sessions" could lead to inaccurate design and rework.** 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.	M

Recommendations	Progress
• The facilitator should use their expertise to drive discussions through leading questions.	In process
• BAs should come to design sessions fully prepared to facilitate discussion on the topic(s) of the design session.	In process
• The ASI to bring User Experience (UE) designers to engage with DHS and review the currently built BES solution.	Complete
• 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	**Risk – The planned BES infrastructure is complex which could be difficult to implement and maintain and could lead to schedule/cost impacts.** 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.	M

Recommendations	Progress
• 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
• 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
• 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.	Not started
• ASI allot time in the schedule to conduct proof of concepts to assure infrastructure components work as expected.	Not started
• 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	**Risk - The Americans With Disabilities Act (ADA) Section 508 compliance tool has not been installed for the Project, which may cause significant rework.** 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.	M

Recommendations	Progress
• The ADA tool meets contractual and project requirements.	In process
• The ASI communicates a plan for ADA test execution.	In process
• 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
• 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	**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.** 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.	M

Recommendations	Progress
• The ASI continues to develop the BI-13 Security Plan in close collaboration with DHS.	In process
• 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
• 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

- 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

Additional Inputs

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

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	Identified Date	Category	Observation	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Status Update	Client Comments	Vendor Comments
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 BAs lacking 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 BAs/SAs 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 • 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 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.	Immediate	3	1	Low	Open	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, many of the development team that was subcontracted to the previous ASI remain on the Project. However, the new ASI has significantly increased their resources (now totaling 137), which may mitigate this risk. Therefore, IV&V lowered the criticality rating of this finding from medium to low. IVV will continue to closely monitor this risk and look for evidence the added resources includes skilled developers that can drive the productivity of less experienced developers. 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 recommendations once more is known. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI 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 ASI. IVV will reassess our recommendations for this finding once more is known. 09/29/22 - The ASI has announced the departure of key		
79	External vendor delays in the development of the BES task management system interface have impacted the project schedule.	Reynolds, Mark	Finding - Issue	6/3/2022	Integration and Interface Management	Current (previously known as ePathos) is a task management system developed by the Change and Innovation Agency (CIA). The Department of Human Services (DHS) uses the Current system to manage and create case related tasks. The Benefits Eligibility Solution (BES) will interface with the Current system to manage tasks. The BES system will create tasks and will send them to Current. BES does not have the capabilities to manage or close the tasks. The intended task management process for BES include Eligibility Workers claiming tasks and Supervisors will manage tasks from within the Current system. The webhook is being designed by CIA that will provide task details for cases that have been tagged as No Contact.	The BES Project expected the CIA developed Current interface (aka., webhook) to be completed by 04/07/2022. CIA reported that the webhook development work would be done by 05/27/2022. As of 05/25/2022, the ASI has not received any status from CIA. The webhook delay has previously impacted the projects critical path.	The ASI re-establish regular collaboration meetings with CIA to assure strong communication and brainstorm optimal solutions for BES integration with Current. The ASI provide test results from the task management integration to ensure that the interface works.	Q3	5	1	Med	Open	03/31/2023 - 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. IVV will continue to monitor the subject of this finding and the related project activities. 02/28/2023 - The Project has upcoming designs (Epic 104) that involve the BES task management system. The new ASI has engaged DHS to meet with the task management system vendor. 01/31/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once we have visibility into the progress of related project activity. 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 recommendations once more is known. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI 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 ASI. IVV will reassess our recommendations for this finding once more is known. 09/30/22 - No material update in the reporting period. 08/30/22 - No material update in the reporting period. 08/01/2022 - DHS has decided not to establish an agreement with CIA (the task management vendor) because DHS currently has a subscription that includes the BES requirements. In addition, DHS and the ASI have established biweekly meetings with the task management vendor. 06/30/2022 - The task management system vendor provided details regarding the webhook at a recent meeting with DHS, allowing for related BES development to commence. DHS is determining the type of agreement required with this interface vendor. Based upon receiving the needed information, IVV is reducing the criticality rating to 'Medium'. 06/02/2022 - Issue created.		
74	A BES Project schedule based on accurate estimations diminishes effective planning and resource management, which could result in late deliverables, 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 IV&V 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. Leverage velocity and burn down charts to adjust development tasks estimates if needed. COMPLETE DHS and the ASI agree to a revised schedule against which project deliverables can be managed. (2/28/2023 - complete) CLOSED 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 POs, slow design sprints, and cadence of development teams. (2/28/2023 - new ASI) The new ASI presents a draft schedule for DHS review/feedback in advance of the project restart kickoff. (1/31/2023 - Not Completed)	Immediate	4	2	Med	Open	3/31/2023 - The ASI continues to incorporate details to the project schedules (Primary and DDI) 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 immediate delays. IV&V added a recommendation regarding DHS/ASI collaboration on the schedule. 11/30/2022 - The Project is reviewing and revising the BI-5 Project Schedule to reflect the new implementation approach, and to align with updated project deadlines, resources, and scope. An updated Project Schedule is expected for the Project restart kick-off in early January 2023. 10/31/2022 - A project schedule documenting post-transition activities and project execution activities of the new ASI has not been developed. Without a realistic project schedule based on accurate estimates, it is difficult for the Project to plan future activities, estimate staffing needs, and uncover possible gaps in knowledge transfer. 9/30/2022 - The ASI did not deliver a revised BES Project Schedule prior to DHS issuing the work stoppage on September 9, 2022. Regardless of the BES move		
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 the BES infrastructure and the additional costs and time to configure, test, and implement the planned complex environment remain unclear. 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 tools they may not be familiar with in a complex infrastructure environment.	• ASI clearly communicates the potential costs and schedule impacts to implement and maintain 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. • 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. • 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. • 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 month	3	3	Med	Open	3/31/2023 - 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 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 recommendations once more is known. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI conducts restart planning. 10/31/2022 - The previous ASI was largely responsible for the infrastructure design and build out, these responsibilities are now transitioned to the new ASI. The previous ASI is performing knowledge transfer (KT) to the new ASI; however, IVV is concerned that KT will suffer given the complexity of the infrastructure and that some of the new ASI resources appear to lack significant experience with some of the tools and techniques used. IVV will reassess our recommendations for this finding once more is known. 9/30/2022 - The ASI announced the departure of key infrastructure resources who have provided leadership to the infrastructure efforts, which could exacerbate this risk.		

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70	Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution	Fors, Michael	Finding - Risk	8/23/2021	Configuration and Development	The BI-6 DDI 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 projects 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 some 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/ASI 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 • 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. • ASI validate plans for configuration management with DHS and agree on a meaningful set of configuration items or settings they will track. • 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. COMPLETED • 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	3/31/2023 - 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 and to be determined. 2/28/2023 - The new ASI 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 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 recommendations once more is known. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI 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 ASI. IVV will reassess our recommendations for this finding once more is known. 09/29/22 - The ASI announced the departure of key resources including their lead CM strategist, which could exacerbate this risk. With the recent work stoppage and planned reassignment, IVV is not aware of the plans to mitigate this risk. 08/30/22 - The ASI updated the Configuration Management Plan (CMP) with additional configuration management details. 07/27/22 - DHS has identified technical and functional primary points of contacts for ASI to work with for configuration management efforts. IVV remains concerned that some configuration management (CM) details have yet to be finalized and the lack of clarity around the CM database (CMDB) tools. For example, it remains unclear what CMDB tool will be used if Service Now is not part of the GCP change request. 06/30/22 - The Project previously stated its intention to utilize		9/9/2021 - RAP: We look forward to receiving specific inquiries from the IV&V team on configuration management and having conversations. We do acknowledge that the plan likely needs to be updated to reflect the processes in place on the project for configuration management.
68	Incomplete implementation statements in the BES System Security Plan may lead to delays in gaining Federal Partner approval for the BES Project to begin the Pilot Phase.	Heath, Dustin	Finding - Risk	7/28/2021	Security and Privacy	Over the last several months, the BES project team has been working through the planning efforts to develop the BI-13 Security Plan while also managing through ASI Security Lead staffing changes. DHS and the ASI agreed to modify the BI-13 Security Plan Deliverable Expectation Document (DED) last month and are currently revising it to align to the requirements and changes to the project since inception.	The BES project must have a clear plan to define, implement, test, and validate all Security and Privacy Requirements/Controls prior to entering the Pilot phase. There are many standards that must be met, and the project team plans to utilize the BES Security Control Implementation Workbook to document the status of each control. The Security Control Implementation Workbook must be detailed and allow for ease of referencing to the Security Policies, Standards, Controls, and implementation plan along with evidence for each control.	OPEN - The ASI continues to develop the BI-13 Security Plan in close collaboration with DHS. - An eGRC system be included in a future Advanced Planning Document to seek federal funding assistance for licensing and implementation. COMPLETE - DHS and the ASI agree upon the tools and processes 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 3/31/2023 - ASI ensure that the ASI Security Lead has a depth of experience in NIST 800-53 and experience authoring implementation statements of System Security Plans (SSP). Complete 2/28/2023 - DHS review the proposed staff resume, interview individual, and approve resource to ensure that they meet the position's contractual requirements. Complete 2/28/2023 - DHS and the ASI agree and finalize the BI-13 DED. 1/4/22 Complete - ASI, per DHS guidance, should begin to pivot toward the adoption of 800-53 Rev 5 since Rev 4 will be obsolete when the system goes live. COMPLETE 3/31/2022 -DHS should determine the FNS requirements for go live based on their meeting and provide ASI with proper guidance. FNS requirements should be documented as part of BI-13 Security Plan COMPLETE 3/31/2022 - ASI have a security SME attend the weekly security planning meetings and workshops. COMPLETE 7/31/2022 - ASI add a Security Architect to the Project ASAP to assist with the Security Plan activities. COMPLETE 11/30/2022	ASAP	3	3	Med	Open	03/31/3023 - 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. 2/27/2023 – The new ASI began weekly status meetings for the security stakeholders in February. The ASI presented and clearly articulated an approach to developing the System Security Plan. This includes the selection of the controls for the SSP and is consistent with NIST 800-53 guidance. At the end of February, the ASI and DHS began the controls selection process for a NIST 800-53 moderate SSP. Additionally, the ASI and DHS have begun discussing selecting an eGRC system. However, after looking at the Service Now GRC module, it appears to be cost-prohibitive. The ASI continues to look at options for a GRC system while continuing to use AHA as a repository for the SSP. Based on the current status of security activities IVV lowered the criticality rating to Medium. 1/31/2023 - The new ASI has published a project schedule that shows the BES Security Plan completion in early March. With the significant amount of work required to complete, including work that DHS must perform, IVV is concerned that this timeline may be unrealistic. 12/31/2022 - There remains a significant amount of work to plan, implement, test, and approve all Security and Privacy controls prior to starting the BES Pilot. The controls should be implemented and documented in a manner that allows effective maintenance. 11/30/2022 - The new ASI has named its Security Lead. As one of the five key project resources, IVV recommends that DHS review and approve this proposed staff to ensure that they meet the position's contractual requirements. 10/31/2022 - With the transition to the new ASI, the key position of Security Lead will be filled by a new		9/9/2021 - RAP: The decision to move to GCP for deployment has driven the need for a complete rewrite of the security plan per DHS. The ASI is in the process of planning the effort to make these updates. The effort required to complete this work will be included in either the GCP change request or a new change request We look forward to additional discussions with IV&V and DHS.
67	The Americans With Disabilities Act (ADA) Section 508 compliance tool has not been installed for the Project, which may cause significant rework.	Tan, Ryan	Finding - Risk	7/12/2021	Testing	While R0.3 and R0.4 reported that Section 508 compliance had been successfully completed the ASI confirmed that there is currently no working tool installed and that Section 508 compliance testing has not been performed. This risk has been discussed with the ASI over the past several months, but there have been evidence of results to-date. The ASI did state that they are coding to some of the ADA requirements and are using a desk-top tool for 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 all 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 ASI 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 ASI communicates a plan for ADA test execution. - The ASI communicates how the tool will be used to report compliance and non-compliance and how non-compliance will be addressed/corrected. - The ASI communicates how and when DHS/IVV will be provided the reports from the ADA tool execution and how to interpret the results. Superseded 8/30/2021 - The ASI should gain DHS' approval on the tool selected after the ASI validates it will perform as expected within the BES architecture, meeting all contractual and project requirements. The ASI 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	3/31/2023 - 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. 2/28/2023 - The Project is evaluating different ADA compliance tools. DHS currently uses Site Improve in other areas and the ASI is reviewing its feasibility for this project. The ASI requested access to the Site Improve tool for a Proof of Concept (POC) Additionally, the ASI previously evaluated Usability.net and will use it if the Site Improve 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 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 recommendations once more is known. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI 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 ASI. 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 ASI 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 ASI recommended ADA compliance tool. 7/27/2022 - The ASI successfully completed the ADA compliance tool proof of concept and provided reports to DHS for their review and approval. The final steps remaining would be the purchase, installation, and implementation of the tool. 6/29/2022 - The ADA compliance tool is still in the trial phase and a		9/9/21 - RAP: The ASI has invited the IV&V to make contact with the development team to review the results of the desk-top tool to gain insight. To date, the IV&V has not contacted the development lead 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 documented by the ASI.- Connectivity is planned to utilize a presently undefined ETS API 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 (Unit Test, SIT, UAT).- Interface planning and execution tasks and activities, including those for interface partners, are neither resident nor managed within the Project Schedule.	DDI project often underestimate the time needed to effectively manage all the tasks and activities to successfully implement data sharing. A clearly defined communication plan and schedule that includes the coordination, planning, and execution activities along with milestone dates can minimize the risk of potential delays. In addition, after planning has been completed, interface partners will have to be available during interface implementation to ensure that the interfaces are properly developed and tested before deploying the system to production.	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 DDI activities. COMPLETED 10/29 2. Identify and document all interface partners' contacts. COMPLETED 3/31/2022 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	Q4 2021	4	1	Low	Open	03/31/2023 - 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 IVV recommendations as interface work proceeds. 02/28/2023 - The new ASI 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 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 recommendations once more is known. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI 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 ASI. IVV will reassess our recommendations for this finding once more is known. 09/29/22 - No material update in the reporting period. 08/26/2022 - The statuses of the three remaining required agreements (DAGS, DLIR, HYCF) have not changed. 08/01/2022 - DHS executed the DPS agreement (MOA) on 07/20/2022. The statuses of the three remaining required agreements are as follows. The DAGS agreement is moving forward with design work. DHS reviewed the DLIR MOA and resubmitted it to DLIR. The latest draft of the HYCF was sent to the DHS Directors' office with feedback from BESSD and MCD. 06/30/2022 - There are 4 agreements outstanding (DAGS, DLIR, DPS, and HYCF). DHS plans to discuss the agreement at the next meeting with DAGS, which is tentatively scheduled for 07/06/2022. DHS is currently reviewing		7/20/21 RAP - The ASI team requests that the IV&V reassess the severity of this risk 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 current state of the MOA's and contact 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

ID	Title	Reporter	Finding Type	Identified Date	Category	Observation	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Status Update	Client Comments	Vendor Comments
61	Poorly executed JAD and design sessions could lead to inaccurate design and rework.	Molina, Brad	Finding - Issue	11/30/2020	System Design	ASI-led Workflow JAD sessions have been held for CMM, with the following concerns being observed, - No clear introduction to all participants on the goal of the JAD, overview on the process and the importance of their participation. - On many occasions the conversation needed to be driven by leading questions, as expected, but was instead lead by business users - Too much pause time when participants did not know the answer to a question; several occasions where complete silence on the call for 30 seconds or more - Lack of thought leadership from the ASI on how workflow could be designed to ease/improve process for client	The CMM Workflow JAD sessions restarted in November. DHS indicated some concern regarding the CMM Workflow JAD sessions, specifically; (1) Do the JAD participants understand how the Case will be managed through workflow? (2) What improvements will be made in the new BES to support the users and clients? Incomplete or unclear JAD sessions with insufficient documentation could lead to a poor design, lacking the details needed to support business requirements; as well as missing opportunities to improve workflow and related system design.	OPEN - The facilitator should use their expertise to drive discussions through leading questions. - BAs should come to design sessions fully prepared to facilitate discussion on the topic(s) of the design session. - ASI to quickly gain lessons learned to apply to future sessions. Closed - JAD and design sessions should be lead by experienced senior BAs, with goals, objectives and results communicated to all participants. (additional Senior BA being added, rest of recommendation being met - Closed 4/30/2022) - The DHS and ASI product owners should actively participate to ensure the system meets the requirements, designed taking advantage of new technology and aligns to the 'to be' business process. (Closed 4/30/2022) - The ASI should back-track significant differences in design direction to determine the root cause to identify these items as early in the SDLC as possible. - The ASI to bring User Experience (UE) designers to engage with DHS and review the currently built BES solution. COMPLETE - The Product Owners should have more direct interaction with the development team, proactively seeking collaboration. 10/5/21 Complete - The Functional Design Document process, to include the Design Sprint concept, should be clearly defined and shared with all project team members. (Closed, 1/31/2022) - Invite IVV to all future design sessions and design sprints to allow IVV to observe and assess the effectiveness of the revised design processes. (Closed, 1/31/2022) - ASI and DHS should work together to vet the in-progress design with all SMEs for the area of focus. (being met by new design sprint process, closed 2/28/2022) - ASI staff all design sprint meetings with additional support staff to ensure the meetings are adequately documented and ASI Business Analyst are not running the meetings alone. Complete 7/31/2022	ASAP	2	5	Med	Open	3/31/2023 - Due to the small number of design sessions IVV 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 IVV can assess improvements. 2/28/2023 - DHS and IVV observed the ASI continues to struggle to sufficiently prepare for and deliver well-facilitated design sessions. There are indications the ASI team has not thoroughly prepared for, discussed, and solutioned designs prior to client meetings. While the ASI has made progress in addressing some of the recommendations of this finding, other concerns continue. IVV suggests the ASI team review and apply the recommendations of this finding, to improve the productivity of meetings going forward. 1/31/2023 - The new ASI is in the start-up phase and as expected have experienced a few wrinkles during the initial design sessions. IVV looks for the ASI to quickly incorporate the recommendations in this finding to deliver effective design sessions, avoiding delays to design and development. 12/31/2022 - The new ASI continues to develop its approach to the BES design sessions. IVV will assess this issue along with the below recommendations when the new ASI restarts the BES design sessions. 11/30/2022 - The new ASI is revising the approach to the BES design sessions to improve efficiency and align with Agile methodology. IVV will assess this issue along with the below recommendations when the new ASI restarts the BES design sessions. 10/31/2022 - No work has been performed regarding this finding due to the work stoppage and ongoing transition to the new ASI. IVV will reassess our recommendations for this finding once more is known. 9/30/2022 - DHS Product owners and SMEs have raised concerns about a lack of a cohesive design and a user		9/9/21 RAP - The IV&V does participate in many facets of the design process including screen mock-up reviews, backlog grooming sessions, and Sprint demo's. Product owner discussions are meant to have limited participation. The team is concerned about the participation of the IV&V for two main reasons: 1) IV&V does not always stay silent in discussions on design despite assurances from the IV&V PM that it is not their role, and 2) IV&V participation typically drives what are meant to be informal processes to more
43	DHS PMO project team members have transitioned off the Project, which may cause gaps in knowledge transfer and leadership on the Project.	Molina, Brad	Finding - Issue	1/10/2020	Project Management	As reported in various project meetings, several key DHS PMO, BES and ASI project team members are planning to retire or leave the project within the next few months or have already transitioned off the project. While there are plans and actions being taken, a formal transition/succession plan has not been documented. In January, the ASI did announce and introduce an interim Project Manager, but a plan for a permanent replacement is not currently known.	The key resources leaving the BES Project provide knowledge and history of DHS and its software, solutions, and business processes, along with a level of consistency and continuity to the extended project team. This experience and knowledge is critical for the BES DDI and KOLEA Modifications, and planning efforts for BES Maintenance and Operations activities. Additionally, as per the budget, DHS stated if they are unable to fill these positions timely, DHS may fall out of federal funding compliance and lose the $37 million needed matching funds for continued development of BES.	2/28/2022 - DHS consider other options (Contractors, State employees borrowed from other agencies) to fill these positions if there is ongoing difficulty in finding permanent hires. 5/31/2021 - DHS continue to work with the appropriate organizations to identify the funds necessary to fill these positions. - In progress The state should document a transition plan for the project and PMO resources as identified in the RFP (reference RFP section 3.4.3 'DHS Staffing'). The plan should include the possible COVID-19 economic impact to the state budget, directly in relation to the project resources. - Closed The ASI should document a transition plan for each key resource as required by the RFP (reference RFP section 3.5.1.2 'Benefits Eligibility Solution Project Staffing'.) - Closed	ASAP	3	5	High	Open	3/31/2023 -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. IVV continues to monitor the impact of the DHS PMO vacancies on the BES Project. 2/28/2023 -DHS continues to recruit for PMO positions. Although DHS has received applications, the recent applicants have not been selected to interview. 1/31/2023- The BES project management duties and responsibilities continue to be filled by the new DHS contract Project Manager (PM) and the Assistant Project Manager. However, the new PM is still onboarding and learning about the BES Project. The lack of DHS PMO resources could lead to Project delays if Program PMO responsibilities are not met timely. 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 recommendations once more is known. 11/30/22 - No material update in the reporting period as the work stoppage continues and the new ASI 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 ASI. IVV will reassess our recommendations for this finding once more is known. 9/30/2022 - No material update in the reporting period. 8/31/2022 - DHS continues to seek applicants for the three PMO positions these positions remain unfilled. 7/29/2022 - DHS has received minimal applications for the open PMO positions therefore, they may fill the positions with contractors. IVV does not have visibility to the full impact of the delay in filling these positions. However, some of the administrative and contract management activities are significant so DHS assigned these activities to internal staff on an interim basis. 6/30/2022 - DHS continues to recruit for PMO resources. No other material updates for this reporting period. 5/31/2022 - DHS continues to	02/08/2021 - Brian Donohoe does not agree with IVV's high-criticality rating on this Finding (#43) and DHS rolled out the DHS Product Owner Roles and Responsibilities to the DHS team on January 29, 2021. (Gary provided the Final DHS Product Owner Roles and Responsibilities document to IVV on 02/8/2021). 06/30/2020 - Mark Choi is becoming more involved in the project. Involved in Arch decisions and PM decisions around tool sets, future vision, etc. Day to day PM working closely w/ Gary and Emerald. We have no insight into other DHS staffing.	4/23/21 RAP - From the ASI perspective, the changes to the project management of the BES project have provided little impact on the overall project. At this point, the knowledge transfer gaps have been closed and the leadership of the project remains strong hands from DHS. We recommend that the IV&V reassess the probability of impact and severity of impact and lower the overall rating for this risk.3/3/2020 - The ASI PM stated the Project Coordinator position is filled and they will begin work on 3/9/2020, transition activities from Donna will begin next week.
29	Uncertainty and/or a lack of communication around long-term architecture 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 ASI and DHS had not broadly communicated their decision implementing two Siebel instances (one for KOLEA, 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 ASI continue to make updates to the BI-12 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 3/31 - The Project should continue to vet possible architectural change impacts to the platform (e.g., ADA, Configuration Management tools), M and O, MQD, and BES systems before finalizing architectural decisions. - DHS continue to request ASI 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	3/31/2023 - The ASI 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 ASI will go live with their interlinked 2 portals (BES and KOLEA) strategy but may initially go live with less functionality than originally planned and/or communicated. 2/28/2023 - The ASI 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 eGRC. 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 ASI is developing a lift-and-shift of their existing legacy system (HAWI) with little to no improvements (to avoid scope creep) and have labeled it HAWI 2.0. Others seem to think the ASI will continue the work of the previous ASI that include improvements based on previous ASI 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 ASI is developing its communication plans so it is 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 ASI had built the bulk of the portal (based on LifeRay) prior to their departure. The new ASI developed the current portal used by the public to submit applications for benefits. The new ASI is assessing the best way forward and is considering combining both code sets without LifeRay. 10/31/22 - Given that the project is transitioning to the new ASI, it remains unclear what changes the new ASI will make to the planned infrastructure and other technologies being utilized. IVV will update the	06/30/2020 - Combined application is still planned. App still not finalized by DHS. From Arch perspective, we are building in Liferay. Future Integration 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.	4/23/21 rap - The ASI and DHS continue to refine the final plan for the two portal vision. We expect that final decisions will likely be made during this reporting period and communicated to the project. The ASI refers the IV&V to our February update regarding Recommendation #3. From our perspective all necessary actions are complete. If the IV&V does not believe it is Complete we request supporting detail. 4/23/21 rap - The ASI and DHS continue to refine the final plan for the two portal vision. We expect that