OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

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May 18, 2022

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 (May 16, 2022 10:04 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: April 1 – 30, 2022

Submitted: **May 06, 2022**

PUBLIC
CONSULTING GROUP

Solutions that Matter

Overview

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PUBLIC CONSULTING GROUP

Solutions that Matter

Executive Summary

Executive Summary

The project team continues to refine the design sprint process addressing concerns that have been raised. One persistent concern that IV&V raised is the inexperience of the ASI business analysts and their lack of knowledge about integrated eligibility systems. This results in DHS staff becoming involved in design decisions beyond what would be considered typical. The ASI has made staffing changes in design team leadership with the intent of increasing business analyst effectiveness.

Another month has passed with no approved BES project schedule, extending this high criticality risk. The ASI delivered a proposed schedule on the last day of April, and the project team will review in May. It remains unclear if the open DHS concerns have been addressed.

IV&V opened a new high-criticality security risk this month regarding DHS resources. The DHS Security Analyst resigned this month and although DHS identified staff as an interim solution, most organizations struggle to fill security positions.

Feb	Mar	Apr	Category	IV&V Observations
H	H	H	Project Management	IV&V maintains a high criticality rating for this category due to the: 1) absence of an approved and reasonable project schedule 2) late project deliverables causing schedule delays, and 3) vacant PMO positions. This category has been at a high criticality rating since July 2020 (22 months).
M	M	M	System Design	The ASI responded to DHS and IV&V concerns regarding the design sprint facilitation by ASI business analysts (BAs). An experienced lead BA has been reassigned to train, mentor, and guide the staff in the design sprints, with the objective of improved design outcomes. Additional training material and design sprint process updates are also being used to prepare staff. While training is good, it can take years to establish a Senior BA with the facilitation and IT knowledge needed for a program of this complexity.

Executive Summary

Feb	Mar	Apr	Category	IV&V Observations
M	M	M	Configuration and Development	The ASI added a lead architect to the Project and reassigned a senior BA to CMM. Both actions are intended to improve design communications, solution development, gain project efficiencies and streamline the implementation approach.
L	L	L	Integration and Interface Management	There has been minimal progress to report with interface planning. One area IV&V is monitoring is the DLIR interface, due to DHS needing additional data that the interface does not currently include.
M	M	M	Testing	No material change in this category, the results of the design change process have not yet been tested. Additions to DHS and ASI testing resources are proactively preparing for workload increases.
H	H	H	Security and Privacy	IV&V's concern about the level of effort needed to complete the BES Security Plan has been exacerbated by the departure of the DHS Security Analyst. While the ASI has a significant amount of work that can be completed without DHS involvement, the lack of key security resources may delay progress.

IV&V Findings and Recommendations

IV&V Findings and Recommendations

As of the April 2022 reporting period, PCG is tracking 16 open findings (9 risks and 7 issues) and has retired a total of 54 findings. Of the 16 open findings, 7 are related to Project Management, 2 in Integration and Interface Management, 2 in Testing, 2 in System Design, 1 in Configuration and Development, and 2 in Security and Privacy.

Open Risks & Issues

Open Risks & Issues by Category
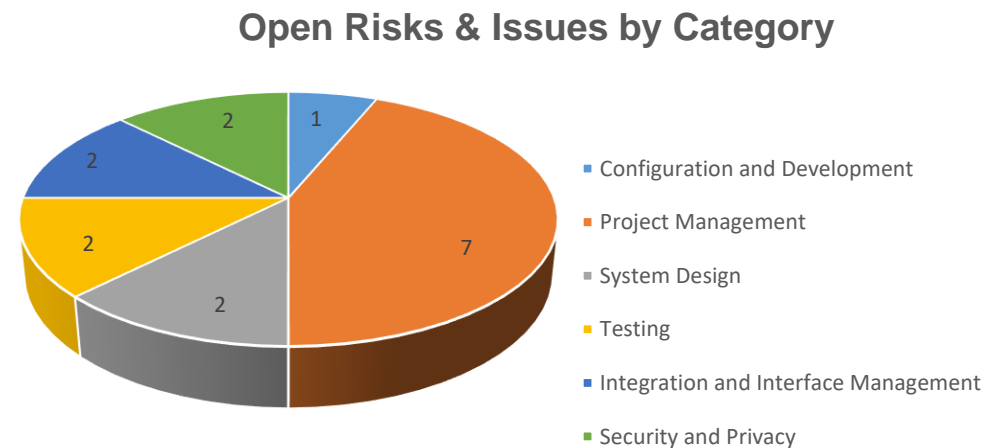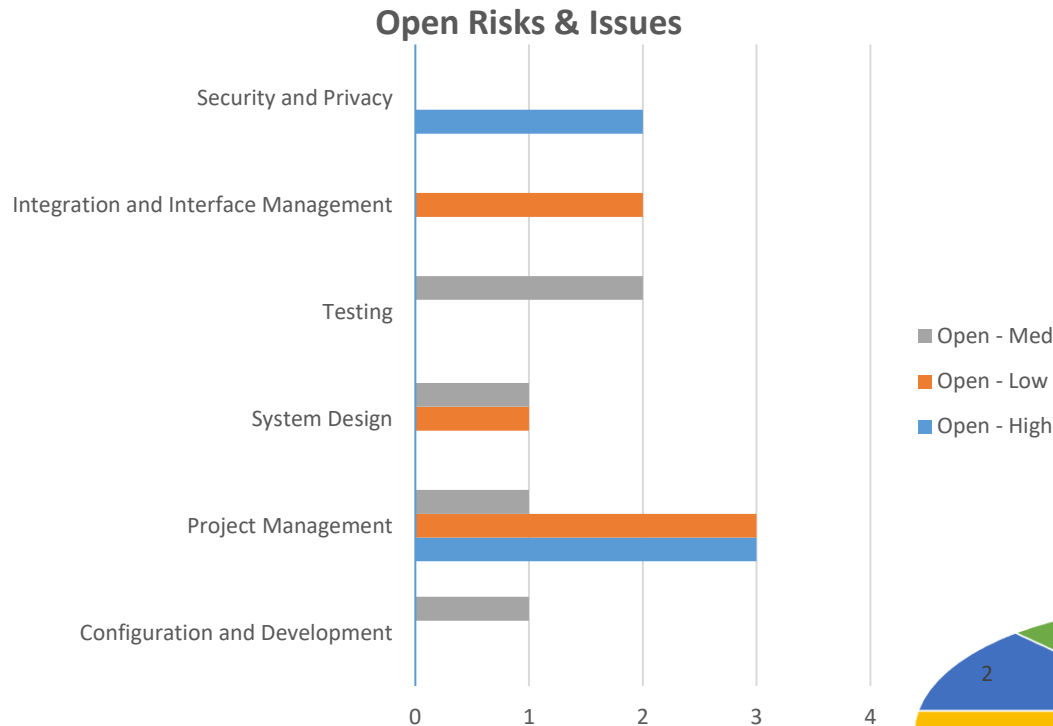
IV&V Findings and Recommendations

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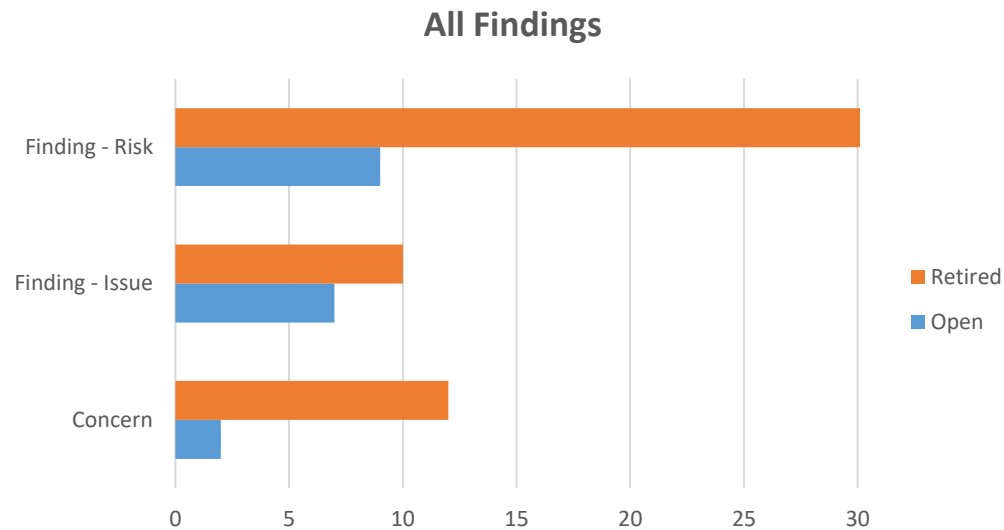
All Findings

IV&V Findings and Recommendations

Findings Retired During the Reporting Period

#	Finding	Category
	None	

IV&V Findings and Recommendations

Preliminary Concerns Investigated During the Reporting Period

#	Finding	Category
70	**Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution.** IV&V expects this concern to be impactful as the Project approaches go-live. Implementation of all the components of configuration management later in the Project could leave the project team scrambling to implement during pre-go-live when resources are likely to be constrained. Delayed completion may lead to configuration management that does not fully meet the needs of the Project or DHS expectations.	Configuration and Development
76	**Volunteer DHS resources leaving the Project can lead to schedule delays, lower morale, and burnout.** A new DHS tester has joined the testing team and is being trained. Two additional testers are needed on the ASI team, and it is understood that more ASI testers will be added to support final acceptance testing. These factors help mitigate this finding, but it is unclear if this will address all the testing resource needs or the potential impact of DHS testers returning to their operational roles. The resource loaded updates to the project plan may help forecast resource needs for FAT. DHS is taking steps to retain resources in these roles as they are 'volunteer' roles.	Project Management

IV&V Findings and Recommendations

Findings Opened During the Reporting Period

#	Finding	Category
77	**Risk – Insufficient DHS Security Resources on the BES Project may lead to delays in completing security tasks and the System Security Plan (SSP). Criticality Rating - High** **Observation**: IV&V has observed the DHS Security Analyst working alone on the BES SSP with the ASI. The amount of security work is more than one resource can effectively handle, including 1) the level of effort needed to effectively manage the ASI's security efforts, 2) DHS work needed to complete the SSP, and 3) daily security tasks supporting DHS. In addition, the DHS Security Analyst announced their resignation from DHS effective in May, leaving no BES security resources from DHS. Currently, all ASI and DHS security-related meetings for BES are canceled. **Significance**: DHS has a significant role in ensuring that the security controls established for the BES application are appropriate and adequately implemented. There are areas of the BES SSP that include control implementations that DHS is responsible for implementing that need DHS to provide content to the ASI. Without sufficient DHS security resources to complete this effort, the BES project may be delayed. DHS Security also has an oversight responsibility that requires subject matter expertise in federal regulatory governance, risk, and compliance (GRC). DHS also needs a qualified security resource that can work with the ASI to ensure that the security efforts taken are in the best interest of DHS and the State of Hawaii. **Recommendations**: • DHS contract for a qualified Security resource(s) as soon as possible to support BES while the Department security positions are filled. • DHS aggressively recruits and promotes the open DHS Security positions to obtain a pool of applicants. • DHS and ASI agree in writing to clear expectations of what security efforts the ASI should complete while the DHS fills positions. • Fill all available DHS Security positions as soon as possible.	Security and Privacy

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
2	**Issue – Late Delivery of project deliverables has caused schedule delays**. The Project continues to conduct design sprints with varying degrees of success. Some sprints require additional time due to 1) not having the right resources involved early in the process, 2) business analyst lack of preparation and/or experience conducting the sprints, or 3) the ability of the DHS POs and SMEs to effectively execute their roles. However, the Project conducts retrospectives and is continuously taking steps to the improve the process. Additionally, the ASI monitors deliverables that may impact the critical path.	H

Recommendations	Progress
• Despite not yet having a revised baseline schedule, continue monitoring and analyzing deliverables that may have impact to the critical path.	In process

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
29	**Issue – Uncertainty and/or a lack of communication around long-term architecture decisions could impact the project budget, schedule, system design, and planning decisions.** The ASI OCM team is developing a Communication Plan for communicating the 2-portal strategy, which may include a portal overview walkthrough with the project team and videos prepared for DHS stakeholders.	L

Recommendations	Progress
• The Project should continue to vet possible architectural change impacts to the platform (e.g., ADA, Configuration Management tools), M&O, MQD, and BES systems before finalizing architectural decisions.	In process
• DHS continue to request ASI perform due diligence in any recommendation for foundational architecture change decisions and continue to review with appropriate DHS stakeholders to assure a common understanding of the implications of these decisions.	In process
• The Project should continue to ensure communication between development leads and architecture leads to assure optimal collaboration on possible architecture changes that could impact decisions in each area.	In process
• Maintain current communication processes to ensure regular communication between the architecture team and the rest of the project team to assess impacts of architecture decisions to the Project.	In process

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
43	**Issue – DHS PMO project team members have transitioned off the Project, which may cause gaps in knowledge transfer and leadership on the Project**. No material updates for this reporting period.	H

Recommendations	Progress
• DHS continue to work with the appropriate organizations to identify the funds necessary to fill these positions.	In process
• DHS consider other options (Contractors, State employees borrowed from other agencies) to fill these positions if there is ongoing difficulty in finding permanent hires.	In process

IV&V Findings and Recommendations

Project Management

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

Recommendations	Progress
• Suggest the Project and DHS create a detailed, documented risk mitigation strategy and plan that is reviewed regularly and revised to address the current state of the COVID-19 threat and related impacts over the next 6 to 12 months. The plan should include the possible economic impacts to the state budget directly related to project resources.	In process
• Send broad communications to stakeholders to assure clear understanding of changes to the Project with this regard to impacts of COVID as well as clarifying communications as to what will remain the same.	In process
• Project leadership continue to encourage independent phone conversations to enhance and accelerate communications, and for team members not wait for meetings to converse.	In process

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
49	**Issue – Poor quality project deliverables may impact system design, testing artifacts and the project schedule.** No material update for this reporting period as IV&V awaits updates to the Quality Management Plan.	(L)

Recommendations	Progress
• ASI review the Quality Management Plan to ensure that the Project is working within the Quality guidelines. In particular, the ASI should evaluate and consider if it is in alignment with Section 3.1.2 Measure Project Quality, which states "ASI measures process and product quality by 1) selecting BES implementation process and product attributes to measure; 2) selecting component activities to measure; 3) defining value scales for each component activity; 4) recording observed activity values; and 5) combining the recorded attribute values into a single number called a process quality index." IV&V has not seen evidence indicating the ASI is utilizing metrics to measure its process and product quality.	In Process
• ASI verify that the information in design and testing artifacts is kept in sync and consistent.	In process

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
71	**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.** The ASI developed a Rough Order of Magnitude (ROM) for the cost of the change request based on scope discussions with DHS. While progress is being made, the pace is slow. The ASI Security Lead reported the lack of an approved GCP decision is delaying security work.	M

Recommendations	Progress
• The ASI should document the current environment M&O activities to ensure all activities are known with a clear understanding of the "AS IS" and "TO BE" model for services beginning with the DDI, through Pilot/Implementation and M&O.	In process
• The ASI clearly document the scope of work and cost for the GCP CR during DDI and M&O and provide to DHS for approval.	In process

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
74	**Risk – The lack of a BES project schedule based on accurate estimations diminishes effective planning and resource management, which could result in late deliverables, cost increases, and a late go-live.** A revised schedule that addresses the two main open issues (increased Final Acceptance Testing duration and updates to the Design Sprint timeline) was not finalized during this reporting period. Without a final revised schedule to manage the Project, planning of future activities and the ability to objectively measure project progress is hindered.	H

Recommendations	Progress
• Using the available tools, review the current estimates to complete each activity compared to past actual hours.	In process
• Update as necessary and provide the DHS/ASI project managers with reports and data that accurately reflect the DHS/ASI resource needs along with over/under allocations of staff for the duration of the Project.	In process
• Develop mitigation and contingency plans that are tracked/managed by DHS/ASI for all tasks that are behind schedule or are at risk of being behind schedule which includes resource management.	In process
• Discuss, validate and address additional concerns within the project processes that may cause the project delays other than inaccurate estimates such as over reliance on POs, slow design sprints, and cadence of development teams.	In process
• DHS and the ASI agree to a revised schedule against which project deliverables can be managed.	In process

IV&V Findings and Recommendations

Integration and Interface Management

#	Key Findings	Criticality Rating
60	**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.** The ASI reported efforts to mitigate this risk, including, onboarding a new build manager to assure cross-team integration challenges are addressed and ensuring scrum masters are aware of these challenges. The ASI intends to establish regular 'Scrum of Scrums' meetings where these integration issues/challenges can be discussed and addressed. The move of the ASI SSP Lead BA to CMM should help to assure a better understanding of integrations between SSP and CMM.	L

Recommendations	Progress
• Prioritize the build and testing of integration points to assure integrations (through early end-to-end testing) meet expectations throughout development instead of waiting to perform them for the first time as go-live approaches.	In process
• The ASI plan and communicate the mitigation strategy for handling risks associated with their integration approach.	In process

IV&V Findings and Recommendations

Integration and Interface Management

#	Key Findings	Criticality Rating
63	**Risk – The lack of early planning and coordination with interface partners may result in schedule delays.** There were no changes to the interface communication plans in this reporting period. The DAGS, DLIR, DOH, and HYCF agreements are still outstanding. In addition, there is a new element to this risk regarding DLIR because the interface will not be able to offer additional data elements which DHS needs.	L

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

IV&V Findings and Recommendations

Configuration and Development

#	Key Findings	Criticality Rating
16	**Issue – Lack of clear understanding of the DDI approach may reduce effectiveness of all SDLC Processes.** The Project continues to attempt to mitigate the impact of relying on less experienced BAs to lead design sessions including moving one of their more experienced BAs from the SSP team to the CMM team. DHS product owners continue to express concerns that they don't fully understand the DDI process and question how effective they can be in making important design decisions if they do not fully understand what's being asked, the technology, and/or the DDI process. IV&V continues to receive feedback from DHS design session participants voicing their concerns that ASI BAs are not fully prepared for sessions and that Use Case designs and user interfaces produced may be less than optimal. More experienced DHS participants appear to be stepping up efforts to take control of some design sessions when they sense that ASI BAs are not meeting their expectations for productive analysis and optimal UI designs.	M

Recommendations	Progress
• ASI make available their DDI approach documentation/materials for stakeholders to review and/or refresh their knowledge on demand.	In process
• The Project monitor DHS product owner productivity, ability/willingness to provide effective feedback to the ASI for design and other important decisions and provide coaching as needed to assure their effectiveness in their role.	In process

IV&V Findings and Recommendations

System Design

#	Key Findings	Criticality Rating
61	**Issue – Poorly executed JAD and "design sessions" could lead to inaccurate design and rework.** The ASI is working to mitigate issues raised regarding inconsistent BA performance, including the migration of Senior BA to CMM team and providing additional training/onboarding for new BAs. Additionally, a System Analyst will participate in the early days of design sprints to help with initial discussions of design. The IV&V team and DHS look to observe improved facilitation in design sprints as these changes take effect. An additional recommendation has also been added, focusing on BA preparation for Design Sprints.	(M)

Recommendations	Progress
• JAD and design sessions should be led by experienced senior BAs, with goals, objectives and results communicated to all participants.	Complete
• The facilitator should use their expertise to drive discussions through leading questions.	In process
• 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.	Complete
• The ASI should back-track significant differences in design direction to determine the root cause to identify these items as early in the SDLC as possible.	Complete
• BAs should come to Day one of Design Sprint fully prepared to facilitate discussion on topic of sprint, with adequate knowledge about business process and approach for design based on JAD/JAR notes and other pertinent material.	In process

IV&V Findings and Recommendations

System Design

#	Key Findings	Criticality Rating
73	**Risk – The planned BES infrastructure is complex which could be difficult to implement and maintain and could lead to schedule/cost impacts** With the onboarding of the new Lead Architect, it remains unclear what efforts will be made to mitigate this risk. The ASI has stated, "The GCP scope definition will determine the nature and complexity of the environment to be implemented. The evaluation of tools and SaaS product solutions will include maintenance and support costs. Risk management methodologies will be included in the evaluation and selection process." Though the ASI has deemed this risk minimal given that they will be owning M&O for the foreseeable future, DHS has concerns about their ability to do so. IV&V has added a new recommendation regarding governance.	L

Recommendations	Progress
• ASI clearly communicate the potential costs and schedule impacts to implementing the planned infrastructure.	In process
• DHS work with the ASI to assess the potential challenges of maintaining a complex environment and consider scaled back options that could reduce this risk and reduce long-term support costs.	In process
• ASI develop a process to closely monitor cloud and other product changes (software updates/new releases), manage changes, and regression test once updates are applied.	In process
• The project team work to establish strong governance over the utilization and maintenance of various components to simplify their use and monitoring.	Not Started

IV&V Findings and Recommendations

Testing

#	Key Findings	Criticality Rating
66	**Issue – The number of issues/defects found during testing may cause planned work in the future sprints to be delayed due to the resolution and retesting of issues/defects.** The number of defects found during SIT for Release 0.6 are reasonable compared to the number of defects reported during INT. This metric is being tracked by the ASI as the quality metric "Defect Leakage." This finding is mitigated by the continued tracking of defect leakage by the ASI. The ASI has indicated that they will be assigning Story Points for backlogged defects that will help measure the effort needed to fix defects that are in the defect backlog.	M

Recommendations	Progress
• Adjust the project plan and provide reasonable scope for SIT in subsequent releases considering the number of defects and testing time needed.	In process
• If defect leakage worsens in the future releases, the ASI should consider a Root Cause Analysis (RCA) with DHS and IV&V to identify and take corrective actions.	In process

IV&V Findings and Recommendations

Testing

#	Key Findings	Criticality Rating
67	**Risk - The Americans With Disabilities Act (ADA) Section 508 compliance tool has not been installed for the Project, which may cause significant rework.** The ASI is evaluating four ADA testing tools for consideration due to high pricing for the tool selected in March. This tool was demonstrated to the ASI and appeared to provide the required reporting features and the needed integration with the BES architecture. A second ADA tool under review has a proof of concept scheduled for the week of 5/1/2022. The ASI has stated that little impact is expected from the delay in performing ADA compliance testing and that a tool will be tested and selected shortly.	M

Recommendations	Progress
• The ADA tool meets contractual and project requirements.	In process
• The ASI communicates a plan for ADA test execution.	In process
• The ASI communicates how the tool will be used to report compliance and non-compliance and how non-compliance will be addressed/corrected	In process
• The ASI communicates how and when DHS/IV&V will be provided the reports from the ADA tool execution and how to interpret the results.	In process

IV&V Findings and Recommendations

Security and Privacy

#	Key Findings	Criticality Rating
68	**Risk - 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.** As of April 22nd, IV&V has not observed any ASI Security SMEs attending security meetings. While Unisys states an open job requisition exists for a Security Architect, one has yet to be added to the DHS BES team. The BES Security Officer gave conditional approval of the system security boundary, based on the BES architecture not being finalized. All current security-related meetings have been canceled between the ASI and DHS as the DHS security officer has resigned. Between the guidance that DHS has been providing on federal regulatory compliance (Pub 1075, MARS-E, FNS, NIST 800-53r5) and the lack of an ASI security architect and security SMEs to collaborate with DHS, security components are likely to stall until DHS and the ASI have adequate security staffing to continue with BES security-related work. A separate finding has been developed by IV&V related to DHS security resources.	H

Recommendations	Progress
• The ASI continue to develop the BI-13 Security Plan in close collaboration with DHS.	In process
• DHS and the ASI agree upon the tools and process that will be used to document and track security control implementation, such as security governance, risk, and control (GRC software). The process should define the level of detail needed to track progress (estimates, target dates, risks, issues, evidence) along with the Requirement Traceability Matrix, and plans of actions and milestones (POAM).	In process
• ASI add a Security Architect to the Project ASAP to assist with the Security Plan activities.	In process
• ASM have a security SME attend the weekly security planning meetings and workshops.	Not Started

IV&V Status

IV&V Engagement Status

IV&V Engagement Area	Feb	Mar	Apr	Comments
IV&V Budget	🟢	🟢	🟢	
IV&V Schedule	🟢	🟢	🟢	
IV&V Deliverables	🟢	🟢	🟢	PCG submitted the final March IV&V Monthly Status Report.
IV&V Staffing	🟢	🟢	🟢	
IV&V Scope	🟢	🟢	🟢	PCG and DHS fully executed the Supplemental Agreement to exercise the contract's first two-year option period.

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

IV&V Activities

- IV&V activities in the April reporting period:
  - Completed – March 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 May 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-14 Release 0.6 Technical Design Document - Shared Interfaces deliverable (Iteration 1)	4/21/2022	V1.0
BI-20 Release 0.7 Test Scenarios, Cases, and Scripts deliverable (Iteration 2)	4/20/2022	v1.0
BI-14 Release 0.6 Technical Design Document - BESSD Interfaces deliverable (Iteration 1)	4/20/2022	V1.0
BI-21 Release 0.5 Updated and Completed Detailed Functional and Technical RTM – DRAFT	4/20/2022	V1.0
The BI-14 Release 0.6b Technical Design Document – SSP deliverable (Iteration 1)	4/15/2022	V1.0
BI-14 R0.6d Technical Design Document CF – DRAFT	4/14/2022	v0.3
BI-10 R0.6d CMM Interview (Iteration 1)	4/14/2022	v1.0
BI-20 Release 0.7 Test Scenarios, Cases, and Scripts deliverable (Iteration 1)	4/12/2022	v1.0
BI-14 SSP Application Management (No Account) & Pre-populate Online Application (Iteration 2)	4/11/2022	V1.3
BI-10 R0.7 CMM Verifications – DRAFT	4/5/2022	v1.0
BI-14 Release 0.6d Technical Design Document - CMM	4/4/2022	v0.2

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 Project Schedule (BI-5)	4/04/2022	V0.22
BES Weekly Status Report	4/27/2022 4/20/2022 4/13/2022 4/6/2022	N/A
BES Risks and Issues Log	4/27/2022	N/A
BES Interface Communication Plans and Interface Control Documents	N/A	N/A
NIST Special Publication 800-53 Security and Privacy Controls for Information Systems and Organizations	12/20/2020	Rev.5
2021-002a Two-Portals Change Request	07/12/2021	V1.2
Controlled Correspondence 2020-5016 SOAP Updates – Payment Schedule	06/19/2020	V 2.0

Additional Inputs

Meetings and/or Sessions Attended/Observed:

1. Weekly Platform Status Meeting – 4/5/2022, 4/12/2022, 4/19/2022, 4/26/2022
2. Bi-Weekly Project Status Meeting – 4/13/2022, 4/27/2022
3. Bi-Weekly BES PMO and IV&V Touch Base – 4/14/2022, 4/28/2022
4. Weekly BES Dev Stand-up – 4/6/2022, 4/13/2022, 4/20/2022, 4/27/2022
5. Weekly SSP Backlog Grooming Session – 4/6/2022, 4/19/2022
6. Weekly CMM Backlog Grooming Session – 4/6/2022, 4/19/2022
7. IV&V Team Meeting – 4/4/2022, 4/7/2022, 4/11/2022, 4/14/2022, 4/18/2022, 4/21/2022, 4/25/2022, 4/28/2022
8. Weekly DHS-Unisys Security Touchpoint – 4/5/2022, 4/12/2022, 4/19/2022, 4/26/2022
9. BES Security Control Workbook – 4/7/2022
10. BES Testing Touch base – 4/8/2022, 4/22/2022
11. HI DHS BES March Draft IV&V Report Review – 4/11/2022
12. Bi-Weekly DHS and IV&V Touch Base – 4/5/2022, 4/19/2022
13. ASI/IV&V Mid-month Check-in – 4/19/2022
14. ASI and IV&V Pre-Draft Report Review – 4/1/2022
15. Executive Steering Committee Meeting – 4/21/2022
16. HI BES ASI and IV&V Touch Base - Functional Team – 4/26/2022
17. HI BES ASI and IV&V Touch Base - Technical Team – 4/28/2022
18. Monthly Project Risk and Issue Review Meeting – 4/27/2022
19. Implementation Planning – 4/6/2022, 4/20/2022
20. R0.11 Correspondence Specs Mtg – 4/1/2022, 4/5/2022, 4/7/2022, 4/11/2022, 4/13/2022, 4/18/2022, 4/20/2022, 4/22/2022, 4/26/2022
21. Manage Client Address Information Mtg – 4/1/2022
22. CF20a Manage Generated Correspondence – 4/1/2022, 4/6/2022, 4/7/2022, 4/8/2022, 4/12/2022, 4/13/2022, 4/18/2022, 4/19/2022

Additional Inputs – Continued

Meetings and/or Sessions Attended/Observed:

23. CO01e Identify Possible Client Duplicates for Merge – 4/1/2022, 4/5/2022
24. FM01a Send FIS Data / FM01d Receive FIS Data – 4/4/202, 4/6/2022, 4/8/2022, 4/10/2022, 4/12/2022, 4/14/2022, 4/19/2022, 4/20/2022
25. R0.10 Report Specs Mtg – 4/4/2022, 4/6/2022, 4/8/2022, 4/10/2022, 4/12/2022, 4/14/2022, 4/19/2022, 4/21/2022, 4/25/2022
26. FM15 Manage Repayment Plans – 4/4/2022, 4/6/2022, 4/8/2022, 4/12/2022, 4/14/2022, 4/19/2022, 4/21/2022, 4/25/2022, 4/27/2022, 4/29/2022
27. CO01d Manage Client Contact Information – 4/5/2022, 4/7/2022, 4/11/2022, 4/13/2022, 4/18/2022, 4/21/2022, 4/25/2022, 4/27/2022, 4/29/2022
28. FM08 Manage Benefits Issuance History – 4/5/2022
29. PE01a View Eligibility History – 4/7/2022, 4/11/2022, 4/13/2022, 4/18/2022, 4/20/2022, 4/26/2022, 4/28/2022
30. CF09a Generate Case Notes – 4/22/2022, 4/26/2022
31. CO51a Manage IRS Data – 4/25/2022, 4/26/2022, 4/27/2022, 4/29/2022
32. FM01c Send FIS Data - Issue Disaster Benefit – 4/25/2022, 4/27/2022, 4/29/2022
33. R0.11 Report Specs Mtg – 4/27/2022, 4/29/2022
34. Weekly Functional PMO Meeting – 4/6/2022, 4/11/2022, 4/18/2022, 4/25/2022
35. Data Conversion PMO meeting – 4/4/2022, 4/11/2022, 4/18/2022, 4/25/2022
36. Weekly Interfaces - PMO Meeting – 4/11/2022, 4/18/2022, 4/25/2022
37. PMO Meeting Structure – Testing – 4/7/2022, 4/14/2022, 4/21/2022, 4/28/2022
38. PMO Meeting Structure - BES Development – 4/7/2022, 4/14/2022, 4/21/2022, 4/28/2022
39. PMO Meeting Structure - AH/MDM/SSP Development – 4/14/2022, 4/21/2022, 4/28/2022
40. BES Application Architecture discussion – 4/8/2022
41. Data Conversion Working Session – 4/1/2022, 4/7/2022, 4/11/2022, 4/28/2022
42. [BES] Screen Prototype Review - FMM FM08 Manage Benefits Issuance History – 4/11/2022

Additional Inputs – Continued

Meetings and/or Sessions Attended/Observed:

43. [BES] R0.6d BI-14 Walk-Through - Technical Design Document CMM – 4/12/2022, 4/26/2022
44. Controlled Correspondence Documentation Mtg – 4/13/2022
45. R0.6d SIT Over-the-Shoulder Testing – 4/5/2022, 4/13/2022
46. R0.6d Sit Go/ No Go Exit – 4/13/2022
47. Sprint Demo– 4/11/2022, 4/18/2022, 4/25/2022, 4/26/2022
48. [BES] BI-10 R0.6d CMM Interview Walk-Through – 4/19/2022, 4/20/2022, 4/21/2022, 4/25/2022
49. [BES] R0.6d BI-14 Walk-Through - Technical Design Document CF – 4/19/2022
50. [BES] Screen Prototype Review - CF CF20a Manage Generated Correspondence – 4/20/2022
51. [BES] BI-21 R0.5 Updated and Completed Detailed Functional and Technical RTM – 4/21/2022
52. [BES] Screen Prototype Review - FMM FM01a Send FIS Data / FM01d Receive FIS Data – 4/21/2022
53. Lessons Learned Proposal Review – 4/19/2022
54. BES Design Sprint Retrospective & Planning – 4/22/2022
55. Design Sprint 1 Check In Follow Up Meeting – 4/22/2022, 4/26/2022
56. Junit test case Demo – 4/13/2022, 4/27/2022

Appendices

Appendix A – IV&V Criticality Ratings

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

Appendix B – Findings Log

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

Appendix C – Acronyms and Glossary

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

Appendix C – Acronyms and Glossary

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

Appendix C – Acronyms and Glossary

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

Appendix D – Background Information

Systems Modernization Project

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

- ESI or Platform Vendor – responsible for the shared technology and services required for multiple Application vendors to implement and support functionality that leverages the DHS Enterprise Platform.

- ASI or ASI Vendor – responsible for the DDI of the Benefits Eligibility Solution (BES Project) enhancing the currently implemented Medicaid E&E Solution (KOLEA) and providing support for the combined Solutions.

- CCWIS Vendor – responsible for the DDI of the CCWIS Solution to meet the needs of child welfare services and adult protective services (CCWIS Project) and providing support for the Solution.

Systems Modernization IV&V Project

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

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

- BES DDI

- CCWIS DDI

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

- Evaluating efforts performed by the Project (processes, methods, activities) for consistency with federal requirements and industry best practices and standards

- Reviewing or validating the work effort performed and deliverables produced by the ASI vendor as well as that of DHS to ensure alignment with project requirements

- Anticipating project risks, monitoring project issues and risks, and recommending potential risk mitigation strategies and issue resolutions throughout the Project's life cycle

- Developing and providing independent project oversight reports to DHS, ASI vendors, State of Hawaii Office of Enterprise Technology Services (ETS) and DHS' Federal partners

Appendix D – Background Information

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

- Oversight by an independent third party that assesses the Project against industry standards to provide an unbiased view to stakeholders

- The goal of IV&V is to help the State get the solution they want based on requirements and have it built according to best practices

- IV&V helps improve design visibility and traceability and identifies (potential) problems early

- IV&V objectively identifies risks and communicates to project leadership for risk management

PCG's Eclipse IV&V® Technical Assessment Methodology

- Consists of a 4-part process made up of the following areas:

  1. **Discovery** – Discovery consists of reviewing documentation, work products and deliverables, interviewing project team members, and determining applicable standards, best practices and tools.

  2. **Research and Analysis** – Research and analysis is conducted in order to form an objective opinion.

  3. **Clarification** – Clarification from project team members is sought to ensure agreement and concurrence of facts between the State, the Vendor, and PCG.

  4. **Delivery of Findings** – Findings, observations, and risk assessments are documented in this monthly report and the accompanying Findings and Recommendations log. These documents are then shared with project leadership on both the State and Vendor side for them to consider and take appropriate action on.

IV&V Assessment Categories for the BES Project

- Project Management
- Requirements Analysis & Management
- System Design
- Configuration and Development
- Integration and Interface Management

- Security and Privacy
- Testing
- OCM and Knowledge Transfer
- Pilot Test Deployment
- Deployment

Solutions that Matter

ID	Title	Reporter	Finding Type	Identified Date	Category	Observation	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Status Update	Client Comments	Vendor Comments
77	Insufficient DHS Security Resources on the BES Project may lead to delays in completing security tasks and the System Security Plan (SSP).	Dustin Heath	Finding - Risk	4/29/2022	Security and Privacy	IVV has observed the DHS Security Analyst working alone on the BES SSP with the ASI. The amount of security work is more than one resource can effectively handle, including; 1) level of effort needed to effectively manage the ASI's security efforts, 2) DHS work needed to complete the SSP, and 3) daily security tasks supporting DHS. In addition, the DHS Security Analyst announced their resignation from DHS effective in May, leaving no BES security resources from DHS. Currently, all ASI and DHS security-related meetings for BES are canceled.	DHS has a significant role in ensuring that the security controls established for the BES application are appropriate and adequately implemented. There are areas of the BES SSP that include control implementations that DHS is responsible for implementing that need DHS to provide content to the ASI. Without sufficient DHS security resources to complete this effort, the BES project may be delayed. DHS Security also has an oversight responsibility that requires subject matter expertise in federal regulatory governance, risk, and compliance (GRC). DHS also needs a qualified security resource that can work with the ASI to ensure that the security efforts taken are in the best interest of DHS and the State of Hawaii.	• DHS contract for a qualified Security resource(s) as soon as possible to support BES while the Department security positions are filled. • DHS aggressively recruits and promotes the open DHS Security positions to obtain a pool of applicants. • DHS and ASI agree in writing to clear expectations of what security efforts the ASI should complete while the DHS fills positions. • Fill all available DHS Security positions as soon as possible.	Immediate	4	5	High	Open			
76	Volunteer DHS resources leaving the Project can lead to schedule delays, lowered morale, and burnout.	Earl Burba	Concern	3/3/2022	Project Management	The DHS resources assigned to work with the ASI on the BES Project are all volunteers except one. Resources are not in dedicated roles within the team and have the option of returning to their previous operational roles at any time.	The replacement of DHS resources in project roles (e.g., testers and product owners) is not guaranteed and DHS already stated that no additional resources will be assigned to the test team. It is a risk to the Project that the remaining DHS resources will be overallocated, risking burnout, and creating a cycle of more DHS resources leaving the Project. If additional DHS staff are provided, their training will add to the workloads of current DHS project resources.	• Consider adding DHS resources as needed. • Allocate more time for the DHS team members to dedicate time to the project. • Carefully plan for all project activities with reasonable hour allocations for the DHS resources and adjust dates in the integrated project plan accordingly. • Add cushion time to the schedule for unexpected project delays. • Provide incentives for the DHS resources to help maintain the team and possibly alleviate attrition from the team and possibly increase the number of volunteers to the team.	Immediate	4	5	High	Open	4/26/2022 - A new DHS tester has joined the testing team and is being trained. Two additional testers are needed on the ASI team, and it is understood that more ASI testers will be added to support final acceptance testing. These factors help mitigate this finding, but it is unclear if this will address all the testing resource needs or the potential impact of DHS testers returning to their operational roles. The resource loaded updates to the project plan may help forecast resource needs for FAT. DHS is taking steps to retain resources in these roles as they are 'volunteer' roles. 3/28/2022 - DHS SME's are not assigned to the project as full time resources. DHS testing resources are volunteers and can return to the operational positions at any time or may be called back to address BESSD operations needs. Currently a new resource is being evaluated for the DHS testing team. As additional DHS testing expertise becomes apparent in the revised SDLC process, losing resources will have increased impact on delivery and the project schedule.		
74	The lack of a BES project schedule based on accurate estimations diminishes effective planning and resource management, which could result in late deliverables, cost increases, and a late go-live.	Ryan	Finding - Risk	11/29/2021	Project Management	DHS and the ASI have tried multiple times to rework the schedule with results that have not yielded improvement. Concerns with the structure, estimating practices, and ability to manage to the schedule persist. The use of multiple tools to track resources obfuscate resource management. Previous IVV findings focused on specific schedule components such as resource management and critical path analysis, all of which were addressed and closed.	If estimates for project schedule activities are not accurate, this can lead to constant schedule changes, resources not being available when needed, rushed activities, and general frustration which can lead to schedule delays, low quality output, scope changes, and budget issues.	• Using the available tools, review the current estimates to complete each activity compared to past actual hours • Update as necessary and provide the DHS/ASI Project Managers with reports and data that accurately reflect project activities with reasonable hour allocations for the DHS resources and the duration of the Project • Discuss, validate and address additional concerns within the project processes that may cause the project delays other than inaccurate estimates such as over reliance on POs, slow design sprints, and cadence of development teams. • DHS and the ASI agree to a revised schedule against which project deliverables can be managed.	Immediate	4	4	High	Open	4/29/2022 - A revised schedule that addresses the two main open issues (increased Final Acceptance Testing duration and updates to the Design Sprint timeline) was not finalized during this reporting period. Without a final revised schedule to manage the Project, planning of future activities and the ability to objectively measure project progress is hindered. 3/31/2022 - A revised schedule was not submitted in this reporting period, and the Project does not have an approved schedule. Updates to increase the Final Acceptance Testing duration and updates to the Design Sprint duration to reflect current DHS resource levels are still pending. Even with an updated Design Sprint schedule to accommodate existing DHS resource levels, it remains unclear if the Project will be able to meet the revised dates due to: 1) the complexity of the design sprint process, 2) the availability of DHS SMEs and POs when needed, and 3) the Design Sprint participants being able to competently perform in their respective roles. 2/28/2022 - The updated target for DHS to approve the project schedule is early March 2022. The ASI provided a version 20 draft schedule but is adjusting the schedule to increase the length of Final Acceptance Testing and to accommodate the estimated capacity of DHS resources during the Design Sprints. Even with a less aggressive Design Sprint schedule, it remains unclear if the Project will be able to meet the revised dates due to 1) the complexity of the design sprint process, 2) the availability of DHS SMEs and POs when needed, and 3) the Design Sprint participants being able to competently perform in their respective roles. 1/28/2022 - The ASI provided several draft schedules and is responding to comments from reviewers. The schedule has not been approved by DHS. The ASI stated that development, technical design and functional design estimates were all reviewed and assigned levels of efforts which fed directly into the revised schedule. However, it remains unclear if the current level of DHS and/or ASI		
73	The planned BES infrastructure is complex which could be difficult to implement and lead to schedule/cost impacts.	mfors	Finding - Risk	10/28/2021	System Design	Current ASI infrastructure plans include a significant number of sophisticated components that make up a complex cloud infrastructure. Further, the Project Team has yet to finalize components that will make up the BES infrastructure and the additional costs and time to configure, test, and implement the planned complex environment remain unclear.	If the level of effort to implement and manage the complexities of the BES infrastructure is not accurately accounted for and staffed by the ASI, the project could be met with unexpected costs and schedule delays. Delays in finalizing the components being implemented could exacerbate this risks and lead to further delays. Complex platforms often present system maintenance and operations challenges as system changes can hold the increased potential for system failure (i.e., due to the significant number of "moving parts") and increase the level of time and effort to resolve infrastructure and application-level bugs. Further, some components remain in an immature state compared to their legacy counterparts. For example, the project recently experienced a system failure because Google Cloud failed to clearly communicate a change that led to failure in another component (i.e., Nexus). Google Cloud is generally viewed as a less mature product offering, compared to their rivals (Amazon Web Services, Microsoft Azure). IV&V remains concerned that this could lead to failures at critical points in the project (including post-go live production failures) that could be difficult to resolve and lead to project disruption. If DHS intends to eventually reduce M&O outsourcing costs turning over M&O tasks to State employees, they could face challenges supporting tools they may not be familiar with in a complex infrastructure environment.	• ASI clearly communicate the potential costs and schedule impacts to implementing the planned infrastructure. • DHS work with the ASI to assess the potential challenges of maintaining a complex environment and consider scaled back options that could reduce this risk and reduce long-term infrastructure costs. • ASI develop a process to closely monitor cloud and other product changes (software updates/new releases), manage changes, and regression test once updates are applied. • The project team work to establish strong governance over the utilization and maintenance of various components to simplify their use and monitoring.	Next several month	2	2	Low	Open	04/29/22 - With the onboarding of the new Lead Architect, it remains unclear what efforts will be made to mitigate this risk. IVV recommends the project work to establish strong governance over how the various components will be utilized and maintained in order to simplify and control their use through standardized controls and monitoring. The ASI has stated, "The GCP scope definition will determine the nature and complexity of the environment to be implemented. The evaluation of tools and SaaS product solutions will include maintenance and support costs. Risk management methodologies will be included in the evaluation and selection process." Though the ASI has deemed this risk minimal given that this ASI will be owning M and O for the foreseeable future, DHS has concerns about their ability to do so. IV&V has added a new recommendation regarding governance. 03/31/22 - The ASI has onboarded their new Lead Architect who will be responsible for managing the system infrastructure which should improve clarity around governance, capabilities of the different infrastructure components and how they will be utilized. 02/28/22 - The ASI is onboarding their replacement Lead Architect in the coming weeks. The ASI has stated that the infrastructure, while complex, is sufficiently understood and manageable. The revised project schedule provides additional time to implement the BES infrastructure and could mitigate the risk of infrastructure delays. IV&V is lowering the criticality rating to 'Low'. 01/28/22 - The ASI stated that the proposed revised/extended schedule allows enough time to build the complex environment. The ASI continues to maintain that the components they are using, though complex, will reduce person-hours for maintenance and improve system support. The ASI is making efforts to refine their patching strategy for the large number of components that will have to be updated and patched throughout the life of the system. 12/31/21 - The ASI stated they believe they will continue to		
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.	Joe Frasca	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 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.	- The ASI should document the current environment M and O activities to ensure all activities are known with a clear understanding of the "AS IS" and "TO BE" model for services beginning with the DDI, through Pilot/Implementation and M and O. The ASI clearly document the scope of work and cost for the GCP CR during DDI and M and O and provide to DHS for approval. COMPLETE - DHS and the ASI agree to a firm delivery date for when DHS will receive the GCP CR. 12/16/2021 Complete	ASAP	3	3	Med	Open	4/30/2022 - The ASI developed a Rough Order of Magnitude (ROM) for the cost of the change request based on scope discussions with DHS. While progress is being made, the pace is slow. The ASI Security Lead reported the lack of an approved GCP decision is delaying security work. 3/31/2022 - DHS and the ASI have met to further define the scope of the CR and confirm the responsibilities of the ASI and ESI. DHS plans to have the Rough Order of Magnitude (ROM) done by April 15th, and then will engage the HI Attorney General. DHS has extended an opportunity for IVV to participate in the writing of the change request. 2/28/2022 - IVV has requested a copy of the GCP change request from the DHS Enterprise Technology Officer. When received, IVV will review the GCP CR and provide comments. 1/31/2022 - IVV has requested a copy of the GCP change request from the DHS Enterprise Technology Officer. IVV waits to see if the ASI addressed our recommendations in the details of the CR. 12/31/21 - No material update in the reporting period. IVV waits to see if the ASI addressed our recommendations in the details of the CR delivered to DHS on 11/11/2021. 11/30/2021 - DHS has received information and pricing for the GCP CR from the ASI. The ASI and DHS are working to confirm the scope of this change request. IVV waits to see if the ASI addressed our recommendations in the CR details. 10/28/2021 - The ASI has not submitted the GCP Change Request to DHS. IVV recommends that DHS and the ASI agree to a firm delivery date for the change request. 09/30/2021 - The ASI met with the IVV team on 09/15/2021 and provided a high-level overview of GCP Change Request. The ASI continues to draft the CR and a date has not yet been established to present the CR at the BES CCB. IVV is concerned with the scope of this CR and ability for the project team to fully implement the scope of work in the time remaining prior to pilot.		9/9/2021 - RAP: Point of clarification. The SOAP agreement did not establish that the project would be deployed to the Cloud. SOAP provided that development be done in the Cloud and specifically that deployment would we be to the on-premise environment. However, we did acknowledge that deployment may move to the Cloud. The final decision to move to GCP for production was made in July 2020. The costs for managing the UAT, Production, and Disaster Recovery environments were not included in the SOAP agreement nor

ID	Title	Reporter	Finding Type	Identified Date	Category	Observation	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Status Update	Client Comments	Vendor Comments
70	Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution	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, however, it remains unclear if sufficient progress has been toward establishing CM processes, selecting CM tools (e.g., CMDB), and building out the CM infrastructure. The projects Google Cloud Platform (GCP) Change Request and Security Plan have yet to be finalized which may include additional requirements or decisions that could impact CM. The project currently relies on Github for tracking of some configurations	Configuration Management is a set of processes and procedures that 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.	• ASI adhere to plans for configuration management as documented in BI-6 DDI Plan, Section 5.2 and clarify details and/or any changes with DHS. • ASI validate plans for configuration management with DHS and agree on a meaningful set of configuration items or settings they will track. • Identify the DHS POC for the Configuration Management Activities that would provide oversight of configuration management activities and assure defined CM steps and plans are being followed, are effective, and are achieving DHS objectives for CM.	ASAP	2		2 Low	Open	4/29/22 - IVV expects this concern to be impactful as the Project approaches go-live. Implementation of all the components of configuration management later in the Project could leave the project team scrambling to implement during pre-go-live when resources are likely to be constrained. Delayed completion may lead to configuration management that does not fully meet the needs of the Project or DHS expectations. 03/31/22 - No material update for this reporting period. 2/28/22 - No material update for this reporting period. 1/31/22 - No material update for this reporting period. 12/31/21 - No material update for this reporting period. 11/29/21 - The ASI stated their plans to utilize Service Now as their Configuration Management Database (CMDB). If utilized to its fullest extent, Service Now can effectively track system configurations and provide system support personnel with an effective means to resolve system bugs. IVV will continue to monitor for the effective build out of the CMDB and further elaboration by the ASI of their configuration management plans. 10/29/21 -The ASI has made progress in their configuration management (CM) planning, such as identifying who will fill the Configuration Manager position but have noted that full implementation of configuration tracking may be delayed as they prioritize build out of more critical components of the BES infrastructure. The ASI will work with DHS to solidify CM tool decisions. The project is currently considering replicating and improving on KOLEA's CM approach which only tracks the most critical configuration items (e.g., firewall and other security configurations) and creating a CM database (CMDB). It remains unclear if the ASI will utilize ServiceNow (currently in use at DHS) for their CMDB. The ASI is currently using bitbucket for configuration tracking purposes. 9/29/21 - The ASI has stated their intention to make updates to the Configuration Management Plan. It is anticipated that the GCP will shift some configuration management responsibilities from the ESI		9/9/2021 - RAP: We look forward to receiving specific inquiries from the IV&V team on configuration management and having conversations. We do acknowledge that the plan likely needs to be updated to reflect the processes in place on the project for configuration management.
68	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.	Jeremy Riley	Finding - Risk	7/28/2021	Security and Privacy	Over the last several months, the BES project team has been working through the planning efforts to develop the BI-13 Security Plan while also managing through ASI Security Lead staffing changes. DHS and the ASI agreed to modify the BI-13 Security Plan Deliverable Expectation Document (DED) last month and are currently revising it to align to the requirements and changes to the project since inception.	The BES project must have a clear plan to define, implement, test, and validate all Security and Privacy Requirements/Controls prior to entering the Pilot phase. There are many standards that must be met, and the project team plans to utilize the BES Security Control Implementation Workbook to document the status of each control. The Security Control Implementation Workbook must be detailed and allow for ease of referencing to the Security Policies, Standards, Controls, and implementation plan along with evidence for each control.	OPEN - The ASI continue to develop the BI13 Security Plan in close collaboration with DHS. - DHS and the ASI agree upon the tools and process that will be used to document and track security control implementation, such as security governance, risk, and control (GRC software). The process should define the level of detail needed to track progress (estimates, target dates, risks, issues, evidence) along with the Requirement Traceability Matrix, and plans of actions and milestones (POAM). - ASI add a Security Architect to the Project ASAP to assist with the Security Plan activities. - ASM have a security SME attend the weekly security planning meetings and workshops. COMPLETE - DHS and the ASI agree and finalize the BI-13 DED. 1/4/22 Complete - ASI, per DHS guidance, should begin to pivot toward the adoption of 800-53 Rev 5 since Rev 4 will be obsolete when the system goes live. COMPLETE 3/31/2022 -DHS should determine the FNS requirements for go live based on their meeting and provide ASI with proper guidance. FNS requirements should be documented as part of BI-13 Security Plan COMPLETE 3/31/2022	ASAP	4		5 High	Open	04/27/2022 – As of April 22nd, IV&V has not observed any ASI Security SMEs attending security meetings. While Unisys states an open job requisition exists for a Security Architect, one has yet to be added to the DHS BES team. The BES Security Officer gave conditional approval of the system security boundary, based on the BES architecture not being finalized. All current security-related meetings have been canceled between the ASI and DHS as the DHS security officer has resigned. Between the guidance that DHS has been providing on federal regulatory compliance (Pub 1075, MARS-E, FNS, NIST 800-53r5) and the lack of an ASI security architect and security SMEs to collaborate with DHS, security components are likely to stall until DHS and the ASI have adequate security staffing to continue with BES security-related work. A separate finding has been developed by IVV related to DHS security resources. 03/31/2022 – DHS has decided to use NIST 800-53 revision 5 moderate controls, and the ASI has been working on changing the control mappings in Confluence to the revision 5 standard. This significant effort is mitigated in part by the efforts the ASI already completed on the Rev 5 controls. The effort to define the security boundary of BES and the components that make up the system has taken a considerable amount of time and is incomplete. A security architect is essential to defining the security boundary of BES; however, the security architect position remains unfilled. Over the past month, no security SMEs from the ASI have attended the weekly meetings with DHS. The result is questions raised within the meeting not getting answered, and the response being deferred to the following week. 2/28/2022 - DHS and the ASI continue to populate the in-scope controls. There is renewed discussion regarding the use of Rev 5 controls as required by the IRS, while Rev 4 controls are required by FNS. DHS continues to determine the FNS requirements for go live and FNS timelines for security approval. 2/2/22 - The format of the security and		9/9/2021 - RAP: The decision to move to GCP for deployment has driven the need for a complete rewrite of the security plan per DHS. The ASI is in the process of planning the effort to make these updates. The effort required to complete this work will be included in either the GCP change request or a new change request We look forward to additional discussions with IV&V and DHS.
67	The Americans With Disabilities Act (ADA) Section 508 compliance tool has not been installed for the Project, which may cause significant rework.	Earl Burba	Finding - Risk	7/12/2021	Testing	While RD.3 and RD.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 has been discussed with the ASI over the past several months, but there have been evidence of results to-date. The ASI did state that they are coding to some of the ADA requirements and are using a desk-top tool for ADA compliance as an interim solution. IVV has not received any data to demonstrate the desk-top tool results nor if it provides coverage for all ADA compliance items.	There is a contractual obligation and requirement for BES to be ADA compliant to obtain State and Federal funds for the development of the BES. The ADA Section 508 intent is to make electronic and information technology accessible to people with disabilities (e.g., color blindness, vision and hearing disabilities), in a way that is comparable to the access available to others. Part of the system acceptance criteria for BES is to meet "all applicable State and federal policies, laws, regulations, and Standards, including without limitation the Electronic and Information Technology Accessibility Standards associated with Section 508 of the Rehabilitation Act., which was verified in the ASI proposed Technical Requirements Approach that states "The system complies with DHS branding standards as defined by DHS and adheres to W3C level 2 accessibility guidelines, sub-parts of Section 508 of the Americans with Disabilities Act (ADA), nondiscrimination safeguards in 45 CFR 85.". If the Hawaii guidelines (https://www.hawaii.edu/access/uh-guidelines-for-accessibility/), FNS Guidelines from the 901 Handbook, and contractual obligations to adhere to the Section 508 compliance guidelines (https://section508.gov/) there may be a significant amount of rework to the solution.	1/31/2022 - The following recommendations will be evaluated for this finding. - The ADA tool meets contractual and project requirements. - The ASI communicates how the tool will be used to report compliance and non-compliance and how non-compliance will be addressed/corrected. - The ASI communicates how and when DHS/IVV will be provided the reports from the ADA tool execution and how to interpret the results. Superseded 8/30/2021 - The ASI should gain DHS' approval on the tool selected after the ASI validates it will perform as expected within the BES architecture, meeting all contractual and project requirements. The ASI create and communicate the plan for when the ADA compliance tool will be put into action, how the tool will report compliance or non-compliance, how non-compliance will be corrected, and how and when DHS/IVV will be provided the reports from the ADA compliance tool and how to interpret those reports for the code from previous, current and future releases.	As soon as possible	3		3 Med	Open	4/26/2022 - The ASI is evaluating four ADA testing tools for consideration due to high pricing for the tool selected in March. This tool was demonstrated to the ASI and appeared to provide the required reporting features and the needed integration with the BES architecture. A second ADA tool under review has a proof of concept scheduled for the week of 5/1/2022. The ASI has stated that little impact is expected from the delay in performing ADA compliance testing and that a tool will be tested and selected shortly. 3/28/2022 - The ADA testing lead confirmed that an ADA tool has been selected for consideration and a demonstration held. Next step is to execute a proof of concept within the BES application. To mitigate this risk, the ASI stated that problems identified by a tool or through manual evaluation to Section 508 criteria for web applications can be easily rectified with little impact to development and schedule. 2/25/2022 - The ASI team identified a new ADA tool to conduct 508 compliance testing. While a demonstration is planned to confirm the tool can work with the BES architecture, the ASI has stated that if an appropriate ADA tool is not found, a manual ADA testing effort will be conducted along with the ASI's use of an accessibility validation tool used during development. 1/31/2022 - No further demonstrations or communication regarding the use of an ADA compliance tool occurred during the reporting period. Note that this finding is mitigated by the ASI using a desktop ADA compliance checking tool during development. 12/30/2021 - No further demonstrations or communication regarding the use of the AccessBe tool occurred during the reporting period. It was communicated that the ports have been opened to allow the tool to be executed. However, the ASI reported that there was a configuration issue with the tool, which they are discussing with the vendor. While IVV remains concerned that there could be unknown impacts to existing code/page, the ASI is mitigating this by utilizing a desktop tool		9/9/21 - RAP: The ASI has invited the IV&V to make contact with the development team to review the results of the desk-top tool to gain insight. To date, the IV&V has not contacted the development lead to have further discussions on this topic.
66	The number of issues/defects found during testing may cause planned work in the future sprints to be delayed due to the resolution and retesting of issues/defects.	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 RD.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 IAD sessions very few defects are expected. As such, the amount of testing expected to be completed during the current RD.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 RD.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.	- Adjust the project plan and provide reasonable scope for SIT in subsequent releases considering the number of defects and testing time needed. - The ASI report testing metrics and DHS should monitor this Key Performance Indicator (KPI). Note defect leakage has been reported and testing metrics are presented in a dashboard for each release. COMPLETE - If defect leakage worsens in the future releases, the ASI should consider a Root Cause Analysis (RCA) with DHS and IVV to identify and take corrective actions. COMPLETE - Perform a joint Release 0.4 UAT (DHS/ASI/IVV) Root Cause Analysis (RCA) to identify and take corrective actions. 10/28 Complete - Validate all UAT defects are retested in SIT to ensure they are included in Regression Testing. 10/6 Cancelled - Execute System and Integration testing more rigorously. 1/4/22 Complete - 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	4/26/2022 - The number of defects found during SIT for Release 0.6 are reasonable compared to the number of defects reported during INT. This metric is being tracked by the ASI as the quality metric "Defect Leakage". This finding is mitigated by the continued tracking of defect leakage by the ASI. The ASI has indicated that they will be assigning Story Points for backlogged defects that will help measure the effort needed to fix defects that are in the defect backlog. 3/28/2022 - The positive trend of defects being detected and reported earlier in the SDLC continues. Using the updated design/development process has provided early identification of areas where design does not meet end user expectations and the ASI has adjusted the design to meet user needs and expectations. Coupled with the early inclusion of the DHS testing team and SMEs in the design process, improvement is noted by the IVV team. 2/25/2022 - The Project is monitoring Integration (INT) and System Integration Testing (SIT) defects, and the trend appears to be positive. The number of defects reported in SIT is much less than in INT, which is the expected trend. Additionally, the correction of defects appears to be timely and progressing positively. The go/no-go decision to move to future releases has not been held up because of a defect threshold greater that twenty percent. IVV will continue to monitor the number of defects identified for future releases and the trending of defect leakage from INT to SIT. 1/31/2022 - There has been no progress during this reporting period. IVV is monitoring this finding and plans to review the defect leakage KPI and remaining Release 0.6 and Release 0.7 metrics as they become available as a measure of the effectiveness of changes made based on the ASI's RCA. The ASI maintains that they have completed the RCA of the defects from Release 0.5 and feel no additional benefit will be gained. 12/30/2021 - The ASI does not plan to conduct a root cause analysis as recommended by IVV because the ASI		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 for FAT. Recommendation 3: All UAT defects are retested in both INT & SIT before they are promoted to UAT as fixed. Most will most likely not become good regression candidates

ID	Title	Reporter	Finding Type	Identified Date	Category	Observation	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Status Update	Client Comments	Vendor Comments
63	The lack of early planning and coordination with interface partners may result in schedule delays.	Al Pangelinan	Finding - Risk	1/21/2021	Integration and Interface Management	The following planning and execution items have not yet been addressed and documented by the ASI. - Connectivity is planned to utilize a presently undefined ETS 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, including those for interface partners, are neither resident nor managed within the Project Schedule. - A mitigation plan has not been developed to address the unavailability of interface partners during interface implementation after MOAs have been approved, testing dates have been confirmed, and communications have been frequent.	Interfaces is one of the areas where 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.	OPEN 5. Complete all MOAs and obtain approval. 6. Confirm testing dates with interface partners in writing. COMPLETE 1. Establish a communication plan for each interface partner for the duration of the BES DDI activities. 10/29 COMPLETE 2. Identify and document all interface partners' contacts. COMPLETE 3/31/2021 3. Define a release schedule for each interface to include milestone dates, coordination, and execution and share with the interface partners. 01/04 COMPLETE 4. Determine which deliverable will include the details associated with the planned connectivity and detailed technical designs of all interfaces. 01/04 COMPLETE	Q4 2021	4	1	Low	Open	04/28/2022 - There were no changes to the interface communication plans in this reporting period. The DAGS, DLIR, DOH, and HYCF agreements are still outstanding. In addition, there is a new element to this risk regarding DLIR because the interface will not be able to offer additional data elements which DHS needs. 03/29/2022 - There were no changes to the interface communication plans in this reporting period. 02/25/2022 - There were no changes to the interface communication plans in this reporting period. 01/28/2022 - There were no changes to the interface communication plans in this reporting period. Based on discussions with the ASI, two recommendations are complete. 01/05/2022 - No changes to the interface communication plans in this reporting period. The ASI and DHS have been progressing although there are 3 MOAs awaiting approval and 3 unit-test dates awaiting confirmation. Due to the recent project schedule change and the 19-month addition to the Go-Live date, IVV has changed the priority to Low. 11/29/2021 - No changes to the interface communication plans in this reporting period. IVV has concerns regarding the 120-day certification process for the IRS interface, the DLIR modernization phase, and the modernization of the tax interface from a flat file to a direct web service with DOTAX. These new items may impact the project schedule, the existing process for the DHS Financial Management Office, and the functional designs for the FMM module. 10/28/2021 - The project team continues to update the communication plans. One interface contact (CYRCA) is still outstanding. There are 3 MOAs (DAGS, HYCF, NCOA) still outstanding. IVV has recently been invited to interface meetings, which have been very productive. The ASI and DHS have made major progress in identifying interface partner contacts and planning for testing with them. Note - Since this risk only pertains to interface planning, IVV is evaluating the need for a separate finding regarding the implementation of interfaces. 09/30/2021 -		7/20/21 RAP - The IV&V reassess the severity of this risk in light of the following reasons: a) the ATC schedule extension has made the urgency for tackling these tasks less than it was before that started lessening the schedule risk, b) the increase from Medium to High in May was based on a misunderstanding of the current state of the MOA's and contact metrics, c) substantial progress has made against each of the In Progress recommendations, and it continues to trend in the right direction. In regards to
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.	- JAD and design sessions should be lead by experienced senior BAs, with goals, objectives and results communicated to all participants. (additional Senior BA being added, rest of recommendation being met - Closed 4/30/2021) - 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. (Closed 4/30/2021) - The ASI should back-track significant differences in design direction to determine the root cause to identify these items as early in the SDLC as possible. COMPLETE - The Product Owners should have more direct interaction with the development team, proactively seeking collaboration. 10/5/21 Complete - The Functional Design Document process, to include the Design Sprint concept, should be clearly defined and shared with all project team members. (Closed, 1/31/2022) - Invite IVV to all future design sessions and design sprints to allow IVV to observe and assess the effectiveness of the revised design processes. (Closed, 1/31/2022) - ASI and DHS should work together to vet the in-progress design with all SMEs for the area of focus. (being met by new design sprint process, closed 2/28/2022) - BAs should come to Day one of Design Sprint fully prepared to facilitate discussion on topic of sprint, with adequate knowledge about business process and approach for design based on JAD/IAR notes and other pertinent material.	ASAP	2	5	Med	Open	4/30/2022 - The ASI is working to mitigate the issues raised regarding inconsistent BA performance, including the migration of Senior BA to CMM team and providing additional training/onboarding for new BAs. Additionally, a System Analyst will participate in early days of design sprints to help with initial discussions of design. The IVV team and DHS look to observe improved facilitation in design sprints as these changes take effect. An additional recommendation has also been added, focusing on BA preparation for Design Sprints. 3/30/2022 - DHS and ASI continue to ramp up design sprints, with positive movement in addressing this finding's open recommendations. IVV has observed some challenges, including Business Analyst confusion around Use Cases and needing to backtrack as new participants join design sprints mid-flight. Additionally, the ASI facilitators have stated the JAR/JAD notes from those sessions are not useful, which results in the project team revisiting requirements definition efforts already completed. Prototypes of more complex Use Cases in coming weeks should provide a clear picture if designs are meeting DHS business needs. 2/28/2022 - The Project adopted the recommendation to include DHS SMEs in the design process. DHS and IVV have observed improved DHS/ASI team collaboration and design session results. IVV notes that DHS may be taking on more responsibility than expected by leading some of the design sessions. The next step is to observe/review the results of the sprint prototypes to determine if the number of key issues raised by the stakeholders are reduced. 1/31/2022 - Based on progress by ASI, two of the recommendations are complete. The revised Design Sprint process will kick-off on 1/31/2022, which both ASI and DHS hope will address many of the concerns called out in this finding. 12/31/2021 - IVV continues to observe misalignment between DHS and the ASI on design decisions made later in design sprint process - causing frustration on both sides of the		9/9/21 RAP - The IV&V does participate in many facets of the design process including screen mock-up reviews, backlog grooming sessions, and Sprint demo's. Product owner discussions are meant to have limited participation. The team is concerned about the participation of the IV&V for two main reasons: 1) IV&V does not always stay silent in discussions on design despite assurances from the IV&V PM that it is not their role, and 2) IV&V participation typically drives what are meant to be informal processes to more
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.	Failure to perform integration testing and/or proof of concept integrations early in the development effort could lead to unexpected design and technical complications as well as bugs as go-live approaches and lead to unexpected delays. A 'big bang' integration strategy towards the end of development could result schedule slippage if components do not integrate as expected and additional testing time is required once repairs are completed.	- Prioritize the build and testing of integration points to assure integrations (through early end-to-end testing) meet expectations throughout development instead of waiting to perform them for the first time as go-live approaches. - The ASI plan and communicate the mitigation strategy for handling risks associated with their integration approach.	N/A	2	2	Low	Open	4/29/22 - The ASI reported efforts to mitigate this risk, including, onboarding a new build manager to assure cross-team integration challenges are addressed and ensuring scrum masters are aware of these challenges. The ASI intends to establish regular Scrum of Scrums meeting where these integration issues/challenges could be discussed and addressed. The move of the ASI SSP Lead BA to CMM should help to assure a better understanding of integrations between SSP and CMM. 03/31/22 - The ASI stated that system integration across the SSP, CMM, and FMM modules have been redistributed in a continuous integration modal as part of the new schedule. The integrations start in Release 9 and complete in Release 15. However, the ASI had previously stated that integrations would begin as early as Release 5 and is using stubbed interfaces to mitigate this risk. 2/28/22 - The ASI plans to schedule integration tasks earlier in the project schedule and to 'stub' out integration interfaces that return relevant data that could mitigate this risk to some extent, therefore, IVV is reducing the criticality rating of this finding to 'Low'. Note - 'Stubbing' out interfaces can be an effective mitigation strategy when the implemented interfaces return sample data that can be consumed by calling modules during testing. 1/31/22 - The ASI has stated they continue to make progress in integrating their teams to assure integration points are effectively and efficiently addressed. The ASI has also stated that they have moved up some integration tasks in the schedule to further mitigate this risk. 12/31/21 - The ASI delivered an updated BES product schedule on 12/20/2021. IVV will review the schedule to assess any updates that may impact this finding. 11/29/21 - The ASI stated that communications between their development teams have improved, and as result, moved some integration components into earlier releases. However, most of the integrations are scheduled for implementation shortly before go-live based on the project schedule.		7/30/21 RAP - Integration of the core modules (SSP & CMM and CMM & FMM) will continue to evolve in future releases. R0.6 will demonstrate the first integration points between CMM & SSP. This is now four releases before the final planned development release. Similar interfaces between CMM & Current will begin in R0.7, 3 releases before the final development release. The ASI team is mitigating the risk stated by the IV&V in 3 ways: 1) gaining agreement from both development teams on integration methods, and service
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.	- 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 - 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. If the ASI is utilizing metrics to measure its process and product quality. - ASI verifies that the information in design and testing artifacts is kept in sync and consistent. - ASI perform a root cause analysis with DHS and IVV in attendance to determine the source of the design defects. (closed, 1/31/2022)	Immediate	2	2	Low	Open	4/30/2022 - No material update for this reporting period as IVV awaits updates to the Quality Management Plan. 3/30/2022 - When Release 6 final test results are published, IVV will re-evaluate this finding. 2/28/2022 - IVV continues to review the Release 0.6 test results and available metrics. The initial results show a positive trend, which is encouraging since Release 0.6 has the most complex functionality developed and tested by the project team to date. If the number of defects attributed to design remain low throughout Release 0.6 testing, the focus of this finding will be addressed. 1/31/2022 - Based on ASI and DHS testing and defect validation progress, IVV's root cause recommendation is complete. If remaining testing for all sub-releases in Release 0.6 shows a low cause of defects related to design, the primary concern of this finding should be addressed. 12/31/2021 - The completion of Release 0.6 testing should provide clarity on overall defects, specifically those related to design. Results consistent with already completed SSP testing for Release 0.6 could address the scope of this finding. 11/30/2021 - The results of the system test for release 0.6 showed a significant reduction in defects compared to prior releases, which could reflect improvement in the quality of deliverables. IV&V will review the root cause analysis when provide by the ASI. 10/31/2021 DHS testing team reported inconsistencies between wireframes and Functional Design Documents, causing challenges in creating test cases and resulting in defects in development. IVV and DHS are concerned that as the project moves to larger and more complex releases, these quality issues could negatively impact the project. IVV added a new recommendation that the ASI focus on addressing these inconsistencies. 9/30/2021 - No material updates in this reporting period. The ASI reported in April 2021 that they would publish proposed quality metrics, but this has not occurred. IVV is concerned with the lack of evidence that the ASI is following the Quality Management Plan	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.

ID	Title	Reporter	Finding Type	Identified Date	Category	Observation	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Status Update	Client Comments	Vendor Comments
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.	- Continue to make efforts to setup, train, and assist new 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. 2/28/22 - The State of Hawaii is planning on eliminating most COVID mandates as of 3/5/22. In-person meetings could improve collaboration for design and other sessions, if the Project elects to increase in-person meetings. 1/31/22 - The ASI has reaffirmed that remote meetings are a less effective form of communication than in-person meetings and therefore, COVID continues to have a negative impact on the quality of some project activities, albeit difficult to quantify. 12/31/21 - Though Omicron COVID cases are surging, the project has indicated they do not plan to make changes to current protocols and do not expect this surge will materially impact the project. 11/29/21 - The ASI has transitioned their team from working remotely to primarily working in their Honolulu office as of October 2021. It remains unclear whether the new COVID variant (Omicron) will disrupt project activities. 10/28/21 - No material update in reporting period. 9/29/21 - No material update in reporting period. 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	ASAP	2		2 Low	Open	04/29/22 - No material update for this reporting period. 03/31/22 - State leadership has rolled back most COVID mandates this month, however, most individual State departments have been given the option of not requiring their staff to work in-person. DHS will likely maintain remote work policies for the foreseeable future. IVV recommends DHS consider strategically requesting in-person meetings for discussions that can be significantly more productive in-person. 2/28/22 - The State of Hawaii is planning on eliminating most COVID mandates as of 3/5/22. ...	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
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.	2/28/2022 - DHS consider other options (Contractors, State employees borrowed from other agencies) to fill these positions if there is ongoing difficulty in finding permanent hires. 5/31/2021 - DHS continue to work with the appropriate organizations to identify the funds necessary to fill these positions. - In progress The state should document a transition plan for the project and PMO resources as identified in the RFP (reference RFP section 3.4.3 'DHS Staffing'). The plan should include the possible COVID-19 economic impact to the state budget, directly in relation to the project resources. - Closed The ASI should document a transition plan for each key resource as required by the RFP (reference RFP section 3.5.1.2 'Benefits Eligibility Solution Project Staffing'.) - Closed	ASAP	3		5 High	Open	4/28/2022 - No material updates for this reporting period. 3/31/2022 - DHS continues to recruit for these positions but received minimal interest to-date. 2/28/2022 - DHS posted the PMO positions but are having difficulty identifying candidates. While online metrics show there is interest and the positions are being viewed, as of this date, there has only been one application. 1/28/2022 - No material updates in this reporting period. 12/30/2021 - No material updates in this reporting period. 11/26/2021 - No material updates in this reporting period. 10/31/2021 - No material updates in this reporting period. 9/30/2021 - The BESSD Administrator, serving as the interim DHS BES Project Manager resigned from DHS. To mitigate the knowledge and leadership risk, DHS backfilled the DHS BES Project Manager with a contractor possessing extensive BES project experience. The Assistant BESSD Administrator will provide an active decision-making role in the project. IVV will monitor the impact of these project management changes. The remaining DHS PMO positions continue to be unfilled. 8/30/2021 - No material 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	02/08/2021 - Brian Donohoe does not agree with IVV's high-criticality rating on this Finding (#43) and DHS rolled out the DHS Product Owner Roles and Responsibilities to the DHS team on January 29, 2021. (Gary provided the Final DHS Product Owner Roles and Responsibilities document to IVV on 02/8/2021). 06/30/2020 - Mark Choi is becoming more involved in the project. Involved in Arch decisions and PM decisions around tool sets, future vision, etc. Day to day PM working closely w/ Gary and Emerald. We have no insight into other DHS staffing.	4/23/21 RAP - From the ASI perspective, the changes to the project management of the BES project have provided little impact on the overall project. At this point, the knowledge transfer gaps have been closed and the leadership of the project remains strong hands from DHS. We recommend that the IV&V reassess the probability of impact and severity of impact and lower the overall rating for this risk.3/3/2020 - The ASI PM stated the Project Coordinator position is filled and they will begin work on 3/9/2020, transition activities from Donna will begin next week.
29	Uncertainty and/or a lack of communication around long term architecture decisions could impact the project budget, schedule, system design, and planning decisions.	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.	- The ASI continue to make updates to the BI-12 System Architecture Deliverable with additional details as they become available and with any architectural changes are finalized. - Complete - DHS should finalize the Portal strategy and implementation details and communicate clearly communicate out to stakeholders and project teams. Complete 3/31 - The Project should continue to vet possible architectural change impacts to the platform (e.g., ADA, Configuration Management tools), MandO, MQD, and BES systems before finalizing architectural decisions. - DHS continue to request ASI perform due diligence in any recommendation for foundational architecture change decisions and continue to review with appropriate DHS stakeholders to assure a common understanding of the implications of these decisions. - The Project should continue to ensure communication between development leads and architecture leads to assure optimal collaboration on possible architecture changes that could impact decisions in each area. - Maintain current communication processes to ensure project team to assess impacts of architecture decisions to the Project.	ASAP	2		2 Low	Open	4/29/22 - The ASI OCM team is developing a communication plan for communicating the 2-portal strategy, which may include a portal overview walkthrough with the project team and videos prepared for DHS stakeholders. 03/31/22 - The ASI has onboarded a new Lead Architect who will be responsible for managing the system infrastructure which should improve clarity around governance, capabilities of the different infrastructure components and how they will be utilized. The strategy for 2 portal integration has been agreed to by DHS OIT, MQD, ASI, and ESI, and communicated to the architects and project leadership. The Change Request has been distributed to DHS leadership for review and approval, the related project decisions have been logged, and the high-level architecture is available to the project team. 2/28/22 - IVV remains concerned that details of the proposed change requests have not been fully communicated to all project stakeholders. If DHS is not able to fund these changes, stakeholders could be left with little time to respond if exclusions are discovered late into the development phase. The ASI has stated they are close to onboarding a new lead architect; however, this resource will likely roll off the Project after 6 months. 1/31/22 - The ASI has yet to fully share and vet details of key change requests with all relevant stakeholders. The ASI plans to review these details with PACXA (subcontractor) in the coming weeks. 12/31/21 - Details of the outstanding draft Change Requests (CRs) have yet to be fully shared and vetted by all stakeholders and project impacts remain unclear. Delays in providing these details could leave the project and stakeholders little time to react to significant architecture or other CR changes. 11/29/21 - The ASI reported progress in finalizing details of the Two-Portal and GCP change requests (CRs) and vetted several key details with DHS. They are also working to finalize some of the architecture components. However, it remains unclear if these changes are fully communicated and vetted to the	06/30/2020 - Combined application is still planned. App still not finalized by DHS. From Arch perspective, we are building in Liferay. Future Integration of the portals is still to be determined, but is not more complex than originally planned for data sharing. If change is made to Adobe, this would require a CR.	4/23/21 rap - The ASI and DHS continue to refine the final plan for the two portal vision. We expect that final decisions will likely be made during this reporting period and communicated to the project. The ASI refers the IV&V to our February update regarding Recommendation #3. From our perspective all necessary actions are complete. If the IV&V do not believe it is Complete we request supporting detail.

4/23/21 rap - The ASI and DHS continue to refine the final plan for the two portal vision. We expect that |
| 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. | OPEN • 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. COMPLETE • 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. | 1/31/19 | 3 | | 3 Med | Open | 4/29/22 - The Project continues to make efforts to mitigate the impact of relying on junior BAs to lead design sessions including moving one of their more experienced BAs from the SSP team to the CMM team. DHS product owners continue to express concerns that they don't fully understand the DDI process and question how effective they can be in making important design decisions if they do not fully understand what's being asked, the technology, and/or the DDI process. Other more experienced DHS participants appear to be stepping up efforts to take control of some sessions when they sense that DHS SMS are not understanding the process. 03/31/22 - The Project appears to be making strides in implementing and refining their new SDLC process, though SMEs have indicated the process requires a significant amount of their time and participation in the Project can take away from their operational duties. DHS provided feedback to IVV that the lack of senior Business Analysts (BAs) is causing confusion in the design process and ASI lack of expertise to design the user interface may result in a cumbersome design. DHS remains concerned that some design sessions are being led by junior resources without the support of more experienced BAs. 2/28/22 - IVV remains concerned that the new SDLC process may become resource intensive for DHS SMEs, who may struggle with implementation, which could hinder productivity and lead to schedule delays. 1/31/22 - The ASI and DHS are revising their current SDLC/Design process to improve, among other things, overall effectiveness and assure important details are vetted by appropriate stakeholders. Given that the estimated duration for each use case averages 15 days, it remains unclear if the new process will lead to schedule delays. 12/31/21 - The project team is updating existing design processes due to numerous issues with design accuracy, which is delaying final approval. These issues may have been the result of a lack of stakeholder understanding of the DDI approach. It | 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. | 9/9/21 RAP - The most recent updates on the SDLC have been added to Confluence as promised. The testing lead will continue in her role as testing lead and will also continue to play an advisory role on the design of the system as she has done throughout the project. The process changes did not change her role. 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 |

4

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2	Late delivery of project deliverables has caused schedule delays.	Ryan	Finding - Issue	11/28/2018	Project Management	Based upon the project schedule dated 11/26/18 (refer to schedule for specifics), several due dates for project deliverables have been missed. As of the date of this report, these deliverables include the Project Management Plan (PMP), which is the formal document that is used to manage the execution of the project. In some instances, this risk may be compounded by a backlog of Deliverable Expectation Documents (DED) requiring approval and acceptance from the State.	Late deliverables can lead to schedule impacts and too many late deliverables may cause significant disruption to schedules or delays. ***OLD***Without a PMP that depicts all Project Management processes, the Project can suffer unplanned consequences in scope, schedule, cost, and quality parameters. Without a schedule that provides the required level of detail to manage the work, the project is at risk to be successful.	IN PROGRESS Despite not yet having a revised baseline schedule, continue monitoring and analyzing deliverables that may have impact to the critical path COMPLETE 5/31/2021 - When the revised schedule is published the project team should 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, 7/29/2021, 12/30/2021 - DHS and the ASI agree to a revised schedule against which project deliverables can be managed. 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	TBD	4	5	High	Open	4/28/2022 - The Project continues to conduct design sprints with varying degrees of success. Some sprints require additional time due to 1) not having the right resources involved early in the process, 2) business analyst lack of preparation and/or experience conducting the sprints, or 3) the ability of the DHS POs and SMEs to effectively execute their roles. However, the Project conducts retrospectives and is continuously taking steps to the improve the process. Additionally, the ASI monitors deliverables that may impact the critical path. 3/31/2022 - The ASI reported most design sprints were completing 4 days earlier than planned. IVV observed instances where design sprints were not completed as planned, functionality shifting to future releases or paused due to resource challenges. While a certain amount of delay would be expected for some sprints due to the new process, it remains unclear if/where delays will occur in future sprints and what the effect those will have on the critical path. The project team reported Release 7 Development was underestimated and is anticipated to delay Release 7 System Integration Testing. It is not yet known how this delay may impact the current proposed go-live dates. The Project continues to meet regularly to discuss work in progress to anticipate and mitigate further project delays. 2/28/2022 - The updated target for DHS to approve the project schedule is early March 2022. To minimize further schedule and deliverable delays, the project team implemented update meetings for each of the major BES modules where detailed tasks and deliverable due dates are reviewed and mitigation actions identified, if necessary. 1/28/2022 - The Project continues to develop a new baseline schedule for DHS approval that addresses existing delays and changes to SDLC processes. The project team continues to use an unapproved version of the schedule to track tasks. Until a baseline is developed and agreed upon, there is no reference to determine if project deliverables are late for any release past Release 0.6.		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 to be taken on late work on