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July 14, 2021

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

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

Dear President Kouchi, Speaker Saiki, and Members of the Legislature:

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

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

Sincerely,

Douglas Murdock (Jul 14, 2021 17:04 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: May 1 - 31, 2021

Submitted: June 10, 2021

PUBLIC CONSULTING GROUP

Solutions that Matter

Overview

- Executive Summary

- IV&V Findings and Recommendations

- IV&V Engagement Status

- Appendices
    - A – IV&V Criticality Ratings
    - B – Risk Identification Report
    - C – Acronyms and Glossary
    - D – Background Information

PUBLIC
CONSULTING GROUP ™

Solutions that Matter

Executive Summary

Executive Summary

In May, the project team continued to revise the project schedule due to the delays for the KOLEA ATC impact (the CMS required KOLEA modifications are causing a delay of the integration with BES) and CMM Interview. Project work continued on several releases, but it has been over 3 months since the potential delay was announced resulting in a loss of momentum. IV&V received one project deliverable this month and several project meetings were cancelled or delayed until June.

To avoid future delays, the project should establish a schedule that is achievable not only by the development team but also the work required for the project (e.g., design, deliverables, data conversion, testing and implementation activities). The project team has a good track record of identifying/applying lessons learned and with the Release 0.3 activity currently in process there may be suggestions that will improve the confidence level of achieving the revised schedule, once approved.

Mar	Apr	May	Category	IV&V Observations
H	H	H	Project Management	IV&V retains a high criticality rating for this category due to the lack of a Project Schedule, loss of project momentum and inability to measure the velocity of the development effort.
L	M	M	System Design	A few design sessions were conducted in May resulting in the early identification of changes, a positive for the team. The ASI and their subcontractor adjusted and added staff to aid the design process. Other measures may be implemented when the Release 0.3 Lessons Learned activity is completed.
L	N/A	N/A	Deployment	There are no open findings in this category.

Executive Summary

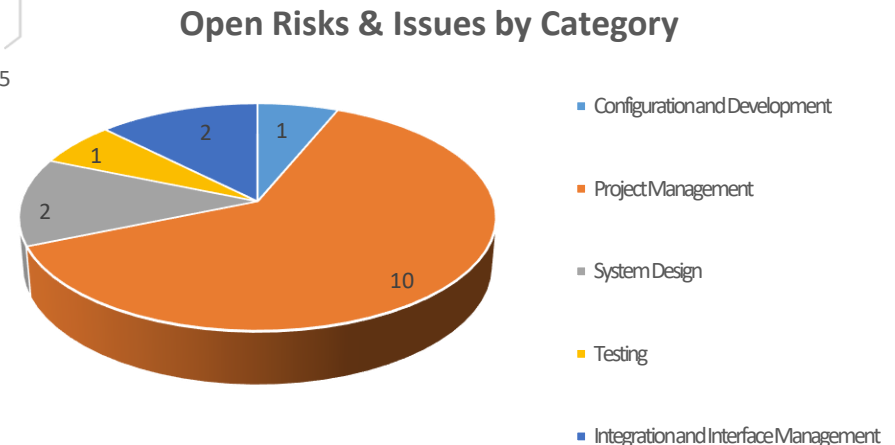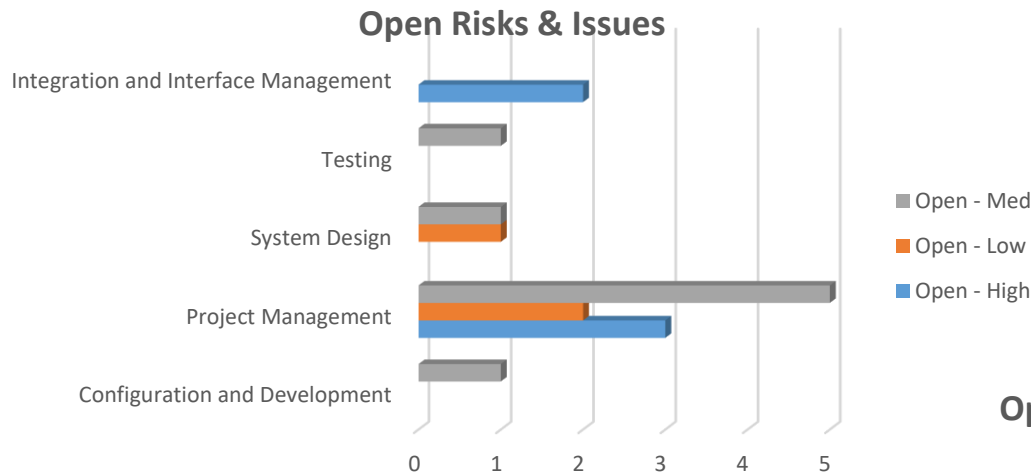| Mar	Apr	May	Category	IV&V Observations
M	M	M	Configuration and Development	There were no material changes to this category in the reporting period.
H	H	H	Integration and Interface Management	The project team is creating communication plans for each of the interface partners. The detailed schedule along with the testing approach and plan is in progress. The timing of the integration between the BES Modules (SSP, CMM, FMM) and interface partners remains a high criticality rating.
N/A	N/A	M	Testing	A finding previously reported as a concern was transferred to a risk this month. The number and types of defects found in UAT appear to be high.

IV&V Findings and Recommendations

IV&V Findings and Recommendations

As of the May 2021 reporting period, PCG is tracking 16 open findings (8 risks and 8 issues) and has retired a total of 46 findings. Of the 16 open findings, 10 are related to Project Management, 2 in Integration and Interface Management, 2 in System Design and 1 each in Configuration and Development and Testing.

Open Risks & Issues

Legend:
- Open - Med
- Open - Low
- Open - High

Open Risks & Issues by Category

- Configuration and Development
- Project Management
- System Design
- Testing
- Integration and Interface Management

IV&V Findings and Recommendations

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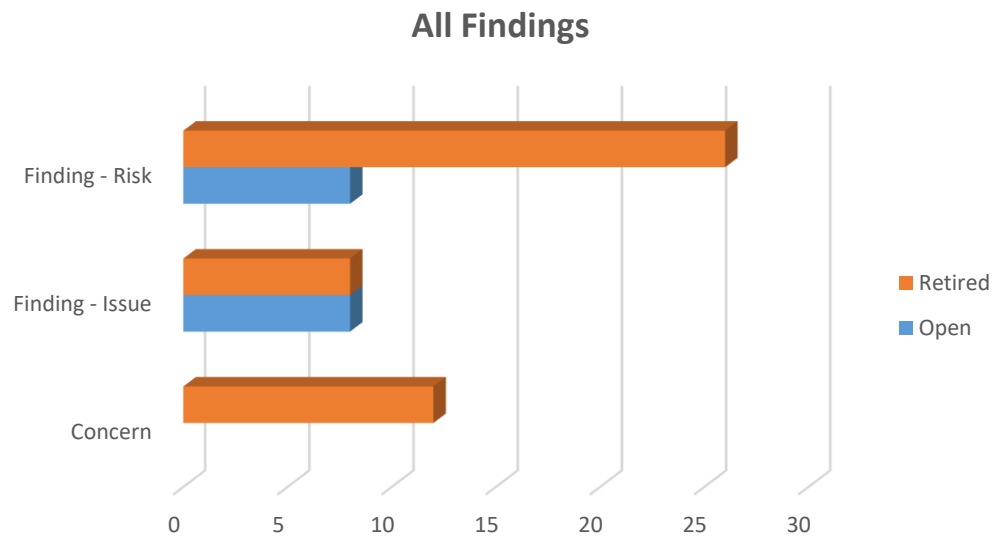
All Findings

IV&V Findings and Recommendations

Findings Retired During the Reporting Period

#	Finding	Category
	No findings were retired in this reporting period.	

IV&V Findings and Recommendations

New Findings

#	Finding	Category
	No new findings were identified in this reporting period.	

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
2	**Issue – Late Delivery of project deliverables may cause schedule delays**. There are no material updates to this finding in this reporting period; the revised project schedule is under development.	H

Recommendations	Progress
• DHS and the ASI agree and publish the revised schedule based on the KOLEA ATC impact and CMM development delays.	In process
• 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.	Not started

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.** Although the ASI has taken efforts to clarify how they intend to utilize the State Hub, some aspects have yet to be decided by DHS and the ASI. IV&V will continue to monitor communications between the various stakeholders to assure decisions are made with a full understanding of the system architecture.	L

Recommendations	Progress
• DHS should finalize the Portal strategy and communicate the strategy with the stakeholders and project teams.	In process
• The project should continue to vet possible architectural change impacts to the platform, M&O, MQD, and BES systems before finalizing architectural decisions.	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**. There are no material updates in 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

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.** The ASI has allowed their team and select DHS team members to return to their office. DHS' acting PM has noted in-person interactions with the ASI have improved communications and productivity at the PM level. It remains unclear whether the off-shore ASI team will continue to be impacted by team members who may become unavailable due to COVID.	M

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

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
48	**Risk – The CMS Outcomes-Based Certification Requirements have not been published by CMS, which may impact the project schedule and funding.** There are no material updates this month; IV&V will continue to monitor.	M

Recommendations	Progress
• DHS to continue dialogue with CMS regarding the project's approach to OBC and MITA alignment to ensure all CMS requirements are met by the BES Project.	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.** One deliverable was submitted in this reporting period and is currently being reviewed. The revised metrics were not provided by the ASI.	L

Recommendations	Progress
• IV&V recommends that a facilitated root cause analysis be performed by the ASI with DHS and IV&V 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, IV&V recommends immediate action be employed to resolve quality concerns on in-process deliverables prior to submission of subsequent deliverables.	In process
• IV&V recommends that the ASI review the Quality Management Plan to ensure that the project is working within the Quality guidelines. In particular, the ASI should evaluate and consider if it is in alignment with Section 3.1.2 Measure Project Quality, which states "ASI measures process and product quality by 1) selecting BES implementation process and product attributes to measure; 2) selecting component activities to measure; 3) defining value scales for each component activity; 4) recording observed activity values; and 5) combining the recorded attribute values into a single number called a process quality index." IV&V has not seen evidence indicating the ASI is utilizing metrics to measure its process and product quality.	In process

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
54	**Risk – User Acceptance Testing (UAT) processes and timing of inputs required for UAT could lead to implementation delays and delivery of a solution that does not meet business needs or requirements.** There were no active UAT sessions during this reporting period. However, DHS indicated that in Release 0.3, the solution design was updated after UAT start, causing rework on test case/script creation. This may be addressed in the Release 0.3 Lessons Learned activity, planned for next month.	M

Recommendations	Progress
• Further develop the Release 0.2 Lessons Learned action plan to include target complete dates. Report progress in the weekly status meeting.	Complete
• All agreed upon actions to resolve issues called out in Lessons Learned should be added to project schedule so adequate timing is provided to support UAT preparation and execution.	Complete
• The ASI could conduct a debrief meeting with DHS after SIT and UAT have completed, summarizing work completed and follow-up actions required from ASI and DHS.	In process
• Develop a clear and collaborative approach and plan to review and categorize all defects after testing if the current defined process is not being followed. This should include joint (ASI/DHS) severity level assignments for defects and determining the next steps for defects that require a change to the FDD or other previously approved or drafted deliverables.	Complete
• Evaluate the process and/or schedule to determine if adjustments could streamline the process for the UAT test team to plan and create UAT test cases, minimizing rework.	In process

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
58	**Risk – The data conversion effort lacks leadership, consistency in data governance, and effective communications which may impact the schedule**. IV&V observed the Data Conversion team (ASI/DHS) completing very specific tasks related to data cleansing and validating conversion plans. However, the ASI has yet to develop the 'big picture' of the data conversion activities – a high-level activity chart from start to finish.	M

Recommendations	Progress
• Assign a dedicated project leader to actively manage all aspects of the Data Conversion effort. Consider a full-time position until the Data Conversion effort is completed.	Complete
• Investigate and resolve communication issues that are suspected to be delaying the data conversion effort.	Complete
• Prioritize the conversion activities to validate the key tasks are addressed early to avoid further delays considering the complexity of the later releases.	In process
• Update the timing of the project Data Conversion meeting from every-other-week to weekly.	Complete
• The ASI should develop reports with metrics that accurately measure the Data Conversion progress along with a high-level pictorial view of conversion activities planned for each release.	In process
• Add detailed Conversion tasks to the Project Schedule.	In process
• The DHS Data Governance committee needs to clarify the usage of MDM so the BES conversion team aligns to the planned governance structure.	In process

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
62	**Issue – Inability to measure development team velocity may impact the projects' ability to forecast the delivery date of the remaining features.** There has been no progress this reporting period. The CMM/FMM team is unable to measure sprint velocity. The ASI is working with their subcontractor to make this information available to project leadership.	H

Recommendations	Progress
• The ASI work with the subcontractor Scrum Masters to calculate the average velocity from past iterations to be used as a historical reference.	In process
• Moving forward, the development teams should provide the ASI with Sprint and Product Burndown charts at the end of every iteration.	In process
• To calculate velocity, user stories need assigned values (IV&V recommends relative story points). If the developers are not currently assigning values to user stories, IV&V recommends this become common practice.	In process

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
65	**Risk - DHS BESSD knowledgeable staff are needed on the project to ensure the BES solution is designed to meet the business needs and requirements.** The DHS Product Owners continue to adjust to their new roles to include decision making and designing BES to take advantage of new technologies. DHS identified a replacement BES PM; onboarding was delayed and is now planned for June 2021.	M

Recommendations	Progress
• DHS continue to identify BESSD SME's to support the project as the project progresses.	In process
• DHS develop a project team list that identifies the participants along with their roles and areas of expertise to be used as short-term needs are identified.	Complete
• DHS utilize the BI-4 Project Schedule report developed by the ASI to identify those tasks owned by DHS in the short team in addition to the 4-month look-ahead to identify time frames and activities where there is a high-demand on DHS resources.	Complete
• Identify and on-board a replacement BES Project Manager.	In process
• Continue coaching the new BES Product Owners to ensure the new system takes advantage of new technologies and aligns to the planned business processes.	In process

IV&V Findings and Recommendations

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 provided IV&V with a timeline for the planned integration of the BES modules. Integration between SSP and BES modules is planned to start in Release 0.5 and will continue through the final release. The plan is to integrate applications first, then appointments, alerts, notifications, and cases, etc.. This risk will remain until there is demonstration of end-to-end functionality across modules.	H

Recommendations	Progress
• Prioritize the build of integration points within each module and the creation of scripts (API calls) required for integration.	In process
• Each release demo should be a collaborative effort across all modules (end-to-end solution) and verified against system-level requirements.	Not started
• If the ASI needs all the remaining releases to demonstrate an end-to-end solution of the identified business processes across all modules, IV&V recommends planning and communicating the mitigation strategy for handling risks associated with a 'big bang' release.	Not started

IV&V Findings and Recommendations

Integration and Interface Management

#	Key Findings	Criticality Rating
63	**Risk – The lack of early planning and coordination with interface partners may result in schedule delays.** The project team continues to update the interface planning documents. However, IV&V reviewed the Communication Plans and found that 23 interface partners' contacts have not been documented, 14 MOAs have not been approved, and testing dates have not been confirmed for all of the interfaces. IV&V raised the criticality rating from Medium to High this month due to the status of the communication plans and testing schedule. IV&V will continue to monitor.	H

Recommendations	Progress
• Establish a communication plan for each interface partner for the duration of the BES DDI activities to include the contact's name and information.	In process
• Define a detailed schedule for each interface to include milestone dates, coordination, and execution and share with the interface partners.	In process
• Determine which deliverable will include the details associated with the planned connectivity and detailed technical designs of all interfaces.	In process
• Complete all MOAs and obtain approval.	In process
• Confirm testing dates with interface partners in writing.	In process
• Distribute preparation procedures for interface implementation to the interface partners.	In process

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.** DHS and the ASI continue to take efforts to bring their new product owners up to speed with the methodology and expectations of their role. It remains unclear whether DHS product owners will be able to meet project expectations to assure their product owner responsibilities are fully met.	(M)

Recommendations	Progress
• ASI provide an additional DDI approach overview session for stakeholders who still may be unclear on elements of the methodology, especially new product owners.	In process
• ASI make available their DDI approach documentation/materials for stakeholders to review and/or refresh their knowledge on demand.	In process

IV&V Findings and Recommendations

System Design

#	Key Findings	Criticality Rating
38	**Issue – Due to the sequencing of JADs addressing Workflow at the end instead of during current JAD sessions, the project could be faced with significant design rework, which may result in schedule delays, and impact the quality of solution design.** It is IV&V understanding that software development efforts have slowed as they revisit some design documents to ensure developers (subcontractors) have a full understanding of analysis and designs that have already been developed, which may include workflows that were not fully vetted in the earlier design sessions. Details of this effort have not been made available to IV&V.	L

Recommendations	Progress
• ASI to quickly define how the workflow/task functionality will flow and provide training to the facilitators.	In process
• ASI augment the project team with seasoned business analysts, with significant workflow expertise, to review workflow/task functionality and integrate into systems designs with input from DHS.	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.** A few screen prototype review sessions were held with positive collaboration between all participants. Product owners raised some concerns (e.g., the POs stated the 'Manage Veterans Information' screen might not be needed as the information could be captured elsewhere). This is exactly what these sessions are meant to identify and the earlier they are found in the SDLC process the better. IV&V will continue to monitor in May.	M

Recommendations	Progress
• JAD and design sessions should be led by experienced senior BAs, with goals, objectives and results communicated to all participants.	In process
• 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.	In process
• The ASI should back-track significant differences in design direction to determine the root cause in an effort to identify these items as early in the SDLC as possible.	In process
• The Product Owners should have more direct interaction with the development team, proactively seeking collaboration.	In process

IV&V Findings and Recommendations

Testing

#	Key Findings	Criticality Rating
66	**Risk – The number of issues/defects found in UAT may cause planned work in the future sprints to be delayed due to the prioritization of the resolution of issues/defects found in UAT.** An industry standard metric used to identify the efficiency of System Testing is defect leakage, i.e., how many defects are missed/slipped during System testing. The formula used is Defect Leakage = (No. of Defects found in UAT / No. of Defects found in System testing.). For Release 0.3 there were 28 'Not a Defect', 124 'Done', and 10 'Unresolved'. For UAT the defect count was 199 'Not a Defect', 135 'Done', and 8 'Unresolved'. Removing those defects marked 'Not a Defect' for System Test and UAT counts there were 134 for System Test and 143 for UAT. By plugging those numbers into the formula, the result is 106.72%. Since the industry average for good testing processes is 10-12%, the defect leakage appears excessive for this project.	M

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

IV&V Status

IV&V Engagement Status

IV&V Engagement Area	Mar	Apr	May	Comments
IV&V Budget	🟢	🟢	🟢	
IV&V Schedule	🟢	🟢	🟢	
IV&V Deliverables	🟢	🟢	🟢	
Centers for Medicare and Medicaid Services (CMS) IV&V Progress Reports	🟢	🟢	🟢	The first quarterly CMS Eligibility and Enrollment (E&E) IV&V Progress Report is on hold until IV&V and DHS determine the appropriate time to submit the report.
CMS Milestone Reviews	🟢	🟢	🟢	The first CMS Milestone Review date has not yet been determined.
IV&V Staffing	🟢	🟢	🟢	Ryan Tan rejoined the IV&V team.
IV&V Scope	🟢	🟢	🟢	

Engagement Rating 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 May reporting period:
  - Completed – April Monthly Status Report
  - Ongoing – Review the BES Project Artifacts and Deliverable
  - 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 June 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/Monthly 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 0.4 Technical Design Document - CMM/CF	5/27/2021	Draft

Additional Inputs – Artifacts

Deliverable Name	Artifact Date	Version
Unisys Contract Amendment 3	4/17/2020	N/A
2019-11-22 HI Test Plan - FNS Comments.xlsx	11/22/2019	N/A
FNS Handbook 901	01/2020	V2.4
BES Risks and Issues Log	05/05/2021 05/12/2021 05/19/2021 05/26/2021	N/A
BES Weekly Schedule (BI-5)	05/03/2021	N/A
BES Weekly Status Report	05/05/2021 05/12/2021 05/19/2021 05/26/2021	N/A
Java Code Standards	09/11/2020	1.6
Release 0.3 UAT Test Cases	NA	NA
Release 0.3 SIT Test Cases	NA	NA
Java Code Standards	09/11/2020	1.6
R0.3 Codebase	05/11/2021	0.3

Additional Inputs

Meetings and/or Sessions Attended/Observed:

1. Weekly Schedule Review Meeting – 05/18/2021, 05/25/2021
2. Int Data Conversion Meeting – 05/10/2021, 05/17/2021, 05/24/2021
3. Weekly IV&V Team Meeting – 05/03/2021, 05/10/2021, 05/17/2021, 05/20/2021, 05/24/2021, 05/27/2021
4. ASI/IV&V – pre-draft review of IV&V Findings – 05/03/2021
5. ASI/IV&V - Release 0.3 SIT Test Case Review Draft – 05/03/2021
6. Weekly Platform Status Meeting – 05/04/2021, 05/11/2021, 05/18/2021, 05/25/2021
7. Weekly Architecture Meeting – 05/05/2021, 05/19/2021, 05/26/2021
8. Weekly Project Status Meeting – 05/05/2021, 05/19/2021
9. Weekly BES PMO and IV&V Touch Base – 05/26/2021
10. Weekly BES Stand-up – 05/05/2021, 05/12/2021
11. Weekly SSP Backlog Grooming Session – 05/05/2021, 05/19/2021, 05/26/2021
12. Bi-weekly Data Conversion Meeting – 05/07/2021
13. UAT Test Case Review – DHS and IV&V – 05/10/2021
14. DHS/BESSD/IV&V Bi-weekly Touch Base – 05/10/2021, 05/24/2021
15. Bi-weekly Implementation Planning Meeting – 05/11/2021, 05/25/2021
16. CMM/CF/FMM Bi-Weekly Backlog Grooming – 05/11/2021
17. HI DHS BES Draft IV&V Report Review – 05/11/2021
18. R0.5 Screen Prototype – CO05s Manage Veterans Information – 05/13/2021
19. R0.5 Screen Prototype – CMM CO05l - 05/14/2021
20. R0.4 BI-10 CF: Iteration 1 Comment Review (Part 2) – 05/14/2021
21. R0.4 BI-10 CF: Iteration 1 Comment Review (Part 2) – 05/14/2021
22. ASI and IV&V team mid-month Check-in – 05/19/2021
23. ASI and IV&V Monthly Touch Base – Technical – 05/20/2021
24. DHS Executive Steering Committee – 05/20/2021
25. R0.5 Sprint Demo – CO05e and CO05k – 05/21/2021
26. ASI/IV&V SIT Test Case Review – 05/25/2021
27. BES ASI and IV&V Monthly Touch Base - Functional Team – 05/25/2021
28. BES Data Conversion Working Group – 05/26/2021
29. Sprint Demo| SSP – 05/26/2021
30. Enterprise Operations Committee – 05/27/2021
31. R0.5 Screen Prototype – CMM CO05o Manage Pregnancy Information – 05/28/2021
32. Weekly SIT Status – 05/27/2021

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