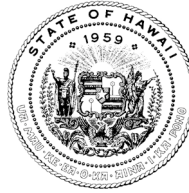


JOSH GREEN, M.D.
GOVERNOR



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March 15, 2023

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


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

Aloha Senate President Kouchi, Speaker Saiki, and Members of the Legislature:

Pursuant to HRS section 27-43.6, which requires the Chief Information Officer to submit applicable independent verification and validation (IV&V) reports to the Legislature within ten days of receiving the report, please find attached the report the Office of Enterprise Technology Services received for the State of Hawai'i, Department of Human Services, Systems Modernization Project.

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

Sincerely,


Douglas Murdock (Mar 15, 2023 16:16 HST)

Douglas Murdock
Chief Information Officer
State of Hawai'i

Attachments (2)



Hawaii Department of Human Services Systems Modernization Project

Final IV&V Status Report
for Reporting Period: February 1 – 28, 2023

Submitted: March 14, 2023

Overview

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



Solutions that Matter

Executive Summary





This is the first full month of performance for the new ASI since the January 17th project restart and the pace of the BES Project has noticeably increased. Two significant items to highlight:

- After 29 months of not having an approved BES Project schedule, DHS and the new ASI achieved a significant milestone by gaining joint approval of the BES Project Schedule, which was baselined on February 15, 2023. The project team now has visibility into schedule deviations and the ability to mitigate schedule delays. This positive news is combined with the approved list of deliverables the new ASI will provide.
- The new ASI held two project meetings to further detail the Agile approach to the design and development of the BES application. DHS concerns about the lack of design meetings and reduced involvement of DHS Subject Matter Experts (SMEs) were addressed by the new ASI. The Agile approach involves more independent planning and preparation by the new ASI team, with impromptu one-on-one discussions to clarify specific items with DHS. This approach is expected to allow the new ASI to gather DHS input efficiently, without over-reliance on DHS resources as seen previously on the Project.

Considering the positive progress being made on the BES Project, IV&V has retired two findings in this reporting period and lowered the criticality rating for several others.

| Dec | Jan | Feb | Category | IV&V Observations |
|-----|-----|-----|--------------------|--|
| | | | Project Management | An overall project schedule was approved by DHS and baselined. The weekly project status meeting has been streamlined, efficiently providing visibility to stakeholders on overall project progress. |

Executive Summary



| Dec | Jan | Feb | Category | IV&V Observations |
|-----|-----|-----|--------------------------------------|---|
| M | M | M | System Design | The ASI continued to lead design sessions, including focused SME discussions, internal ASI pre-design discussions, and reviews of planned Epic design with the expanded DHS team. |
| M | M | L | Configuration and Development | The ASI published a schedule for System Design, Development, and Implementation (DDI) work, which is included in the overall project schedule (BI-5) to track cross-project dependencies. |
| M | M | M | Integration and Interface Management | The ASI started work on a Dashboard to provide the status of the remaining work with interface partners, which will be available for viewing in Confluence. |
| M | M | M | Testing | The DHS testing lead was determined this month. The ASI continued research for an ADA compliance tool. |
| H | H | M | Security and Privacy | Weekly security touchpoints meetings started in February. Additionally, the completion date for BI-13 System Security Plan has been pushed out from March, recognizing the amount of work to still be completed. The ASI has not published a new completion date. |

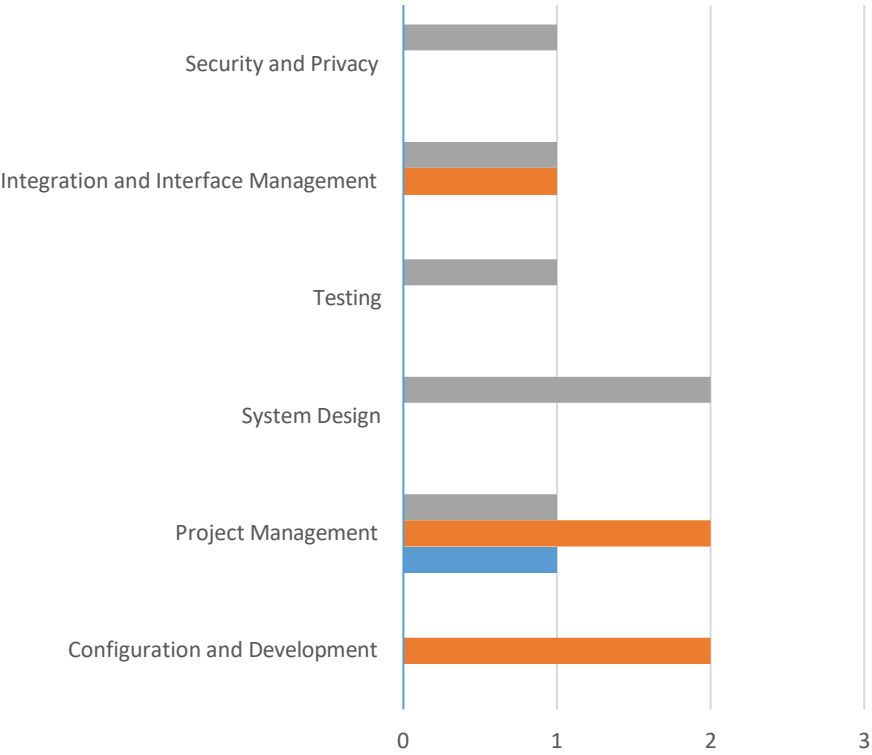
IV&V Findings and Recommendations

IV&V Findings and Recommendations

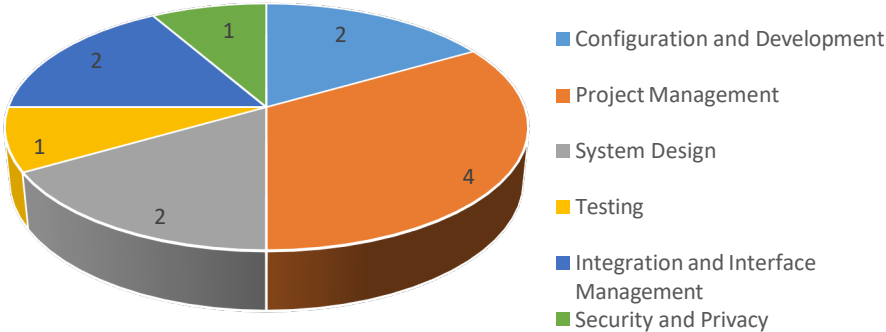


As of the February 2023 reporting period, PCG is tracking 12 open findings (7 risks, 5 issues) and has retired a total of 63 findings. All these findings were opened during the tenure of the prior ASI. Of the 12 open findings, 1 is a High criticality rating, 6 are Medium, and 5 are Low.

Open Risks & Issues



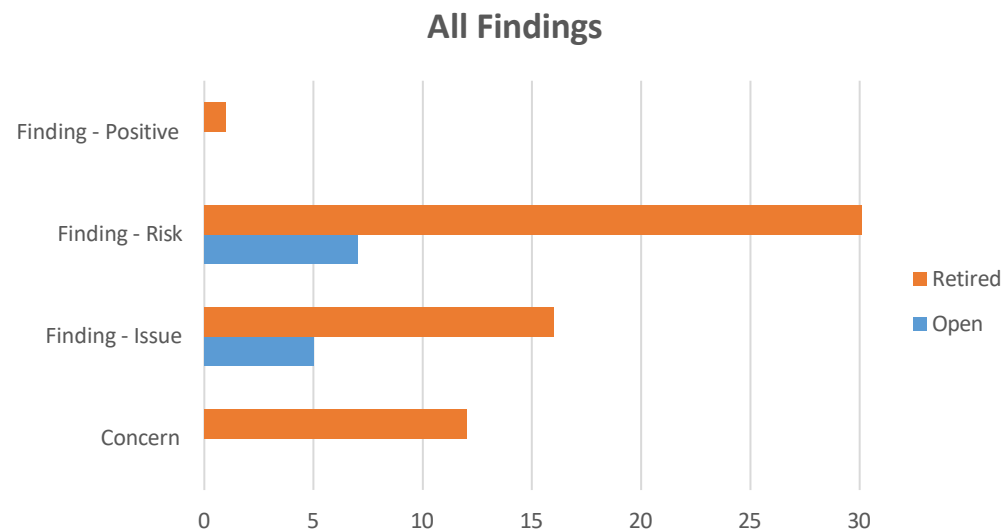
Open Risks & Issues by Category



IV&V Findings and Recommendations



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



IV&V Findings and Recommendations



Findings Retired During the Reporting Period

| # | Finding | Category |
|----|---|--------------------|
| 49 | <p>Issue – Poor quality project deliverables may impact system design, testing artifacts, and the project schedule.</p> <p>Due to the length of time this finding has been at a low priority, and no evidence of the new ASI delivering poor quality deliverables, IV&V is retiring this finding. IV&V will continue to monitor and review project deliverables, verifying there is no deprecation in quality.</p> | Project Management |
| 2 | <p>Issue – Late delivery of project deliverables has caused schedule delays.</p> <p>Under the new ASI, the Project adopted new review processes to develop and approve project deliverables. The Project also baselined a schedule approved by DHS. The original finding has been overcome by events and there is no indication that existing deliverables are late. Therefore, IV&V retired this finding.</p> | Project Management |

IV&V Findings and Recommendations



Preliminary Concerns Investigated During the Reporting Period

| # | Finding | Category |
|---|---------|----------|
| | None | |

IV&V Findings and Recommendations



Findings Opened During the Reporting Period

| # | Finding | Category |
|---|---------|----------|
| | None | |

IV&V Findings and Recommendations



Project Management

| # | Key Findings | Criticality Rating |
|----|---|--------------------|
| 29 | <p>Issue – Uncertainty and/or a lack of communication around long-term architecture decisions could impact the project budget, schedule, system design, and planning decisions.</p> <p>The ASI has sought to clarify the scope of BES 2023 in the recent Agile training sessions. Some uncertainty remains around the use of ServiceNow (SN) and the tools that will be utilized for electronic Governance, Risk, and Compliance (eGRC).</p> | |

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

IV&V Findings and Recommendations



Project Management

| # | Key Findings | Criticality Rating |
|----|---|--------------------|
| 43 | <p>Issue – DHS PMO project team members have transitioned off the Project, which may cause gaps in knowledge transfer and leadership on the Project.</p> <p>DHS continues to recruit for PMO positions. Although DHS has received applications, the recent applicants have not been selected for interviews.</p> | |

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

IV&V Findings and Recommendations



Project Management

| # | Key Findings | Criticality Rating |
|----|--|--------------------|
| 74 | <p>Risk – A BES Project schedule based on inaccurate estimations diminishes effective planning and resource management, which could result in late deliverables, cost increases, and a late go-live.</p> <p>The BES Project schedule was approved on 2/15/23 and its development included DHS and ASI input to estimate the remaining work. Therefore, IV&V changed the criticality rating from high to medium.</p> | |

| Recommendations | Progress |
|--|------------|
| <ul style="list-style-type: none">Monitor, evaluate and revise scheduling estimates for accuracy. | In process |
| <ul style="list-style-type: none">Confirm current assumption that a delay with the current go-live date will not result in major implications. | In process |
| <ul style="list-style-type: none">DHS and the ASI agree to a revised schedule against which project deliverables can be managed. | Completed |

IV&V Findings and Recommendations



Project Management


| # | Key Findings | Criticality Rating |
|----|---|--------------------|
| 76 | <p>Risk – Volunteer DHS resources leaving the Project may lead to schedule delays, lower morale, and burnout.</p> <p>With DHS resource requirements reduced by the new ASI's DDI process, IV&V lowered the criticality rating of this finding from medium to low. IV&V will continue to monitor, verifying that all DHS resources required by the Project are being met.</p> | |

| Recommendations | Progress |
|---|-------------|
| <ul style="list-style-type: none">Carefully plan for all project activities with reasonable hour allocations for the DHS resources and adjust dates in the BES Project schedule accordingly. | In process |
| <ul style="list-style-type: none">Add cushion time to the schedule for unexpected project delays. | Not started |
| <ul style="list-style-type: none">Provide incentives for the DHS resources to help maintain the project team and possibly alleviate attrition or increase the number of volunteers to the team. | In process |

IV&V Findings and Recommendations



Integration and Interface Management


| # | Key Findings | Criticality Rating |
|----|---|---|
| 63 | <p>Risk – The lack of early planning and coordination with interface partners may result in schedule delays.</p> <p>The new ASI is reviewing all the BES interfaces and is building a Confluence dashboard to track and progress and status of each interface.</p> |  |

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

IV&V Findings and Recommendations



Integration and Interface Management

| # | Key Findings | Criticality Rating |
|--|---|---|
| 79 | <p>Issue – External vendor delays in the development of the BES task management system interface have impacted the project schedule.</p> <p>The Project has upcoming designs (Epic 104) that involve the BES task management system. The new ASI has engaged DHS to meet with the task management system vendor.</p> |  |
| Recommendations | | Progress |
| <ul style="list-style-type: none">The ASI re-establish regular collaboration meetings with CIA to assure strong communication and brainstorm optimal solutions for BES integration with Current. | | In process |
| <ul style="list-style-type: none">The ASI provide test results from the task management integration to ensure that the interface works. | | Not Started |

IV&V Findings and Recommendations



Configuration and Development

| # | Key Findings | Criticality Rating |
|----|--|--------------------|
| 70 | <p>Risk – Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution.</p> <p>The new ASI intends to utilize ServiceNow (SN) for most configuration management tracking. Details of exactly how they'll be using SN and its multitude of modules and capabilities remain unclear.</p> | |

| Recommendations | Progress |
|---|------------|
| <ul style="list-style-type: none">ASI adhere to plans for configuration management as documented in BI-6 DDI Plan, Section 5.2 and clarify details and/or any changes with DHS. | In process |
| <ul style="list-style-type: none">ASI validate plans for configuration management with DHS and agree on a meaningful set of configuration items or settings they will track. | In process |
| <ul style="list-style-type: none">DHS and ASI work to clarify/solidify plans for the potential use of configuration management tools and DHS work to fund and procure a CM tool, as required, to avoid any negative impacts to the project. | In process |

IV&V Findings and Recommendations



Configuration and Development

| # | Key Findings | Criticality Rating |
|----|---|--------------------|
| 80 | <p>Risk – Development delays could negatively impact the project schedule and delay go-live.</p> <p>Though the Project transitioned to the new ASI, many of the development team that was subcontracted to the previous ASI remain on the Project. However, the new ASI has significantly increased their resources (now totaling 137), which may mitigate this risk. Therefore, IV&V lowered the criticality rating of this finding from medium to low. IV&V will continue to closely monitor this risk and look for evidence the added resources includes skilled developers that can drive the productivity of less experienced developers.</p> | |

| Recommendations | Progress |
|---|------------|
| <ul style="list-style-type: none">DHS request the ASI strategically add the right project team resources to effectively increase velocity. Note that adding additional junior resources may not be as effective as staffing additional expert-level development, analysis, and other resources that can lead and mentor junior resources. | In process |
| <ul style="list-style-type: none">ASI effectively track and regularly provide DHS (potentially via the weekly DDI status meeting) with an accurate velocity (e.g., story points per day/week/month) and assure that the current velocity is accurately and consistently reflected in the project schedule. | In process |

IV&V Findings and Recommendations



System Design

| # | Key Findings | Criticality Rating |
|----|---|--------------------|
| 61 | <p>Issue – Poorly executed JAD and "design sessions" could lead to inaccurate design and rework.</p> <p>DHS and IV&V observed the ASI is struggling to sufficiently prepare for and deliver well-facilitated design sessions. There are indications the ASI team has not thoroughly prepared for, discussed, and solutioned designs prior to client meetings. While the ASI has made progress in addressing some of the recommendations of this finding, other concerns continue. IV&V suggests the ASI team review and apply the recommendations of this finding to improve the productivity of meetings going forward.</p> | |

| Recommendations | Progress |
|---|------------|
| <ul style="list-style-type: none">The facilitator should use their expertise to drive discussions through leading questions. | In process |
| <ul style="list-style-type: none">BAs should come to Day one of Design Sprint fully prepared to facilitate discussion on topic of sprint, with adequate knowledge about business process and approach for design based on JAD/JAR notes and other pertinent material. | In process |
| <ul style="list-style-type: none">The ASI to bring User Experience (UE) designers to engage with DHS and review the currently built BES solution. | In process |
| <ul style="list-style-type: none">New ASI to quickly gain lessons learned to apply to future sessions. | In process |

IV&V Findings and Recommendations



System Design

| # | Key Findings | Criticality Rating |
|----|---|--------------------|
| 73 | <p>Risk – The planned BES infrastructure is complex which could be difficult to implement and maintain and could lead to schedule/cost impacts.</p> <p>Though the new ASI intends to simplify the BES infrastructure, it remains unclear whether that will be possible in a timely manner and avoid impacting the critical path. The new ASI also intends to expand on the previous ASI scope of DevOps by adding more automation. While this has the potential to simplify environment management, it could also present challenges without impacting the schedule.</p> | |

| Recommendations | Progress |
|---|-------------|
| <ul style="list-style-type: none"> ASI clearly communicates the potential costs and schedule impacts to implementing the planned infrastructure. The architecture process should include steps to provide a detailed impact of DHS architectural decisions including the integration activities, support required, and maintenance and operations impacts. | In process |
| <ul style="list-style-type: none"> DHS work with the ASI to assess the potential challenges of maintaining a complex environment and consider scaled-back options that could reduce this risk and reduce long-term maintenance challenges and costs. | In process |
| <ul style="list-style-type: none"> ASI develop a process to closely monitor cloud and other product changes (software updates/new releases), manage changes, and regression test once updates are applied. | In process |
| <ul style="list-style-type: none"> The project team work to establish strong governance over the utilization and maintenance of various components to simplify their use and monitoring. | Not started |
| <ul style="list-style-type: none"> ASI development team identify infrastructure components and techniques that are new to them and take action to assure potential integration problems do not lead to unexpected delays. | Not started |
| <ul style="list-style-type: none"> Request the ASI maintain a detailed schedule for DevOps implementation tasks to avoid unexpected delays that could delay project milestones and the critical path. | Not started |

IV&V Findings and Recommendations



Testing

| # | Key Findings | Criticality Rating |
|----|--|--------------------|
| 67 | <p>Risk - The Americans With Disabilities Act (ADA) Section 508 compliance tool has not been installed for the Project, which may cause significant rework.</p> <p>The Project is evaluating different ADA compliance tools. DHS currently uses Site Improve in other areas and the ASI is reviewing its feasibility for this project. The ASI requested access to the Site Improve tool for a Proof of Concept (POC) Additionally, the ASI previously evaluated Usability.net and will use it if the Site Improve POC is unsuccessful.</p> | |

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

IV&V Findings and Recommendations



Security and Privacy

| # | Key Findings | Criticality Rating |
|----|---|--------------------|
| 68 | <p>Risk - Incomplete implementation statements in the BES Security Plan activities may lead to delays in gaining Federal Partner approval for the BES Project to begin the Pilot Phase.</p> <p>The new ASI began weekly status meetings with the security stakeholders in February. The ASI presented and clearly articulated an approach to developing the System Security Plan (SSP). This includes the selection of the controls for the SSP consistent with NIST 800-53 guidance. At the end of February, the ASI and DHS began the controls selection process for a NIST 800-53 moderate SSP. Additionally, the ASI and DHS have begun to discuss the selection of an eGRC system. After reviewing the Service Now GRC module as an option, it appears to be cost-prohibitive. The ASI continues to look at options for a GRC system while continuing to use Aha as a repository for the SSP. Based on the status of security activities IV&V lowered the criticality rating to Medium.</p> | |

| Recommendations | Progress |
|--|------------|
| <ul style="list-style-type: none"> The ASI continues to develop the BI-13 Security Plan in close collaboration with DHS. | In process |
| <ul style="list-style-type: none"> DHS and the ASI agree upon the tools and process that will be used to document and track security control implementation, such as security governance, risk, and control (GRC software). The process should define the level of detail needed to track progress (estimates, target dates, risks, issues, evidence) along with the Requirement Traceability Matrix, and plans of actions and milestones (POAM). | In process |
| <ul style="list-style-type: none"> ASI ensure that the ASI Security Lead has a depth of experience in NIST 800-53 and experience authoring implementation statements of System Security Plans (SSP). | Completed |
| <ul style="list-style-type: none"> DHS review the proposed staff resume, interview individual, and approve resource to ensure that they meet the position's contractual requirements. | Completed |

The background is a solid blue color. It features several decorative elements: white-outlined squares of various sizes and orientations, and semi-transparent blue squares of various sizes and orientations. The white squares are primarily located in the upper-left and lower-right areas, while the blue squares are scattered throughout the background.

IV&V Status

IV&V Engagement Status



| IV&V Engagement Area | Dec | Jan | Feb | Comments |
|----------------------|-----|-----|-----|---|
| IV&V Budget | | | | |
| IV&V Schedule | | | | |
| IV&V Deliverables | | | | PCG submitted the final January IV&V Monthly Status Report. |
| IV&V Staffing | | | | |
| IV&V Scope | | | | |

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



- IV&V activities in the February reporting period:
 - Completed – January 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 March reporting period:
 - Ongoing – Observe BES Design and Development sessions as scheduled
 - Ongoing – Observe Weekly Project Status meetings
 - Ongoing – Observe Weekly Architecture meetings
 - Ongoing – Observe Weekly Security meetings
 - Ongoing – Monthly IV&V findings meetings with the ASI
 - Ongoing – Monthly IV&V Draft Report Review with DHS, ETS and ASI
 - Ongoing – Participate in Bi-Weekly DHS and IV&V Touch Base meetings
 - Ongoing – Review BES artifacts and deliverables

Deliverables Reviewed



| Deliverable Name | Deliverable Date | Version |
|---|------------------|---------|
| BI-5 DDI Project Schedule DRAFT.mpp | 02/062023 | Draft |
| BI-19 Complete and Final Test Plan.docx | 02/28/2023 | V2.0 |
| | | |
| | | |
| | | |

Additional Inputs – Artifacts



| Artifact Name | Artifact Date | Version |
|---|---------------|---------|
| Unisys Contract Amendment 3 | 4/17/2020 | N/A |
| Unisys Contract Amendment 4 | 5/1/2021 | N/A |
| FNS Handbook 901 | 01/2020 | V2.4 |
| NIST Special Publication 800-53 Security and Privacy Controls for Information Systems and Organizations | 12/20/2020 | Rev.5 |
| One RTM (Aha) | N/A | V1 |
| BES DDI Post-transition 11-16-2022 draft | 11-16-2022 | N/A |
| BES 2023 New Way Forward | 11-29-2022 | N/A |
| BES 2023 Implementation, Appendix – Plan Approach Details | 11/29/2022 | N/A |
| BES 2023 Implementation Planning – Confluence page | N/A | N/A |
| BI-1 BES 2023 Client Project Kickoff Presentation | 1/13/2023 | N/A |



Meetings and/or Sessions Attended/Observed:




1. Weekly Platform Status Meeting – 2/7/2023, 2/14/2023, 2/21/2023
2. IV&V Team Meeting – 2/2/2023, 2/3/2023, 2/6/2023, 2/9/2023, 2/13/2023, 2/16/2023, 2/21/2023, 2/23/2023, 2/27/2023
3. HI DHS BES December Draft IV&V Report Review – 2/13/2023
4. IV&V December Findings Roast – 2/27/2023
5. Bi-Weekly DHS and IV&V Touch Base Meeting – 2/7/2023, 2/21/2023
6. Weekly BES Infrastructure meeting – 2/3/2023, 2/10/2023, 2/17/2023, 2/24/2023
7. DHS/IV&V Check-in – 2/9/2023, 2/23/2023
8. Weekly Client BES 2023 Project Status Meeting – 2/1/2023, 2/8/2023, 2/15/2023, 2/22/2023
9. PMO End of Day Huddle – 2/1/2023, 2/2/2023, 2/7/2023, 2/8/2023, 2/9/2023, 2/14/2023, 2/16/2023, 2/21/2023, 2/22/2023, 2/23/2023
10. Epic 123 Client Management, Demographics, Citizenship Planning Meeting - 2/1/2023, 2/2/2023, 2/15/2023
11. BES 2023 Project – Epic Listing Review Meeting - 2/2/2023, 2/16/2023, 2/22/2023
12. Security Touchpoint – 2/2/2023, 2/9/2023, 2/16/2023, 2/23/2023
13. BES 2023 Project – BI-21 Updated and Completed Functional and Technical Requirements Traceability Matrix DED Discussion Meeting – 2/3/2023
14. BI-06 DDI Plan Addendum Response Review Meeting – 2/7/2023, 2/13/2023
15. BES 2023 Project – BI-5 Project Schedule Response/Update Review Meeting – 2/10/2023
16. BES 2023 Project – Agile Approach Meeting – 2/15/2023, 2/24/2023
17. BES-SSP Portal Discussion – 2/16/2023
18. February Mid-Month ASI/IV&V Findings Review – 2/17/2023
19. BES Security Controls tailoring – PE family – 2/21/2023
20. Epic 105: Application Registration and Case Creation – 2/21/2023
21. Epic 238: Clarification on FM23a’s Waiving/Terminating Claim Functionality – 2/23/2023
22. BES Security Controls tailoring – PL Family – 2/24/2023
23. Epic 124: Communication Management – 2/24/2023
24. Expedited Eligibility and Reporting Discussion – 2/27/2023
25. IV&V Findings Changes for February – 2/28/2023



Appendices



Appendix A – IV&V Criticality Ratings

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



Appendix B – Findings Log

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

Appendix C – Acronyms and Glossary



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



Appendix C – Acronyms and Glossary

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

Appendix C – Acronyms and Glossary



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

Appendix D – Background Information



Systems Modernization Project

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

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

Systems Modernization IV&V Project

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

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

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

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

Appendix D – Background Information



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

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

PCG's Eclipse IV&V® Technical Assessment Methodology

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

IV&V Assessment Categories for the BES Project

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

Ending Slide



Solutions that Matter

| ID | Title | Reporter | Finding Type | Identified Date | Category | Observation | Significance | Recommendation | Event Horizon | Impact | Probability | Analysis Priority | Finding Status | Status Update | Client Comments | Vendor Comments |
|----|--|----------------|-----------------|-----------------|--------------------------------------|---|---|--|---------------|--------|-------------|-------------------|----------------|--|-----------------|-----------------|
| 80 | Development delays could negatively impact the project schedule and delay go-live. | Fors, Michael | Finding - Risk | 6/30/2022 | Configuration and Development | ASI had previously reported development activities have been slowed as they have been unable to achieve and/or maintain their expected development velocity. Previously, the development team was challenged with accurately estimating development task level of effort (i.e., story points) and the project has been challenged with producing a project schedule that accurately reflects realistic timelines (see Finding #74). The ASI continues to be challenged with finding qualified resources in a timely manner. | If the ASI is unable to achieve a velocity that enables them to meet planned milestones, schedule delays may lead to a delayed system go-live date. Failure to achieve a level of accuracy in estimating development tasks could lead to a project schedule that is flawed and unrealistic. Previously, DHS had indicated, and IVV agreed, that some of these delays were due to some ASI lack of the expertise required to create optimal designs and system specifications that developers could consume without requiring extensive clarification from the ASI BA/SA team. DHS and IVV observed instances where ASI BA/SA have presented less than optimal designs and left it to DHS (who may lack software or UI design expertise) to improve, which has contributed to unproductive design sessions (see Finding #61). It remains unclear if scope creep has contributed to these delays. | OPEN - DHS request the ASI strategically add the right project team resources to effectively increase velocity. Note that adding additional junior resources may not be as effective as staffing additional expert-level development, analysis, and other resources that can lead and mentor junior resources. - ASI effectively track and regularly provide DHS (potentially via the weekly DD status meeting) with an accurate velocity (i.e., story points per day/week/month) and assure that the current velocity is accurately and consistently reflected in the project schedule. | Immediate | 3 | 1 | Low | Open | 2/28/2023 - Though the Project transitioned to the new ASI, many of the development team that was subcontracted to the previous ASI remain on the Project. However, the new ASI has significantly increased their resources (now totaling 137), which may mitigate this risk. Therefore, IVV lowered the criticality rating of this finding from medium to low. IVV will continue to closely monitor this risk and look for evidence the added resources includes skilled developers that can drive the productivity of less experienced developers. 1/31/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once related project activity has begun. 12/11/2022 - No material update in the reporting period as the work stoppage continued and the new ASI conducted restart planning. IVV will reassess this finding and our associated recommendations once more is known. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI conducts restart planning. 10/31/22 - No work has been performed regarding this finding due to the work stoppage and ongoing transition to the new ASI. IVV will reassess our recommendations for this finding once more is known. 09/30/22 - The ASI has announced the departure of key resources that have provided leadership and design quality assurance to the project, which could further hinder development productivity. With the recent work stoppage, it remains unclear if factors that created development delays will be fully addressed to mitigate this risk. 08/30/22 - The ASI continues to onboard additional development resources, stating they added 2 on-shore and 2 off-shore developers to their team. Though an updated schedule has yet to be completed by the ASI, they estimate they will need approximately 50 additional resources to assure adequate velocity and cadence to complete the project in the proposed timeframe. However, and a revised schedule is available the actual number of additional resources 02/28/2023 - The Project has upcoming design (Epic 104) that involve the BES task management system. The new ASI has engaged DHS to meet with the task management system vendor. 01/11/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once we have visibility into the progress of related project activity. 12/31/2022 - No material update in the reporting period as the work stoppage continued and the new ASI conducted restart planning. IVV will reassess this finding and our associated recommendations once more is known. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI conducts restart planning. 10/31/22 - No work has been performed regarding this finding due to the work stoppage and ongoing transition to the new ASI. IVV will reassess our recommendations for this finding once more is known. 09/30/22 - No material update in the reporting period. 08/30/22 - No material update in the reporting period. 08/04/2022 - DHS has decided not to establish an agreement with CIA (the task management vendor) because DHS currently has a subscription that includes the BES requirements. In addition, DHS and the ASI have established biweekly meetings with the task management vendor. 06/30/2022 - The task management system vendor provided details regarding the webhook at a recent meeting with DHS, allowing for related BES development to commence. DHS is determining the type of agreement required with this interface vendor. Based upon receiving the needed information, IVV is reducing the criticality rating to Medium. 06/02/2022 - Issue created. | | |
| 79 | External vendor delays in the development of the BES task management system interface have impacted the project schedule. | Reynolds, Mark | Finding - Issue | 6/2/2022 | Integration and Interface Management | Current (previously known as ePilot) is a task management system developed by the Change and Innovation Agency (CIA). The Department of Human Services (DHS) uses the Current system to manage and create case related tasks. The Benefits Eligibility Solution (BES) will interface with the Current system to manage tasks. The BES system will create tasks and will send them to Current. BES does not have the capability to manage or close the tasks. The intended task management process for BES includes eligibility workers claiming tasks and Supervisors will manage tasks from within the Current system. The webhooks is being designed by CIA that will provide task details for cases that have been tagged as No Contact. | The BES Project expected the CIA developed Current Interface (aka, webhooks) to be completed by 04/07/2022. CIA reported that the webhooks development work would be done by 05/27/2022. As of 05/25/2022, the ASI has not received any status from CIA. The webhooks delay has previously impacted the projects critical path. | The ASI re-establish regular collaboration meetings with CIA to assure strong Q8 communication and brainstorm optimal solutions for the integration work. Current. The ASI provide test results from the task management integration to ensure that the interface works. | 08 | 5 | 1 | Med | Open | 02/28/2023 - The Project has upcoming design (Epic 104) that involve the BES task management system. The new ASI has engaged DHS to meet with the task management system vendor. 01/11/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once we have visibility into the progress of related project activity. 12/31/2022 - No material update in the reporting period as the work stoppage continued and the new ASI conducted restart planning. IVV will reassess this finding and our associated recommendations once more is known. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI conducts restart planning. 10/31/22 - No work has been performed regarding this finding due to the work stoppage and ongoing transition to the new ASI. IVV will reassess our recommendations for this finding once more is known. 09/30/22 - No material update in the reporting period. 08/30/22 - No material update in the reporting period. 08/04/2022 - DHS has decided not to establish an agreement with CIA (the task management vendor) because DHS currently has a subscription that includes the BES requirements. In addition, DHS and the ASI have established biweekly meetings with the task management vendor. 06/30/2022 - The task management system vendor provided details regarding the webhook at a recent meeting with DHS, allowing for related BES development to commence. DHS is determining the type of agreement required with this interface vendor. Based upon receiving the needed information, IVV is reducing the criticality rating to Medium. 06/02/2022 - Issue created. | | |
| 76 | Volunteer DHS resources leaving the Project may lead to schedule delays, lowered morale, and burnout. | Molina, Brad | Finding - Risk | 3/1/2022 | Project Management | The DHS resources assigned to work with the ASI on the BES Project are all volunteers except one. Resources are not 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, rising 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. | OPEN - Carefully plan for all project activities with reasonable hour allocations for the DHS resources and adjust dates in the BES Project schedule accordingly. - Add cushion time to the schedule for unexpected project delays. - Provide incentives for the DHS resources to help maintain the project team and possibly alleviate attrition or increase the number of volunteers to the team. COMPLETED - Consider adding DHS resources as needed. 6/30/2022 Complete - Allocate more time for the DHS team members to dedicate time to the Project. - DHS have all Assigned Project resources informed of the transition progress and the timeline for when they will be asked to participate again, so resources can maintain their engagement with the Project. 1/31/2023 - Closed | Immediate | 3 | 1 | Low | Open | 2/28/2023 - With DHS resource requirements reduced by the new ASI's DDI process, IVV lowered the criticality rating of this finding from medium to low. IVV will continue to monitor, verifying that all DHS resources required by the Project are being met. 1/31/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once related project activity has begun. 12/31/2022 - A key resource from DHS left the project, one of the most knowledgeable and vocal DHS Product Owners. With no additional DHS resources being added to the Project, design sessions could be negatively impacted by this departure. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI conducts restart planning. 10/31/2022 - DHS BES project team members are actively participating in the transition to the new ASI. They identify and communication possible gaps and are highly motivated to ensure the start-up with the new ASI is successful. DHS BES project team members have expressed a need to fully understand the future direction of the BES project and how known issues will be corrected. IVV will monitor the project restart planning and the DHS BES project team members participation. 9/30/2022 - With the BES Project work stoppage, some of the DHS resources assigned to the project are helping with transition work. The work stoppage is a significant event for the project team and the impact to overall morale (positive or negative) is uncertain. 8/30/2022 - No material update for this reporting period. - IVV continue to monitor. 7/27/2022 - No material update for this reporting period. 7/6/2022 - In June, DHS added the following five staff to the BES Project: - An Interface Product Owner - A DDM Product Owner - Two DME resources joined the team to support the Returned Mail Use Cases. - One SME to support the Reporting function. DHS stated they plan on adjusting staff as needed and proactively review the project schedule to identify future 2/28/2023 - The BES Project schedule was approved on 2/15/23 and its development included DHS and ASI input to estimate the remaining work. Therefore, IVV changed the criticality rating from high to medium. 1/31/2023 - The new ASI submitted a draft schedule for review and is receiving comments from stakeholders. The schedule continues to be revised so that it can be approved and baselined. The current proposed go-live date could be delayed if there are substantial adjustments made to address feedback. 12/31/2022 - The Project completed transition activities and is preparing for a Project restart kick-off on January 17th. The new ASI plans to present an updated schedule during the kick-off. However, without prior review from stakeholders, the proposed schedule may cause further questions and discussions which may impact restart activities creating immediate delays. IVV added a recommendation regarding DHS/ASI collaboration on the schedule. 11/30/2022 - The Project is reviewing and revising the BES Project Schedule to reflect the new implementation approach, and to align with updated project deadlines, resources, and scope. An updated Project Schedule is expected for the Project restart kick-off in early January 2023. 10/31/2022 - A project schedule documenting post-transition activities and project execution activities of the new ASI has not been developed. Without a realistic project schedule based on accurate estimates, it is difficult for the Project to plan future activities, estimate staffing needs, and uncover possible gaps in knowledge transfer. 9/30/2022 - The ASI did not deliver a revised BES Project Schedule prior to DHS issuing the work stoppage on September 5, 2022. Regardless of the BES move forward strategy, a schedule that is based on estimates provided by staff performing the work is critical to ensure the schedule is realistic. 8/31/2022 - The ASI indicated that substantial changes and improvements were made to the schedule but did not deliver the revised draft to DHS by | | |
| 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. | Molina, Brad | Finding - Issue | 11/29/2021 | Project Management | DHS and the ASI have tried multiple times to rework the schedule with results that have not yielded improvement. Concerns with the structure, estimating practices, and ability to manage to the schedule persist. The use of multiple tools to track resources obfuscate resource management. Previous IVV findings focused on specific schedule components such as resource management and critical path analysis, all of which were addressed and closed. | If estimates for project schedule activities are not accurate, this can lead to constant schedule changes, resources not being available when needed, rushed activities, and general frustration which can lead to schedule delays, low quality output, scope changes, and budget issues. | OPEN Monitor, evaluate and revise scheduling estimates for accuracy. Confirm current assumption that a delay with the current go-live date will not result in major implications. COMPLETED DHS and the ASI agree to a revised schedule against which project deliverables can be managed. (2/28/2023 - complete) CLOSED Using the available tools, review the current estimates to complete each activity compared to past actual hours (1/31/2023 - new ASI - Not Started) Update as necessary and provide the DHS/ASI Project Managers with reports and data that accurately reflect the DHS/ASI resource needs along with over/under allocations of staff for the duration of the Project (1/31/2022 - new ASI - Not Started) Develop mitigation and contingency plans that are tracked/managed by DHS/ASI for all tasks that are behind schedule or are at risk of being behind schedule which includes resource management. (1/28/2023 - new ASI) Discuss, validate and address additional concerns within the project processes that may cause the project delays other than inaccurate estimates such as over reliance on POs, slow design sprints, and cadence of development teams. (2/28/2023 - new ASI) The new ASI presents a draft schedule for DHS review/feedback in advance of the project restart kickoff. (1/31/2023 - Not Completed) | Immediate | 4 | 2 | Med | Open | 2/28/2023 - The BES Project schedule was approved on 2/15/23 and its development included DHS and ASI input to estimate the remaining work. Therefore, IVV changed the criticality rating from high to medium. 1/31/2023 - The new ASI submitted a draft schedule for review and is receiving comments from stakeholders. The schedule continues to be revised so that it can be approved and baselined. The current proposed go-live date could be delayed if there are substantial adjustments made to address feedback. 12/31/2022 - The Project completed transition activities and is preparing for a Project restart kick-off on January 17th. The new ASI plans to present an updated schedule during the kick-off. However, without prior review from stakeholders, the proposed schedule may cause further questions and discussions which may impact restart activities creating immediate delays. IVV added a recommendation regarding DHS/ASI collaboration on the schedule. 11/30/2022 - The Project is reviewing and revising the BES Project Schedule to reflect the new implementation approach, and to align with updated project deadlines, resources, and scope. An updated Project Schedule is expected for the Project restart kick-off in early January 2023. 10/31/2022 - A project schedule documenting post-transition activities and project execution activities of the new ASI has not been developed. Without a realistic project schedule based on accurate estimates, it is difficult for the Project to plan future activities, estimate staffing needs, and uncover possible gaps in knowledge transfer. 9/30/2022 - The ASI did not deliver a revised BES Project Schedule prior to DHS issuing the work stoppage on September 5, 2022. Regardless of the BES move forward strategy, a schedule that is based on estimates provided by staff performing the work is critical to ensure the schedule is realistic. 8/31/2022 - The ASI indicated that substantial changes and improvements were made to the schedule but did not deliver the revised draft to DHS by | | |

| ID | Title | Reporter | Finding Type | Identified Date | Category | Observation | Significance | Recommendation | Event Horizon | Impact | Probability | Priority | Finding Status | Status Update | Client Comments | Vendor Comments |
|----|---|---------------|----------------|-----------------|-------------------------------|---|---|---|---------------------|--------|-------------|----------|----------------|---|---|-----------------|
| 73 | The planned BES infrastructure is complex which could be difficult to implement and lead to schedule/cost impacts. | Fors, Michael | Finding - Risk | 10/28/2021 | System Design | Current ASI Infrastructure plans include a significant number of sophisticated components that make up a complex cloud infrastructure. Further, the Project Team has yet to finalize components that will make up the BES infrastructure and the additional costs and time to configure, test, and implement the planned complex environment remain unclear. | If the level of effort to implement and manage the complexities of the BES infrastructure is not accurately accounted for and staffed by the ASI, the project could be met with unexpected costs and schedule delays. Delays in finalizing the components being implemented could exacerbate this risk and lead to further delays. Complex platforms often present system maintenance and operations challenges as system changes can hold the increased potential for system failure (i.e., due to the significant number of "moving parts") and increase the level of time and effort to resolve infrastructure and application-level bugs. Further, some components remain in an immature state compared to their legacy counterparts. For example, the project recently experienced a system failure because Google Cloud failed to clearly communicate a change that led to failure in another component (i.e., Nexus). Google Cloud is generally viewed as a less mature product offering, compared to their rivals (Amazon Web Services, Microsoft Azure). N&V remains concerned that this could lead to failures at critical points in the project (including post-go live production failures) that could be difficult to resolve and lead to project disruption. If DHS intends to eventually reduce M&O subcontracting 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. | <ul style="list-style-type: none"> ASI clearly communicates the potential costs and schedule impacts to implement and maintain the planned infrastructure. The architecture process should include steps to provide a detailed impact of DHS architectural decisions including the integration activities, support required, and maintenance and operations impacts. DHS work with the ASI to assess the potential challenges of managing a complex environment and consider scaled back options that could reduce this risk and reduce long-term maintenance challenges and costs. ASI develop a process to closely monitor cloud and other product changes (software updates, lower releases, managed changes, and regression test) once updates are applied. The project team work to establish strong governance over the utilization and maintenance of the various system tools/components to verify their use and monitoring. ASI development team identify infrastructure components and techniques that are new to them and take action to assure potential integration problems do not lead to unexpected delays. For example, allot time in the schedule to conduct proof of concepts to assure infrastructure components work as expected. Request the ASI maintain a detailed schedule for DevOps implementation tasks that could delay project milestones and the critical path. | Next several month | 3 | 3 | Med | Open | 2/28/2023 - Though the new ASI intends to simplify the BES Infrastructure, it remains unclear whether that will be possible in a timely manner and avoid impacting the critical path. The new ASI also intends to move from the previous ASI scope of DevOps by adding more automation. While this has the potential to simplify environment management, it could also present challenges without impacting the schedule. 1/21/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once related project activity has begun. 12/31/2022 - No material updates in the reporting period as the work stoppage continued and the new ASI conducted restart planning. IVV will reassess this finding and our associated recommendations once more is known. 11/30/2022 - No material updates in the reporting period as the work stoppage continues and the new ASI conducts restart planning. 10/31/2022 - The previous ASI was largely responsible for the infrastructure design and build out, these responsibilities are now transitioned to the new ASI. The previous ASI is performing knowledge transfer (KT) to the new ASI; however, IVV is concerned that KT will suffer given the complexity of the infrastructure and that some of the new ASI resources appear to lack significant experience with some of the tools and techniques used. IVV will reassess our recommendations for this finding once more is known. 9/30/2022 - The ASI announced the departure of key infrastructure resources who have provided leadership to the infrastructure efforts, which could exacerbate this risk. With the recent work stoppage, it's unclear how this risk will be mitigated going forward. 08/30/22 - The ASI intends to engage two 3rd party vendors to assist with the production environment build (once the GCP change order is approved), which could increase their velocity. The inclusion of these vendors could also mitigate the risk of maintaining a complex infrastructure if these vendors can provide experts who have significant | | |
| 70 | Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution | Fors, Michael | Finding - Risk | 8/23/2021 | Configuration and Development | The Bi-6 C0I Plan Deliverable, Section 5.2 establishes the framework for the Configuration Management Plan, however, it remains unclear if sufficient progress has been made toward establishing CM processes and governance, selecting CM tools (e.g., CMDB), and building out the CM infrastructure. The project's Security Plan has yet to be finalized which may include additional requirements or decisions that could impact CM. The project currently relies on GitHub for tracking of configuration features. | 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. | <ul style="list-style-type: none"> OPEN - ASI adhere to plans for configuration management as documented in Bi-6 C0I Plan, Section 5.2 and clarify details and/or any changes with DHS. ASI validate plans for configuration management with DHS and agree on a meaningful set of configuration items or settings they will track. DHS and ASI work to clarify/validate plans for the potential use of configuration management tools and DHS work to fund and procure a CM tool, as required, to avoid any negative impacts to the project. COMPLETE - ASI identify the DHS POC for the Configuration Management Activities that would provide oversight of configuration management activities and assure the defined CM steps and processes are effective, and are achieving DHS objectives for CM. 7/31/2022 | ASAP | 2 | 2 | Low | Open | 2/28/2023 - The new ASI intends to utilize ServiceNow (SN) for most configuration management tracking. Details of exactly how they will be using SN and its multitude of modules and capabilities remain unclear. 1/31/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once related project activity has begun. 12/31/2022 - No material updates in the reporting period as the work stoppage continued and the new ASI conducted restart planning. IVV will reassess this finding and our associated recommendations once more is known. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI conducts restart planning. 10/31/22 - No work has been performed regarding this finding due to the work stoppage and ongoing transition to the new ASI. IVV will reassess our recommendations for this finding once more is known. 09/29/22 - The ASI announced the departure of key resources including their lead CM strategist, which could exacerbate this risk. With the recent work stoppage and planned reassignment, IVV is not aware of the plans to mitigate this risk. 08/30/22 - The ASI updated the Configuration Management Plan (CMP) with additional configuration management details. 07/27/22 - DHS has identified technical and functional primary points of contact for ASI to work with for configuration management efforts. IVV remains concerned that some configuration management (CM) details have yet to be finalized and the lack of clarity around the CM Database (CMDB) tools. For example, it remains unclear what CMDB tool will be used if Service Now is not part of the GCP change request. 06/30/22 - The Project previously stated its intention to utilize ServiceNow (SN) for Configuration Management (CM), however, it remains unclear if progress has been made on 1) finalizing this decision, 2) how it will be used, and 3) the status of funding for purchase. Further, it remains unclear whether DHS will utilize their existing SN installation or | 9/9/2021 - RAP: We look forward to receiving specific inquiries from the IVV team on configuration management and having conversations. We do acknowledge that the plan likely needs to be updated to reflect the process in place on the project for configuration management. | |
| 68 | Incomplete implementation statements in the BES System Security Plan may lead to delays in gaining Federal Partner approval for the BES Project to begin the Pilot Phase. | Heath, Dustin | Finding - Risk | 7/28/2021 | Security and Privacy | Over the last several months, the BES project team has been working through the planning efforts to develop the Bi-13 Security Plan while also managing through ASI Security Lead staffing changes. DHS and the ASI agreed to modify the Bi-13 Security Plan Deliverable Expectation Document (ED) last month and are currently reviewing it to align to the requirements and change to the project's reception. | 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. | <ul style="list-style-type: none"> OPEN - The ASI continues to develop the Bi-13 Security Plan in close collaboration with DHS. DHS and the ASI agree upon the tools and process that will be used to document and track security control implementation, such as security governance, risk, and control (GRC) software. The process should define the level of detail needed to track progress (estimates, target dates, risks, issues, evidence) along with the Requirement Traceability Matrix, and plans of actions and milestones (POMM). COMPLETE - ASI ensure that the ASI Security Lead has a depth of experience in NES 800-43 and experience authoring implementation statements of System Security Plans (SSP). Complete 2/28/2023 - DHS review the proposed staff resume, interview individual, and approve resources to ensure that they meet the position's contractual requirements. Complete 2/28/2023 - DHS and the ASI agree and finalize the Bi-13 DED. 1/4/22 Complete - ASI, per DHS guidance, should begin to pivot toward the adoption of 800-53 v5 since they will be obsolete when the system goes live. COMPLETE 3/31/2022 - DHS should determine the FIS requirements for go live based on their meeting and provide ASI with proper guidance. FIS requirements should be documented as part of Bi-13 Security Plan COMPLETE 3/31/2022 - ASI have a security SME attend the weekly security planning meetings and workshops. COMPLETE 7/31/2022 - ASI add a Security Architect to the Project ASAP to assist with the Security Plan activities. COMPLETE 11/30/2022 | ASAP | 3 | 3 | Med | Open | 2/27/2023 - The new ASI began weekly status meetings for the security stakeholders in February. The ASI presented and clearly articulated an approach to developing the Security Plan. This includes the selection of the controls for the SSP and is consistent with NES 800-53 guidance. At the end of February, the ASI and DHS began the control selection process for a NES 800-53 modernized SSP. Additionally, the ASI and DHS have begun discussing selecting an eGRC system. However, after looking at the Service Now GRC module, it appears to be cost-prohibitive. The ASI continues to look at options for a GRC system while continuing to use AHA as a repository for the SSP. Based on the current status of security activities IVV lowered the criticality rating to Medium. 1/31/2023 - The new ASI has published a project schedule that shows the BES Security Plan completion in early March. With the significant amount of work required to complete, including work that DHS must perform, IVV is concerned that this timeline may be unrealistic. 12/31/2022 - There remains a significant amount of work to plan, implement, test, and approve all Security and Privacy controls prior to starting the BES Pilot. The controls should be implemented and documented in a manner that allows effective maintenance. 11/30/2022 - The new ASI has named its Security Lead. As one of the five key project resources, IVV recommends that DHS review and approve this proposed staff to ensure that they meet the position's contractual requirements. 10/31/2022 - With the transition to the new ASI, the key position of Security Lead will be filled by a new resource. As of the reporting period end, this position remains unfilled. As the new ASI assumes the responsibility for the Project security and privacy tasks it is appropriate to revisit the IVV recommendations and the tools used to document and track security controls. 09/29/2022 - Since only one meeting was held between the ASI and DHS Security teams, IVV currently sees Site Improve (SI) over the area and the ASI is reviewing its feasibility for this project. The ASI requested access to the Site Improve tool for a Proof of Concept (POC). Additionally, the ASI previously evaluated Usability.net and will use it if the Site Improve POC is unsuccessful. 1/31/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once related project activity has begun. 12/31/2022 - No material updates in the reporting period as the work stoppage continued and the new ASI conducted restart planning. IVV will reassess this finding and our associated recommendations once more is known. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI conducts restart planning. 10/31/2022 - No work has been performed regarding this finding due to the work stoppage and ongoing transition to the new ASI. IVV will reassess our recommendations for this finding once more is known. 9/30/2022 - DHS issued a work stoppage, and progress was made to move forward with purchasing the ASI recommended ADA compliance tool. 8/30/2022 - No change in status. Waiting on DHS acceptance/approval to move forward with purchase, installation, configuration, and implementation of the ASI recommended ADA compliance tool. 7/27/2022 - The ASI successfully completed the ADA compliance tool proof of concept and provided reports to DHS for their review and approval. The final steps remaining would be the purchase, installation, and implementation of the tool. 6/29/2022 - The ADA compliance tool is still in the trial phase and a compliance report will be run once the initial testing has been completed. The ASI is expected to provide results of the testing to DHS when the trial phase is finished, and the report generated. 5/31/2022 - The ASI has identified an accessibility compliance tool that will meet the needs of the Project and DHS will | | |
| 69 | The Americans With Disabilities Act (ADA) Section 508 compliance tool has not been installed for the Project, which may cause significant rework. | Tan, Ryan | Finding - Risk | 7/12/2021 | Testing | While HQ 3 and RO 4 reported that Section 508 compliance had been successfully completed the ASI confirmed that there is currently no working tool installed and that Section 508 compliance testing has not been performed. This risk has been discussed with the ASI over the past several months, but there have been evidence of results to date. The ASI did state that they are coding to some of the ADA requirements and are using a desk-top tool for ADA compliance as an interim solution. IVV has not received any data to demonstrate the desk-top tool results nor if it provides coverage for an 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 WC3 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 (http://www.hawaii.edu/access/ada-guidelines-for-accessibility/), FIS Guidelines from the DOI 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. | <ul style="list-style-type: none"> 1/31/2023 - The following recommendations will be evaluated for the finding. - The ADA tool meets contractual and project requirements. - The ASI communicates a plan for ADA test execution. The ASI communicates how the tool will be used to report compliance and non-compliance and how non-compliance will be addressed/corrected. - The ASI communicates how and when DHS/IVV will be provided reports from the ADA tool execution and how to interpret the results. Supervised 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 creates 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 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 | 2/28/2023 - The Project is evaluating different ADA compliance tools. DHS currently sees Site Improve (SI) over the area and the ASI is reviewing its feasibility for this project. The ASI requested access to the Site Improve tool for a Proof of Concept (POC). Additionally, the ASI previously evaluated Usability.net and will use it if the Site Improve POC is unsuccessful. 1/31/2023 - Activity in the reporting period concentrated on project restart tasks, and IVV will reassess this finding once related project activity has begun. 12/31/2022 - No material updates in the reporting period as the work stoppage continued and the new ASI conducted restart planning. IVV will reassess this finding and our associated recommendations once more is known. 11/30/2022 - No material update in the reporting period as the work stoppage continues and the new ASI conducts restart planning. 10/31/2022 - No work has been performed regarding this finding due to the work stoppage and ongoing transition to the new ASI. IVV will reassess our recommendations for this finding once more is known. 9/30/2022 - DHS issued a work stoppage, and progress was made to move forward with purchasing the ASI recommended ADA compliance tool. 8/30/2022 - No change in status. Waiting on DHS acceptance/approval to move forward with purchase, installation, configuration, and implementation of the ASI recommended ADA compliance tool. 7/27/2022 - The ASI successfully completed the ADA compliance tool proof of concept and provided reports to DHS for their review and approval. The final steps remaining would be the purchase, installation, and implementation of the tool. 6/29/2022 - The ADA compliance tool is still in the trial phase and a compliance report will be run once the initial testing has been completed. The ASI is expected to provide results of the testing to DHS when the trial phase is finished, and the report generated. 5/31/2022 - The ASI has identified an accessibility compliance tool that will meet the needs of the Project and DHS will | 9/9/2021 - RAP: The ASI has invited the IVV team to make contact with the development team to review the results of the desk-top tool to gain insight. To date, the IVV has not contacted the development lead to have further discussions on this topic. | |

