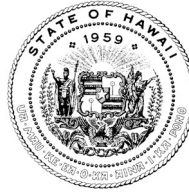


DAVID Y. IGE
GOVERNOR



DEPT. COMM. NO. 28
DOUGLAS MURDOCK
CHIEF INFORMATION
OFFICER

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

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August 18, 2022

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

The Honorable Scott K. Saiki
Speaker and Members of the
House of Representatives
Thirty-First 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 (Aug 18, 2022 09:07 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: July 1 – 31, 2022

Submitted: August 12, 2022

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

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Executive Summary




Executive Summary



In July, DHS asked the ASI to develop a Corrective Action Plan (CAP) to address their overall lack of performance. DHS' CAP specifically requested the ASI address the open IV&V findings; which most significantly include the following:
















- The BES Project schedule has not been approved by DHS and continues to be revised. The ASI has since communicated to DHS and IV&V that the Pilot and Go-Live dates are expected to be further delayed.
- Delays in the development of the BES application persist. The ASI performed an analysis that found staffing shortages as the primary cause. However, unrealistic development estimates have also led to the extended development duration. The analysis performed by the ASI did not include DHS or IV&V, and all root causes may not be known and addressed by the ASI.
- Security control efforts continue to be in the planning stages, four years into the project. IV&V has raised concerns about the level of effort to implement the entirety of security and privacy controls, and the lack of experienced ASI security and privacy staffing.
- The Google Cloud Platform (GCP) change request for the BES Higher (including production) environments remains unresolved. The ASI plans to submit a formal Project Impact Assessment (PIA) in August.

Requesting a CAP from the ASI is a significant event for the BES project. The BES project has experienced various changes, challenges, and delays over the last few years. DHS and IV&V are hopeful that the ASI develops a detailed, actionable, reasonable CAP that comprehensively addresses the root causes so that the ASI performs to their contractual requirements and commitments.

May	Jun	Jul	Category	IV&V Observations
			Project Management	The ASI committed to providing an updated schedule, along with a remediation plan to address the other concerns raised in the CAP request, by August 12, 2022. This category has been at a high criticality rating for over two years (since July 2020).

Executive Summary



May	Jun	Jul	Category	IV&V Observations
			System Design	Design sprints faced challenges in July, as the number of concurrent design sessions taxed the ASI and DHS project resources. Additionally, DHS and IV&V raised concerns with ASI Business Analysts working alone and struggling to facilitate meetings, take notes, and capture action items. While the ASI stated this is addressed, IV&V will continue to monitor.
			Configuration and Development	Development delays continue to impact the project. The ASI added two developers to help alleviate the staffing shortages that contributed to the development delays. DHS and IV&V await the detailed CAP that the ASI will deliver on August 12.
			Integration and Interface Management	DHS continues to progress on completing the outstanding Memorandums of Agreement (MOA) for three interface partners. The agreement with the Department of Public Safety was completed in July.
			Testing	The ASI has completed a proof of concept for the ADA Compliance tool and is seeking DHS approval to use on the Project. IV&V has reviewed compliance reports and did not find any concerns.
			Security and Privacy	DHS' addition of two security contractors to the BES Project and the inclusion of a security SME on the ASI team has been positive, which led IV&V to reduce the criticality rating of our related finding in this category. However, IV&V remains cautious due to the amount and significance of the security and privacy work. The ASI has stated that additional security resources are included in the GCP CR.

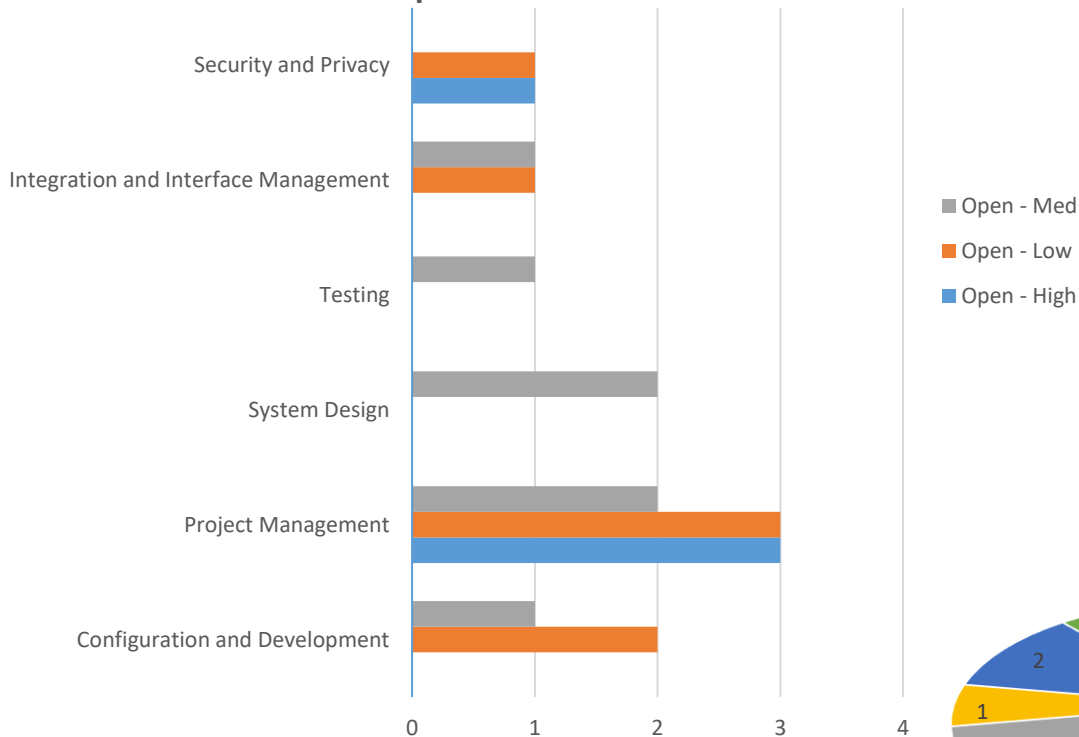
IV&V Findings and Recommendations

IV&V Findings and Recommendations

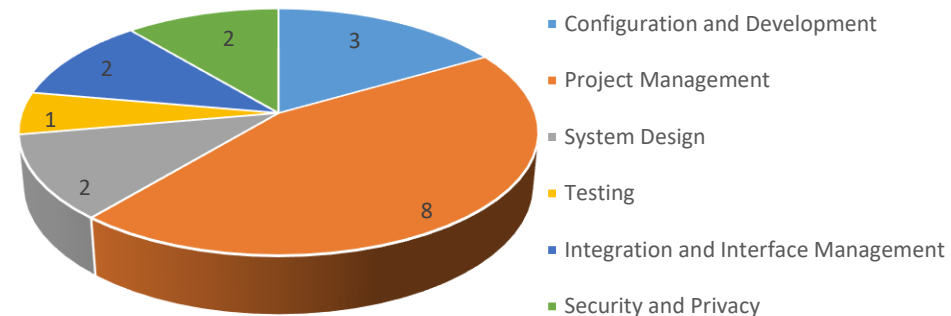


As of the July 2022 reporting period, PCG is tracking 18 open findings (9 risks, 9 issues) and has retired a total of 57 findings. Of the 18 open findings, 8 are related to Project Management, 2 in Integration and Interface Management, 1 in Testing, 2 in System Design, 3 in Configuration and Development, and 2 in Security and Privacy.

Open Risks & Issues



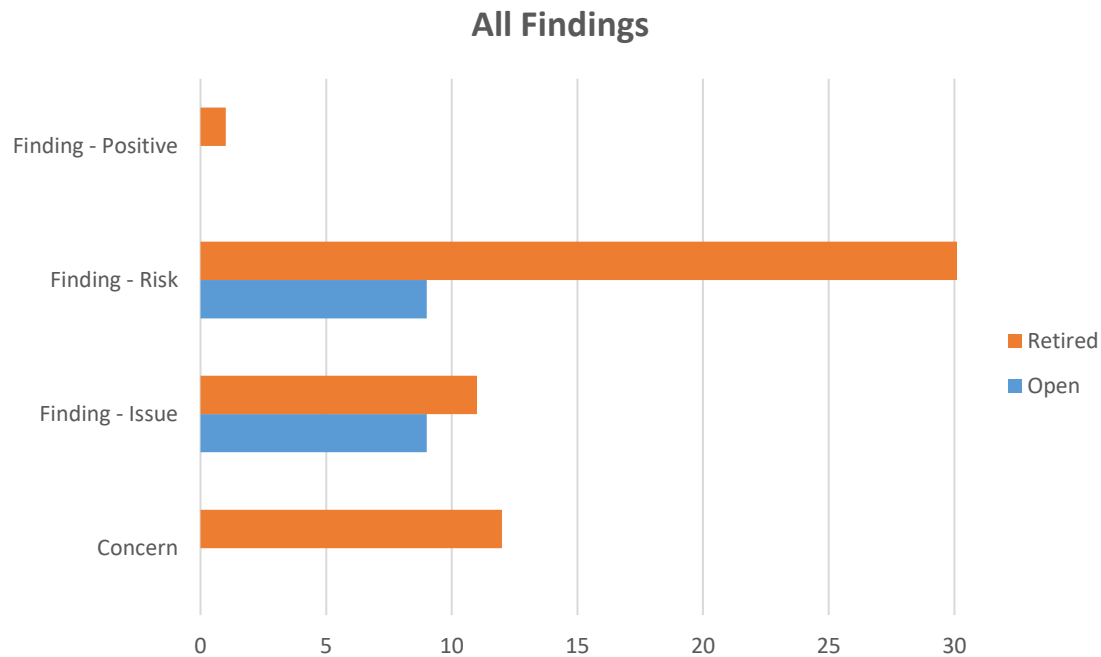
Open Risks & Issues by Category



IV&V Findings and Recommendations



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



IV&V Findings and Recommendations



Findings Retired During the Reporting Period

#	Finding	Category
	None	

Preliminary Concerns Investigated During the Reporting Period

#	Finding	Category
	None	

Findings Opened During the Reporting Period

#	Finding	Category
	None	

IV&V Findings and Recommendations



Project Management


#	Key Findings	Criticality Rating
2	<p>Issue – Late Delivery of project deliverables has caused schedule delays.</p> <p>Fewer project deliverables are delivered late, and critical path activities do not appear impacted when this happens since they are not dependent on those deliverables. For example, development delays found in Finding #80 do not appear to be caused by late deliverables. Schedule impacts from late deliverables are minimal during this stage of the Project as opposed to the planning/initiation stages where deliverables directly impacted subsequent activities. Given the reduced impact this finding has on the Project, IV&V is lowering the criticality rating to 'Medium'. IV&V has separate findings for the BI-5 Project Schedule and BI-13 Security Plan deliverables.</p>	A yellow circular icon with the letter 'M' inside, representing a Medium criticality rating.

Recommendations	Progress
<ul style="list-style-type: none">Despite not yet having a revised baseline schedule, continue monitoring and analyzing deliverables that may have impact to the critical path.	In process

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>IV&V remains concerned with the lack of clear communication around the planned configuration management tool and its intended use. DHS prefers Service Now but it is currently not funded, and IV&V is unaware of contingency plans in the event Service Now funding is not approved. The project is currently assessing the additional level of effort that will be required to comply with the latest revision (Revision 5) of Federally required security controls. IV&V is concerned that the move to Revision 5 and potential impact to the project architecture have not been broadly communicated to stakeholders.</p>	

Recommendations	Progress
<ul style="list-style-type: none">The Project should continue to vet possible architectural change impacts to the platform (e.g., ADA, Configuration Management tools), M&O, MQD, and BES systems before finalizing architectural decisions.	In process
<ul style="list-style-type: none">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.	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
<ul style="list-style-type: none">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.	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 received very few applications for the open PMO positions therefore, they may fill the positions with contractors. IV&V does not have visibility into 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.</p>	A red circle with a white letter 'H' inside, indicating a high criticality rating.

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
47	Risk – The COVID-19 pandemic and the related "stay at home" order could hinder project activities and negatively impact the project schedule and budget. No material update for this reporting period.	

Recommendations	Progress
<ul style="list-style-type: none">Suggest the Project and DHS create a detailed, documented risk mitigation strategy and plan that is reviewed regularly and revised to address the current state of the COVID-19 threat and related impacts over the next 6 to 12 months. The plan should include the possible economic impacts to the state budget directly related to project resources.	In process
<ul style="list-style-type: none">Send broad communications to stakeholders to assure clear understanding of changes to the Project with this regard to impacts of COVID as well as clarifying communications as to what will remain the same.	In process
<ul style="list-style-type: none">Project leadership continue to encourage independent phone conversations to enhance and accelerate communications, and for team members not wait for meetings to converse.	In process

IV&V Findings and Recommendations



Project Management


#	Key Findings	Criticality Rating
49	<p>Issue – Poor quality project deliverables may impact system design, testing artifacts and the project schedule.</p> <p>The ASI plans to provide resources to develop and report on quality metrics, which will be addressed in the CAP.</p>	A green circle with a white 'L' inside, indicating a Low Criticality Rating.

Recommendations	Progress
<ul style="list-style-type: none">ASI review the Quality Management Plan to ensure that the Project is working within the Quality guidelines. In particular, the ASI should evaluate and consider if it is in alignment with Section 3.1.2 Measure Project Quality, which states “ASI measures process and product quality by 1) selecting BES implementation process and product attributes to measure; 2) selecting component activities to measure; 3) defining value scales for each component activity; 4) recording observed activity values; and 5) combining the recorded attribute values into a single number called a process quality index.” IV&V has not seen evidence indicating the ASI is utilizing metrics to measure its process and product quality.	In Process

IV&V Findings and Recommendations



Project Management

#	Key Findings	Criticality Rating
71	<p>Issue – The lack of the final agreement on the scope and costs of the GCP Change Request (CR) may lead to unanticipated DHS costs, schedule delays, and/or the need to reduce scope.</p> <p>The ASI and DHS have a general agreement to the scope of the GCP CR. The ASI is preparing a project impact analysis and will submit a formal document to DHS in August 2022.</p> <p>IV&V concerns are increasing as this CR is not finalized and is focused on the impact to the Project if not completed. Uncertainty created by this open scope issue has already impacted security planning.</p>	

Recommendations	Progress
<ul style="list-style-type: none">The ASI should document the current environment M&O activities to ensure all activities are known with a clear understanding of the “AS IS” and “TO BE” model for services beginning with the DDI, through Pilot/Implementation and M&O.	In process
<ul style="list-style-type: none">The ASI clearly document the scope of work and cost for the GCP CR during DDI and M&O and provide to DHS for approval.	In process

IV&V Findings and Recommendations



Project Management


#	Key Findings	Criticality Rating
74	<p>Risk – The lack of 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.</p> <p>The ASI delivered a draft schedule that did not meet DHS' expectations as it was developed with inaccurate estimates. In their CAP, the ASI plans to deliver a new draft of the schedule by August 12, 2022. Despite many late activities, the ASI originally planned to update the schedule without impacting the existing go-live and pilot dates. After further analysis, the ASI anticipates updates to the existing go-live and pilot dates. Since the Project has not accurately estimated/planned resources, further delays and disruptions to the BES Project may occur.</p>	

Recommendations	Progress
<ul style="list-style-type: none">Using the available tools, review the current estimates to complete each activity compared to past actual hours.	In process
<ul style="list-style-type: none">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.	In process
<ul style="list-style-type: none">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.	In process
<ul style="list-style-type: none">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.	In process
<ul style="list-style-type: none">DHS and the ASI agree to a revised schedule against which project deliverables can be managed.	In process

IV&V Findings and Recommendations



Project Management


#	Key Findings	Criticality Rating
76	Risk – Volunteer DHS resources leaving the Project may lead to schedule delays, lower morale, and burnout. No material update for this reporting period.	

Recommendations	Progress
• Consider adding DHS resources as needed.	Complete
• Allocate more time for the DHS team members to dedicate time to the Project.	In process
• Carefully plan for all project activities with reasonable hour allocations for the DHS resources and adjust dates in the BES Project schedule accordingly.	In process
• Add cushion time to the schedule for unexpected project delays.	In process
• Provide incentives for the DHS resources to help maintain the project team and possibly alleviate attrition or increase the number of volunteers to the team.	In process

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>DHS executed the DPS agreement (MOA) on 07/20/2022. The status of the three remaining required agreements are as follows:</p> <ul style="list-style-type: none">• 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 MQD.	

Recommendations	Progress
• Complete all MOAs and obtain approval.	In process
• Confirm testing dates with interface partners in writing.	In process

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 (Current) interface have impacted the project schedule.</p> <p>DHS has decided not to establish an agreement with C!A (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.</p>	A yellow circle with a black border containing the letter 'M'.

Recommendations	Progress
<ul style="list-style-type: none">• Ensure that there is an agreement between DHS and C!A to address roles/responsibilities and outcomes.	In process
<ul style="list-style-type: none">• Schedule recurring meetings with C!A to ensure consistent communication between DHS, the ASI, IV&V, and C!A.	Complete
<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
16	<p>Issue – Lack of clear understanding of the DDI approach may reduce effectiveness of all SDLC Processes.</p> <p>DHS has stated they remain unclear as to whether the new DDI process is always being followed by the ASI which has created some confusion for DHS SMEs. IV&V added a recommendation to help address this confusion.</p>	A green circle with a white 'L' inside, indicating a Low Criticality Rating.

Recommendations	Progress
<ul style="list-style-type: none">ASI make available their DDI approach documentation/materials for stakeholders to review and/or refresh their knowledge on demand.	Complete
<ul style="list-style-type: none">The Project monitor DHS product owner productivity, ability/willingness to provide effective feedback to the ASI for design and other important decisions and provide coaching as needed to assure their effectiveness in their role.	In process
<ul style="list-style-type: none">ASI work with DHS lead BAs to determine gaps in understanding and develop a plan to address any gaps and sources of DHS SME confusion.	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>DHS has identified technical and functional primary points of contact for the ASI to work with for configuration management (CM) efforts. IV&V remains concerned that some 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.</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">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.	Complete
<ul style="list-style-type: none">Project 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.	Not Started

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 has a severe shortage of development resources and is recruiting to fill the open positions, but the current job market presents challenges. The ASI plans to update the schedule to account for the current lack of resources and intends to submit a re-baselined schedule on 8/12/22. The ASI is currently assessing the level of effort to address changes to Federal security control requirements (revision 5 of NIST); which may increase development efforts. The ASI recently hired 2 additional developers and is working to increase the accuracy and validity of the tracking of development velocity. Accurate velocity tracking may improve the accuracy of development estimates, allowing the ASI to more accurately determine resource levels required to meet development milestones and planning.</p>	

Recommendations	Progress
<ul style="list-style-type: none">Complete and execute remediation plan based on the result of a Root Cause Analysis (RCA).	In process
<ul style="list-style-type: none">ASI consider moving/adding/replacing project team resources strategically to effectively increase velocity.	In process
<ul style="list-style-type: none">ASI track and regularly provide DHS 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>Although the ASI has implemented preparatory sessions for their Business Analysts (BAs) prior to design Sprint Day 1, IV&V continues to observe occurrences of ASI BAs not being fully prepared for the initial session. DHS has also raised concerns that the ASI support admins are not always assigned to meetings, leaving the BA solely responsible to lead discussions and capture notes, update artifacts, and capture action items. DHS requested the ASI to address these concerns going forward.</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 Day one of Design Sprint fully prepared to facilitate discussion on topic of sprint, with adequate knowledge about business process and approach for design based on JAD/JAR notes and other pertinent material.	In process
<ul style="list-style-type: none">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

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 newly assigned ASI architects continue to ramp up to meet productivity expectations. The ASI recently reinstituted weekly architecture meetings with DHS and other infrastructure stakeholders. The ASI is analyzing the impact of the revised federal security controls on the project. System changes resulting from the security controls update may further complicate the infrastructure and/or add unexpected work to complete the infrastructure buildout. The ASI reported they are experiencing turnover of some infrastructure staff; this may result in exacerbating this risk due to the potential loss of explicit and tacit infrastructure knowledge or if efforts to capture their knowledge will prove sufficient.</p>	

Recommendations	Progress
• ASI clearly communicate the potential costs and schedule impacts to implementing the planned infrastructure.	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 support 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 components to simplify their use and monitoring.	Not Started
• ASI development team identify infrastructure components and techniques that are new to them and take action to assure potential integration problems do not lead to unexpected delays.	Not Started

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 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.</p>	A yellow circle with a black border containing the letter 'M'.

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 - Insufficient planning/execution of 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 ASI filled the Security SME position this month and their prior NIST Security Standard experience should benefit the BES project. The ASI does not have a Security Architect on this project which may lead to an incomplete security and privacy design. It is IV&V's understanding that the addition of the Security Architect is included in the GCP change request (CR) and will not be filled until the CR is approved. An agreement has been reached for the immediate term to use Aha and Confluence to develop and collaborate on System Security Plan (SSP) controls. However, an electronic Governance, Risk, and Compliance system (eGRC) is under consideration at DHS.</p>	

Recommendations	Progress
<ul style="list-style-type: none">The ASI continue 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).	In process
<ul style="list-style-type: none">ASI add a Security Architect to the Project ASAP to assist with the Security Plan activities.	In process
<ul style="list-style-type: none">ASI have a security SME attend the weekly security planning meetings and workshops.	Complete

IV&V Findings and Recommendations



Security and Privacy

#	Key Findings	Criticality Rating
77	<p>Issue – Insufficient DHS Security Resources on the BES Project may lead to delays in completing security tasks and the System Security Plan (SSP)</p> <p>The two DHS Security Resources are having an immediate positive impact to the BES project by contributing expertise to the control planning process and developing supporting artifacts. IV&V has lowered the criticality rating to 'Low' and will continue to monitor this transition.</p>	

Recommendations	Progress
<ul style="list-style-type: none">DHS contract for a qualified Security resource(s) as soon as possible to support BES while the Department security positions are filled.	Complete
<ul style="list-style-type: none">DHS aggressively recruits and promotes the open DHS Security positions to obtain a pool of applicants.	In process
<ul style="list-style-type: none">Fill all available DHS Security positions as soon as possible.	In process

The background is a solid blue color. It features several abstract geometric elements: a cluster of overlapping squares and rectangles in the top-left corner, some with white outlines and others as solid blue shapes; a single square with a white outline in the middle-left; and a series of squares and rectangles in the bottom-right, connected by thin white lines, suggesting a flow or process. The text 'IV&V Status' is positioned in the lower-left area.

IV&V Status

IV&V Engagement Status



IV&V Engagement Area	May	Jun	Jul	Comments
IV&V Budget				
IV&V Schedule				
IV&V Deliverables				PCG submitted the final June 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 July reporting period:
 - Completed – June 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 Original Contract and BES Optimization contract amendment documentation
- Planned IV&V activities for the August 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 – Observe Agile Development 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 weekly DHS and IV&V Touch Base meetings
 - Ongoing – Review BES artifacts and deliverables

Deliverables Reviewed



Deliverable Name	Deliverable Date	Version
BI-10 Release 0.9 CF Manage Reports – DRAFT	7/29/2022	V0.1
BI-15 Release 0.7 Fully Configured and Developed System (Iteration 1)	7/29/2022	V1.0
BI-21 Release 0.6 Updated and Completed Detailed Functional and Technical RTM (Iteration 2)	7/28/2022	V1.0
BI-10 Release 0.8 FMM EBT Core(Iteration 1)	7/27/2022	V1.0
BI-10 Release 0.8 FIS Interface Consumption (Iteration 1)	7/27/2022	V1.0
BI-10 Release 0.8 FMM Card Issuance (Iteration 1)	7/27/2022	V1.0
BI-22 Release 0.8 System Test Report – DRAFT	7/19/2022	V1.0
BI-10 Release 0.9 CMM Core Eligibility – DRAFT	7/18/2022	V0.1
BI-10 Release 0.9 Client Management – DRAFT	7/18/2022	V1.0
BI-20 Release 0.9a SSP Test Scenarios, Cases, and Scripts (Iteration 1)	7/18/2022	V1.0
BI-14 Release 0.7 Technical Design Document - Verifications - CMM – (Iteration 1)	7/13/2022	V1.0
BI-21 Release 0.6 Updated and Completed Detailed Functional and Technical RTM (Iteration 1)	7/8/2022	V1.0
BI-15 Release 0.7 Fully Configured and Developed System - DRAFT	7/7/2022	V1.0
BI-20 Release 0.9a SSP Test Scenarios, Cases, and Scripts – DRAFT	7/8/2022	V0.1

Additional Inputs – Artifacts



Artifact Name	Artifact Date	Version
Unisys Contract Amendment 3	4/17/2020	N/A
FNS Handbook 901	01/2020	V2.4
BES Project Schedule (BI-5)	7/13/2022	_07112022
BES Weekly Status Report	7/27/2022 7/20/2022 7/13/2022 7/6/2022	N/A
BES Risks and Issues Log	N/A	N/A
BES Interface Communication Plans and Interface Control Documents	N/A	N/A
NIST Special Publication 800-53 Security and Privacy Controls for Information Systems and Organizations	12/20/2020	Rev.5
BESControls_7_21_22.docx	7/21/2022	N/A
BESControls_7_24_22.docx	7/24/2022	N/A
BESUseCases_Additional Ideas.docx	7/24/2022	N/A



Meetings and/or Sessions Attended/Observed:

1. Weekly Platform Status Meeting – 7/5/2022, 7/12/2022, 7/19/2022, 7/26/2022
2. Bi-Weekly Project Status Meeting – 7/6/2022, 7/20/2022
3. Bi-Weekly BES PMO and IV&V Touch Base – 7/7/2022
4. Weekly BES Dev Stand-up – 7/6/2022, 7/13/2022, 7/20/2022, 7/27/2022
5. Weekly BES Project Schedule Review Meeting – 7/19/2022, 7/26/2022
6. IV&V Team Meeting – 7/5/2022, 7/7/2022, 7/11/2022, 7/14/2022, 7/18/2022, 7/21/2022, 7/25/2022, 7/27/2022, 7/28/2022
7. Weekly DHS-Unisys Security Touchpoint – 7/5/2022, 7/12/2022, 7/19/2022, 7/26/2022
8. BES Security Control Workbook – 7/7/2022, 7/14/2022, 7/21/2022, 7/28/2022
9. BES Testing Touch base – 7/13/2022, 7/28/2022
10. HI DHS BES February Draft IV&V Report Review – 7/12/2022
11. Bi-Weekly DHS and IV&V Touch Base Meeting – 7/12/2022, 7/26/2022
12. ASI/IV&V Mid-month Check-in – 7/22/2022
13. ASI and IV&V Pre-Draft Report Review – 7/8/2022
14. Executive Steering Committee Meeting – 7/21/2022
15. HI BES ASI and IV&V Touch Base - Functional Team – 7/19/2022
16. HI BES ASI and IV&V Touch Base - Technical Team – 7/21/2022
17. Monthly Project Risk and Issue Review Meeting – 7/13/2022
18. Implementation Planning – 7/13/2022, 7/27/2022
19. CO07 Withdraw Application – 7/5/2022, 7/6/2022, 7/7/2022, 7/11/2022, 7/13/2022
20. CF20b Manage Returned Mail – 7/5/2022, 7/6/2022, 7/11/2022



Meetings and/or Sessions Attended/Observed:

21. CO23b Manage Interface Verifications – 7/5/2022, 7/7/2022, 7/11/2022, 7/12/2022, 7/13/2022, 7/18/2022, 7/19/2022
22. CF47 Process a SMRF Workflow – 7/5/2022, 7/7/2022, 7/11/2022, 7/13/2022
23. R0.13 Report Specs – 7/5/2022, 7/7/2022, 7/13/2022, 7/15/2022, 7/19/2022, 7/21/2022, 7/25/2022
24. FM26a Manage State Tax Offset / FM26b Manage Federal Tax Offset– 7/6/2022, 7/12/2022
25. CO15 Manage Scheduled Appointments– 7/6/2022, 7/12/2022, 7/14/2022
26. PE04 Override Eligibility – 7/12/2022, 7/14/2022, 7/18/2022, 7/20/2022, 7/26/2022, 7/28/2022
27. FM25 View Benefits Overpayment Recovery History – 7/13/2022, 7/19/2022, 7/21/2022, 7/25/2022, 7/27/2022, 7/28/2022
28. IF44 Current ICD – 7/14/2022, 7/18/2022, 7/20/2022
29. R0.13 Correspondence Specs – 7/18/2022, 7/20/2022, 7/26/2022, 7/28/2022
30. CO10 Discontinue Program – 7/19/2022, 7/21/2022, 7/25/2022, 7/27/2022
31. FM50k Receive FIS Data - Inactive/Dormant/Expunged File / FM50l Receive FIS Data - Grant Expungement File – 7/19/2022, 7/21/2022, 7/27/2022, 7/29/2022
32. CO14 Manage SMRF – 7/25/2022, 7/27/2022, 7/29/2022
33. CO19 Manage Providers – 7/26/2022, 7/28/2022
34. R0.14 Report Specs – 7/29/2022
35. Weekly Functional PMO Meeting – 7/6/2022, 7/11/2022, 7/18/2022, 7/26/2022
36. Data Conversion PMO meeting – 7/11/2022, 7/25/2022
37. Weekly Interfaces - PMO Meeting – 7/11/2022, 7/18/2022, 7/25/2022
38. PMO Meeting Structure – Testing – 7/7/2022, 7/14/2022, 7/21/2022, 7/28/2022
39. PMO Meeting Structure - BES Development – 7/7/2022, 7/14/2022, 7/21/2022, 7/28/2022
40. PMO Meeting Structure - AH/MDM/SSP Development – 7/7/2022, 7/14/2022, 7/21/2022, 7/28/2022



Meetings and/or Sessions Attended/Observed:




41. BES Design Sprint Retrospective & Planning – 7/15/2022
42. BES Data Conversion Working Group Meeting – 7/26/2022
43. [[BES] R0.7 BI-15 Walk-Through - Fully Configured and Developed System – 7/7/2022
44. [BES] Screen Prototype Review - FMM FM23 Process Write-offs – 7/7/2022
45. R0.9a SSP SIT Go/No Go Entry – 7/8/2022
46. [BES] Screen Prototype Review - CF CF20b Manage Returned Mail – 7/12/2022
47. R0.8 SIT Go/No Go Exit – 7/13/2022
48. [BES] R0.9 Final Release Build Demo - SSP Lookup Values, Enhancements, and System Integration – 7/13/2022
49. Sprint Demo – 7/5/2022
50. [BES] Screen Prototype Review - CMM CO15 Manage Scheduled Appointments – 7/18/2022
51. [BES] BI-22 R0.8 Walk-Through - System Test Report – 7/22/2022
52. DHS DDI Architecture Review Kickoff – 7/27/2022
53. BI-21 discussion – 7/27/2022

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Appendices



Appendix A – IV&V Criticality Ratings

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

Appendix B – Findings Log



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

Appendix C – Acronyms and Glossary



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



Appendix C – Acronyms and Glossary

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

Appendix C – Acronyms and Glossary



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

Appendix D – Background Information



Systems Modernization Project

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

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

Systems Modernization IV&V Project

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

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

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

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

Appendix D – Background Information



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

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

PCG's Eclipse IV&V® Technical Assessment Methodology

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

IV&V Assessment Categories for the BES Project

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

Ending Slide



Solutions that Matter

ID	Title	Reporter	Finding Type	Identified Date	Criticality	Description	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Severity	Finding Status	Status Update	Client Comments	Vendor Comments
85	Development delays could negatively impact the project schedule and delay go-live.	nmfms	Finding - Risk	6/30/2022	Configuration and Development	ASJ reported development activities have been slowed as they have been unable to achieve and/or maintain their expected development velocity. The ASJ is working to produce a root cause analysis and remediation plan to address these delays, however, both have been delayed. Previously, the development team was challenged with accurately estimating development task level of effort (i.e., story points) in the past and the ASJ has been challenged with producing a project schedule that accurately reflects realistic timelines (see Finding #76). The ASJ continues to be challenged with finding qualified resources in a timely manner.	If the ASJ is unable to achieve a velocity meets planned milestones, schedule delays may lead to a delayed system go-live date. Failure to achieve a level of accuracy in estimating development tasks challenge DHS in planning for their project activities. DHS has indicated, and IVV agrees, that some of these delays could be due to some ASJ BAs lacking the expertise required to create system designs and specifications that developers could consume without having to get extensive clarification from the ASJ BA/SA team. DHS and IVV observed instances where ASJ BA/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 • Complete and execute remediation plan based on the result of a Root Cause Analysis (RCA). • ASJ consider moving/additive/replacing project team resources strategically 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. • Request the ASJ effectively track and regularly provide DHS (potentially via the weekly DCS 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	3	Med	Open	07/27/22 - The ASJ has a severe shortage of development resources and is recruiting to fill the open positions, but the current job market presents challenges. The ASJ plans to update the schedule to account for the current lack of resources and intends to submit a re-baselined schedule on 8/12/22. The ASJ is currently assessing the level of effort to address changes to Federal security control requirements (revision 5 of NST), which may increase development efforts. The ASJ recently hired 2 additional developers and is working to increase the accuracy and validity of the tracking of development velocity. Accurate velocity tracking may improve the accuracy of development estimates, allowing the ASJ to more accurately determine resource levels required to meet development milestones and planning.		
79	External vendor delays in development of the BES task management system (Current) interface have impacted the project schedule.	AI Panglaman	Finding - Issue	6/1/2022	Integration and Interface Management	The BES Project expected the CIA developed Current interface (aka, webbook) to be completed by 04/07/2022. CIA reported that the webbook development work would be done by 05/17/2022. As of 05/25/2022, the ASJ has not received any status from CIA. The webbook is currently held up due the design of the CF44 – Manage CIA Data use case for Release 0.8.	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 task. The BES system will create tasks and will send them to Current. BES does not have the capabilities to manage or close the tasks. Eligibility Workers will claim tasks, and the Supervisors will manage tasks from within the Current system. The webbook is being designed by CIA that will provide task details for cases that have been tagged as "No Contact". This is a requirement to meet the design of the CF44 – Manage CIA Data use case. The ASJ has stated that webbook is required before some critical path development tasks can commence.	1. Ensure that there is an agreement between DHS and CIA to address roles/responsibilities and outcomes. Not applicable and completed. 2. Schedule remediation meetings with CIA to ensure consistent communication between DHS, the ASJ, IVV, and CIA. Completion 3. The ASJ provide test results from the task management integration to ensure that the interface works.	Q3	5	1	Med	Open	06/01/2022 - DHS has decided not to establish an agreement with CIA (the task management vendor) because DHS currently has a subscription that includes the CIA B's requirements. In addition, DHS and the ASJ have established biweekly meetings with the task management vendor. 06/30/2022 - The task management system vendor provided details regarding the webbook 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.		
77	Insufficient DHS Security Resources on the BES Project may lead to delay in completing security tasks and the System Security Plan (SSP).	Dustin Heath	Finding - Issue	4/29/2022	Security and Privacy	IVV has observed the DHS Security Analyst working alone on the BES SSP with the ASJ. The amount of security work is more than one resource can effectively handle, including: 1) level of effort needed to effectively manage the ASJ's security efforts, 2) DHS work needed to complete the SSP, and 3) daily security tasks supporting DHS. In addition, the DHS Security Analyst announced their resignation from DHS effective in May, leaving no BES security resources from DHS. Currently, all ASJ and DHS security-related meetings for BES are canceled.	DHS has a significant role in ensuring that the security controls established for the BES application are appropriate and adequately implemented. There are areas of the BES SSP that include control implementations that the ASJ is responsible for implementing that need DHS to provide content to the ASJ. Without sufficient DHS security resources to complete this effort, the BES project may be delayed. DHS Security also has an oversight responsibility that requires subject matter expertise in federal regulatory governance, risk, and compliance (GRC). DHS also needs a qualified security resource that can work with the ASJ to ensure that the security efforts taken are in the best interest of DHS and the State of Hawaii.	OPEN • DHS aggressively recruits and promotes the open DHS Security positions to obtain a pool of applicants. • Fill all available DHS Security positions as soon as possible. COMPLETE • DHS and ASJ agree in writing to clear expectations of what security efforts the ASJ should complete with the DHS file positions. 6/30/2022 Complete • DHS contract for a qualified Security resource(s) as soon as possible to support BES while the Department security positions are filled. 7/30/2022 Complete	Immediate	3	2	Low	Open	7/31/2022 – The two DHS Security Resources are having an immediate positive impact to the BES project by contributing expertise to the control planning process and developing supporting artifacts. IVV has lowered the criticality rating to 'Low' and will continue to monitor this transition. 6/28/2022 – A new security resource will join the Project next month to fill the open DHS position. Once the new resource starts, IVV will assess reclassifying this finding as a risk. 5/31/2022 - IVV changed this finding from a risk to an issue due to the resignation of the DHS Security Analyst assigned to the BES Project. DHS has identified a temporary replacement resource and are taking action to acquire contract resources to support the BES Project.		
76	Volunteer DHS resources leaving the Project may lead to schedule delays, lowered morale, and burnout.	Earl Barba	Finding - Risk	3/1/2022	Project Management	The DHS resources assigned to work with the ASJ on the BES Project are all volunteers except one. Resources are not in dedicated roles within the team and have the option of returning to their previous operational roles at any time.	The replacement of DHS resources in project roles (e.g., testers and product owners) is not guaranteed and DHS already stated that no additional resources will be assigned to the test team. It is a risk to the Project that the remaining DHS resources will be overallocated, risking burnout, and creating a cycle of more DHS resources leaving the Project. If additional DHS staff is provided, their training will add to the workloads of current DHS project resources.	• Consider adding DHS resources as needed. 6/30/2022 Complete • Allocate more time for the DHS team members to dedicate time to the Project. • Carefully plan for all project activities with reasonable hour allocations for the DHS resources and adjust dates in the BES Project schedule accordingly. • Add cushion time to the schedule for unexpected project delays. • Provide incentives for the DHS resources to help maintain the project team and possibly alleviate attrition or increase the number of volunteers to the team.	Immediate	4	2	Med	Open	7/27/2022 - No material update for this reporting period. 7/6/2022 - In June, DHS added the following five staff to the BES Project: • An Interim Product Owner • A CMM Product Owner • Two SME resources joined the team to support the Returned Mail Use Cases. • One SME to support the Reporting function. DHS stated they plan on adjusting staff as needed and pro-actively review the project schedule to identify future staffing needs. IVV will evaluate the impact of these staff additions to determine if the criticality rating can be lowered. 5/31/2022 - IVV updated this finding from a preliminary concern to a risk in this reporting period. The draft schedule plans for multiple releases in the testing phase which may stretch the DHS test team to the point where they request to return to their operations positions. DHS is actively working to mitigate this risk by identifying and instituting retention/incentive policies/practices. 4/26/2022 - A new DHS tester has joined the testing team and is being trained. Two additional testers are needed on the ASJ team, and it is understood that more ASJ testers will be added to support final acceptance testing. These factors help mitigate this finding, but it is unclear if this will address all the testing resource needs or the potential impact of DHS testers returning to their operational roles. The resource loaded updates to the project plan may help forecast resource needs for FAT. DHS is taking steps to retain resources in these roles as they are 'volunteer' roles. 3/28/2022 - DHS SMEs are not assigned to the project as full time resources. DHS testing resources are volunteers and can return to the operational positions at any time or may be called back to address BES30 operations needs. Currently a new resource is being evaluated for the DHS testing team. As additional DHS testing expertise becomes apparent in the revised SDLC process, losing resources will have increased impact on delivery and the project schedule.		
74	The lack of 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.	Ryan	Finding - Risk	11/29/2021	Project Management	DHS and the ASJ 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 period. The use of multiple tools to track resources obfuscate resource management. Previous N&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.	• Using the available tools, review the current estimates to complete each activity compared to past actual hours • Update as necessary and provide the DHS/ASJ Project Managers with reports and data that accurately reflect the DHS/ASJ resource needs along with over/under allocations of staff for the duration of the Project • 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 PDR, slow design sprints, and cadence of development teams. • DHS and the ASJ agree to a revised schedule against which project deliverables can be managed.	Immediate	4	4	High	Open	7/29/2022 The ASJ delivered a draft schedule that did not meet DHS's expectations as it was developed with inaccurate estimates. In their CAP, the ASJ plans to deliver a new draft of the schedule by August 12, 2022. Despite many late activities, the ASJ originally planned to update the schedule without impacting the existing go-live and pilot dates. After further analysis, the ASJ anticipates updates to the existing go-live and pilot dates. Since the Project has not accurately estimated/planned resources, further delays and disruptions to the BES Project may occur. 6/30/2022 DHS has not approved the May 18, 2022 draft project schedule and the project continues to work without an approved version. DHS stated the draft schedule contained late tasks and they lack confidence in the ASJ's ability to perform to the schedule. An updated draft was published on June 24, 2022 to effect changes and progress for DHS approval. 5/31/2022 - A draft project schedule was submitted for DHS approval. It incorporated additional DHS resources into the design sprint durations and extended the Final Acceptance Testing duration from 40 to 60 days. DHS approval of this schedule is anticipated in June 2022. IVV remains concerned with the accuracy and validity of the BES Project schedule due to past performance of the ASJ and known current development delays. 4/29/2022 - A revised schedule that addresses the two main open issues (increased Final Acceptance Testing duration and updates to the Design Sprint timeline) was not finalized during this reporting period. Without a final revised schedule to manage the Project, planning of future activities and the ability to objectively measure project progress is hindered. 3/31/2022 - A revised schedule was not submitted in this reporting period, and the Project does not have an approved schedule. Updates to increase the final Acceptance Testing duration and updates to the Design Sprint duration to reflect current DHS resource levels are still pending. Even with an updated Design Sprint timeline to accommodate existing DHS resource		
73	The planned BES infrastructure is complex which could be difficult to implement and lead to schedule/cost impacts.	nmfms	Finding - Risk	10/28/2021	System Design	Current ASJ 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 ASJ, the project could be met with unexpected costs and schedule delays. Delays in finalizing the components being implemented could exacerbate this risk and lead to further delays. Complex platforms often present system maintenance and operations challenges as system changes can hold the increased potential for system failure (i.e., due to the significant number of "moving parts") and increase the level of time and effort to resolve infrastructure and application-level bugs. Further, some components remain in an immature state compared to their legacy counterparts. For example, the project recently experienced a system failure because Google Cloud failed to clearly communicate a change that led to failure in another component (i.e., Nexus). Google Cloud is generally viewed as a less mature product offering, compared to their rivals (Amazon Web Services, Microsoft Azure). N&V remains concerned that this could lead to failures at critical points in the project (including go-live) due to the significant number of components 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 as they may not be familiar with in a complex infrastructure environment.	• ASJ clearly communicate 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 to include the integration activities, support required, and maintenance and operations impacts. • DHS work with the ASJ to assess the potential challenges of maintaining a complex environment and consider scaled back options that could reduce this risk and reduce long-term infrastructure costs. • ASJ 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 will establish strong governance over the utilization and maintenance of various components to simplify their use and monitoring. • Request the ASJ development team identify infrastructure components (and techniques that are new to them and take action to assure potential integration problems do not lead to unexpected delays. For example, allot time in the schedule to conduct proof of concepts to assure infrastructure components work as expected.	Next several month	3	3	Med	Open	07/13/22 - The newly assigned ASJ architects continue to ramp up to meet productive expectations. The ASJ recently reinstated weekly architecture meetings with DHS and other infrastructure stakeholders. The ASJ is analyzing the impact of the revised federal security controls on the project. System changes resulting from the security controls update may further complicate the infrastructure and/or add unexpected work to complete the infrastructure buildout. The ASJ reported they are experiencing tension of some infrastructure staff; this may result in exacerbating this risk due to the potential loss of explicit and tacit infrastructure knowledge or if efforts to capture their knowledge will prove sufficient. 06/30/22 - IVV added work recommendation and is escalating the criticality rating from 'Low' to 'Medium' based on the following ASJ statements regarding: "The ASJ development team experienced delays in a recent release due to problems related to development integration with some infrastructure components. The root cause of these delays may be because the infrastructure utilizes a series of software components and tools that must be fully configured, integrated, and managed to work effectively." The level of effort to stand up, maintain, replicate, and troubleshoot the complex infrastructure. Complex infrastructures often require developers to be reliant on the infrastructure team to resolve some technical issues that they haven't experience before. IVV recommends the development team identify infrastructure components and techniques that are new to them and make efforts to assure potential integration problems do not lead to unexpected delays. For example, allot time in the schedule to conduct proof of concepts to assure infrastructure components work as expected. It remains unclear if the existing buildout and configuration schedule is realistic to assure the infrastructure buildout will complete on time and reach a level of stability that will assure development and other activities are not impacted/delayed.		

ID	Title	Reporter	Finding Type	Identified Date	Category	Observation	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Strategic Update	Client Comments	Vendor Comments
71	The lack of the final agreement on the scope and costs of the Google Cloud Platform (GCP) Change Request (CR) may lead to unanticipated DHS costs, schedule delay, and/or the need to reduce scope.	Joe Frasca	Finding - Issue	8/23/2021	Project Management	In April 2020, the DHS/ASI SOAP contract amendment codified the migration of some of the BES environments from an on-prem to cloud based solution however, not all details were vetted at that point in time. In the July/August 2020 timeframe, DHS and the ASI agreed to have all BES environments migrated to the cloud. Since then, the scope has been adjusted and the CR is being drafted by the ASI. It has been over 12 months since the project decided to move all BES environments to the Cloud solution – more than enough time to document, price and negotiate the scope of work. The BES is being developed in GCP and DHS/ASI consistently report they are working on the CR, however, it is not final.	The migration of some BES environments to the cloud and shifting the maintenance of cloud environments from the ESI to the ASI was included in the ASI/DHS SOAP Contract Amendment finalized in April 2020. The decision to migrate all BES environments to the cloud was made in the July/August 2020 timeframe. DHS' intent is for this CR to be cost-neutral. While the BES application is being developed in the cloud, details regarding the specific services to be provided and by which vendor during the BES ODI and Maintenance and Operations Phases have not been finalized.	The ASI should document the current environment M and O activities to ensure all activities are known with a clear understanding of the "AS is" and "TO BE" model for services beginning with the DDL through Pilot/Implementation and M and O. The ASI clearly document the scope of work and cost for the GCP CR during ODI and M and O and provide to DHS for approval. COMPLETE - DHS and the ASI agree to a firm delivery date for when DHS will receive the CR. 12/28/2022 - Complete	ASAP	4	4	High	Open	7/30/2022 - The ASI and DHS have a general agreement to the scope of the GCP CR. The ASI is preparing a project impact analysis and will submit a formal document to DHS in August 2022. IVV concerns are increasing as this CR is not finalized and is focused on the impact to the Project if not completed. Uncertainty created by this open scope issue has already impacted security planning. 6/30/2022 - IVV remains concerned that the production environment for BES is unknown along with the roles and responsibilities of the ASI, ES and DHS. There are many possible impacts to the project ranging from contract changes to procurement and integration activities. All these take time to complete yet there are no tasks and activities in the schedule to complete this work. 5/31/2022 - IVV has increased concerns about the slow progress and lack of detail regarding the GCP change request, as this has been in discussion since July/August 2020. The ASI has stated that their work on tasks within the scope of the CR is 'at risk' and may need to stop, pending the CR approval. Based on the ASI Security Lead's report that the lack of an approved GCP decision is delaying security work, this risk has materialized to an issue and the criticality rating is escalated to High. 4/30/2022 - The ASI developed a Rough Order of Magnitude (ROM) for the cost of the change request based on scope discussions with DHS. While progress is being made, the pace is slow. The ASI Security Lead reported the lack of an approved GCP decision is delaying security work. 3/31/2022 - DHS and the ASI have met to further define the scope of the CR and confirm the responsibilities of the ASI and ESI. DHS plans to have the Rough Order of Magnitude (ROM) done by April 15th, and then will engage the HI Attorney General. DHS has extended an opportunity for IVV to participate in the writing of the change request. 2/28/2022 - IVV has requested a copy of the GCP change request from the DHS Enterprise Technology Office. When received, IVV will review the GCP CR and provide 01/27/22 - 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 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 ServiceNow is not part of the GCP change request. 06/30/22 - The Project previously stated its intention to utilize ServiceNow (SN) for Configuration Management (CM). However, it remains unclear if progress has been made on 1) finalizing this decision, 2) how it will be used, and 3) the status of funding for purchase. Further, it remains unclear whether DHS will utilize their existing SN installation or create a separate instance and who will be responsible for defining the service catalog and SN/CM processes. Funding for SN is currently dependent on the approval and funding of the GCP change request; it remains unclear if contingencies have been detailed or documented if GCP is not approved. IVV has elevated this 'Concern' to a 'Risk.' 05/31/22 - No material update in the reporting period. 4/29/22 - IVV expects this concern to be increasingly impactful as the Project approaches go-live. Implementation of all the components of configuration management later in the Project could leave the project team scrambling to implement during pre-go-live when resources are likely to be constrained. Delayed completion may lead to configuration management that does not fully meet the needs of the Project or DHS expectations. 03/31/22 - No material update for this reporting period. 2/28/22 - No material update for this reporting period. 1/31/22 - No material update for this reporting period. 12/31/21 - No material update for this reporting period. 11/29/21 - The ASI stated their plans to utilize Service Now as their Configuration Management Database (CMDB). If utilized to its fullest extent, Service Now can effectively track system configurations and provide system support.	9/9/2021 - RAP: Point of clarification. The SOAP agreement did not establish that the project would be deployed to the Cloud. SOAP provided that development be done in the Cloud and specifically that deployment would be to the on-premise environment. However, we did acknowledge that deployment may move to the Cloud. The final decision to move to GCP for production was made in July 2020. The costs for managing the UAT, Production, and Disaster Recovery environments were not included in the SOAP agreement nor	
70	Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution	Jeffers	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 toward establishing CM processes, selecting CM tools (e.g., CMDB), and building out the CM infrastructure. The projects Google Cloud Platform (GCP) Change Request and Security Plan have 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 ensure 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 clearly 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. Project work to clarify/simplify 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. COMPLETE - 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	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 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 ServiceNow is not part of the GCP change request. 06/30/22 - The Project previously stated its intention to utilize ServiceNow (SN) for Configuration Management (CM). However, it remains unclear if progress has been made on 1) finalizing this decision, 2) how it will be used, and 3) the status of funding for purchase. Further, it remains unclear whether DHS will utilize their existing SN installation or create a separate instance and who will be responsible for defining the service catalog and SN/CM processes. Funding for SN is currently dependent on the approval and funding of the GCP change request; it remains unclear if contingencies have been detailed or documented if GCP is not approved. IVV has elevated this 'Concern' to a 'Risk.' 05/31/22 - No material update in the reporting period. 4/29/22 - IVV expects this concern to be increasingly impactful as the Project approaches go-live. Implementation of all the components of configuration management later in the Project could leave the project team scrambling to implement during pre-go-live when resources are likely to be constrained. Delayed completion may lead to configuration management that does not fully meet the needs of the Project or DHS expectations. 03/31/22 - No material update for this reporting period. 2/28/22 - No material update for this reporting period. 1/31/22 - No material update for this reporting period. 12/31/21 - No material update for this reporting period. 11/29/21 - The ASI stated their plans to utilize Service Now as their Configuration Management Database (CMDB). If utilized to its fullest extent, Service Now can effectively track system configurations and provide system support.	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 needs to be updated to reflect the processes in place on the project for configuration management.	
68	Insufficient planning/execution of the BES Security Plan activities may lead to delays in gaining Federal Partner approval for the BES Project to begin the Pilot Phase.	Dustin Heath	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 (SED) last month and are currently reviewing 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 continue to develop the Bi13 Security Plan in close collaboration with DHS. 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 (POMM). ASI add a Security Architect to the Project ASAP to assist with the Security Plan activities. COMPLETE - DHS and the ASI agree and finalize the Bi-13 DDO. 1/4/22 - Complete - ASI, per DHS guidance, should begin to pivot toward the adoption of BDO-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	ASAP	4	5	High	Open	7/31/2022 - The ASI filed the Security SME position this month and their prior NIST Security Standard experience should benefit the BES project. The ASI does not have a Security Architect on this project which may lead to an incomplete security and privacy design. It is IVV's understanding that the addition of the Security Architect is included in the GCP change request (CR) and will not be filed until the CR is approved. An agreement has been reached for the immediate term to use Aha and Confluence to develop and collaborate on System Security Plan (SSP) controls. However, an electronic Governance, Risk, and Compliance system (GRC) is under consideration at DHS. 6/28/2022 - The ASI hired a Security SME who will be working with DHS on security governance, risk, and compliance activities. Weekly security meetings began again in May but are more in the form of status updates. Working sessions on the system security plan controls will resume in July. 5/31/2022 - The ASI plans to add a security resource in June and may need to add additional resources. While the lack of a completed GCP change request is impacting security tasks, the loss of the DHS Security Analyst covered in finding #77 is a project issue. The ASI states that the security activities are six weeks behind schedule, and it will take a couple of months to mitigate this risk. 04/27/2022 - As of April 22nd, IVV has not observed any ASI Security SMEs attending security meetings. While Unisys states an open job requisition exists for a Security Architect, one has yet to be added to the DHS BES team. The BES Security Officer gave conditional approval of the system security boundary, based on the BES architecture not being finalized. All current security-related meetings have been canceled between the ASI and DHS as the DHS security officer has resigned. Between the guidance that DHS has been providing on federal regulatory compliance (Pub 1075, MARS-E, FNS, NIST 800-53/5) and the lack of an ASI security architect and security SMEs to collaborate with DHS, security components	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 IVV 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.	Earl Burba	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 BS," if the Hawaii guidelines (https://www.hawaii.edu/access/un-guidelines-for-accessibility/), FNS Guidelines from the 90L 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	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. 4/29/2022 - The ADA compliance tool is still in the trial phase and a compliance report will be run once the initial testing has been completed. The ASI is expected to provide results of the testing to DHS when the trial phase is finished, and the report generated. 5/31/2022 - The ASI has identified an accessibility compliance tool that will meet the needs of the Project and DHS has approved opening a Request for Proposal to demonstrate of that tool. The ASI completed a Proof of Concept for the tool and now needs to 1) receive DHS approval to use the tool, 2) purchase the tool, 3) configure the system to accommodate the tool, and 4) institute the tool into the delivery pipeline. 4/26/2022 - The ASI is evaluating four ADA testing tools for consideration due to high pricing for the tool selected in March. This tool was demonstrated to the ASI and appeared to provide the required reporting features and the needed integration with the BES architecture. A second ADA tool under review has a proof of concept scheduled for the week of 5/2/2022. The ASI has stated that little impact is expected from the delay in performing ADA compliance testing and that a tool will be tested and selected shortly. 3/28/2022 - The ASI testing lead confirmed that an ADA tool has been selected for consideration and a demonstration held. Next step is to execute a proof of concept within the BES application. To mitigate this risk, the ASI stated that problems identified by a tool or through manual evaluation to Section 508 criteria for web applications can be easily rectified with little impact to development and schedule. 2/25/2022 - The ASI team identified a new ADA tool to conduct 508 compliance testing. While a demonstration is planned to confirm the tool can work with the BES architecture, the ASI has stated that if an	9/9/2021 - RAP: The ASI has invited the IVV to make contact with the development team to review the results of the desk top tool to gain insight. To date, the IVV has not contacted the development lead to have further discussions on this topic.	

ID	Title	Reporter	Finding Type	Identified Date	Category	Description	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst	Finding Status	Status Update	Client Comments	Vendor Comments	
63	The lack of early planning and coordination with interface partners may result in schedule delays.	Al Pangelinan	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 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 (Unit Test, SIT, ST, OAT). Interface planning and execution tasks and activities, including those for interface partners, are neither resident nor managed within the Project Schedule. A mitigation plan has not been developed to address the unavailability of interface partners during interface implementation after MOAs have been approved, testing dates have been confirmed, and communications have been frequent.	Interfaces is one of the areas where DOI projects 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 may minimize the risk of possible 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 tested before deploying the system to production.	OPEN - Complete all MOAs and obtain approval. 6. Confirm testing dates and interface partners in writing. COMPLETE - Establish a communication plan for each interface partner for the duration of the BES OI activities. 10/29 COMPLETE - Identify and document all interface partners. COMPLETE 3/31/2022 3. Define a release schedule for each interface to include milestone dates, coordination, and execution and share with the interface partners. 01/04 COMPLETE 4. Determine which deliverable will include the details associated with the planned construction and detailed technical designs of all interfaces. 01/04 COMPLETE	Q4 2021	3	Low	Analyst	Open	07/01/2022 - DHS executed the DPS agreement (MOA) on 07/07/2022. The status of the three remaining required agreements are as follows: The DAGS agreement is moving forward with design work. DHS reviewed the DLR MOA and resubmitted it to DHS. The latest draft of the HVC was sent to the DHS Directors office with feedback from BES3 and MQD. 06/30/2022 - There are 4 agreements outstanding (DAGS, DLR, DPS, and HVC). DHS plans to discuss the agreement at the next meeting with DAGS, which is tentatively scheduled for 07/06/2022. DHS is currently reviewing the DLR, DPS, and HVC agreements. 05/12/2022 - There were no changes to the interface communication plans in this reporting period. There are 5 agreements outstanding (DLR, DPS, HVC, DAGS, and CYRCA). DPS, HVC, and DLR have all been drafted and are going through reviews with DHS and the interested parties. DAGS has not been drafted by DHS. DHS is in discussions with the Department of Tax for an interface that would bypass DAGS. The CYRCA interface has been evaluated within DHS as the business requirements. CYRCA meets are being evaluated by DHS executive management. IVV has opened a new issue #79 related to vendor development delays for the task management software. 04/28/2022 - There were no changes to the interface communication plans in this reporting period. The DAGS, DLR, DOH, and HVC agreements are still outstanding. In addition, there is a new element to this risk regarding DLR because the interface will not be able to offer additional data elements which DHS needs. 03/29/2022 - There were no changes to the interface communication plans in this reporting period. 02/25/2022 - There were no changes to the interface communication plans in this reporting period. 01/28/2022 - There were no changes to the interface communication plans in this reporting period. Based on discussions with the ASI, two recommendations are complete. 01/05/2022 - No changes to the interface communication plans in this reporting period.	7/20/21 RAP - The ASI team requests that the IVV reassess the severity of this risk in light of the following reasons: a) the ATC schedule extension has made the agency 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 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		
61	Poorly executed JAD and design sessions could lead to inaccurate design and rework.	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 concerns 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 Day one of Design Sprint fully prepared to facilitate discussion on topic of sprint, with adequate knowledge about business process and approach for design based on JAD/OAT notes and other pertinent material. 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 recommendations being met. Closed 4/30/2022 - The DHS 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. 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 process. (Closed, 1/31/2022) - ASI and DHS should work together to vet the in-progress design with all SMEs for the areas 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 Analysts are not running the meetings alone. Complete 7/31/2022	ASAP	2	5	Med	Open	7/31/2022 - Although the ASI has implemented preparatory sessions for their Business Analysts (BA) prior to design Sprint Day 1, IVV continues to observe occurrences of BAs not being fully prepared for the initial session. DHS has also raised concerns that the ASJ support analysts are not always assigned to meetings, leaving the BA solely responsible to lead discussions and capture notes, update artifacts, and capture action items. DHS requested the ASI to address these concerns going forward. 4/30/2022 - The ASI continues to review the Design Sprint process by engaging the DHS SMEs and ASI system analysts earlier in the process and conducting prep sessions with the ASI Business Analysts (BA) prior to each Sprint. These pre-sprint sessions with BAs are starting to address the remaining recommendations. IVV will continue to observe and look for impactful results from these latest changes to the process. 5/31/2022 - The ASI instituted a new process to assign ASJ BAs to similar Use Cases to build knowledge of common business processes, strengthening their facilitation during design meetings. DHS Lead Product Owners are also taking an active role to ensure the BES Design meets the requirements as noted in this month's positive finding. 4/30/2022 - The ASI is working to mitigate the issues raised regarding inconsistent BA performance, including the migration of Senior BA to CMM team and providing additional training/onboarding for new BAs. Additionally, a System Analyst will participate in early days of design sprints to help with initial discussions of design. The IVV team and DHS look to observe improved facilitation in design sprints as these changes take effect. An additional recommendation has also been added, focusing on BA preparation for Design Sprints. 3/30/2022 - DHS and ASI continue to ramp up design sprints, with positive movement in addressing this finding's open recommendations. IVV has observed some challenges, including Business Analyst confusion around Unit 7/31/2022 - The ASI plans to provide resources to develop and report on quality metrics, which will be addressed in the CAP. 6/30/2022 - No significant change to the status of this finding although DHS has assigned a resource to research a solution for creating quality metrics. 5/31/2022 - The revised DOI process, in particular the design sprints, is bringing more focus and attention on design documents, which has a positive effect on quality when measured by the lower number of comments in deliverable reviews. IVV will validate this metric is fully documented in the Quality Management Plan, when published by the ASI. 4/30/2022 - No material update for this reporting period as IVV awaits updates to the Quality Management Plan. 3/30/2022 - When Release 6 final test results are published, IVV will re-evaluate this finding. 1/28/2022 - IVV continues to review the Release 0.6 test results and available metrics. The initial results show a positive trend, which is encouraging since Release 0.6 has the most complex functionality developed and tested by the project team to date. If the number of defects attributed to design remain low throughout Release 0.6 testing, the focus of this finding will be addressed. 1/31/2022 - Based on ASI and DHS testing and defect validation progress, IVV's root cause recommendation is complete. If remaining testing for all sub-releases in Release 0.6 shows a low cause of defects from design, the primary concern of this finding should be addressed. 12/15/2021 - The completion of Release 0.6 testing should provide clarity on overall defects, specifically on those related to design. Results consistent with already completed SSP testing for Release 0.6 could address the scope of this finding. 11/30/2021 - The results of the system test for Release 0.6 showed a significant reduction in defects compared to prior releases, which could reflect improvement in the quality of deliverables. IVV will review the root cause analysis when provided by the ASI. 10/31/2021 DHS testing team reported inconsistencies in Release 0.6 testing for this reporting period. 06/30/21 - The ASI has stated they have removed the restriction requirement for working in person and are encouraging staff to spend time in the office. DHS team members are still not required to work in the office but DHS is also encouraging office time. Three DHS team members currently work out of the ASI's downtown Honolulu office. 03/31/22 - The ASI and their subcontractor are making efforts to increase in-office person work which could help to increase productivity and communication as well as overall quality of project work. 04/29/22 - No material update for this reporting period. 03/31/22 - State leadership has rolled back most COVID mandates. This month, however, most individual State departments have been given the option of not requiring their staff to work in-person. DHS key liability maintain remote work policies for the foreseeable future. IVV recommends DHS consider strategically requesting in-person meetings for discussions that can be significantly more productive in-person. 2/28/22 - The State of Hawaii is planning on eliminating most COVID mandates as of 3/5/22. In-person meetings could improve collaboration for design and other sessions, if the Project elects to increase in-person meetings. 1/31/22 - The ASI has reaffirmed that remote meetings are a less effective form of communication than in-person meetings and therefore, COVID continues to have a negative impact on the quality of some project activities, albeit difficult to quantify. 12/31/21 - Though Omicron COVID cases are surging, the project has indicated they do not plan to make changes to current protocols and do not expect this surge will materially impact the project. 11/29/21 - The ASI has transitioned their team from working remotely to primarily working in their Honolulu office as of October 2021. It remains unclear whether the new COVID variant (Omicron) will disrupt project activities. 10/28/21 - No material updates in resource period. 9/29/21 - No material update in	06/30/2020 - New deliverables this month included Bi-10 and Bi-20. Bi-10 was initially called back for quality issues, and the issues were corrected. DHS is not comfortable with Bi-10 re-format, will be revised again.	9/2/21 RAP - The ASI team does participate in many facets of the design and development including screen mock-up reviews, backlog grooming, and Sprint demo's. Product owner participation is meant to have limited participation. The team is concerned about the participation of the IVV for two main reasons: 1) IVV does not always stay alert in discussions on design despite assurances from the IVV PM that it is not their role, and 2) IVV participation typically drives what are meant to be informal processes to more	
49	Poor quality project deliverables may impact the system design, testing efforts and the project schedule.	Brad	Finding - Issue	4/16/2020	Project Management	In April, four Bi-10 design deliverables and one Interface Control Document deliverable were submitted for client review. There was an average of 85 comments submitted for each of these deliverables. The documents exhibited erroneous information, a lack of a logical organizational flow, an insufficient level of detail, and a lack of understanding of the subject matter from both a functional and technical perspective. DHS logged this issue in the Project Issue Log for corrective action by the ASI. The ASI acted by conducting an internal root cause analysis and provided DHS and IVV the high-level results.	The staff time spent on reviewing deliverables is exceeding the plan for all project entities and has caused schedule delays due to the associated rework needed for remediation. If poor quality deliverables continue to be produced and submitted for review, this can continue to result in unproductive use of time, unanticipated rework, misguided development and testing activities, potentially unfulfilled functionality, and additional schedule delays.	- IVV recommends that a facilitated root cause analysis be performed by the ASI with DHS and IVV in attendance. Quality issues are rarely generated by a single entry in a project, so there could potentially be multiple causes or root causes of this current condition. Once the root cause(s) are identified, IVV recommends immediate action be employed to resolve quality concerns on in-process deliverables prior to submission of subsequent deliverables. (Closed 7/30/2021 - ASI reviews its Quality Management Plan to ensure that the Project is working within the guidelines of this Plan document. In particular, the ASI should evaluate and consider if it is in alignment with Section 3.1.2 Measure Project Quality, which states, ASJ measures process and product quality by 1) selecting BES implementation processes and product attributes to measure; 2) selecting component activities to measure; 3) defining value scales for each component activity; 4) recording observed activity values; and 5) combining the recorded attribute values into a single number called a process quality index. IVV has not seen evidence indicating the ASI is utilizing metrics to measure its process and product quality. - ASI verifies that the information in design and testing artifacts is kept in sync and consistent. (Closed 5/31/2022) - ASI perform a root cause analysis with DHS and IVV in attendance to determine the source of the design defects. (Closed, 1/31/2022)	Immediate	2	2	Low	Open	07/31/2022 - No material update for this reporting period. 06/30/21 - The ASI has stated they have removed the restriction requirement for working in person and are encouraging staff to spend time in the office. DHS team members are still not required to work in the office but DHS is also encouraging office time. Three DHS team members currently work out of the ASI's downtown Honolulu office. 03/31/22 - The ASI and their subcontractor are making efforts to increase in-office person work which could help to increase productivity and communication as well as overall quality of project work. 04/29/22 - No material update for this reporting period. 03/31/22 - State leadership has rolled back most COVID mandates. This month, however, most individual State departments have been given the option of not requiring their staff to work in-person. DHS key liability maintain remote work policies for the foreseeable future. IVV recommends DHS consider strategically requesting in-person meetings for discussions that can be significantly more productive in-person. 2/28/22 - The State of Hawaii is planning on eliminating most COVID mandates as of 3/5/22. In-person meetings could improve collaboration for design and other sessions, if the Project elects to increase in-person meetings. 1/31/22 - The ASI has reaffirmed that remote meetings are a less effective form of communication than in-person meetings and therefore, COVID continues to have a negative impact on the quality of some project activities, albeit difficult to quantify. 12/31/21 - Though Omicron COVID cases are surging, the project has indicated they do not plan to make changes to current protocols and do not expect this surge will materially impact the project. 11/29/21 - The ASI has transitioned their team from working remotely to primarily working in their Honolulu office as of October 2021. It remains unclear whether the new COVID variant (Omicron) will disrupt project activities. 10/28/21 - No material updates in resource period. 9/29/21 - No material update in	06/30/2020 - Office deliverables this month included Bi-10 and Bi-20. Bi-10 was initially called back for quality issues, and the issues were corrected. DHS is not comfortable with Bi-10 re-format, will be revised again.	7/30/21 RAP - The ASI team will review and respond to this issue again when a material update is made by the IVV. We also recommended the rethinking of the first recommendation based on the assessment from the IVV that this is a low risk. The tone, length, and substance of that recommendation is out of step with a risk perceived by the IVV for a number of months now to be 4/21/21 rap - The ASI team agrees that the full embrace of the project of the Confidence tool has improved the deliverable management process.	
47	The COVID-19 pandemic and the related "stay at home" order could hinder project activities and negatively impact the project schedule and budget.	mfor	Finding - Risk	3/29/2020	Project Management	On 3/23/2020, the Governor of Hawaii issued a "stay at home, work from home" order that has reduced state departments' ability to be fully functional as the large majority of state workers will be required to work from home/remotely at least until the end of May and many offices may be completely shut down until that time as well. Unclear if the order will extend beyond that date.	DHS stakeholder participation in key activities could be significantly hindered, not only by working remotely but also by the need to focus on delivering services to beneficiaries. Planned key activities such as design sessions may be facilitated remotely which may impact the quality of the sessions. Going forward, most if not all project activities will more than likely be conducted remotely until this crisis passes. The DHS project team will soon lose some key members of the PMO, the PMO lead will retire on 4/30/20 and another key member in June 2020. DHS has concerns that the state could experience a significant loss of revenue due to COVID, which could lead to DHS budget challenges. If the state/DHS institutes a hiring freeze, DHS PMO may not be able to replace these key resources. Additionally, if the state institutes furloughs, DHS project team resources could be further constrained. Unclear if the state budget challenges will impact overall project funding.	- Continue to make efforts to setup, train, and assist new stakeholders on remote work devices and tools and continue to assist stakeholders with becoming highly functional with remote access technology (e.g. MS Teams/SharePoint). - Complete - Support the project and DHS create a detailed, documented risk mitigation strategy and plan that is reviewed regularly and revised to address the current state of the COVID-19 threat and related impacts. - Update the OCA Plan to include any new activities or updates to planned activities to aid the organization through this COVID-19 pandemic in the short and long term. - Complete - Send broad communications to stakeholders to assure clear understanding of changes to the Project with regard to impacts of COVID, as well as clarifying communications as to what will remain the same. - Explore options for freeing up key BES3D SME's to work on the project. - Complete - Project leadership continues to encourage independent phone conversations to enhance and accelerate communications, and for team members to not wait for meetings to converse.	ASAP	2	2	Low	Open	07/31/2022 - No material update for this reporting period. 06/30/21 - The ASI has stated they have removed the restriction requirement for working in person and are encouraging staff to spend time in the office. DHS team members are still not required to work in the office but DHS is also encouraging office time. Three DHS team members currently work out of the ASI's downtown Honolulu office. 03/31/22 - The ASI and their subcontractor are making efforts to increase in-office person work which could help to increase productivity and communication as well as overall quality of project work. 04/29/22 - No material update for this reporting period. 03/31/22 - State leadership has rolled back most COVID mandates. This month, however, most individual State departments have been given the option of not requiring their staff to work in-person. DHS key liability maintain remote work policies for the foreseeable future. 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It remains unclear whether the new COVID variant (Omicron) will disrupt project activities. 10/28/21 - No material updates in resource period. 9/29/21 - No material update in	06/30/2020 - Office opening may be delayed until September/October.	7/30/21 RAP - The ASI agrees that COVID at this time is likely a low risk to both schedule and budget for the project despite some increases related to the data variant. The ASI team continues to maintain social distancing in the office in line with State mandates. However, the team has essentially reached the new normal in Honolulu. This includes fewer resources traveling and more conference calls; however, the project has indicated they are not off shore office, we still have staff working from home. We expect	

ID	Title	Reporter	Finding Type	Identified Date	Category	Description	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst	Finding Status	Initial Update	Client Comments	Vendor Comments	
43	DHS PMO project team members have transitioned off the Project, which may cause gaps in knowledge transfer and leadership on the Project.	Ryan	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 DOI and KOLA Modifications, and planning efforts for BES Maintenance and Operations activities.	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 (ONS 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	Analyst	Open	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 to 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 recruit for PMO resources, but the three positions remain unfilled. However, some PMO responsibilities are being addressed through existing resources. For example, the contracted DHS PM has filled in leadership gaps and has positively impacted the Project. 4/28/2022 - No material updates for this reporting period. 3/31/2022 - DHS continues to recruit for these positions but received minimal interest to date. 2/28/2022 - DHS posted the PMO positions but are having difficulty identifying candidates. While online metrics show there is interest and the positions are being viewed, as of this date, there has only been one application. 1/28/2022 - No material updates in this reporting period. 11/24/2021 - No material updates in this reporting period. 10/31/2021 - No material updates in this reporting period. 9/30/2021 - The BESDO Administrator, serving as the interim DHS BES Project Manager resigned from DHS. To mitigate the knowledge and leadership risk, DHS backfilled the DHS BES Project Manager with a contractor possessing extensive BES project experience. The Assistant BESDO Administrator will provide an active decision-making role in the project. IVV will monitor the impact of these project management changes. The remaining DHS PMO positions continue to be unfilled. 8/30/2021 - No material updates in this reporting period. 7/28/2021 - No material updates in this reporting period. 6/30/2021 - No material updates in this reporting period. 5/31/2021 - DHS remains concerned with the lack of clear communication around the planned configuration management tool and its intended use. DHS pre-provision Service Now but it is currently not funded, and IVV is unaware of contingency plans in the event Service Now funding is not approved. The project is currently assessing the additional level of effort that will be required to comply with the latest revision (Revision 5) of Federally required security controls. IVV is concerned that the move to Revision 5 and potential impact to the project architecture have not been broadly communicated to stakeholders. 4/30/22 - The ASI has stated that their cloud infrastructure will continue to evolve as the technology improves or the cloud provider(s) make changes and that some architecture decisions have yet to be finalized (e.g., use of Splunk vs. Dynatrace). IVV has little to no visibility into whether these changes are being effectively communicated to, or vetted by, the right stakeholders. Further, the Project has previously stated their intention to utilize ServiceNow (SN) for Configuration Management (CM), however, it remains unclear if progress has been made on finalizing this decision, how it will be used, how it will be licensed, division of responsibility between the ES/DHS/ASI, and the status of funding for licenses. 5/31/22 - The ASI's addition of resources including backfilling of key positions may help to increase communication of architecture changes. The ASI stated they are evaluating the benefits of moving the BES portal (SSP) off Oracle DBMS. 4/29/22 - The ASI CDM team is developing a communication plan for communicating the 2 portal strategy, which may include a portal overview walkthrough with the project team and videos prepared for the project stakeholders. 03/31/22 - The ASI has onboarded a new Lead Architect who will be responsible for managing the system infrastructure which should improve clarity around governance, capabilities of the different infrastructure components and how they will be utilized. The strategy for 2/7/19/22 - DHS has stated they remain unclear as to whether the new DOI process is always being followed by the ASI which has created some confusion for DHS/ASI. IVV advised a recommendation to help address this confusion. 6/30/22 - The ASI refined and solidified their DOI process. IVV observed improved understanding of the processes by the DHS SME's, likely due to DHS lead PO's communication and coordination efforts (see finding #78). IVV observed DHS lead PO's effectively advising less experienced ASI BA's as to the process and next steps to increase velocity. Therefore, IVV is lowering this criticality rating to "Low". 5/31/22 - DHS Product Owners have noted that some agreed upon processes (e.g., the reinstatement of formal DHS prototype approvals) were bypassed at some point and now have been reinstated, which created confusion. However, overall understanding of the DOI process continues to improve as DHS leads become more adept with the SDLC and project processes. 4/29/22 - The Project continues to make efforts to mitigate the impact of relying on junior BA's to lead design sessions including moving one of their more experienced BA's from the SSP team to the CDM team. DHS product owners continue to express concerns that they don't fully understand the DOI process and question how effective they can be in making important design decisions if they do not fully understand what's being asked, the technology, and/or the DOI process. Other more experienced DHS participants appear to be stepping up efforts to take control of some sessions when they sense that DHS SMEs are not understanding the process. 03/31/22 - The Project appears to be making strides in implementing and refining their new SDLC process, though DHS has indicated the process requires a significant amount of their time and participation in the Project can take away from their operational duties. DHS provided feedback to IVV that the lack of senior Business Analysts (BA's) is causing confusion in the design process and ASI lack of expertise to design	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 Role and Responsibilities to the DHS team on January 25, 2021. (Gary provided the Final DHS Product Owner Role and Responsibilities document to IVV on 02/08/2021). 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 change 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	mfrs	Finding - Issue	5/28/2019	Project Management	Some platform and BES system architecture decisions have yet to be made and solidified to the project. For example, the ASI and DHS have stated that they have reached agreement that the project will move forward with implementing two Siebel instances (one for KOLA, one for BES), but this is not currently reflected in the project change log or the project decision log. It remains unclear if the details of the rationale for this decision or the plan for integrating the two instances post go-live have been thoroughly vetted and/or documented. Further, there may be some uncertainty around whether when/if all environments (including KOLA and BES production) will be moved to the cloud.	The current project architecture and design should be as representative and inclusive of all known future solution plans as possible. As an example, if KOLA and BES are to move to a single instance of Siebel in the future, planning for that integration should be incorporated into the project now. Such significant future changes are not planned for now, the project is likely to see increased complexity, rework, and costs when integrating the two systems in the future.	- The ASI continue to make updates to the Bi-12 System Architecture Deliverable with additional details as they become available and with any architectural changes are finalized. - Complete. DHS should finalize the Portal strategy and implementation details and communicate clearly communicate out to stakeholders and project teams. - Complete J31 - The Project should continue to vet possible architectural change impacts to the platform (e.g., ADA, Configuration Management tools), Mando, MQ2, 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 changes that could impact 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.	ASAP	2	2	Low	Open	7/31/22 - IVV remains concerned with the lack of clear communication around the planned configuration management tool and its intended use. DHS pre-provision Service Now but it is currently not funded, and IVV is unaware of contingency plans in the event Service Now funding is not approved. The project is currently assessing the additional level of effort that will be required to comply with the latest revision (Revision 5) of Federally required security controls. IVV is concerned that the move to Revision 5 and potential impact to the project architecture have not been broadly communicated to stakeholders. 4/30/22 - The ASI has stated that their cloud infrastructure will continue to evolve as the technology improves or the cloud provider(s) make changes and that some architecture decisions have yet to be finalized (e.g., use of Splunk vs. Dynatrace). IVV has little to no visibility into whether these changes are being effectively communicated to, or vetted by, the right stakeholders. Further, the Project has previously stated their intention to utilize ServiceNow (SN) for Configuration Management (CM), however, it remains unclear if progress has been made on finalizing this decision, how it will be used, how it will be licensed, division of responsibility between the ES/DHS/ASI, and the status of funding for licenses. 5/31/22 - The ASI's addition of resources including backfilling of key positions may help to increase communication of architecture changes. 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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 system. 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.	
16	Lack of clear understanding of the DOI approach may reduce effectiveness of all SDLC Processes.	mfrs	Finding - Issue	12/17/2018	Configuration and Development	Several DHS stakeholders have commented that the SI Design, Development, and Implementation (DOI) approach is unclear. While stakeholders can observe SI activity and have participated in some SI activities, they do not understand how it all fits together and some activity objectives seem unclear. The SI conducted a DOI approach overview session during an initial JAR session, however not all stakeholders were present. IVV did not locate any DOI approach documentation or materials that could be referenced by stakeholders who may have missed to the overview session, by new members of the team, or by other interested parties.	Lack of stakeholder understanding and buy-in to the SI DOI approach and project activity objectives may reduce the effectiveness of JAR and JAD sessions as well as other BES project activities and decisions.	OPEN - The Project monitor DHS product owner productivity, ability/willingness to provide effective feedback to the ASI for design and other important decisions before cascading as needed to assure their effectiveness in their role. - ASI work with DHS lead BA's to determine gaps in understanding and come up with a plan to address any gaps and sources of DHS SME confusion. - ASI work with DHS lead BA's to determine gaps in understanding and develop a plan to address any gaps and sources of DHS SME confusion. COMPLETE - ASI make available the DOI approach documentation/materials for stakeholders to review and/or refresh their knowledge on demand. - ASI provide an additional DOI approach overview session for stakeholders who still may be unclear on elements of the methodology, especially new product owners. - Complete 8/27/2021.	1/31/19	2	2	Low	Open	7/31/22 - IVV remains concerned with the lack of clear communication around the planned configuration management tool and its intended use. DHS pre-provision Service Now but it is currently not funded, and IVV is unaware of contingency plans in the event Service Now funding is not approved. The project is currently assessing the additional level of effort that will be required to comply with the latest revision (Revision 5) of Federally required security controls. IVV is concerned that the move to Revision 5 and potential impact to the project architecture have not been broadly communicated to stakeholders. 4/30/22 - The ASI has stated that their cloud infrastructure will continue to evolve as the technology improves or the cloud provider(s) make changes and that some architecture decisions have yet to be finalized (e.g., use of Splunk vs. Dynatrace). IVV has little to no visibility into whether these changes are being effectively communicated to, or vetted by, the right stakeholders. 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To my understanding, Unites offered to present the orientation during each JAD session. It was suggested by DHS that the pre-JAD packet be placed in the SharePoint project site. For new participants in the JADs, a separate orientation before the JAD should be held for those new participants.	5/9/21 RAP - The most recent update to the SDLC has been published. The ASI will continue to refine the published schedule based on feedback from DHS and the IV&V while we work through the final change request for the ATC which is nearing completion. Regarding the recommendations: Recommendation #1: Based on progress made to date, the ASI is hopeful that we can agree in principle on the ATC change request in July and receive a final schedule published by the end of the month. Recommendation #2: The team has reinstated every other week schedule meetings and is tracking actions be taken on late work on	
2	Late delivery of project deliverables has caused schedule delays.	Ryan	Finding - Issue	11/28/2018	Project Management	Based upon the project schedule dated 11/26/18 (refer to schedule for specifics), several due dates for project deliverables have been missed. As of the date of this report, these deliverables include the Project Management Plan (PMP), which is the formal document that is used to manage the execution of the project. In some instances, this risk may be compounded by a backlog of Deliverable Approval Documents (DEAs) requiring approval and acceptance from the State.	Late deliverables can lead to schedule impacts and too many late deliverables may cause significant disruption to schedules or delays. ****OLD**Without a PMP that depicts all Project Management processes, the Project can suffer unplanned consequences in scope, schedule, cost, and quality parameters. Without a schedule that provides the required level of detail to manage the work, the project is at risk to be successful.	IN PROGRESS Despite not yet having a revised baseline schedule, continue monitoring and analyzing deliverables that may have impact to the critical path. COMPLETE 5/31/2021 - When the revised schedule is published the project team should restate the weekly practice of reporting actions being taken for late tasks and develop mitigation plans for those tasks that may be late. - Complete 4/30/2021, 7/29/2021, 12/26/2021 - DHS and the ASI agree to a revised schedule against which project deliverables can be managed. 3/30/2020 Recommendation - IVV recommends the project team evaluate the estimating process to determine if changes should be made to reduce the number of late tasks and/or conduct a root cause analysis to determine and address the root cause(s). - Closed 8/31/2020 Recommendations: - Prior to acceptance of the new baseline, finalize the needed updates to the project schedule to address the outstanding items/issues identified by DHS, the ASI, and IVV to include the Release 0.1 lessons learned. - Closed - Establish the process for DHS and the ASI to mutually agree to the revised project schedule baseline. - Complete - Establish the process for on-going schedule management and weekly updates, utilizing the Schedule Management sub-plan of the Project Management Plan (BIO-04). - Complete 5/31/2020 - Finalize the updates to the project schedule to address the outstanding items/issues identified by DHS and IVV. - Closed. 5/31/2020 - Establish the process for DHS and the ASI to mutually agree to the revised project schedule baseline. - Closed. 3/31/2020 - Add all tasks that have been performed or planned to be performed in the interim schedule. Closed 3/30/2020 - effective 1/15/2020 the ASI is no longer maintaining the interim schedule. IVV recommends that the ASI complete the Project Management Plan deliverable, work with DHS and IVV for review and edit as needed, and obtain approval of the PMP. This will help ensure that all processes within the project management entity are	TBD	3	3	High	Open	7/29/2022 - Fewer project deliverables are delivered late, and critical path activities do not appear impacted when this happens since they are not dependent on those deliverables. For example, development delays found in Finding #80 do not appear to be caused by late deliverables. Schedule impacts from late deliverables are minimal during this stage of the Project as opposed to the planning/initiation stages where deliverables directly impact subsequent activities. Given the reduced impact this finding has on the Project, IVV is lowering the criticality rating to Medium. IVV has separate findings for the B-5 Project Schedule and BI-13 Security Plan deliverables. 6/30/2022 - The ASI continues to monitor project activities that may impact the critical path and conduct meetings to address late activities. Although some late activities may not impact the critical path, they may impact ASI and DHS staffing since they need additional time to do the unplanned work. The Project reported development activities are running behind in Releases 8, 9 and 10, but only 10 is impacting the critical path. The ASI is reviewing remediation actions. Additionally, based on late activities in the schedule, the Project is updating the schedule further. 5/3/2022 - The Project continues to refine SDLC processes to improve project schedule estimates. Although the schedule has not been approved, the ASI continues to monitor project activities that may impact the critical path and conducts meetings to address late tasks. The ASI has reported delays in development that may impact the project schedule. 4/28/2022 - The Project continues to conduct sprints with varying degrees of success. Some sprints require additional time due to 1) not having the right resources involved early in the process, 2) business analysts lack of preparation and/or experience conducting the sprints, or 3) the ability of the DHS POs and SMEs to effectively execute their roles. However, the Project conducts retrospectives and is continuously taking steps to the improve the			