DAVID Y. IGE
GOVERNOR

DOUGLAS MURDOCK
CHIEF INFORMATION
OFFICER

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

P.O. BOX 119, HONOLULU, HAWAI'I 96810-0119
Ph: (808) 586-6000 | Fax: (808) 586-1922
ETS.HAWAII.GOV

April 19, 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 (Apr 19, 2021 14:03 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: March 1 - 31, 2021

Submitted: April 14, 2021

PUBLIC CONSULTING GROUP

Solutions that Matter

Overview

-

PUBLIC CONSULTING GROUP

Solutions that Matter

Executive Summary

Executive Summary

In this reporting period, the project team made good progress towards improving the quality of deliverables, which was positively impacted by using Confluence for draft walkthroughs and final product creation. Release 0.3 UAT started, resulting in a high number of defects being reported. IV&V has introduced a preliminary concern regarding the high defect rate as the project team works through revisions to the defect triage process. Although most of the defects were resolved, the ASI conducted a root cause analysis to improve quality for future releases. Communication across the project continues to improve, resulting in the retirement of a communication-related finding and the reduction of rating for another finding.

The project team continues to address challenges reported with the CMM Interview, Single Sign-on, and KOLEA integration activities. The project schedule has remained static throughout the month as the project team works through options to address these challenges and developing a revised schedule to support the go forward plan.

Jan	Feb	Mar	Category	IV&V Observations
H	H	H	Project Management	IV&V retains a high criticality rating for this category due to schedule concerns and inability to measure the velocity of the development effort.
M	L	L	System Design	There were no material changes to this category in this reporting period as no JAD sessions were held.
L	L	L	Deployment	There were no material changes to this category in this reporting period. Release management will continue to be critical as the project team works through the complexities of Release 0.4 and remaining releases.

Executive Summary

Jan	Feb	Mar	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	Planning, coordination, and communication with interface partners showed improvement this reporting period. The biggest challenge remains to be the timing of actual integration between BES and interface partners.

IV&V Findings and Recommendations

IV&V Findings and Recommendations

As of the March 2021 reporting period, PCG is tracking 16 open findings (8 risks and 8 issues) and has retired a total of 44 findings. Of the 16 open findings, 11 are related to Project Management, 2 in Integration and Interface Management, and there is 1 finding each in Configuration and Development, System Design and Deployment.

Open Risks & Issues

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

Open Risks & Issues by Category

- Configuration and Development
- Deployment
- Project Management
- System Design
- Integration and Interface Management
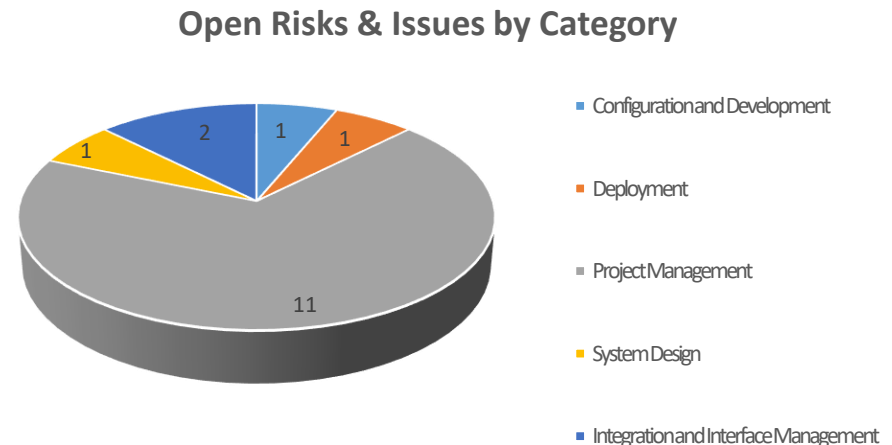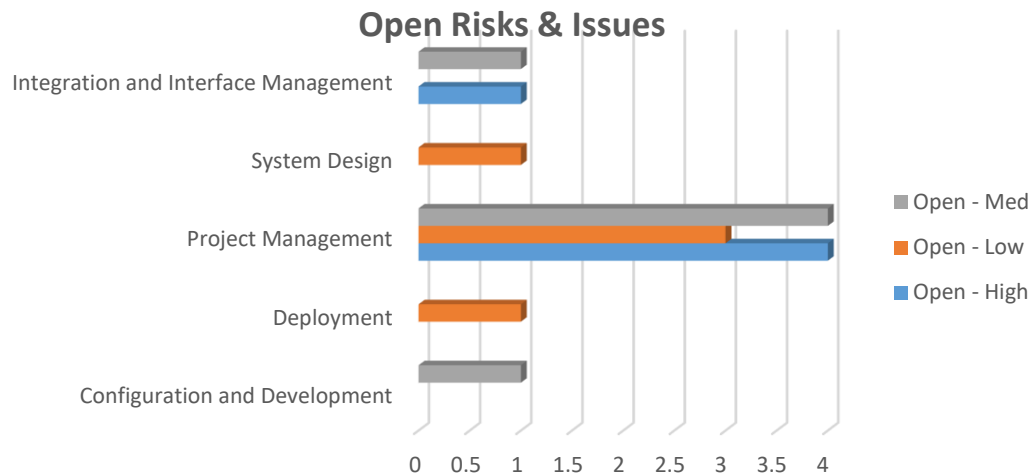
IV&V Findings and Recommendations

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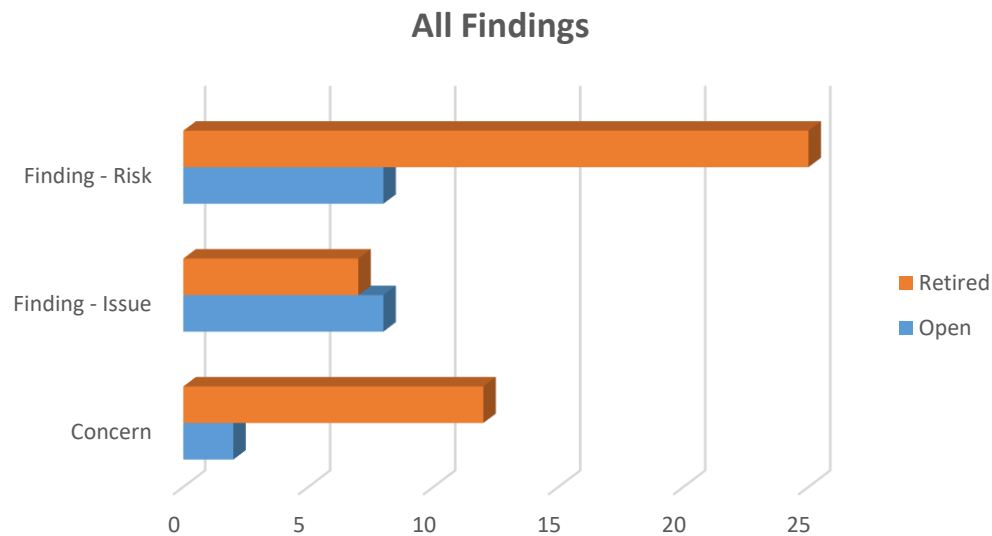
All Findings

IV&V Findings and Recommendations

Findings Opened During the Reporting Period

#	Finding	Category
66	**An excessive number of issues/defects in UAT may cause rework.** The number of defects identified during R0.3 UAT was much larger than expected, considering that the functionality had previously passed Unit, System and Integration testing. This is a potential indication of SIT test coverage and depth concerns. Many of the unresolved R0.3 defects will roll into the backlog and the next release. IV&V notes that the disposition of defects remaining from R0.2 UAT is still unclear. If this trend continues, the volume of unresolved defects will grow by release, potentially creating an unmanageable backlog of defects.	Testing

Recommendations	Progress
• Perform a Root Cause Analysis (RCA) to identify and take corrective actions.	In process
• Validate all UAT defects are re-tested in SIT to ensure they are included in Regression Testing.	In process

IV&V Findings and Recommendations

Findings Retired During the Reporting Period

#	Finding	Category
42	**Project delays and disruption in DHS operations may occur if ASI communications with DHS regarding key (urgent/time sensitive) project information does not improve.** The changes/improvements implemented by both ASI and DHS focused on communication are now having a positive and ongoing impact on the project.	System Design

Recommendations	Progress
• Request ASI enhance processes and planning for project communications and include key project communications to DHS in the project schedule. For example, notifications in preparation for release activities.	Complete
• DHS work with the ASI to remove barriers of communication between the DHS stakeholders and the development team.	Complete
• ASI increase dialog with the DHS project team individuals instead of relying on formal meetings to inform and discuss project topics. Update the project communications plan with enhanced communication processes.	Complete
• DHS increase communication with the DHS project team members and ASI prior to key project meetings to ensure all participants are prepared.	Complete

IV&V Findings and Recommendations

Preliminary Concerns Investigated During the Reporting Period

#	Finding	Category
61	**Poorly planned/executed JAD sessions may lead to rework and schedule delays**. No JAD sessions were held during the reporting period. IV&V will continue to monitor, looking for any negative downstream impacts to the project resulting from poorly executed JADs.	System Design

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
2	**Issue – Late Delivery of project deliverables may cause schedule delays**. The schedule remained static through this reporting period as the project team continued to work through challenges regarding the Release 0.4 CMM Interview, KOLEA MDM and Single Sign-on development activities. During this reporting period, some deliverables were late. The project team is researching options and assessing the schedule impact. IV&V retains this as a high criticality issue.	H

Recommendations	Progress
• Prior to acceptance of the new baseline, finalize the needed updates to the project schedule to address the outstanding items/issues identified by DHS, the ASI, and IV&V.	In process
• IV&V recommends the project team evaluate the estimating process to determine if changes should be made to reduce the number of late tasks and/or conduct a root cause analysis to determine and address the root cause(s).	Complete

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
29	**Issue - Uncertainty and/or a lack of communication around long term architecture decisions could impact the project budget, schedule, system design, and planning decisions.** The project has made progress in clarifying their portal strategy. The BES portal will include a combined BESSD/MQD application for users from either division. The MQD KOLEA portal will include only the MQD application, and transfer users to the BES portal if they also need to apply for BESSD services.	L

Recommendations	Progress
• The ASI should continue to document the architectural details in the BI-12 System Architecture Deliverable and if possible, review draft content with DHS and IV&V.	Complete
• DHS should finalize the Portal strategy and communicate the strategy with the stakeholders and project teams.	In process
• The project should vet possible architectural change impacts to the platform, M&O, MQD, and BES systems before finalizing architectural decisions.	In process
• Communication should be improved to create an awareness of possible architecture changes so that they can prepare for the possibility of a change. For example, if there is a possibility that the platform could change then analysis/design could focus on platform agnostic design and avoid extensive efforts in refining a platform specific design.	Complete
• Establish processes to ensure regular communication between the architecture team and the rest of the project team to assess impacts of architecture decisions to the project.	Complete

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
43	**Issue - DHS PMO project team members have transitioned off the project, which may cause gaps in knowledge transfer and leadership on the project**. No material update to this finding in this reporting period. IV&V will continue to monitor.	H

Recommendations	Progress
• The state should develop a transition plan for the project PMO resources as identified in the RFP, (reference RFP section 3.4.3 'DHS Staffing'). It should also include possible project resource impacts considering the COVID-19 economic impacts to the State.	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.** As BESSD operational activities due to COVID subside, some BESSD SMEs are increasing their level of involvement on project tasks (e.g., UAT testing, Product Owners). Hawaii State leadership has announced that with the influx of Federal funds, furloughs will not be necessary. The ASI is making plans for mitigating risks regarding virtual/remote training and remote user support for teleworkers.	M

Recommendations	Progress
• Ramp up efforts to setup, train, and assist stakeholders on remote work devices and tools and make every effort to help them to become highly functional with remote access technology (e.g. MS Teams/Skype).	Complete
• Suggest the project and DHS create a detailed, documented risk mitigation strategy and plan that is reviewed regularly and revised to address the current state of the COVID-19 threat and related impacts 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
• Update the OCM Plan to include any new activities or updates to planned activities to aid the organization through this COVID-19 pandemic in the short and long term.	Complete
• Send broad communications to stakeholders to assure clear understanding of changes to the project with this regard to impacts of COVID as well as clarifying communications as to what will remain the same.	In process
• Explore options for freeing up key BESSD SME's work on the project.	Complete

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.** No material update 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.** The quality of deliverables continues to show improvement, mainly due to the use of the Confluence tool and its collaborative capabilities. IV&V will continue to monitor the implementation and the effectiveness of quality improvements.	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 could lead to implementation delays and delivery of a solution that does not meet business needs or requirements.** UAT for release 0.3 is now in progress and continues to be facilitated and executed well. New metrics have been introduced which help clarify progress and focus areas. IV&V will continue to monitor.	L

Recommendations	Progress
• Further develop the 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 anomalies after testing if the current defined process is not being followed. This should include defining the severity for defects and determining the next steps for anomalies not identified to be defects.	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.** OIT and IV&V have been invited to more of the ongoing meetings and have been included in communications between ASI and DHS on conversion tasks, greatly increasing visibility to progress in this workstream. Prior to these changes, high level status was shared every two weeks on the status call – making if very difficult to gauge progress. IV&V will continue to monitor.	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.	In process
• The ASI should develop reports with metrics that accurately measure the Data Conversion progress.	Not started

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
59	**Issue – The approach used to identify release and functional dependencies may limit the projects' ability to identify and mitigate schedule slippage early.** The ASI has employed other methods (instead of fully utilizing MS Project critical path features) which could require manual tracking of critical path activities in order to avoid unplanned slippage. The ASI has agreed to meet with IV&V to collaboratively validate whether the critical path methods employed by the ASI are optimal. IV&V will continue to monitor.	H

Recommendations	Progress
• The ASI, DHS PMO, and BESSD collaboratively review the next layer of detail showing the 'Big Picture', including key milestone dates for each release, the concurrent overlap of releases, and resource allocations across all releases to identify potential additional risks to the project.	Complete
• The functional dependencies are considered and visible in the critical path.	In process
• The ASI provides clarity as to how and why the critical path does not have tasks and activities on it until Release 0.6.	Complete
• The Project Team consider establishing a critical path for each Release in addition to the critical path for the overall project schedule.	Not started

IV&V Findings and Recommendations

Project Management

#	Key Findings	Criticality Rating
62	**Issue – Inability to measure development team velocity.** Velocity is an important metric in Agile development to provide project leadership the ability to forecast the number of iterations needed to complete any remaining work. During this reporting period, IV&V observed the shifting of use cases to future releases. This is a result of the inability to use the development team's velocity to plan and forecast work by Sprint and Release. The CMM/FMM team migrated to JIRA but it is too early to tell how effectively the tool is being used to track and utilize agile metrics for planning. IV&V will continue to monitor the team's progress towards using JIRA to track and utilize agile metrics to accurately plan future work	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	**Issue - 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/revised project role, which is having a positive impact to the BES design. DHS is taking the planned actions to replace the DHS PM.	(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

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.** MDM integrations are currently being worked and CIA integrations are planned to be complete by the end of the next reporting period. IV&V will continue to track the progress of the integration of modules and the prioritization of building integration points.	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 Project's approach to planning, coordination and developing system interfaces may impact effective data sharing.** The ASI has incorporated communication plans into the Interface Control Documents (ICD). In addition, the ASI has maintained the Interface MOA and Testing spreadsheet (updated 03/17/2021), which contains the status and dates for each interface. However, there are outstanding MOAs, which need to be established. Overall, the ASI has made improvements regarding the planning and managing of interface activity. IV&V lowered the rating from High to Medium. IV&V will continue to monitor.	M

Recommendations	Progress
• Establish a communication plan for each interface partner for the duration of the BES DDI activities.	Completed
• 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

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.** No material update for this reporting period.	M

Recommendations	Progress
• ASI provide an additional DDI approach overview session for new project team members and allow time for Q/A.	In process
• ASI provide DDI approach documentation/materials for stakeholders to review and/or refresh their knowledge on demand; the materials could be made available via the project SharePoint.	In process
• Encourage ASI and DHS testers to consistently collaborate during SIT and UAT activities.	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.** No JAD sessions were held in this reporting period. IV&V remains concerned that designs could still be less that optimal given that early JAD sessions had deferred workflow discussions until now.	(L)

Recommendations	Progress
• ASI to quickly define how the workflow/task functionality will flow and provide training to the facilitators.	In process
• Introduce Workflow SME's to review workflow/task functionality and integrate into systems designs with input from DHS.	In process

IV&V Findings and Recommendations

Deployment

#	Key Findings	Criticality Rating
40	**Risk - The planning and approach of the ASI Release Management practices were identified as an area to improve during early releases.** No significant change in this reporting period. IV&V will continue to monitor the management of the first complex release (0.4 integration and conversion) and planning for release 0.5.	L

Recommendations	Progress
• Assign a Release Manager to manage all details of planned releases.	Complete
• Develop a Release Plan document for each release, that provides details of the planned release and all associated configuration items, clear assignments for all staff involved in all tasks, a schedule for completion of all tasks and activities, planned release status communications, and back out procedures should they be necessary.	Complete
• Ensure that release planning includes all deliverables within a release, in addition to the software development efforts.	Complete
• Update the Release 0.1 and 0.2 Lessons Learned action plans to include milestone and due dates.	Complete

IV&V Status

IV&V Engagement Status

IV&V Engagement Area	Dec	Jan	Feb	Comments
IV&V Budget	🟢	🟢	🟢	
IV&V Schedule	🟢	🟢	🟢	
IV&V Deliverables	🟢	🟢	🟢	February IV&V Monthly Status Report, CCWIS Staffing Assessment kick-off, CCWIS example resource plan, BES Release 0.2 Code Review Report 3/11/2021, Release 0.2 Code Review Report 3/23/2021
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 March reporting period:
    - Completed – February 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 April reporting period:
    - Ongoing – Observe BES Development, JAD and Workgroup 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-22 Release 0.3 System Test Report	3/1/2021	Draft
R 0.3 BI-19 Complete and Final Test Plan Deliverable	3/3/2021	2.2
BI-10 Release 0.4 SSP - Case Management	3/4/2021	Draft
BI-14 Release 0.3 TDD - CF & BRM	3/5/2021	1.0
BI-15 Release 0.3 Fully Configured and Developed System	3/9/2021	1.0
R 0.4 BI-10 Client Management Module - Application Registration	3/9/2021	1.0
BI-22 Release 0.3 System Test Report	3/11/2021	1.0
BI-11 R0.4 BESSD Interfaces and BI-11 R0.4 Shared Interfaces	3/12/2021	1.0
R0.3 BI-21 Walk-Through - Updated and Completed Detailed Functional and Technical RTM Deliverable	3/19/2021	Draft
FTI Secure Enclave TDD	3/22/2021	1.0
BI-10 Release 0.4 CF – Schedule & Appointments, Case Notes, and Standardized Address	3/25/2021	Draft
BI-10 Release 0.4 SSP - Case Management	3/20/2021	1.0

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	03/03/2021 03/10/2021 03/17/2021 03/24/2021 03/31/2021	BES Risks and Issues Log
BES Weekly Schedule (BI-5)	03/02/2021 03/09/2021 03/16/2021 03/23/2021 03/30/2021	N/A
BES Weekly Status Report	03/03/2021 03/10/2021 03/17/2021 03/24/2021 03/31/2021	N/A
BI-12 Architectural Overview	11/25/2020	1.6
FTI Secure Enclave TDD	02/22/2021	N/A

Additional Inputs – Artifacts

Deliverable Name	Artifact Date	Version
Java Coding Standards	12/30/2020	N/A
Release 0.1 BI-21 RTMs	10/20/2020	0.1
Release 0.1 FMM Test Cases	N/A	0.1
Release 0.1 Requirements, Epics, and Use Cases	02/09/2021	0.1
Release 0.1 SSP Test Cases	N/A	0.1
Release 0.2 BI-21 RTMs	01/13/2021	0.2
Release 0.2 CMM Test Cases	N/A	0.2
Release 0.2 Codebase	01/11/2021	0.2
Release 0.2 FMM Test Cases	N/A	0.2
Release 0.2 Requirements, Epics, and Use Cases	02/23/2021	0.2
Release 0.2 SSP Test Cases	N/A	0.2

Additional Inputs – Artifacts

Deliverable Name	Artifact Date	Version
Release 0.3 BI-10 SSP - Application Management	02/16/2021	0.3
Release 0.3 BI-14 CF Alerts and Notifications and OPA Food, Financial Rules Mgmt	02/05/2021	0.3
Release 0.3 BI-14 Technology Design Documents SSP	02/08/2021	0.3
Release 0.3 BI-15 Fully Configured and Developed System	01/28/2021	0.3
Release 0.4 BI-10 SSP - Case Management	02/18/2021	0.4
Release 0.4 BI-11 BESSD Interfaces	02/19/2021	0.4
SonarQube Screenshots	09/22/2020	0.2
October 2020 CCWIS Project Status Report	10/2020	N/A
November 2020 CCWIS Project Status Report	11/2020	N/A
December 2020 CCWIS Project Status Report	12/2020	N/A
January 2021 CCWIS Project Status Report	1/2021	N/A

Additional Inputs

Meetings and/or Sessions Attended/Observed:

1. PCG Internal BES Project Meetings x13 (03/01/2021, 03/03/2021, 03/04/2021, 03/08/2021, 03/08/2021, 03/15/2021, 03/15/2021, 03/15/2021, 03/18/2021, 03/22/2021, 03/25/2021, 03/29/2021, 03/30/2021)
2. PCG Team Knowledge Transfer Session BI-10 (03/15/2021)
3. PCG Team Knowledge Transfer Session BI-11 (03/25/2021)
4. BESSD PM Team IV&V Weekly Meeting x3 (03/17/2021, 03/24/2021)
5. BES Status Meetings x5 (03/03/2021, 03/10/2021, 03/17/2021, 03/24/2021, 03/31/2021)
6. BES Development Standup Meetings x5 (03/03/2021, 03/10/2021, 03/17/2021, 03/24/2021, 03/31/2021)
7. ASI/IV&V Touch Base x2 (03/01/2021, 03/16/2021)
8. Draft IV&V Report Review Meeting (03/08/2021)
9. BES Implementation Planning Meetings x5 (03/02/2021, 03/09/2021, 03/16/2021, 03/23/2021, 03/30/2021)
10. BES SSP Sprint Demos x4 (03/01/2021, 03/15/2021, 03/29/2021, 03/31/2021)
11. BES SSP Backlog Meetings x2 (03/03/2021, 03/10/2021)
12. ASI FMM/CF/CMM Backlog Meetings x2 (03/16/2021, 03/30/2021)
13. AHA Dependencies Walkthrough (03/02/2021)
14. BES CMM RACI Walkthrough (03/02/2021)
15. R0.4 Prototype Review – CMM Interview (03/04/2021)
16. R0.4 SSP Walkthrough (03/04/2021)
17. Confluence Meeting with ASI (03/04/2021)
18. R0.4 UAT Go/No Go Meeting (03/04/2021)
19. UAT Huddle x8 (03/09/2021, 03/15/2021, 03/16/2021, 03/18/2021, 03/22/2021, 03/23/2021, 03/29/2021, 03/30/2021)
20. Weekly UAT Summary (03/11/2021, 03/25/2021,
21. R0.5 BI-11 ICD Walkthroughs (03/09/2021)
22. R0.4 BI-10 CMM Application Registration walkthrough (03/10/2021)
23. R0.5 CF/CMM Requirements Validation x2 (03/11/2021, 03/18/2021)
24. R0.5 Requirements/Wireframes FMM Benefits Issuance & Overpayments (03/12/2021)
25. BES Data Conversion Meetings (03/11/2021, 03/22/2021,

Additional Inputs - Continued

Meetings and/or Sessions Attended/Observed:

26. R0.5 Requirements/Wireframes CMM Case Management (03/19/2021)
27. R0.3 BI-21 RTM Walkthrough (03/19/2021)
28. R0.4 Release Checkpoint (03/25/2021)
29. R0.4 Prototype Review Client Search (03/30/2021)

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

Finding Number	Title	Reporter	Finding Type	Identified Date	Category	Observation	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Date Retired	Status Update	Client Comments	Vendor Comments
66	An excessive number of issues/defects in UAT may cause rework.	Earl Burba	Concern	3/29/2021	Testing				Immediate	4	4	High	Open				
65	DHS BESSD knowledgeable staff are needed on the project to ensure the BES solution is designed to meet the business needs and requirements.	Jolene	Finding - Risk	3/2/2021	Project Management				ASAP	3	3	Med	Open				
63	The Project's approach to planning, coordination and developing system interfaces may impact effective data sharing.	Al Pangelinan	Finding - Risk	1/21/2021	Integration and Interface Management				Q4 2021	5	2	Med	Open				
62	Inability to measure development team velocity.	John	Finding - Issue	12/28/2020	Project Management				?	4	4	High	Open				
61	Poorly planned and executed JAD sessions may lead to rework and cause schedule delays.	Brad	Concern	11/30/2020	System Design				ASAP	2	2	Low	Open	11/30/2020			
60	System Integration of the BES Modules (CMM, FMM, SIP) will be developed in the later releases as a continuous integration model within each release which may cause schedule delays.	John	Finding - Risk	9/30/2020	Integration and Interface Management				N/A	4	4	High	Open				
59	The approach used to identify release and functional dependencies may limit the projects' ability to identify and mitigate schedule slippage early.	mfors	Finding - Issue	9/30/2020	Project Management				Q4 2020	4	4	High	Open				
58	The Data Conversion effort lacks leadership, consistency in Data Governance, and effective communications which may impact the schedule.	Brad	Finding - Risk	9/30/2020	Project Management				Q4 2020	3	2	Med	Open				

54	Inconsistent User Acceptance Testing (UAT) processes could lead to implementation delays and delivery of a solution that does not meet business needs or requirements.	Brad	Finding - Risk	6/24/2020	Project Management	...	Immediately	3	1	Low	Open	...
49	Poor quality project deliverables may impact system design, testing artifacts and the project schedule.	Brad	Finding - Issue	4/16/2020	Project Management	...	Immediate	2	2	Low	Open	...
48	The CMS Outcomes-Based Certification Requirements have not been published by CMS, which may impact the project schedule and funding.	Jolene	Finding - Risk	3/30/2020	Project Management	...	Prior to Functional and Technical Requirement Approval.	3	3	Med	Open	...
47	The COVID-19 pandemic and the related "stay at home" order could hinder project activities and negatively impact the project schedule and budget.	mfors	Finding - Risk	3/29/2020	Project Management	...	ASAP	2	3	Med	Open	...
43	DHS PMO project team members have transitioned off the project, which may cause gaps in knowledge transfer and leadership on the project.	Jolene	Finding - Issue	1/10/2020	Project Management	...	ASAP	5	4	High	Open	...
40	The planning and approach of the ASI Release Management practices were identified as an area to improve during early releases.	Brad	Finding - Risk	9/23/2019	Deployment	...	OCT 2019	2	2	Low	Open	...

#	Description	Owner	Type	Date	Category			Severity	Status
38	Due to the sequencing of JADs addressing Workflow at the end and 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.	mfers	Finding - Issue	8/29/2019	System Design		2	2	Low	Open
29	Uncertainty and/or a lack of communication around long term architecture decisions could impact the project budget, schedule, system design, and planning decisions.	mfers	Finding - Issue	5/28/2019	Project Management		2	2	Low	Open
16	Lack of clear understanding of the DDI approach may reduce effectiveness of all SDLC Processes	mfers	Finding - Issue	12/17/2018	Configuration and Development		3	3	Med	Open
2	Late delivery of project deliverables may cause schedule delays.	Jolene	Finding - Issue	11/26/2018	Project Management		4	5	High	Open