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September 17, 2021

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

The Honorable Scott K. Saiki,  
Speaker, and  
Members of The House of Representatives  
Thirty-First State Legislature  
Hawaii State Capitol, Room 431  
Honolulu, Hawaii 96813

Dear 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 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 Hawaii 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 (Sep 20, 2021 11:50 HST)

Douglas Murdock  
Chief Information Officer  
State of Hawai'i

Attachment (2)



# Hawaii Department of Human Services Systems Modernization Project

Final IV&V Status Report  
for Reporting Period: August 1 - 31, 2021

*Submitted: **September 14, 2021***

# Overview

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Solutions that Matter

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 center-left; and a few more squares and rectangles in the bottom-right corner, some with white outlines and others as solid blue shapes.

# Executive Summary







# Executive Summary



During this reporting period the results of a survey conducted by the BES Organizational Change Management (OCM) team at the Leadership Conference in July 2021 were published. The survey results indicated the participants valued the information presented and the need for ongoing OCM support (i.e., consistent/frequent communications, training, and stakeholder engagement) to prepare DHS/BESSD for implementation. Key project activities included:

- The ASI presented the proposed SDLC changes to the project team.
- The project team is preparing for Release 0.5 Systems Integration Testing, which will be first test cycle jointly executed by the ASI and DHS Test teams.
- DHS and the ASI are planning to conduct a “Root Cause Analysis” (RCA) on the Release 0.4 UAT cycle that may identify other revisions to the SDLC processes to improve code quality and/or test results.

The project schedule continues to be updated to accommodate SDLC changes, delays due to the KOLEA ATC impact (CMS required KOLEA modifications that are delaying integration with BES), and CMM Interview design/development. The project team is absorbing a lot of change. Additionally, Change Requests are being refined for approval, the Security Plan and Data Conversion are in development, and Interface planning/testing is in process. Some of these activities may require a significant amount of (unplanned) effort prior to the pilot phase.

Jun	Jul	Aug	Category	IV&V Observations
			Project Management	The criticality rating for this category remains high due to the: 1) absence of an approved schedule 2) lack of velocity reporting on FCM (CMM and FMM modules) development that drives project planning, and 3) lack of state funding to fill vacant PMO positions.
			System Design	The project is implementing revisions to the SDLC process to include “Design Sprint” sessions to support early identification of potential design issues. IV&V will monitor the effectiveness of this process in upcoming reporting periods.

# Executive Summary



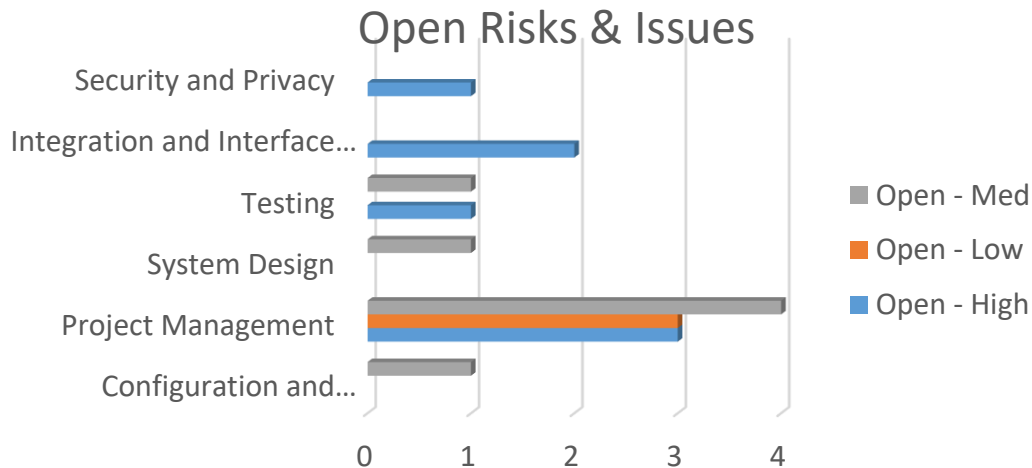
Jun	Jul	Aug	Category	IV&V Observations
M	M	M	Configuration and Development	The ASI conducted a lunch and learn session on August 27, 2021 to review the proposed SDLC process modifications that impact the project schedule. The ASI is planning to publish further details on these changes; IV&V will review when the information is available.
H	H	H	Integration and Interface Management	The project team continued to update the communication plans for the interface partners. A detailed interface schedule along with the testing approach and plan are in progress. The timing of the integration between the BES Modules (SSP, CMM, FMM) and interface partners remains a high criticality rating.
M	M	M	Testing	<p>The project team is planning to remove UAT from all future releases and conduct a Final UAT phase prior to the Pilot phase. By incorporating DHS UAT testers into Systems Testing and Systems Integration Testing, the Project is seeking to identify design issues early based upon their expertise.</p> <p>A risk was opened this month regarding ADA testing; the ASI is in the final stages of selecting the tool for ADA testing, but the amount of rework is unknown for the 5 releases already coded.</p>
N/A	N/A	H	Security and Privacy	A high criticality risk was opened this month concerning the BI-13 Security Plan. There are several standards, controls and requirements that must be implemented within BES prior to conducting the pilot. The Project is behind schedule developing the BI-13 Security Plan and recently the Social Security Administration (SSA) revised their interface process, which may require unplanned work by the project team.

# IV&V Findings and Recommendations

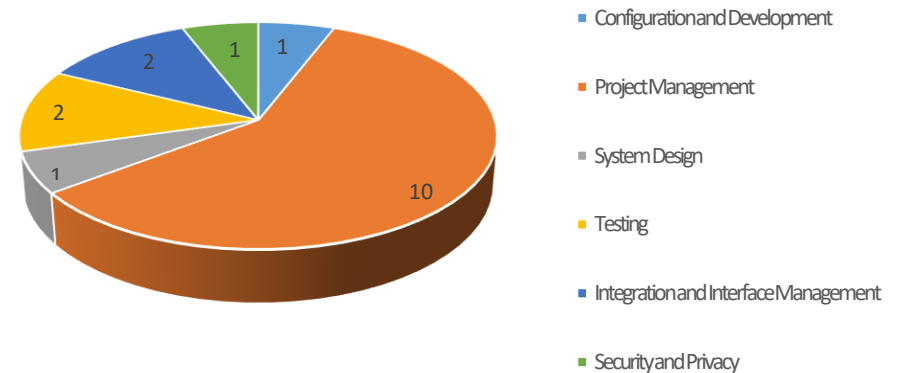
# IV&V Findings and Recommendations



As of the August 2021 reporting period, PCG is tracking 17 open findings (9 risks and 8 issues) and has retired a total of 49 findings. Of the 17 open findings, 10 are related to Project Management, 2 in Integration and Interface Management, 2 in Testing and 1 each in System Design, Configuration and Development, and Security and Privacy.



Open Risks & Issues by Category

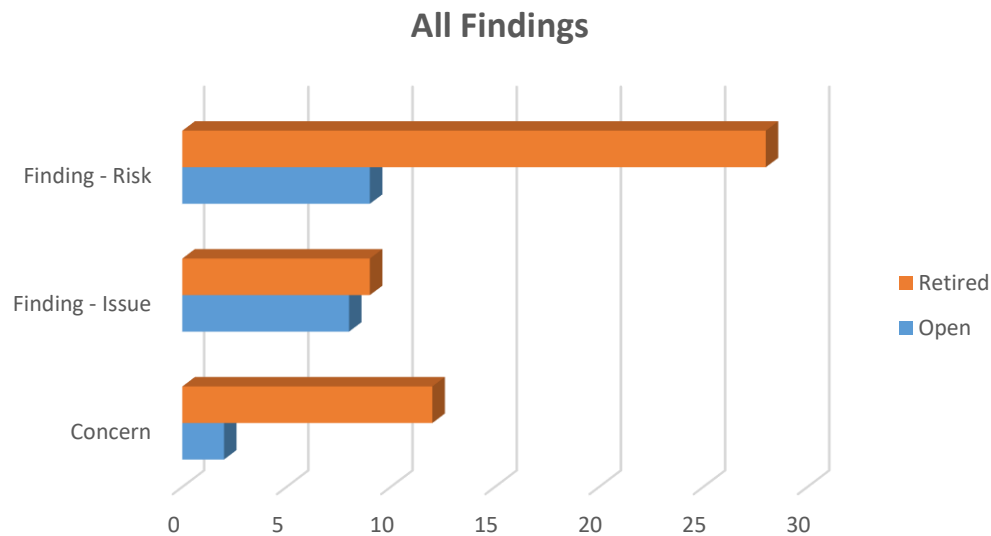




# IV&V Findings and Recommendations



*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
58	<p><b>Risk – The data conversion effort lacks leadership, consistency in data governance, and effective communications which may impact the schedule.</b></p> <p>IV&amp;V retired this finding because DHS and the ASI have taken steps to mitigate this risk. The Data Conversion activities continue to evolve through the SDLC with other identified risks and are noted in IV&amp;V finding #72.</p>	Project Management

# IV&V Findings and Recommendations



## Preliminary Concerns Investigated During the Reporting Period

#	Finding	Category
69	<b>Lack of DHS visibility into regression testing may cause defects/rework within the BES application.</b> Currently, the ASI is conducting regression testing without having a clear process for selecting the regression tests, resolving defects, and communicating those plans/results with DHS. “Failed” regression tests from past releases may cause defects in future releases. IV&V met with the ASI in August to discuss their regression testing tools and processes to identify, track, monitor and report on the status of regression testing activities. Follow-on research and action items are in-progress.	Testing
70	<b>New: Insufficient configuration management may result in preventable defects, schedule delays, budget issues and resource adjustments to compensate for quality and schedule issues.</b> The BI-6 DDI Plan Deliverable, Section 5.2 establishes the framework for the Configuration Management Plan. There is little to no evidence that the Plan is currently being followed. While IV&V recognizes the Google Cloud Platform (GCP) Change Request and Security Plan are not final there are other aspects of the BES configuration that should be currently managed.	Configuration and Development

# IV&V Findings and Recommendations



## Findings Opened During the Reporting Period

#	Finding	Category
71	<p><b>Risk - 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.</b></p> <p><b>Significance:</b> 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 DDI and Maintenance and Operations Phases have not been finalized.</p> <p><b>Rating – Medium</b></p> <p><b>Recommendations:</b></p> <ul style="list-style-type: none"><li>• The ASI should document the current environment M&amp;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&amp;O.</li><li>• The ASI clearly document the scope of work and cost for the GCP CR during DDI and M&amp;O and provide to DHS for approval.</li></ul>	Project Management

# IV&V Findings and Recommendations



## Project Management

#	Key Findings	Criticality Rating
2	<b>Issue – Late Delivery of project deliverables may cause schedule delays.</b> No material change in this reporting period. The project team continues to update the schedule to incorporate the SDLC changes. The revised target date for DHS to accept the schedule is mid-September.	A red circle with a white letter 'H' inside, indicating a high criticality rating.

Recommendations	Progress
<ul style="list-style-type: none"><li>DHS and the ASI agree and publish the revised schedule based on the KOLEA ATC impact, CMM development delays and any other changes to address the potential SDLC Process adjustments.</li></ul>	In process

# IV&V Findings and Recommendations



## Project Management


#	Key Findings	Criticality Rating
29	<p><b>Issue - Uncertainty and/or a lack of communication around long term architecture decisions could impact the project budget, schedule, system design, and planning decisions.</b></p> <p>In August, the revised Two-Portal CR was not published. The ASI continues to research ADA tools that are compatible with the BES Architecture. There is a lack of clarity among stakeholders on how, and to what extent, the project will perform configuration management. DHS has indicated their desire to utilize the ServiceNow configuration management capabilities but have yet to resolve licensing issues and the ASI has yet to commit to the level of configuration management they will perform.</p>	

Recommendations	Progress
<ul style="list-style-type: none"><li>DHS should finalize the Portal strategy and communicate the strategy with the stakeholders and project teams.</li></ul>	In process
<ul style="list-style-type: none"><li>The project should continue to vet possible architectural change impacts to the platform (e.g., ADA, Configuration Management tools), M&amp;O, MQD, and BES systems before finalizing architectural decisions.</li></ul>	In process
<ul style="list-style-type: none"><li>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.</li></ul>	In process
<ul style="list-style-type: none"><li>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.</li></ul>	In process
<ul style="list-style-type: none"><li>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.</li></ul>	In process

# IV&V Findings and Recommendations



## Project Management


#	Key Findings	Criticality Rating
43	<p><b>Issue - DHS PMO project team members have transitioned off the project, which may cause gaps in knowledge transfer and leadership on the project.</b></p> <p>There are no material updates in this reporting period.</p>	

Recommendations	Progress
<ul style="list-style-type: none"><li>DHS continue to work with the appropriate organizations to identify the funds necessary to fill these positions.</li></ul>	In process

# IV&V Findings and Recommendations



## Project Management

#	Key Findings	Criticality Rating
47	<p><b>Risk – The COVID-19 pandemic and the related "stay at home" order could hinder project activities and negatively impact the project schedule and budget.</b></p> <p>The ASI has recently reported they will be closing their offices for at least 2 weeks given the escalating number of COVID cases. As work will be ongoing, they do not expect significant impacts to productivity.</p>	

Recommendations	Progress
<ul style="list-style-type: none"><li>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.</li></ul>	In process
<ul style="list-style-type: none"><li>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.</li></ul>	In process
<ul style="list-style-type: none"><li>Project leadership continue to encourage independent phone conversations to enhance and accelerate communications, and for team members not wait for meetings to converse.</li></ul>	In process



# IV&V Findings and Recommendations



## Project Management


#	Key Findings	Criticality Rating
49	<p><b>Issue – Poor quality project deliverables may impact system design, testing artifacts and the project schedule.</b></p> <p>Although the ASI indicated they plan on providing updated quality metrics that align with use of the Confluence tool, the metrics have not been published. IV&amp;V recognizes this may be a lower priority item since the project team has focused on the SDLC changes along with the necessary schedule adjustments.</p>	

Recommendations	Progress
<ul style="list-style-type: none"><li>IV&amp;V recommends that the 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&amp;V has not seen evidence indicating the ASI is utilizing metrics to measure its process and product quality.</li></ul>	In process

# IV&V Findings and Recommendations



## Project Management


#	Key Findings	Criticality Rating
54	<p><b>Risk – User Acceptance Testing (UAT) processes and timing of inputs required for UAT could lead to implementation delays and delivery of a solution that does not meet business needs or requirements.</b></p> <p>The ASI, with verbal agreement from DHS, revised the SDLC process to eliminate UAT with each BES release; a conduct a consolidated UAT prior to Pilot. IV&amp;V will determine if this finding should be retired after DHS reviews/accepts the revised SDLC process and Project Schedule. The ASI provided an overview of the SDLC changes to the project team on August 29, 2021, IV&amp;V will follow-up with DHS and the ASI to ensure a common understanding is shared regarding the involvement of the DHS UAT test team during the System Test and Systems Integration Testing cycles.</p>	

Recommendations	Progress
• Evaluate the process and/or schedule to determine if adjustments could streamline the process for the UAT test team to plan and create UAT test cases, minimizing rework.	In process
• Designs need to be solidified prior to developing the scripts - should establish a cut-off date for the design.	In process
• Include the IV&V team as SDLC processes are modified based on the Release 0.4 UAT activities.	In process
• Include the IV&V team when the Release 0.4 UAT RCA session is scheduled.	Not Started

# IV&V Findings and Recommendations



## Project Management


#	Key Findings	Criticality Rating
62	<p><b>Issue – Inability to measure development team velocity may impact the projects' ability to forecast the delivery date of the remaining features.</b></p> <p>IV&amp;V observed continued improvement in the development of planning estimates for SSP in Release 0.6. However, IV&amp;V will meet with the ASI to discuss the Jira velocity chart to gain an understanding of how the actual completed story points are maintained by the development team within Jira. The ASI plans to release the FMM and CMM velocity reports in September.</p>	

Recommendations	Progress
<ul style="list-style-type: none"><li>The ASI work with the subcontractor Scrum Masters to calculate the average velocity from past iterations to be used as a historical reference.</li></ul>	In process
<ul style="list-style-type: none"><li>Moving forward, the development teams should provide the ASI with Sprint and Product Burndown charts at the end of every iteration.</li></ul>	In process
<ul style="list-style-type: none"><li>To calculate velocity, user stories need assigned values (IV&amp;V recommends relative story points). If the developers are not currently assigning values to user stories, IV&amp;V recommends this become common practice.</li></ul>	In process

# IV&V Findings and Recommendations



## Project Management


#	Key Findings	Criticality Rating
65	<b>Risk - DHS BESSD knowledgeable staff are needed on the project to ensure the BES solution is designed to meet the business needs and requirements.</b> DHS continues to recruit for the BES PM position.	

Recommendations	Progress
• DHS continue to identify BESSD SME's to support the project as the project progresses.	In process
• Identify and on-board a replacement BES Project Manager.	In process
• Continue coaching the new BES Product Owners to ensure the new system takes advantage of new technologies and aligns to the planned business processes.	In process

# IV&V Findings and Recommendations



## Project Management

#	Key Findings	Criticality Rating
72	<p><b>Risk - The inability to measure and report the overall Data Conversion work effort and progress may lead to schedule slippage.</b></p> <p>The Data Conversion team continues to progress through the data cleansing, planning, and conversion activities. However, the plan does not yet include estimates of all work that is planned to be complete for each release, so it is unclear if there are risks to the project.</p> <p><b><i>Note: This finding replaces finding 58, to more accurately describe the current Data Conversion risk.</i></b></p>	

Recommendations	Progress
<ul style="list-style-type: none"><li>The ASI should develop reports with metrics that accurately measure the Data Conversion progress.</li></ul>	In process
<ul style="list-style-type: none"><li>The Data Conversion team should evaluate the Just In Time (JIT) approach to determine if there are risks to the project that should be monitored/managed.</li></ul>	In process
<ul style="list-style-type: none"><li>The DHS Data Governance committee continue to clarify the usage of MDM so the BES conversion team aligns to the planned governance structure.</li></ul>	In process

# IV&V Findings and Recommendations



## Integration and Interface Management


#	Key Findings	Criticality Rating
60	<p><b>Risk – System Integration of the BES Modules (CMM, FMM, SSP) will be developed in the later releases vs. a continuous integration model within each release which may cause schedule delays.</b></p> <p>The ASI has stated they intend to demonstrate some CMM/SSP integration as part of Release 0.6. With only 4 releases remaining before the final release, it remains unclear if all integrations will be completed and fully tested without schedule slippage. The ASI has described their plan for mitigating this risk which includes enhancing communication between their development groups.</p>	

Recommendations	Progress
<ul style="list-style-type: none"><li>• Prioritize the build of integration points within each module and the creation of scripts (API calls) required for integration.</li></ul>	In process
<ul style="list-style-type: none"><li>• If the ASI needs all the remaining releases to demonstrate an end-to-end solution of the identified business processes across all modules, IV&amp;V recommends planning and communicating the mitigation strategy for handling risks associated with this approach..</li></ul>	In process

# IV&V Findings and Recommendations



## Integration and Interface Management

#	Key Findings	Criticality Rating
63	<p><b>Risk – The lack of early planning and coordination with interface partners may result in schedule delays.</b></p> <p>The project team continued to update the communication plans. IV&amp;V conducted another review of the Communication Plans and found that 2 interface partners' contacts have not been documented, 3 MOAs have not been approved, 3 need unit test dates confirmed, 6 need system test and UAT dates confirmed, and 27 need pilot and production cutover dates confirmed. The project team has escalated the lack of response from some Interface Partners to DHS for resolution.</p>	

Recommendations	Progress
• Establish a communication plan for each interface partner for the duration of the BES DDI activities.	In process
• Identify and document all interface partners' contacts	In process
• Define a detailed schedule for each interface to include milestone dates, coordination, and execution and share with the interface partners.	In process
• Determine which deliverable will include the details associated with the planned connectivity and detailed technical designs of all interfaces.	In process
• Complete all MOAs and obtain approval.	In process
• Confirm testing dates with interface partners in writing.	In process
• Distribute preparation procedures for interface implementation to the interface partners.	In process
• Develop a mitigation plan to address the unavailability of Interface Partners during interface implementation	Not started

# IV&V Findings and Recommendations



## Configuration and Development

#	Key Findings	Criticality Rating
16	<p><b>Issue – Lack of clear understanding of the DDI approach may reduce effectiveness of all SDLC Processes.</b></p> <p>On 8/27/21, the ASI conducted a Lunch and Learn session to help the project team better understand their DDI processes. Key changes to their previous process were highlighted. The changes include the addition of design sprints and moving their current test lead out of testing and into a system design business analyst role. The ASI has stated they will be providing more documentation of their DDI approach and will post in Confluence.</p>	A yellow circle with the letter 'M' inside, indicating a Medium Criticality Rating.


Recommendations	Progress
<ul style="list-style-type: none"><li>ASI provide an additional DDI approach overview session for stakeholders who still may be unclear on elements of the methodology, especially new product owners.</li></ul>	Complete
<ul style="list-style-type: none"><li>ASI make available their DDI approach documentation/materials for stakeholders to review and/or refresh their knowledge on demand.</li></ul>	In process
<ul style="list-style-type: none"><li>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.</li></ul>	In process



# IV&V Findings and Recommendations



## System Design


#	Key Findings	Criticality Rating
61	<p><b>Issue – Poorly executed JAD and "design sessions" could lead to inaccurate design and rework.</b></p> <p>IV&amp;V did not participate in any design sessions or design sprints in this reporting period; therefore, we have no material update this month. Although these sessions were conducted, IV&amp;V was not included. IV&amp;V respectively requests to be included in the design sprints and/or sessions as they are scheduled by the project team.</p>	

Recommendations	Progress
<ul style="list-style-type: none"><li>JAD and design sessions should be led by experienced senior BAs, with goals, objectives and results communicated to all participants.</li></ul>	In process
<ul style="list-style-type: none"><li>The facilitator should use their expertise to drive discussions through leading questions.</li></ul>	In process
<ul style="list-style-type: none"><li>The DHS and ASI product owners should actively participate to ensure the system meets the requirements, designed taking advantage of new technology and aligns to the 'to be' business process.</li></ul>	In process
<ul style="list-style-type: none"><li>The ASI should back-track significant differences in design direction to determine the root cause in an effort to identify these items as early in the SDLC as possible.</li></ul>	In process
<ul style="list-style-type: none"><li>The Product Owners should have more direct interaction with the development team, proactively seeking collaboration.</li></ul>	In process
<ul style="list-style-type: none"><li>The Functional Design Document process, to include the Design Sprint concept, should be clearly defined and shared with all project team members.</li></ul>	In process
<ul style="list-style-type: none"><li>Invite IV&amp;V to all future design sessions and design sprints to allow IV&amp;V to observe and assess the effectiveness of the revised design processes.</li></ul>	Not started

# IV&V Findings and Recommendations



## Testing

#	Key Findings	Criticality Rating
66	<p><b>Issue – The number of issues/defects found in UAT may cause planned work in the future sprints to be delayed due to the prioritization of the resolution of issues/defects found in UAT.</b></p> <p>The ASI, with verbal agreement from DHS, revised the SDLC process to eliminate UAT with each BES release and perform a Final UAT phase prior to Pilot. IV&amp;V will determine if this finding should be retired after DHS reviews/accepts the revised SDLC process and Project Schedule. DHS and the ASI plan to conduct a Release 0.4 UAT RCA with the project team to identify and take appropriate corrective actions. Also, the ASI has indicated they are reviewing testing metrics to generate and report to DHS during future testing cycles.</p>	

Recommendations	Progress
• Perform a joint Release 0.4 UAT (DHS/ASI/IV&V) RCA to identify and take corrective actions.	Not started
• Adjust the project plan and provide reasonable scope for UAT for subsequent releases taking into account the number of defects and testing time needed.	In process
• Validate all UAT defects are retested in SIT to ensure they are included in Regression Testing.	In process
• System and Integration testing be executed more rigorously.	In process
• The ASI should report testing metrics and DHS should monitor this Key Performance Indicator (KPI).	Not started

# IV&V Findings and Recommendations



## Testing

#	Key Findings	Criticality Rating
67	<p><b>Risk - The Americans With Disabilities Act (ADA) Section 508 compliance tool has not been installed for the project, which may cause significant rework.</b></p> <p>The ASI has stated that a tool to provide ADA Section 508 compliance verification for the project was recently selected and they are validating the tool will effectively perform in the BES architecture. As an interim solution, the ASI is using a desk-top tool to identify potential ADA compliance issues however, IV&amp;V has not seen the results of the interim solution, nor it is known if the existing BES application code from Release 0.1 through Release 0.4 used this desk-top ADA tool.</p> <p><i><b>Note: This finding was previously reported as a preliminary concern.</b></i></p>	

Recommendations	Progress
<ul style="list-style-type: none"><li>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.</li></ul>	In process
<ul style="list-style-type: none"><li>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 and IV&amp;V 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.</li></ul>	In process

# IV&V Findings and Recommendations



## Security and Privacy

#	Key Findings	Criticality Rating
68	<p><b>Risk</b> - Insufficient planning/execution of the BES Security Plan activities may lead to delays in gaining Federal Partner approval for the BES to begin the Pilot Phase.</p> <p>The ASI is updating the BI-13 Security Plan Deliverable Expectation Document (DED) with feedback from DHS and IV&amp;V. Simultaneously the ASI is developing the BI-13 Security Plan to include the tools and processes to document, track, monitor and report the status of all requirements and controls through the verification of implementation of each requirement.</p> <p><i><b>Note: This finding was previously reported as a preliminary concern.</b></i></p>	

Recommendations	Progress
<ul style="list-style-type: none"><li>DHS and the ASI agree and finalize the BI-13 DED.</li></ul>	In process
<ul style="list-style-type: none"><li>The ASI continue to develop the BI13 Security Plan in close collaboration with DHS.</li></ul>	In process
<ul style="list-style-type: none"><li>DHS and the ASI agree upon the tools and process that will be used to document and track security control implementation, if not included in the BI-13 Security Plan. The process should define the level of detail needed to track progress (estimates, target dates, risks, issues, evidence) along with the Requirement Traceability Matrix.</li></ul>	In process



# IV&V Status

# IV&V Engagement Status



IV&V Engagement Area	Jun	Jul	Aug	Comments
IV&V Budget				
IV&V Schedule				
IV&V Deliverables				The Release 0.3 Final Code Review results were published.
IV&V Staffing				Joe Frasca joined the IV&V team and Andy Wergedal is no longer supporting the HI DHS BES project.
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 August reporting period:
  - Completed – July 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 September 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-20 Release 0.5 Test Scenarios, Cases, and Scripts (Iteration 1)	8/27/2021	1.0
BI-14 Release 0.5 Technical Design Document	8/18/2021	1.0
BI-10 R0.6 Common Functions - Special Indicators - Iteration 1	8/17/2021	1.0
BI-15 Release 0.4 Fully Configured and Developed System	8/16/2021	1.0
BI-10 R0.5 SSP Renewals, Administrative Hearing, Case Management, Document Management	8/13/2021	1.0
BI-22 Release 0.4 System Test Report - Revised	8/16/2021	1.0
BI-20 Release 0.5 Test Scenarios, Cases, and Scripts	8/14/2021	Draft
BI-13 Security Plan DED	7/26/2021	Pre-Draft
BI-10 R0.6 Financial Management Module - Overpayments – DRAFT	7/30/2021	Draft
BI-10 R0.6 Common Functions Special Indicators – DRAFT	7/26/2021	Draft



# Additional Inputs – Artifacts



Deliverable Name	Artifact Date	Version
Unisys Contract Amendment 3	4/17/2020	N/A
FNS Handbook 901	01/2020	V2.4
BES Risks and Issues Log	08/04/2021 08/11/2021 08/18/2021 08/25/2021	N/A
BES Weekly Schedule (BI-5)	08/10/2021 08/17/2021 08/24/2021 08/31/2021	N/A
BES Weekly Status Report	08/04/2021 08/11/2021 08/18/2021 08/25/2021	N/A
Java Code Standards	09/11/2020	1.6
BES Shared Interfaces	N/A	N/A
R0.3 Codebase	05/11/2021	0.3



## Meetings and/or Sessions Attended/Observed:

1. Weekly Platform Status Meeting – 8/3/2021, 8/10/2021, 8/17/2021, 8/24/2021, 8/31/2021
2. Weekly Architecture Meeting – 8/4/2021, 8/11/2021, 8/18/2021, 8/25/2021
3. Bi-Weekly Project Status Meeting – 8/4/2021, 8/18/2021
4. Weekly BES PMO and IV&V Touch Base – 08/25/2021
5. Weekly BES Dev Stand-up – 8/4/2021, 8/11/2021, 8/18/2021, 8/25/2021
6. Weekly SSP Backlog Grooming Session – 8/11/2021, 8/18/2021, 8/25/2021
7. BES Data Conversion Meeting – 8/9/2021, 8/16/2021, 8/17/2021, 8/23/2021, 8/25/2021, 8/30/2021
8. Weekly Schedule Review Meeting – 8/10/2021, 8/17/2021, 8/24/2021, 8/31/2021
9. IV&V Team Meeting – 8/5/2021, 8/9/2021, 8/16/2021, 8/19/2021, 8/23/2021, 8/26/2021, 8/30/2021
10. HI DHS BES July Draft IV&V Report Review – 8/10/2021
11. DHS and IV&V Touch Base – 8/2/2021, 8/16/2021, 8/30/2021
12. ASI and IV&V Pre-Draft Report – 8/2/2021
13. [BES] R0.5 Final Release Build Demo – CMM DSNAP – 8/2/2021
14. Sprint Demo – SSP – 8/2/2021
15. BES Security – 8/3/2021
16. [BES] R0.6 BI-10 Walk-Through – CF Special Indicator – 8/3/2021
17. Implementation Planning – 8/3/2021, 8/17/2021, 8/31/2021
18. DHS/ASI/IV&V – Release 0.3 Code Review – 8/4/2021
19. [BES] R0.4 BI-15 Walk-Through – Fully Configured and Developed System – 8/5/2021
20. [BES] R0.7 Screen Prototype – CF07 Manage Case Assignment – 8/6/2021
21. [BES] R0.6 BI-10 Walk-Through – FMM Overpayments – 8/11/2021
22. [BES] R0.6 Screen Prototype – CMM CO71 Manage Special Circumstance Allowance – 8/12/2021
23. ASI/IV&V Release 0.3 Code Review – 8/12/2021
24. [BES] R0.6 Sprint Demo – CMM CO5r Manage FTW – 8/13/2021
25. DHS and IV&V – Testing Approach – 8/16/2021
26. HI BES ASI and IV&V Touch Base - Functional Team – 8/17/2021
27. DHS-Unisys Security Touchpoint – 8/17/2021, 8/24/2021, 8/31/2021
28. ASI/IV&V Mid-month Check-in – 8/17/2021
29. HI BES ASI and IV&V Touch Base - Technical Team – 8/19/2021
30. R0.5 BI-20 Walk-Through – Test Scenarios, Cases, and Scripts – 8/19/2021



## Meetings and/or Sessions Attended/Observed:




- 31. DHS/ASI/IV&V BES Defects and Enhancements – 8/24/2021
- 32. [BES] R0.9 Release Kickoff – 8/24/2021
- 33. Monthly Project Risk and Issue Review Meeting – 8/25/2021
- 34. [BES] R0.7 Screen Prototype – CMM CO23 and CO23a – 8/26/2021
- 35. [BES] R0.6 Sprint Demo – CMM CO05r and CO05w – 8/27/2021
- 36. [BES] R0.6 Sprint Demo – CMM CO05n Manage Absent Parent – 8/27/2021
- 37. [BES] R0.6 Sprint Demo – CMM CO05l Manage Disability – 8/27/2021
- 38. Lunch and Learn – 8/27/2021

The background is a solid blue color. It features several abstract geometric elements: squares of various sizes and colors (some are solid blue, others are white outlines) and thin white lines that form larger square frames or connect smaller squares. These elements are scattered across the page, with a higher concentration on the left side.

# 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

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- 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

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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                 |



**Solutions that Matter**

Finding Number	Title	Reporter	Finding Type	Identified Dat	Category	Observation	Significance
72	The inability to measure and report the overall Data Conversion work effort and progress may lead to schedule slippage.	Brad	Finding - Risk	8/31/2021	Project Management	The data conversion work shows good progress at the tactical level, focused on just-in-time work as the releases of BES are developed. However, clarity on progress at a strategic/project level is difficult to measure/guage.	Data Conversion (DC) is often considered one of the longest and most complex tasks in a DDI project. As the releases get more complex and impactful to the overall BES solution, it is critical that the project team understand if DC work is on schedule for Pilot and Implementation and take mitigation actions if risks are identified.
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 delays, and/or the need to reduce scope.	Jolene	Finding - Risk	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 DDI and Maintenance and Operations Phases have not been finalized.
70	Insufficient configuration management may result in preventable defects, schedule delays, budget issues and resource adjustments to compensate for quality and schedule issues.	mfors	Concern	8/23/2021	Configuration and Development	The BI-6 DDI Plan Deliverable, Section 5.2 establishes the framework for the Configuration Management Plan. There is little to no evidence that the Plan is currently being followed. While IV&V recognizes the Google Cloud Platform (GCP) Change Request and Security Plan are not final there are other aspects of the BES configuration that should be currently managed.	Configuration Management is a set of processes and procedures that ensures the BES is understood and works correctly. The BES solution includes tools that may provide a level of automation for Configuration Management that may reduce errors and should provide the project team with accurate, dynamic and timely information on some of the configuration items. However, it is critical that DHS/ASI agree to the full list of items that are included in the configuration plan along with the details regarding the management of the configuration items, reporting and audit features.
69	Lack of DHS visibility into regression testing may cause defects/rework within the BES application.	Earl Burba	Concern	7/28/2021	Testing	On 8/16/2021 the ASI provided additional feedback to questions posed by the PCG IVV team that clarified more completely the plan for conducting Regression Testing. Since the actual automated test scripts are in Bit Bucket the ASI is providing access to PCG IVV. The question of why so many test runs failed was explained and it is expected that a suite of automated Regression Tests that have passed baseline testing will be used and built on for all releases. The goal would be to have only test failure where previously correctly executing functionality fails. On 7/29/2021 the ASI provided feedback to questions from the IVV team dated 6/23/2021. The response/feedback addressed the IVV questions but did not address how the results through Robot framework HTML/XML reports and X-Ray integration. It is understood that the ASI has reported having built a regression suite and integrated it into their Continuous Delivery pipeline, but evidence has not been observed in testing status meetings or provided to DHS or IVV to demonstrate the effectiveness of regression testing. Since the exit criteria for Regression Testing as provided in the BI-19 Complete and Final Test Plan.pdf is “Regression Test Results Report draft has been submitted to DHS” it was expected that a Regression Test Results Report would be posted in either SharePoint or Confluence.	Since the purpose of regression testing is to help assure that code or configuration changes to address defects/bugs do not negatively affect previously working functionality having a robust regression test suite is very relevant. The ASI is working on creating that robust automated suite and adding tests to that suite for future releases. The expectation is that only relevant Regression Test failures will be reported for future executions.
68	Insufficient planning/execution of the BES Security Plan activities may lead to delays in gaining Federal Partner approval for the BES to begin the Pilot Phase.	Manny Barand	Finding - Risk	7/28/2021	Security and Privacy	Over the last several months, the BES project team has been working through the planning efforts to develop the BI-13 Security Plan while also managing through ASI Security Lead staffing changes. DHS and the ASI agreed to modify the BI-13 Security Plan Deliverable Expectation Document (DED) last month and are currently revising it to align to the requirements and changes to the project since inception.	The BES project must have a clear plan to define, implement, test, and validate all Security and Privacy Requirements/Controls prior to entering the Pilot phase. There are many standards that must be met, and the project team plans to utilize the BES Security Control Implementation Workbook to document the status of each control. The Security Control Implementation Workbook must be detailed and allow for ease of referencing to the Security Policies, Standards, Controls, and implementation plan along with evidence for each control.

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 85.". If the Hawaii guidelines ( <a href="https://www.hawaii.edu/access/uh-guidelines-for-accessibility/">https://www.hawaii.edu/access/uh-guidelines-for-accessibility/</a> ), FNS Guidelines from the 901 Handbook, and contractual obligations to adhere to the Section 508 compliance guidelines ( <a href="https://section508.gov/">https://section508.gov/</a> ) there may be a significant amount of rework to the solution.
66	The number of issues/defects found in UAT may cause planned work in the future sprints to be delayed due to the prioritization of the resolution of issues/defects found in UAT.	Earl Burba	Finding - Issue	3/29/2021	Testing	During discussions of UAT progress and metrics the number of defects found during this phase of testing appears greater than what would be expected during UAT. On 3/29/2021 at the conclusion of R0.3 Sprint 3 there were 306 reported defects (4 High, 10 Medium, and 292 Low Severity) where 181 are "Unresolved", 108 are documented as "Not a Defect", and 17 are marked as "Done". Since the functionality had previously been Unit, System and Integration, and the needs of the state clarified during JAD sessions very few defects are expected. As such, the amount of testing expected to be completed during the current R0.3 will not be met and will be pushed to the next release. If that trend continues UAT may not complete as planned and the schedule negatively affected. Additionally, since more defects are being reported and corrected than expected the rate of closure for defects, along with the time needed to retest those corrects, and regression test the functionality additional risk exists to the planned schedule. At the end of R0.3 it was reported that 44 issues were "Done" and 238 issues were incomplete (30 of which had all of their sub-tasks complete) and will be moved to the next Sprint designated SSP R0.3 UAT Sprint 4.	Since UAT is the vehicle for users to assure that the functionality developed and delivered meets their needs it is important that UAT be successfully completed. The high number of defects reported along with not meeting planned progress there may be an inclination to shorten the time needed to complete UAT.
65	DHS BESSD staff with expansive business knowledge or availability are needed on the project to ensure business needs are sufficiently captured so that the BES solution is designed to meet the business needs and requirements.	Ryan	Finding - Risk	3/2/2021	Project Management	As the BES system is designed, it appears there is a lack of BESSD staff with expansive business knowledge and availability to work on the project to ensure the BES system meets the business need and requirements.	BESSD staff with expansive business knowledge and availability are critical to the project to ensure business needs and requirements are effectively documented as the new system is designed and developed.

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	<p>The following planning and execution items have not yet been addressed and documented by the ASI. - Connectivity is planned to utilize a presently undefined ETS API Gateway; however, there is no evidence that details have been determined or documented in this regard. - There is little evidence of active and sufficient communication with interface partners for coordination, design, and testing activities (Unit Test, SIT, UAT). - Interface planning and execution tasks and activities, including those for interface partners, are neither resident nor managed within the Project Schedule. - 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.</p>	<p>Interfaces is one of the areas where DDI 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.</p>
62	Inability to measure development team velocity may impact the projects ability to forecast the delivery date of the remaining features.	Al Pangelinan	Finding - Issue	12/28/2020	Project Management	<p>The subcontractor development teams don't currently track and report Sprint velocity to the ASI.</p>	<p>Velocity is an important metric in Agile development which provides project leadership the ability to forecast how many iterations the team will need to complete the remaining work. Development teams use velocity to avoid over-committing to work in future Sprints. Velocity can also be an early indicator that the project needs more time or resources to meet the planned release dates. If the ASI does not track development team's velocity, they cannot accurately forecast the delivery date of the remaining features, which may place the project cost and critical path at risk.</p>

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 concern regarding the CMM Workflow JAD sessions, specifically; (1) Do the JAD participants understand how the Case will be managed through workflow? (2) What improvements will be made in the new BES to support the users and clients? Incomplete or unclear JAD sessions with insufficient documentation could lead to a poor design, lacking the details needed to support business requirements; as well as missing opportunities to improve workflow and related system design.
60	System Integration of the BES Modules (CMM, FMM, SSP) will be developed in the later releases vs. a continuous integration model within each release which may cause schedule delays.	mfors	Finding - Risk	9/30/2020	Integration and Interface Management	The BES Modules (CMM, FMM, SSP) are developed by separate teams and demo's are conducted separately with each release. Integration points between the modules are currently stubbed and the ASI has yet to demonstrate integration of the modules and end-to-end functionality.	System Integration has historically followed a 'big bang' model where all system components arrive simultaneously (usually towards the end of the project) resulting in a flawed and immature delivery. In theory, integration is expected to occur instantaneously. In reality, a 'big bang' integration strategy results in a rushed and incomplete system test process and a system that is focused on individual components rather than system capabilities.



54	User Acceptance Testing (UAT) processes and timing of inputs required for UAT could lead to implementation delays and delivery of a solution that does not meet business needs or requirements.	Brad	Finding - Risk	6/24/2020	Project Management	11/30/2020 - Applications changes applied in UAT need to be reflected in update BI-10. Poorly planned and executed User Acceptance Testing (UAT) could lead to implementation delays and delivery of a solution that may not meet all business needs. During this reporting period, UAT was initiated. However, several deliverables that support the UAT process were not provided and/or approved prior to UAT, which impacted DHS' ability to proceed with testing. Outstanding predecessor deliverables include: Approval of system test scripts (BI-20) Delivery and approval of system test results (BI-22) Delivery and approval of other R0.1 deliverables (BI-10, BI-14, BI-15, BI-21). The ASI plans to address this challenge, as well as other opportunities for improvement evidenced during R.01 as 'lessons learned' during future releases. IVV notes that DHS staff will be required to enter UAT test scripts into pre-defined spreadsheets, which will be imported into Jira by the ASI. DHS staff will enter defects directly into Jira, which may necessitate a deeper level of training for use of the toolset, in addition to the demonstration previously provided by the ASI.	UAT gives DHS the chance to test the BES release using both real-world examples and those people who will be using the application day to day. It is the final stage of the implementation process; conducted to ensure that system requirements meet business needs and allowing for any issues to be fixed before the system goes live. A UAT that is not comprehensive could result in defects being found post go-live, leading to expensive solution updates and reduction of user confidence in the solution.
49	Poor quality project deliverables may impact system design, testing artifacts 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.

47	The COVID-19 pandemic and the related "stay at home" order could hinder project activities and negatively impact the project schedule and budget.	mfors	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 some 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.
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 DDI and KOLEA Modifications, and planning efforts for BES Maintenance and Operations activities.

29	Uncertainty and/or a lack of communication around long term architecture decisions could impact the project budget, schedule, system design, and planning decisions.	mfors	Finding - Issue 5/28/2019	Project Management	Some platform and BES system architecture decisions have yet to be made and socialized 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 KOLEA, 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 KOLEA 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 KOLEA 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. If 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.
16	Lack of clear understanding of the DDI approach may reduce effectiveness of all SDLC Processes.	mfors	Finding - Issue 12/17/2018	Configuration and Development	Several DHS stakeholders have commented that the SI Design, Development, and Implementation (DDI) 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 DDI approach overview session during an initial JAR session, however not all stakeholders were present. IVV did not locate any DDI 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 DDI approach and project activity objectives may reduce the effectiveness of JAR and JAD sessions as well as other BES project activities and decisions.

2	Late delivery of project deliverables may cause 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 Expectation Documents (DED) requiring approval and acceptance from the State.	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.
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Recommendation	Event Horizo	Impact	Probability	Analyst Pri	Finding Status	Date Retired	Status Update	Client Comments	Vendor Comments
- The ASI should develop reports with metrics that accurately measure the Data Conversion progress. - The DHS Data Governance committee continue to clarify the usage of MDM so the BES conversion team aligns to the planned governance structure.   - The Data Conversion team should evaluate the Just In Time (JIT) approach to determine if there are risks to the project that should be monitored/managed.	Q3 2021	3	2	Med	Open		8/30/2021 - This finding was updated to more accurately describe the data conversion risk, the previous finding #58 was retired. The Data Conversion team continues to progress through the data cleansing, planning, and conversion activities. However, the plan does not yet include estimates of all work that is planned to be complete for each release so it is unclear if there are risks to the project.		
- 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. - 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.	ASAP	3	3	Med	Open				
As documented in the BI-6 DDI Plan Section 5.2 -   • Identify who within the ASI organization is filling the Configuration Manager position.   • The ASI should develop the Configuration Baseline, collaborating with DHS, and present to the CCB.   • The ASI should provide transparency via reports on the Configuration Management activities to include changes and audits of the configuration items, and present to the CCB on a static recurring basis (e.g. monthly).   • Identify the DHS POC for the Configuration Management Activities.	ASAP	3	3	Med	Open				
8/30/2021 - It is also recommended that the ASI document the process of regression testing from start-to-finish and then review that process with DHS. The documented process should include how the candidates for inclusion in the regression suite are selected, how those chosen candidate test cases are validated, how the regression tests are reviewed and how failed tests are resolved and reported, the timing for when regression testing is scheduled, where the regression test cases are stored and documented, and how the project is notified that regression testing is complete and accurate. It is recommended that regression testing results be reported to the project on a regular basis and be included in the weekly dashboards. It is important that DHS be informed of all regression testing results of those passed and failed test cases and that any failed test cases be analyzed to determine if code or configurations need to be made.	Immediate	4	5	High	Open		8/30/2021 -Currently, the ASI is conducting regression testing without having a clear process for selecting the regression tests, resolving defects, and communicating those plans/results with DHS. “Failed” regression tests from past releases may cause defects in future releases. IVV met with the ASI in August to discuss their regression testing tools and processes to identify, track, monitor and report on the status of regression testing activities. Follow-on research and action items are in-progress. 8/19/2021 - Updated this finding Observation to better reflect automated Regression Testing. Updated the Significance to reflect the actual state of Regression Testing and expectations for future executions. IVV will follow-up with the ASI to include review of the future Regression Test executions and results.		
- DHS and the ASI agree and finalize the BI-13 DED. - 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, if not included in the BI-13 Security Plan. The process should define the level of detail needed to track progress (estimates, target dates, risks, issues, evidence) along with the Requirement Traceability Matrix.	ASAP	3	3	High	Open		8/30/2021 - The ASI is updating the BI-13 Security Plan Deliverable Expectation Document (DED) with feedback from DHS and IVV. Simultaneously the ASI is developing the BI-13 Security Plan to include the tools and processes to document, track, monitor and report the status of all requirements and controls through the verification of implementation of each requirement. The lack of progress on security plan development and the amount of work that needs to be completed prior to pilot has raised this concern to a risk. 7/30/2021 - On July 22, 2021, DHS, the ASI, their Security Subcontractor and IV&V met to discuss and review the current status of the BES Security Plan. The BES project team is planning to adopt the MS-Excel workbook to track the detailed SDLC components of each requirement along with status. Several questions required follow-up and may be incorporated into the revised DED. Additionally, SSA has adopted a revised process to include a detailed questionnaire to be completed prior to approval to implement this interface with the BES application. This revised process includes a significant amount of work to be completed and verified to completely address all SSA Security Requirements.		

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 pc 4	5	High	Open	8/30/2021 - The ASI has stated that a tool to provide ADA Section 508 compliance verification for the project was recently selected and they are validating the tool will effectively perform in the BES architecture. As an interim solution, the ASI is using a desk-top tool to identify potential ADA compliance issues however, IVV has not seen the results of the interim solution, nor it is known if the existing BES application code from Release 0.1 through Release 0.4 used this desk-top ADA tool.		
Perform a joint Release 0.4 UAT (DHS/ASI/IVV) Root Cause Analysis (RCA) to identify and take corrective actions. Adjust the project plan and provide reasonable scope for UAT for subsequent releases taking into account the number of defects and testing time needed as reflected in current trending of UAT progress. Validate all UAT defects are retested in SIT to ensure they are included in Regression Testing. System and Integration testing be executed more rigorously. The ASI report testing metrics and DHS should monitor this Key Performance Indicator (KPI). FDD's be complete and frozen prior to the completion of SIT and that completion of FDD's be added to the exit criteria for SIT and entrance criteria for UAT. An alternate recommendation would be to adjust the process to minimize schedule slippage and rework by the SIT and UAT teams. - Closed 7/30/2021	Immediate	3	3	Med	Open	8/30/2021 - The ASI, with verbal agreement from DHS, revised the SDLC process to no longer conduct a UAT testing cycle with each BES release; a Final UAT phase will be performed prior to Pilot. IVV will determine if this finding should be retired after DHS reviews/accepts the revised SDLC process and Project Schedule. DHS and the ASI do plan to conduct a Release 0.4 UAT Root Cause Analysis with the project team to identify and take appropriate corrective actions. Also, the ASI has indicated they are reviewing testing metrics to generate and report to DHS during future testing cycles. 7/26/2021 - In this reporting period, DHS and the ASI agreed to stop Release 0.4 UAT prior to completion due to several issues. The project leadership team is evaluating and discussing options to determine the best path forward to thoroughly test BES prior to Pilot and Statewide Implementation. The project team has reported to IVV multiple actions taken to resolve this however, quality of the BES code and application is not meeting expectations, nor has IVV received the results of the RCA reported by the ASI to be complete on the Release 0.3 UAT results. On a positive note, the ASI is researching and planning to report additional quality metrics which may identify more specific activities to improve the quality of BES. 6/28/2021 - There has been no material update to this finding, the ASI continues to conduct a root cause analysis. Concern still remains that defects reported in UAT exceed the number of defects reported during System Test as shown through defect leakage metrics. 5/25/2021 – An industry standard metric used to identify the efficiency of System Testing is defect leakage, i.e., how many defects are missed/slipped during System testing. The formula used is Defect Leakage = (No. of Defects found in UAT / No. of Defects found in System testing.). For Release 0.3 there were 28 'Not a Defect', 124 'Done', and 10 'Unresolved'. For UAT the defect count was 199 'Not a Defect', 135 'Done', and 8 'Unresolved'. Removing those defects marked 'Not a Defect' for System Test and UAT counts there were 134 for System Test and 143 for UAT. By plugging those numbers into the formula, the result is 106.72%. Since the industry average for good testing	7/20/21 RAP - In response to the specific recommendations, we are taking the following actions: Recommendation 1: We will perform a RCA led by the testing leads this month. Recommendation 2: In progress, we are currently planning to integrate the UAT and SIT teams into a single team that will participate in a joint INT and SIT test. UAT will be reserved to FAT. Recommendation 3: All UAT defects are retested in both INT & SIT before they are promoted to UAT as fixed. Most will likely not become good regression candidates as the majority of the defects at this point are cosmetic, so once they are fixed, they are fixed. However, we have developed an automated regression bed. And we have made changes to how it is executed in recent weeks. It has been incorporated into the CD pipeline and will be run during the initial build cycle rather than being run later in the release. The regression test bed will continue to be built roughly one release in arrears. Recommendation 4: This recommendation is premature until the RCA has been completed. However, we are looking enhancements to the testing process that will put more focus on cosmetic defects and continue to test logic flows. We have already made the following changes: a) combined the INT and SIT teams into a single team, b) combined the CMM/ FMM testing team and SSP testing team into a single testing team. Increased the frequency of guerilla testing, c) initiated staffing to bring on former case workers to augment the testing team, d) held at least three retrospectives with the SSP development teams focused on quality improvement in both development and testing. Recommendation 5: We have looked internally at the defect leakage metrics suggested by the IV&V in May, and we found them helpful, but overly simplistic for several
DHS continue to identify BESSD SME's to support the project as the project progresses. DHS develop a project team list that identifies the participants along with their roles and areas of expertise to be used as short-term needs are identified. - Complete DHS utilize the BI-5 Project Schedule report developed by the ASI to identify those tasks owned by DHS in the short team in addition to the 4-month look-ahead to identify time frames and activities where there is a high-demand on DHS resources. - Complete Identify and on-board a replacement BES Project Manager. Continue coaching the new BES Product Owners to ensure the new system takes advantage of new technologies and aligns to the planned business processes.	ASAP	3	3	Med	Open	8/30/2021 - DHS continues to recruit the BES PM position. 7/28/2021 - DHS continues to recruit the BES PM position. 06/30/2021 - In the 06/09/2021 Status Meeting, DHS reported they added a Reports SME and two additional staff to the UAT test team. DHS continues recruiting for the BES PM position. 05/31/2021 - The DHS Product Owners continue to adjust to their new roles to include decision making and designing BES to take advantage of the new technologies. DHS has identified a replacement BES PM; onboarding was delayed and is now planned for June 2021. 04/30/2021 - The DHS Product Owners are adjusting to their new roles to include decision making and designing BES to take advantage of the new technologies. DHS has identified a replacement BES PM, onboarding is planned for May 2021. 03/31/2020 - The DHS Product Owners continue to adjust to their new/revised project role, which is having a positive impact to the BES design. DHS is taking the planned actions to replace the DHS PM. 02/28/2021 - In January, DHS added many BESSD staff and is having a positive impact on the project. With the retirement of DHS' BES Project Manager (effective 2/26/2021) and Business Analyst (effective March 31, 2021) a transition plan was developed to support the onboarding of a new BES PM. DHS is taking the following actions, DHS developed a DHS BES Resource Pool to support future resource needs on the project. DHS is using a report from the BI-05 Project Schedule focused on the DHS activities and tasks planned to be performed in the next 4 months to provide early visibility to peak DHS resource needs. Additionally, the DHS BESSD Administrator spends 2-3 days per week at the ASI onsite facility to review plans, address issues and conduct follow-up as necessary.	4/23/21 RAP - DHS has added a number of product owners to the project over the past few months and given them the authority to make design decisions for the department. This has resulted in improvement in the turn around time for decisions being made.

1. Establish a communication plan for each interface partner for the duration of the BES DDI activities. 2. Define a detailed schedule for each interface to include milestone dates, coordination, and execution and share with the interface partners 3. Determine which deliverable will include the details associated with the planned connectivity and detailed technical designs of all interfaces 4. Identify and document all interface partners' contacts 5. Complete all MOAs and obtain approval 6. Confirm testing dates with interface partners in writing 7. Distribute preparation procedures for interface implementation to interface partners 8. Develop a mitigation plan to address the unavailability of Interface Partners during interface implementation	Q4 2021	5	3	High	Open	<p>08/31/2021 -The project team continued to update the communication plans. IVV conducted another review of the Communication Plans and found that 2 interface partners' contacts have not been documented, 3 MOAs have not been approved, 3 need unit test dates confirmed, 6 need system test and UAT dates confirmed, 27 need pilot and production cutover dates confirmed. The project team has escalated the lack of response from some Interface Partners to DHS for resolution.</p> <p>08/30/2021 - The status has not changed. IVV conducted another review of the Communication Plans and found that 2 interface partners' contacts have not been documented, 3 MOAs have not been approved, 12 need unit test dates confirmed, 13 need system test and UAT dates confirmed, 27 need pilot and production cutover dates confirmed. 07/28/2021 - The project team continues to update the interface planning documents. IVV conducted another review of the Communication Plans and found that 2 interface partners' contacts have not been documented, 3 MOAs have not been approved, 12 need unit test dates confirmed, 13 need system test and UAT dates confirmed, 27 need pilot and production cutover dates confirmed. In addition, IVV reviewed the SSA process and found that the BES project team may have to satisfy several requirements to pass the security assessment; this process may delay the scheduled completion of the SSA interface.</p> <p>07/27/2021 -The project team continues to update the interface planning documents. IVV conducted another review of the Communication Plans and found that 3 interface partners' contacts have not been documented, 4 MOAs have not been approved, and testing/pilot/cutover dates have not been confirmed for 26 of the interfaces. IVV will continue to monitor. 06/30/2021 -The project team continues to update the interface planning documents. IVV conducted another review of the Communication Plans and found that 3 interface partners' contacts have not been documented, 4 MOAs have not been approved, and testing dates have not been confirmed for 20 of the interfaces. IVV will continue to monitor.</p> <p>06/27/2021 -The project team continues to update the interface planning</p>	<p>7/20/21 RAP - The ASI team requests that the IV&amp;V reassess the severity of this risk in light of the following reasons: a) the ATC schedule extension has made the urgency for tackling these tasks less than it was before that started lessening the schedule risk, b) the increase from Medium to High in May was based on a misunderstanding of the current state of the MOA's and contact metrics, c) substantial progress has made against each of the In Progress recommendations, and it continues to trend in the right direction. In regards to the final recommendation, the ASI does not doubt the importance of this; however, this is unlikely to manifest in a schedule risk. It does have a risk to operations, and it will be managed as part of the implementation planning activities. For recommendation 3, there will be a TDD for each of the interfaces. We are working with the architecture team to build the processes to develop these for each interface partner.</p> <p>4/23/21 RAP - The interface team has created communication plans for all interfaces. The decision on testing dates will be noted once the project schedule has been updated to reflect the impacts from the ATC. DHS has located additional MOA/ MOU with trading partners in March. There are still that remain outstanding; however, DHS is working through the process of locating those, and we do not expect that the lack of MOU/ MOA will have impact on the project until go-live.</p> <p>02/25/2021 - Archie stated that the CYCRA interface is slated for Release 0.6 as one of the BESSD interfaces and stated that Jocelyn</p>
IVV recommends the ASI work with the subcontractor Scrum Masters to calculate the average velocity from past iterations to be used as a historical reference. Moving forward, the development teams should provide the ASI with Sprint and Product Burndown charts at the end of every iteration. The Sprint Burndown chart provides the ASI with a visual representation of the planned vs actual work completed for each Sprint and the Product Burndown chart shows the bigger picture. To calculate velocity, user stories need assigned values (IVV recommends relative story points). If the developers are not currently assigning values to user stories, IVV recommends this become common practice.	?	4	4	High	Open	<p>08/30/2021 -IV&amp;V observed continued improvement in the development of planning estimations for SSP in Release 0.6. However, IVV will meet with the ASI to discuss the Jira velocity chart to gain an understanding on how the actual completed story points are maintained by the development team within Jira. The ASI plans to release the FMM and CMM velocity reports in September. 7/27/2021 - IVV observed improvement in planning estimations for SSP in release 0.5 Sprint 5, and although the sprint is not finished yet, the planned vs actual velocity chart is trending in the right direction. There were major improvements this reporting period regarding FCM (FMM/CMM) work estimations in Aha!. Use case estimates are now in Aha! for the current and follow-on release. The FCM team is tracking story points in an MS-Excel worksheet as they validate their estimations and will be moving those estimations into Jira so they can track and report FCM velocity once the validation is complete. IVV will continue to monitor the progress on the SSP and FCM sprint teams ability to track velocity. 06/28/2021 - No progress to report this reporting period. The CMM/FMM team is still unable to measure sprint velocity and there are no story point estimations in the FCM_ALL backlog. Velocity is being tracked for the SSP sprint team but they consistently commit to more work than their velocity indicates they can complete in a single sprint. This may be a symptom of not using velocity as a planning tool during Sprint Planning.</p> <p>05/27/2021 - There has been no progress this reporting period. The CMM/FMM team is unable to measure sprint velocity. The ASI is working with their subcontractor to make this information available to project leadership. 04/29/2021 - No major update. The CMM/FMM team is still unable to measure sprint velocity. As mentioned previously, the team is using JIRA as their task tracking tool but have not implemented the use of metrics which would enable them to track velocity.</p> <p>03/30/2021 - During this reporting period, IVV observed the shifting of use cases to future releases. This is a result of the inability to use the development team's velocity to plan and forecast work by Sprint and Release. The CMM/FMM team</p>	<p>7/20/21 RAP - First in regards to the statement from the IV&amp;V that "Velocity is being tracked for the SSP sprint team but they consistently commit to more work than their velocity indicates they can complete in a single sprint. This is a symptom of not using velocity as a planning tool during Sprint Planning." assumes facts not in evidence. There are multiple reasons why the SSP hasn't achieved their target velocity in recent sprints: a) We had a data capture problem for reporting velocity on bug fix tasks which resulted in an underreporting of story points for bug work, b) we had fewer points until recent sprints estimated for bug fix work than needed, compounding the problem stated in a. We have fixed both of these problems in the most recent sprints. c) The COVID spike in India resulted in unplanned absences reducing capacity of the teams after sprint planning, d) as part of our processes, we ask the teams to take on stretch goals into each sprint planning session. My direction to the team is that I'm happy when we get to 80-90% of commitments. This is to keep us from having idle resources late in the sprint.</p> <p>4/23/21 rap - The shifting of use cases in March to future releases had nothing to do with development team velocity. Instead, they were based on the unavailability of resources needed by the design and development team to complete their work. The CMM/ FMM development team has moved to JIRA but still needs to implement metrics that would be used to track velocity. At this point, however, we have no data that shows that development velocity is a risk. Rather it is activities upstream of development that are impacting development velocity.</p>

- JAD and design sessions should be lead by experienced senior BAs, with goals, objectives and results communicated to all participants. - The facilitator should use their expertise to drive discussions through leading questions. - The DHS and ASI product owners should actively participate to ensure the system meets the requirements, designed taking advantage of new technology and aligns to the 'to be' business process. - The ASI should back-track significant differences in design direction to determine the root cause in an effort to identify these items as early in the SDLC as possible. - The Product Owners should have more direct interaction with the development team, proactively seeking collaboration. - The Functional Design Document process, to include the Design Sprint concept, should be clearly defined and shared with all project team members. - Invite IVV to all future design sessions and design sprints to allow IVV to observe and assess the effectiveness of the revised design processes.	ASAP	2	2	Med	Open	<p>8/31/2021 - IVV did not participate in any design sessions or design sprints in this reporting period; therefore, we have no material update this month. Although these sessions were conducted, IVV was not included. IVV respectively requests to be included in the design sprints and/or sessions as they are scheduled by the project team. 7/30/2021 -Design sessions were conducted this month along with the corresponding Draft Functional Design Documents. It is IVV's understanding the project is planning to initiate "Design Sprints" to identify design issues earlier and will include DHS/ASI Product Owners, and IVV. IVV will assess the process when it is provided and observe the Design Sprint sessions. 6/30/2021 - No JAD or Design Sessions were conducted in this reporting period. However, the ASI provided IVV a brief overview of the proposed process change to conduct design sprints in concert with the project schedule revisions. In addition, the ASI subcontractor added two Systems Analysts, but it is unclear if they have Integrated Eligibility experience. 5/30/2021 - A few screen prototype review sessions were held with healthy collaboration between all participants. Product owners raised some concerns, for example the PO's stated the Manage Veterans Information screen might not be needed as the information could be captured elsewhere. This is exactly what these sessions are meant to identify and the earlier they are found in the SDLC process the better. IVV will continue to monitor in May. 4/30/2021 - This finding title was revised to include design sessions. DHS has noted that some JAD results documents to include documented design decisions have been lost from prior JAD sessions. To move forward, DHS has requested the ASI to facilitate design sessions to ensure the BES is designed to meet the business requirements and take advantage of new technologies. IVV will continue to monitor. 3/31/2021 - No JAD sessions were held during the reporting period. IVV will continue to monitor, looking for any negative downstream impacts to the project resulting from poorly executed JADs. 2/28/2021 -DHS and IVV observed continued improvement in the February JAD sessions. Specific improvements were JAD</p>	<p>7/20/21 RAP - "Design Sessions" did occur both in the last reporting period as well as in this one. They are done as review sessions with the Product Owners following the processes on a regular basis. The ASI has included a more detailed breakdown of the scheduling for this work in both Aha! and the workplan. In regards to the recommendations, for Recommendation #1: We have the team in place that is responsible for the sessions. Goals, objectives, and results are communicated to all participants on a regular basis. Unless there is a more concrete recommendation from the IV&amp;V, this should be considered Complete. Recommendation #2: The facilitator uses a variety of techniques to drive discussions in the sessions, they are prepared before the session by the Functional Architect for CMM/ FMM or the Product Manager for SSP as well as SME from the testing lead as appropriate. Unless there is a more concrete recommendation from the IV&amp;V, this should be considered Complete. Recommendation #3: A number of steps have been taken by DHS and the ASI to align the design to the 'to be' processes. We will continue to look for input from the ASI SME, the functional architect, and the BESSD leadership team to align to this goal. Recommendation #4: We work weekly in close contact with the DHS leadership to back-track significant differences in design direction. However, there is still improvement to be made. We will be coming forward with a more concrete escalation process from design teams to the leadership this month. Recommendation #5: The interaction with the development teams is via the ASI product owners, SME, and other individuals. Direct interaction with the development team is unlikely to be part of our go-forward plan at this point due to a</p>
1/27/2021 - IVV recommends prioritizing the build of integration points within each module and the creation of scripts (API calls) required for integration. - Each release demo should be a collaborative effort across all modules (end-to-end solution), demonstrating the understanding of every integration point and verified against system-level requirements. - Cancelled - If the ASI needs all the remaining releases to demonstrate an end-to-end solution of the identified business processes across all modules, IVV recommends planning and communicating the mitigation strategy for handling risks associated with this approach.	N/A	4	4	High	Open	<p>08/30/21 - The ASI has stated they intend to demonstrate some CMM/SSP integration as part of release 0.6. With only 4 releases remaining before the final release, it remains unclear if all integrations will be completed and fully tested without schedule slippage. The ASI has described their plan for mitigating this risk which includes enhancing communication between their development groups. 07/27/2021 - This reporting period, IVV observed improvement in the planning efforts for the integration of the BES core modules. Each of the upcoming releases plan to demonstrate the first integration points between CMM/SSP and CMM/Current (Workflow Tool). The ASI provided IVV with steps towards mitigating this risk and we will review the mitigation plan to verify the steps are currently in progress or complete. 06/28/2021 - This reporting period, IVV reviewed the SSP Integrations document in Confluence that outlines the integration approaches for the identified SSP integration points. The document was designed as a reference for developers and contains the expected low-level details (API calls, request/response). To prepare for future knowledge transfer, it should also include high-level information (specific module names associated with each integration point). The SSP integration document will continue to evolve and is a positive step towards the mitigation of this risk. 05/27/2021 -The ASI provided IVV with a timeline for the planned integration of the BES modules. Integration between SSP and BES modules is planned to start in Release 0.5 and will continue through the final release. The plan is to integrate applications first, then appointments, alerts, notifications, and cases, etc. This risk will remain until there is demonstration of end-to-end functionality across modules. 04/29/2021 - Agile Best Practice is to deliver business value through the early development of technical solutions with end-to-end business processes. The ASI is building modules of the application separately and integrating them in later releases to satisfy the end-to-end business processes. This risk will remain until there is demonstration of end-to-end functionality across modules. 03/30/2021 - MDM</p>	<p>7/30/21 RAP - Integration of the core modules (SSP &amp; CMM and CMM &amp; FMM) will continue to evolve in future releases. R0.6 will demonstrate the first integration points between CMM &amp; SSP. This is now four releases before the final planned development release. Similar interfaces between CMM &amp; Current will begin in R0.7. 3 releases before the final development release. The ASI team is mitigating the risk stated by the IV&amp;V in 3 ways: 1) gaining agreement from both development teams on the integration methods, and service contracts as noted in the July report from the IV&amp;V, 2) providing a periodic communication forum for developers to discuss and plan for the integrations and to discuss the service contracts that will implement the integration, 3) leveraging architectural principles for service development that eliminate monolithic integration risks. In terms of the recommendations, the ASI has planned work in the Release plans to meet Recommendation #1. We are happy to review that recommendation with the IV&amp;V in more detail upon request. It is also available for review in Aha! which is available to the IV&amp;V at any time. Recommendation #2: The ASI will not plan our work in line with this recommendation. We disagree with the recommendation because it would slow overall development and encourage more monolithic integration approaches among the development teams likely increasing schedule risks rather than decreasing it. We recommend that the IV&amp;V reconsider this recommendation. Recommendation #3: First, this appears to be a restatement of the second recommendation. Second, the ASI disagrees with the notion that the Release schedule is a 'big</p>



- [All agreed upon actions to resolve issues called out in Release 0.2 Lessons Learned should be added to project schedule so adequate timing is provided to support UAT preparation and execution.] Closed 7/30/2021 - Provide IVV with the Root Cause Analysis conducted for the Release 0.3 UAT. Closed 8/31/2021, the ASI informed IVV that the information they provided via the comments on this finding is all that will be provided to IVV, they will not provide the RCA data/analysis to IVV and the RCA conducted was with ASI staff only, DHS did not participate. - [The ASI could conduct a debrief meeting with DHS after SIT and UAT have completed, summarizing work completed and follow-up actions required from ASI and DHS.] Complete 7/30/2021 Evaluate the process and/or schedule to determine if adjustments could streamline the process for the UAT test team to plan and create UAT test cases, minimizing rework. - Designs need to be solidified prior to developing the scripts - should establish a cut-off date for the design. - Include the IVV team as SDLC processes are modified based on the Release 0.4 UAT activities. - Include the IVV team when the Release 0.4 UAT Activity Root Cause Analysis session is scheduled.	immediately	3	2	Med	Open	8/31/2021 - The ASI, with verbal agreement from DHS, revised the SDLC process to no longer conduct a UAT testing cycle with each BES release; a consolidated UAT will be performed prior to Pilot. IVV will determine if this finding should be retired after DHS reviews/accepts the revised SDLC process and Project Schedule. The ASI did provide an overview of the SDLC changes to the project team on August 29, 2021, IVV will follow-up with DHS and the ASI to ensure a common understanding is shared regarding the involvement of the DHS UAT test team during the releases System Test and Systems Integration Testing cycles. 7/30/2021 - DHS/ASI stopped Release 0.4 UAT before it completed due to several issues and are currently evaluating options regarding UAT that may impact the SLDC process and schedule activities. Additionally, IVV completed the "Shadow Activity" with some of the UAT Testers, resulting in a summary of the process, observations and recommendations for the project team to consider in future testing activities. 6/30/2021 -Release 0.4 UAT began on June 28th and the results of the Release 0.3 Lessons Learned survey were distributed by the ASI, the action plans are planned to be developed in July 2021. Although the action plans are not yet defined, the project team applied some process changes to Release 0.4 UAT including freezing the functional design and delaying the completion of SIT to resolve and retest defects prior to the start of UAT. These changes are anticipated to minimize rework by the DHS UAT team. 05/30/2021 - There were no active UAT sessions during this reporting period. However, DHS indicated that in Release 0.3, the solution design was being updated after UAT start, causing rework on test case/script creation. This may be addressed in the Release 0.3 Lessons Learned activity, planned for next month. 04/30/2021 - In discussions with DHS, during Release 0.3 UAT, Functional Design Documents (FDDs) were being updated during SIT, making it very difficult for the UAT test team to create accurate and complete test cases. IVV will continue to monitor. 03/31/2021 -UAT for release 0.3 is now in progress and continues to be facilitated and executed well. New metrics have	6/30/2020 - RP - Met w/ GH. Acknowledge that the first release is late. Discussed the pre-req deliverables, and the need to start testing. Early drafts for deliverables being circulated for review. DHS does not want to enter UAT test cases into Jira, will populate spreadsheets and provide to ASI for import into Jira. Still under discussion for adding defects into Jira, working towards agreement. PO - DHS Test Lead will triage defects, and DHS WILL add defects into Jira. ASI concern of just one person handling this responsibility to help avoid bottlenecks. None are currently anticipated on ASI side. Project schedule will be re-aligned to ensure that predecessors are completed prior to UAT. Per RP, this may be tied to ASI delivery, not DHS acceptance. Schedule updates expected by next week. Process for potential exceptions for deliverable approvals has not yet determined.	7/20/21 RAP - The ASI and DHS are planning to revamp the UAT process significantly in this reporting period. The UAT testing team will be integrated with the ASI testing team and involved earlier in the testing process. Regarding the recommendations: Recommendation #1: Lessons learned are on schedule and will continue to be worked as part of our normal release processes as they have been for previous releases. It is unclear why the IV&V team is recommending that we continue to do what we have planned to do. Recommendation #2: If the actions resulting from the lessons learned process require sufficient work (>40h) to warrant inclusion in the project schedule, we will include them. Recommendation #3: This recommendation was a hold over from R0.3 and was completed. As appropriate, we will continue this process in future releases. Recommendation #4: The ASI is working with DHS on this as mentioned at the top; however, we also have made recommendations that were not implemented by the UAT to minimize rework in the future in developing test scripts. In addition, it is our understanding that the IV&V has made recommendation for test script development to the DHS team that requires significant increase in effort and will likely increase in rework. The ASI recommends that the IV&V team reconsider those recommendations. 4/23/21 RAP - During this period, UAT for R0.3 completed. We will implement recommendation #3 by the end of the review period. Recommendation #4 to review and categorize "anomalies" reported from UAT is complete. The use of this term rather than industry specific terminology by the IV&V hints at a value judgement on the
[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 entity 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 IVV recommends that the 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, 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. IVV has not seen evidence indicating the ASI is utilizing metrics to measure its process and product quality.	Immediate	2	2	Low	Open	8/31/2021 - The ASI has indicated they do plan on providing updated quality metrics that align with the revised process using the Confluence tool however, they have not yet published them. IVV recognizes this may be a lower priority item since the project team has been focused on the SDLC changes along with the necessary schedule adjustments. 7/30/2021 - The project deliverables published this month appeared to have most comments focused on functionality vs. format/grammar/spelling. This implies improvement however, without published ASI metrics on the quality of the deliverables, IVV is unable to validate. 6/30/2021 - No material update during this reporting period, DHS and IVV will review the ASI's revised process metrics when they are published. 05/30/2021 - One deliverable was submitted in this reporting period and is currently being reviewed. The revised metrics were not provided by the ASI. 04/30/2021 - Improved collaboration between ASI, DHS SMEs and Product Owners in design-related discussions is having a positive impact on the quality of deliverables. The ASI is currently developing additional quality metrics to quantify these improvements. IVV will continue to monitor. 03/31/2021 - The quality of deliverables continues to show improvement, mainly due to the use of the Confluence tool and its collaborative capabilities. IVV will continue to monitor the implementation and the effectiveness of quality improvements. 02/28/2021 - The Project continued to implement Release 0.2 Lessons Learned initiatives to improve project quality during February. Confluence is enabling the team collaboration to increase the quality of deliverables and work products. IVV has reduced the criticality of this finding to low and will continue to monitor the implementation and the effectiveness of these quality improvement initiatives. 01/31/2021 -The ASI submitted multiple deliverables during January spanning all current releases, with inconsistent document quality results. Some technical deliverables exhibited improved quality, while some design-related test deliverables continued to exhibit multiple anomalies. The project team conducted a Deliverable Review Pilot	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.	7/30/21 RAP - The ASI team will review and respond to this issue again when a material update is made by the IV&V. We also recommend the rethinking of the first recommendation based on the assessment from the IV&V that this is a low risk. The tone, tenor, and substance of that recommendation is out of step with a risk perceived by the IV&V for a number of months now to be low. 4/23/21 rap - The ASI team agrees that the full embrace by the project of the Confluence tool has improved the deliverable management process. We agree that the risk of poor quality deliverables impacting the project will remain low if all parties continue to engage in the processes agreed to by the combined project team. The ASI does dispute the notion that quality has improved due to the use of Confluence largely because the IV&V team has yet to establish any meaningful measure that baselines quality on the project. The ASI team in January did capture metrics that supported that quality has marginally improved since earlier in the project; however, the larger change in the project regarding project quality appears to be the project narrative. We attribute this is largely due to the increased collaboration among the joining teams in preparing deliverables. It should be noted that while the Confluence team has provided a number of positives for the project, it does change the metrics for measuring quality. The ASI is working to establish new metric based processes for measuring quality. 2/25/21 rap - The ASI disputes that the deliverables submitted in January were inconsistent with document quality results. The IV&V's

- 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/Skype). - Complete - 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. The plan should include the possible economic impacts to the state budget directly related to project resources. - Update the OCM 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 this regard to impacts of COVID as well as clarifying communications as to what will remain the same. - Explore options for freeing up key BESSD SME's work on the project. - Complete - Project leadership continue to encourage independent phone conversations to enhance and accelerate communications, and for team members not wait for meetings to converse.	ASAP	2	2	Low	Open	8/30/21 - The ASI has recently reported they will be closing their offices for at least 2 weeks given the escalating number of COVID cases. As work will be ongoing, they do not expect significant impacts to productivity. 7/27/21 The ASI has reported that their off-shore (India) team is back to full strength again after having some challenges with COVID. IVV remains concerned that some communications between the project team could be hindered due to not being able to work in closer proximity. IVV recommends project leadership continue to encourage independent phone conversations to enhance and accelerate communications, and for team members not wait for meetings to converse. 6/28/21 - The ASI continues to limit their office occupancy to 50% to comply with State mandates but has indicated that in-office team members continue to see increased productivity from in-person project collaboration. Some key DHS SME's will continue to work remotely which could pose a challenge to project productivity. Earlier concerns with COVID impacts to their offshore (India) team because of the spike in new cases appear to be subsiding. IVV changed the criticality of this finding from medium to low and will continue to monitor. 5/27/21 - The ASI has allowed their team and select DHS team members to return to their office. DHS' acting PM has noted in-person interactions with the ASI have improved communications and productivity at the PM level. It remains unclear whether the off-shore ASI team will continue to be impacted by team members who may become unavailable due to COVID. 4/28/21 - The project continues to adapt to virtual project activities and sessions. Though in-person sessions are likely more productive and can increase stakeholder participation and the project's cadence, DHS has accepted this risk and continues to improve their virtual capabilities. The ASI stated their off-shore India SSP team has been directly impacted by the increased COVID infection rates as 3-4 of their developers have contracted COVID. If these numbers grow the ASI may transfer some of the work to other teams. 3/31/21 - As BESSD operational activities due to COVID subsidy, some BESSD SMEs are increasing their level of	06/30/2020 - Office opening may be delayed until September/October. TBD.	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 delta 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 travelling and more conference calls; however, the project has adjusted to the lack of in person meetings. In our off-shore office, we still have staff working from home. We expect that to continue for at least the rest of the year. However, the impact to our off-shore resources have ameliorated since the spike of COVID cases in India. We are now back to full strength. Regarding the recommendations: Recommendation #1: The ASI has documented on behalf of the project a covid-19 risk that is being managed through the project's risk management processes. Recommendation #2: We will provide updates to all staff at every other month all-hands meetings on COVID beginning in August. The primary update in August will likely be continuing to adhere to State and Local directions as noted and that work will continue as it has for the past 18 months.4/23/21 RAP - The ASI team has logged a risk in this reporting period to track the risk of COVID to implementation activities. In regard to the overall risk ratings, at this point, the Federal COVID relief package and the vaccination effort is making the likelihood of impact to the project low unless there is a significant change in the variants in the coming months. Additionally, the project has worked remotely successfully for over a year now. We believe that the project has adapted successfully to this challenge that should we need to continue to work remotely that we can adapt
5/31/2021 - DHS continue to work with the appropriate organizations to identify the funds necessary to fill these positions. The state should document a transition plan for the project and PMO resources as identified in the RFP (reference RFP section 3.4.3 'DHS Staffing'). The plan should include the possible COVID-19 economic impact to the state budget, directly in relation to the project resources. - Closed The ASI should document a transition plan for each key resource as required by the RFP (reference RFP section 3.5.1.2 'Benefits Eligibility Solution Project Staffing'). - Closed	ASAP	5	4	High	Open	8/30/2021 - No material update in this reporting period. 7/28/2021 - No material update in this reporting period. 6/30/2021 - No material update in this reporting period. 5/31/2021 - No material update in this reporting period. 4/30/2021- DHS reported the 'hiring freeze' has been lifted and are working to secure the budget for these positions. IVV will continue to monitor. 3/31/2021 - No material update to this finding in this reporting period. 2/28/2021 -No material update to this finding in this reporting period. Note - Previously this finding was addressing DHS PMO and DHS BESSD staff, they were split during this reporting period to accommodate different status updates and criticality ratings. The BESSD Staff are now in finding #65. 01/31/2021 - DHS assigned several BESSD staff to the project team this month and they are in the onboarding process. The DHS PMO positions remain in an open status. Although many new staff were added to the project in January, IVV retains this as a high-priority until DHS has validated the project has the staff with the required skill sets needed for the long-term. This may be challenging since the project is using Aha and MS-Project to manage the schedule and Aha does not currently have DHS resource estimates included for the activities and tasks. 12/31/2020 - DHS identified 2 additional staff to begin assisting in the deliverable review process in January 2021. Additional BESSD staff may be needed to support the project in the near term for the larger releases and the open DHS positions have not yet been approved/funded. 11/30/2020 - DHS has identified additional part time BESSD staff to work on the project in the Product Owner role. DHS is planning to establish roles and responsibilities for the new team members and continues to pursue additional staff to work on the project to minimize risk. 10/30/2020 - No material update to this finding during this reporting period. 9/30/2020 - The lack of DHS staff to work on the BES project is negatively impacting the project. The last DHS PMO member retired at the end of this month. The initiation of the Pilot Deliverable review and approval process along with all other project work is straining the DHS project team. It is critical that	02/08/2021 - Brian Donohoe does not agree with IVV's high-criticality rating on this Finding (#43) and DHS rolled out the DHS Product Owner Roles and Responsibilities to the DHS team on January 29, 2021. (Gary provided the Final DHS Product Owner Roles and Responsibilities document to IVV on 02/8/2021). 06/30/2020 - Mark Choi is becoming more involved in the project. Involved in Arch decisions and PM decisions around tool sets, future vision, etc. Day to day PM working closely w/ Gary and Emerald. We have no insight into other DHS staffing.	4/23/21 RAP - From the ASI perspective, the changes to the project management of the BES project have provided little impact on the overall project. At this point, the knowledge transfer gaps have been closed and the leadership of the project remains strong hands from DHS. We recommend that the IV&V reassess the probability of impact and severity of impact and lower the overall rating for this risk.3/3/2020 - The ASI PM stated the Project Coordinator position is filled and they will begin work on 3/9/2020, transition activities from Donna will begin next week. ASI PM also stated they are currently filling the ASI PM and ASI Engagement Manager Roles and is committed to the project in these roles for the next 6 months.

- 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 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 vet possible architectural change impacts to the platform (e.g., ADA, Configuration Management tools), M&O, MQD, and BES systems before finalizing architectural 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. - DHS should finalize the Portal strategy and implementation details and communicate clearly communicate out to stakeholders and project teams. - 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	<p>8/30/21 - In August, the revised Two-Portal change request was not published. The ASI continues to research ADA tools that are compatible with the BES Architecture. There is a lack of clarity among stakeholders on how, and to what extent, the project will perform configuration management. DHS has indicated their desire to utilize the ServiceNow configuration management capabilities but have yet to resolve licensing issues and the ASI has yet to commit to the level of configuration management they will perform. 7/27/21 - The ASI has completed cost estimates for the 2 portal change order but are continuing efforts to refine the implementation plan. Many DHS stakeholders remain unclear on how the cost estimates were derived and the basis of allocating the cost between MQD and BESSD. Therefore, it is unclear if these plans and estimates were fully communicated and socialized prior to the CCB meeting. 6/28/21 - The ASI reviewed the change order to implement 2 portals (BESSD and MQD) instead of a single consolidated portal. Some details of this change have yet to be provided and the stakeholders raised multiple questions and concerns. The ASI indicated that the project is considering replacing the existing State hub with Boomi toolsets but details are not yet available. 5/27/21 - Although the ASI has taken efforts to clarify how they intend to utilize the State Hub, some aspects have yet to be decided by DHS and the ASI. IV&amp;V will continue to monitor communications between the various stakeholders to assure decisions are made with a full understanding of the system architecture. 4/27/21 - Communication and/or agreement over how BES will utilize the State data hub in the short term as well as going forward is not clear. Repeated ESI questions during the ESI Weekly Platform Status Meeting remain outstanding. 3/31/2021 - The project has made progress in clarifying their portal strategy. The BES portal will include a combined BESSD/MQD application for users from either division. The MQD KOLEA portal will include only the MQD application, and transfer users to the BES portal if they also need to apply for BESSD services. 2/24/2021 - The project continues to clarify the DHS portal</p>	<p>06/30/2020 - Combined application is still planned. App still not finalized by DHS. From Arch perspective, we are building in Liferay. Future Integration of the portals is still to be determined, but is not more complex than originally planned for data sharing. If change is made to Adobe, this would require a CR.</p>	<p>4/23/21 rap - The ASI and DHS continue to refine the final plan for the two portal vision. We expect that final decisions will likely be made during this reporting period and communicated to the project. The ASI refers the IV&amp;V to our February update regarding Recommendation #3. From our perspective all necessary actions are complete. If the IV&amp;V does not believe it is Complete we request supporting detail.</p> <p>4/23/21 rap - The ASI and DHS continue to refine the final plan for the two portal vision. We expect that final decisions will likely be made during this reporting period and communicated to the project. The ASI refers the IV&amp;V to our February update regarding Recommendation #3. From our perspective all necessary actions are complete. If the IV&amp;V does not believe it is Complete we request supporting detail.</p> <p>2/25/21 rap - The ASI recommends that this risk be lowered to low. At this point, there is little unknown about the final system architecture. Regarding the recommendations, #1) This is complete, #2) This should complete in February, #3) This is complete, there are multiple processes to vet architectural changes to project stakeholders, #4) This is complete, the ASI and DHS have pursued platform agnostic design wherever possible, there are multiple communication fora on the project to discuss potential architectural changes, #4, This is complete, see #3.</p>
PCG recommends one or more of the following to mitigate this risk, • ASI provide an additional DDI approach overview session for stakeholders who still may be unclear on elements of the methodology, especially new product owners. - Complete 8/27/2021. • ASI make available their DDI approach documentation/materials for stakeholders to review and/or refresh their knowledge on demand. • 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.	1/31/19	3	3	Med	Open	<p>8/30/21 - On 8/27/21, the ASI conducted a Lunch and Learn session to help the project better understand their DDI processes and highlighted key changes they have made to their previous process. The changes include the addition of design sprints and moving their current test lead out of testing and into a system design business analyst role. The ASI has stated they will be providing more documentation of their DDI approach and will post in Confluence. 7/27/21 - The ASI has stated they will continue to provide the DHS and their development teams with updates to the SDLC processes via their monthly release updates. However, it remains unclear whether this will effectively communicate the methodology to DHS project team members such that they become more productive in their participation in the SDLC process or that they provide effective feedback to the ASI with regard to design decisions, optimal testing processes, and other important SDLC activities. For example, if product owners do not fully understand the consequences of their design decisions, systems designs could require rework and the project could be faced with unexpected change orders. 6/28/21 - The ASI is in the process drafting changes to their current development approach to address some DHS concerns. Details of the changes have yet to be fully delivered, vetted, and communicated to the DHS project team. IVV will review proposed changes once more details become available. 5/27/21 - DHS and the ASI continue to make efforts to bring their new product owners up to speed with both the methodology and expectations of their role. It remains unclear whether DHS product owners will be able to meet project expectations to assure their product owner responsibilities are fully met. 4/28/2021 - The ASI and IVV agree that continuing to educate the DHS product owners in Agile and other software development processes can increase the quality of design sessions and productivity of their role. 3/31/2021 - No update for this reporting period. 2/24/2021 - The ASI has stated their intention to reconcile the differences in approach between their 2 software development teams (Unisys India and subcontractor) and increase DHS'</p>	<p>1/7/19; Note. During the 01-02-18 [sic] status meeting, DHS did not decline the offer and made suggestions. To my understanding, Unisys 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.</p>	<p>7/20/21 RAP - The ASI provides updates on the SDLC processes on published Confluence. They continue to evolve in response to lessons learned, project schedule impacts, and retrospective feedback from the development teams. We will leverage the monthly release updates like we did for the R0.4 updates in July to communicate these changes to the development teams.</p> <p>4/23/31 RAP - The ASI requests that the IV&amp;V interview key project stakeholders regarding this risk and refresh recommendations and understanding of this risk. We contend that there is a good shared understanding of the SDLC among project stakeholders. Recommendation #3 should be updated to Closed. The ASI will make more significant update against the Recommendations #1 &amp; #2 in the next reporting period. We think that the IV&amp;V should update Recommendation #2 to reference Confluence rather than SharePoint since it is now the project's knowledge repository. Additionally, if there are new concerns that are related, we recommend that they be logged as distinct items rather than morphing this risk to address other related topics.</p> <p>2/25/21 rap - The ASI made considerable progress on this risk in January and February 2021. The CMM/FMM team has moved to a similar collaboration approach with product owners for development that the SSP development team uses. Additionally the CMM/FMM team has migrated their work to the BES JIRA instance. Regarding the recommendations, #1) the ASI will look to complete this recommendation in March as time allows, #2) the ASI has published design process information on the project teams Confluence site</p>

5/31/2021 - When the revised schedule is published the project team should restart 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 and 7/29/2021 - DHS and the ASI agree and publish the revised schedule based on the KOLEA ATC impact, CMM development delays and any other changes to address the SDLC process adjustments. 9/30/2020 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 (BI-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 5/30/2020 - effective 5/15/2020 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 attain approval of the PMP. This will help ensure that all processes within the project management entity are thoughtfully and collaboratively developed and implemented to meet the needs of the project. Review and update the project schedule to capture and discuss the late deliverable and tasks and delivery thereof; needed mitigation actions along with identification and agreement with DHS on DDI to resolve the late activities and tasks. - Closed Updated Recommendation 10/10/2019 - - Continue to manage and track the schedule to ensure deliverables are provided as planned. - Closed - Review the schedule critical path in the weekly schedule review meeting.- Closed - Continue to meet weekly with DHS to convey new schedule changes, obstacles, and document the corrective actions that will be taken to address schedule delays and obstacle resolution. - Closed - Determine if the stopped	TBD	4	5	High	Open	8/30/30321 - No material change in this reporting period. The project team continues to update the schedule to incorporate the SDLC changes. The revised target date for DHS to accept the schedule is mid-September. 7/28/2021 - Revisions to the project schedule continued this month. DHS and the ASI are currently evaluating SDLC processes changes that may require further schedule updates. Additionally, the schedule impact of the KOLEA ATC changes is not yet final however, the ASI is planning on gaining DHS approval on the revised schedule next month. 6/30/2021 - The ASI published a draft revised schedule on 6/17/2021. The ASI is currently reviewing the comments and questions submitted by DHS and IVV. The project team is moving forward with the revised schedule understanding that further changes may be applied prior to DHS acceptance. 5/31/2021 - There are no material updates to this finding in this reporting period, the revised project schedule is under development. 4/30/2021 -The revised Project Schedule has not been published to reflect the full scope of the project due to the KOLEA ATC impact (the CMS required KOLEA modifications are causing a delay of the integration with BES) and CMM development delays. IVV notes the project team revised the Release 0.4 schedule in this reporting period and the Release 0.5 schedule is in process. It remains unclear why updates to the schedule continue to be delayed. A residual impact of not having a project schedule is the loss of project team momentum, which is occurring based on the reduction of project meetings and deliverable reviews. 3/31/2021 - The schedule remained static through this reporting period as the project team continued to work through challenges regarding the Release 0.4 CMM Interview, KOLEA MDM and Single Sign-on development activities. During this reporting period, some deliverables were late. The project team is researching options and assessing the schedule impact. 2/28/2021 - In the February 17, 2021 status meeting, the project team reported challenges regarding the Release 0.4 CMM Interview, KOLEA MDM and Single Sign-on development activities. The project team is researching options and assessing	7/20/21 RAP - 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 have a final schedule published by the end of the month. Recommendation #2: The team has reinstituted every other week schedule meetings and is tracking actions be taken on late work on a weekly basis. 4/23/21 rap - The ASI acknowledges that in this period and previous periods that some deliverables have been late; however, they have had little to no impact on the project critical path until this month. The delay in the interview design sessions has impacted the overall project schedule. Additionally, the ATC upgrade on the KOLEA project will have a significant impact to the project schedule (not due to late deliverables). We recommend that the IV&V broaden the primary description of this risk. We agree that there are significant risks to the project schedule; however, late deliverables are a minor contributor compared to other risks that aren't properly documented in the IV&V report. 2/25/21 rap - The ASI agrees that this risk if it ocured would have a high impact to the project; however, the ASI notes, that the probability of this impact over January and February were shown to be low. While there were some deliverables that were late (the BI-10 by a couple of days, Technical Design by a couple of weeks), they were completed in time to avoid any impact to the critical path for R0.3. The Training plan development is well off the critical path. The security plan does remain behind schedule but we are on track for
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