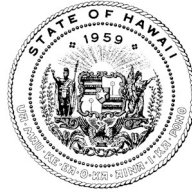


DAVID Y. IGE
GOVERNOR



DOUGLAS MURDOCK
CHIEF INFORMATION
OFFICER

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

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December 11, 2020

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

The Honorable Scott K. Saiki,
Speaker, and
Members of The House of Representatives
Thirtieth 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 (Dec 17, 2020 17:21 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: November 1 - 30, 2020

Submitted: December 10, 2020

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

The background is a solid blue color. It features several abstract geometric elements: a cluster of overlapping squares and rectangles in various shades of blue (light, medium, and dark) in the upper-left quadrant; a single light blue square with a thin white border in the center-left, partially overlapping the text; and a few more squares and rectangles in the lower-right quadrant, some with thin white lines extending from them.

Executive Summary




Executive Summary



The BES Project achieved a significant milestone in November with the completion of Release 0.1 deliverables, marking the conclusion of the first BES release. Several other BES releases were in progress and change requests were researched and/or estimated during this reporting period. Little change occurred to the project risks and issues; IV&V's research of preliminary concerns reported last month continued.











The ASI continued to update the project schedule and add new activities and tasks. Development and review of the architecture deliverables continued. Data conversion activities and the development of the Security Plan are behind schedule, posing a risk to the project if re-work is required to align the BES application code to the approved deliverables. The development team reported to be on schedule with one exception (SSP), which the ASI is planning to resolve with additional staff. The ASI is planning to provide a proposal to DHS that will align the (Waterfall) project deliverable process to an Agile Development approach.

DHS staffing continues to pose a significant risk to the project due to the high-demand on the BESSD operational staff to support the influx of applications due to COVID-19 and the diversion of staff to non-project work. The effectiveness of actions taken to improve communications and engage BESSD SMEs with the development team has yet to be determined. As of the end of this reporting period, DHS staffing, the Project Schedule and ongoing communications are the significant risks to the project.

Sept	Oct	Nov	Category	IV&V Observations
			Project Management	High-criticality risks in the Project Management category include the Project Schedule, communications and DHS staffing. DHS has provided new resources to serve as the Product Owners for the key components of the system however, more staff are needed to support the multiple BES releases in progress.

Executive Summary



Sept	Oct	Nov	Category	IV&V Observations
			System Design	No major change to the System Design category in this reporting period; the draft architecture deliverables were made available to the project team and the weekly architecture project meetings continued.
			Deployment	There were no material changes to this category in this reporting period. The Lessons Learned activity for Release 0.2 is scheduled to occur in December 2020.
	N/A	N/A	Requirements Analysis & Management	There are no open findings in this category.
			Configuration and Development	The project team continued to gain a better understanding of the ASI's development approach, specifically during Release 0.2 UAT and data conversion meetings. The ASI is planning to provide additional training to the project team on the tool set to enhance the team's understanding of the data and reports available in the tools.

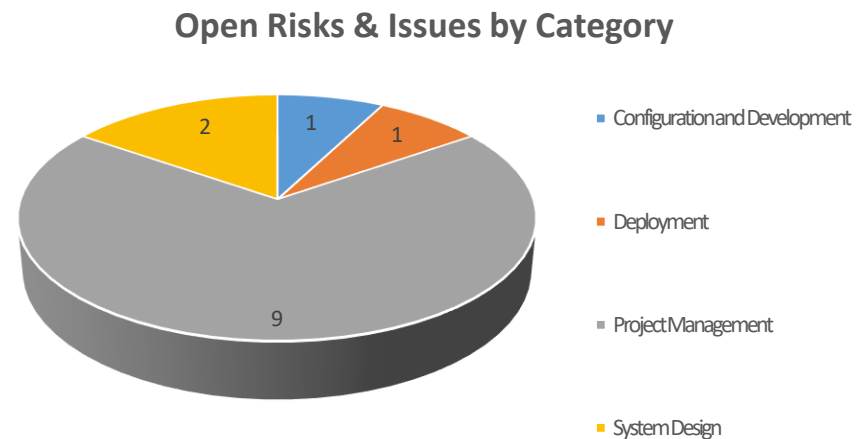
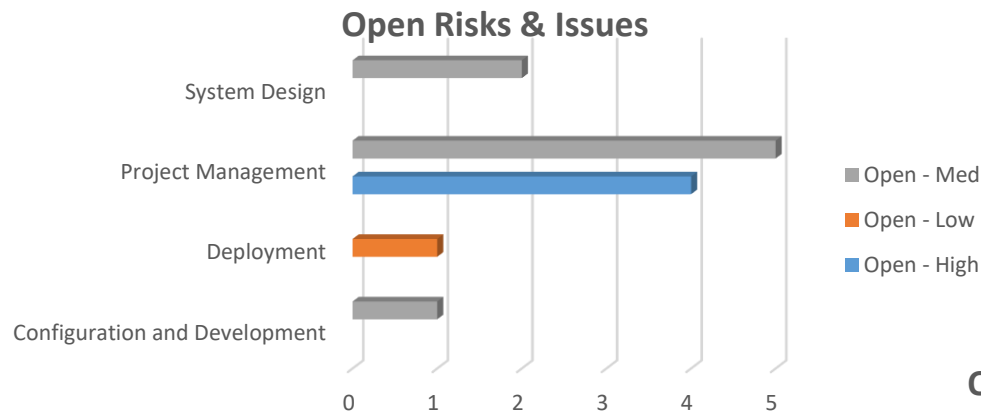
The background is a solid blue color. It features several abstract geometric shapes, including squares and rectangles of various sizes and shades of blue. Some shapes have thin white outlines, while others are solid. They are scattered across the page, with a higher concentration on the left side and a few on the right.

IV&V Findings and Recommendations

IV&V Findings and Recommendations



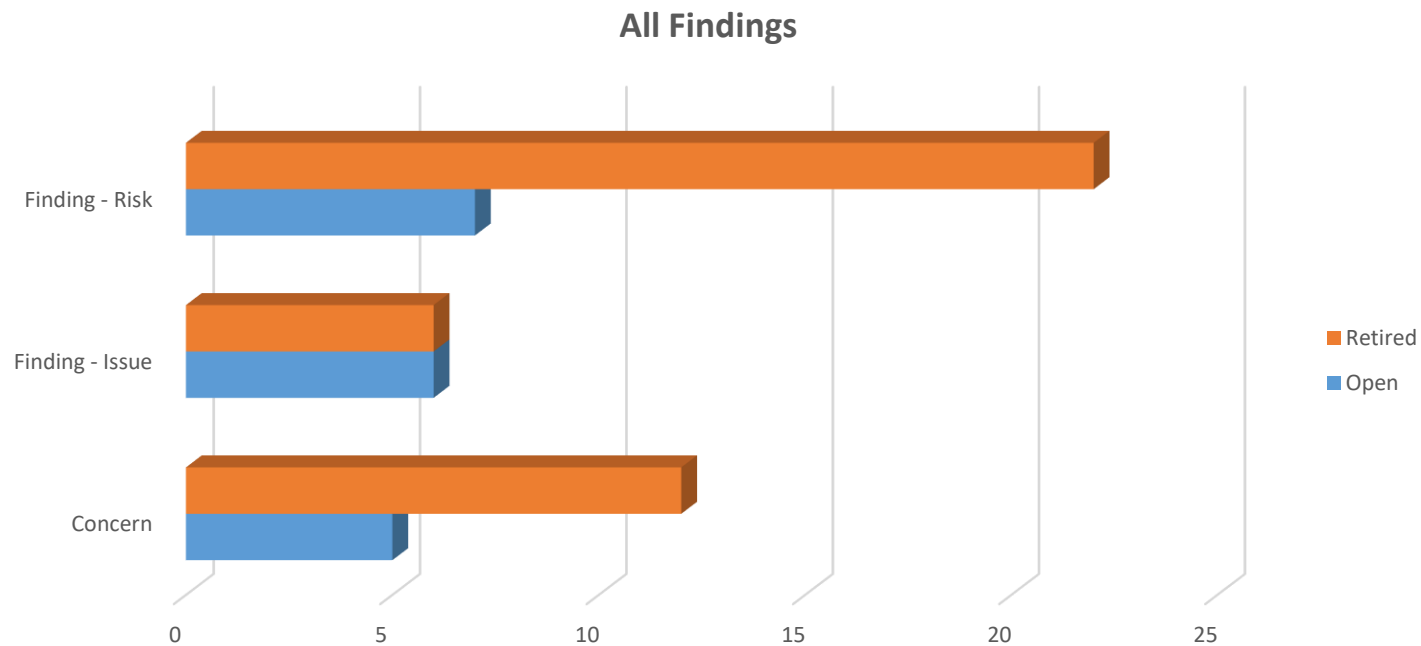
As of the October 2020 reporting period, PCG is tracking 13 open findings (6 risks and 7 issues) and has retired a total of 40 findings. Of the 13 open findings, 9 are related to Project Management, 2 in System Design and 1 each in Configuration and Development, and Deployment.



IV&V Findings and Recommendations



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



IV&V Findings and Recommendations



Findings Opened During the Reporting Period

#	Finding	Category
	No new risks or issues were opened during this reporting period.	

IV&V Findings and Recommendations



Findings Retired During the Reporting Period

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

IV&V Findings and Recommendations



Preliminary Concerns Investigated During the Reporting Period

#	Finding	Category
55	Test case creation without functionality acceptance from JAD/JAR sessions. IV&V is researching how the JAD results, including acceptance criteria, relate to use cases and testing processes. As reported last month, the ASI indicated they may resend the JAD documentation to all JAD participants and work with DHS to revisit/update the BES design decision process. IV&V will follow-up with DHS and the ASI on this topic during the next reporting period.	Project Management
58	The data conversion effort lacks leadership, consistency in data governance, and effective communications. IV&V noted some improvement in the management of the data conversion effort during November. The project schedule has been updated with more detailed tasks and activities for the R0.4 data conversion effort, which should support timely completion of this activity. IV&V notes that the ASI held a joint session with DHS and IV&V in November to review and discuss outstanding questions on the management of the data conversion effort. IV&V will continue to monitor this finding in December.	Project Management
59	The Project's Critical Path does not include release / functionality dependencies. The Project's Critical Path does not include release / functionality dependencies, resulting in most tasks and activities not being on the critical path until R0.6. This concern was discussed with DHS and the ASI, who took an action item to assess and provide a plan of action by 10/27/20, which was subsequently extended to (11/10/20), then planned for discussion as part of Release 0.4 Kick-off. Questions remain on specific changes the ASI may apply.	Project Management

IV&V Findings and Recommendations




Preliminary Concerns Investigated During the Reporting Period

#	Finding	Category
60	Integration of the BES Modules (CMM, FMM, SSP) is planned for later releases vs. continuously integrating the modules within each release. The Release 0.4 kick-off confirmed plans to begin integrating SSP (BES and KOLEA) and CMM (IRS, MDM and various others via API) interfaces with their respective modules but does not include the integration of the modules themselves. It is unclear when an end-to-end solution will be demonstrated. IV&V continues to recommend an integrated end-to-end solution as early as possible. If integration slips past Release 0.4 the project is at risk of on-time completion.	Integration and Interface Management
61	New: Poorly planned/executed JAD sessions may lead to gaps in system design, resulting in rework and schedule delays. The CMM Workflow JAD sessions restarted in November. DHS indicated some concern regarding the CMM Workflow JAD sessions, specifically: (1) Do the JAD participants understand how the Case will be managed through workflow? (2) What improvements will be made in the new BES to support the users and clients? Incomplete or unclear JAD sessions with insufficient documentation could lead to a poor design, lacking the details needed to support business requirements; as well as missing opportunities to improve workflow and related system design.	System Design

IV&V Findings and Recommendations



Project Management

#	Key Findings	Criticality Rating
2	<p>Issue – Late Delivery of project deliverables may result in schedule delays.</p> <p>No material change to this finding in November. The BI-5 Project Schedule continued to be updated to include new tasks and outstanding action items remain that are expected to impact the schedule. Some work products and deliverables were delivered on-time and some late. The Project Action Item (#1041) to discuss the trend of schedule delays remains in an open status. IV&V retains this as a high-criticality rating as the project moves into releases that increase in scope and complexity.</p>	

Recommendations	Progress
<ul style="list-style-type: none">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
<ul style="list-style-type: none">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).	Not started

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 lead to unexpected impacts to the project budget, schedule, system design, and planning decisions.</p> <p>The weekly architecture meetings continue to improve attendee understanding of infrastructure changes introduced, or planned to be introduced, in BES. Given the number of new technology/tools/platforms that are being introduced, the impact on the development team and their ability to quickly adopt the tools to improve overall productivity is unclear.</p>	

Recommendations	Progress
<ul style="list-style-type: none">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.	In process
<ul style="list-style-type: none">DHS should finalize the Portal strategy and communicate the strategy with the stakeholders and project teams.	Complete
<ul style="list-style-type: none">The project should vet possible architectural change impacts to the platform, M&O, MQD, and BES systems before finalizing architectural decisions.	In process
<ul style="list-style-type: none">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.	In process
<ul style="list-style-type: none">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.	In process

IV&V Findings and Recommendations



Project Management

#	Key Findings	Criticality Rating
42	<p>Risk – Project delays and disruption in DHS operations may occur if ASI communications with DHS regarding key (urgent/time sensitive) project information does not improve.</p> <p>The project continues to experience communication issues. Examples that occurred during this reporting period include:</p> <ul style="list-style-type: none">• DHS was not aware that data will be converted on a release-by-release basis. Although this approach was documented in the Data Conversion Plan, it was not fully understood by DHS.• During prototype reviews there were several instances where the participants indicated the prototype did not reflect feedback provided during JAD sessions.	

Recommendations	Progress
<ul style="list-style-type: none">• 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.	In process
<ul style="list-style-type: none">• DHS work with the ASI to remove barriers of communication between the DHS stakeholders and the development team.	Not started
<ul style="list-style-type: none">• 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.	In process

IV&V Findings and Recommendations



Project Management


#	Key Findings	Criticality Rating
43	<p>Issue - Due to key DHS and BES Project Team members departing and/or transitioning from the project, succession planning and knowledge transfer is needed to ensure there are no gaps in knowledge and leadership on the project.</p> <p>DHS has identified additional part time BESSD staff to fulfill the Product Owner role. DHS is planning to establish roles and responsibilities for the new team members and will continue to pursue additional staff to support the project and minimize risk</p>	A red circle with a white 'H' inside, indicating a high criticality rating.

Recommendations	Progress
<ul style="list-style-type: none">The state should develop a transition plan for the project and PMO resources as identified in the RFP, which includes DHS PMO and DHS DDI resources (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
<ul style="list-style-type: none">DHS Continue to identify BESSD SME's to support the project.	In process

IV&V Findings and Recommendations



Project Management


#	Key Findings	Criticality Rating
47	<p>Risk – The COVID-19 pandemic and the related "stay at home" order could hinder project activities and negatively impact the project schedule and budget.</p> <p>Despite BESSD's limited capacity due to the increased COVID-19 workload, BESSD provided resources to support and participate in the recent Workflow JADs. IV&V remains concerned that potential State-wide furloughs could further reduce BESSD's ability to support product efforts.</p>	

Recommendations	Progress
<ul style="list-style-type: none">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).	In process
<ul style="list-style-type: none">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
<ul style="list-style-type: none">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.	In process
<ul style="list-style-type: none">Explore options for freeing up key BESSD SME's work on the project.	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. No material update this month, IV&V will continue to monitor.	

Recommendations	Progress
<ul style="list-style-type: none">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	<p>Issue – Poor quality project deliverables may lead to rework and negatively impact the system design, testing artifacts and project schedule.</p> <p>The ASI submitted multiple deliverables during November, spanning all active releases. Improvements in document quality were inconsistent. The project has extended the timeframe for anticipated resolution of this issue until the end of the calendar year.</p>	

Recommendations	Progress
<ul style="list-style-type: none">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
<ul style="list-style-type: none">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.	Not started

IV&V Findings and Recommendations



Project Management


#	Key Findings	Criticality Rating
54	<p>Risk – Poorly planned and executed UAT could lead to implementation delays and delivery of a solution that may not meet all business needs.</p> <p>As reported last month, IV&V continued to see positive collaboration between the ASI and DHS during the final stages of Release 0.2 UAT. There are several defects that were noted as design changes at the conclusion of UAT cycle. The ASI and DHS are developing a process to validate the final disposition and determine how these defects/design changes will be addressed in future releases.</p>	

Recommendations	Progress
<ul style="list-style-type: none">The ASI further develop the action plan to include owners and target complete dates. Report progress in the weekly status meeting.	In process
<ul style="list-style-type: none">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.	In process
<ul style="list-style-type: none">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.	Not started

IV&V Findings and Recommendations



Project Management


#	Key Findings	Criticality Rating
57	<p>Risk – Roles and responsibilities of the BES "Product Owner" and communication of this role's activities with DHS and the project team is not clear.</p> <p>Although the project team updated the Product Owner/Manager matrix (including a version that included eWorld, Unisys, and DHS), further improvement in communication/engagement levels during DDI is needed, per DHS. The matrix has not yet been updated with roles and responsibilities, nor is there an updated Communication Plan to support the revised model.</p>	

Recommendations	Progress
<ul style="list-style-type: none">Update the Communication Plan to support the revised Product/Owner/Manager matrix.	In process
<ul style="list-style-type: none">DHS and the ASI clearly define the staff assigned and the roles and responsibilities of the ASI Product Managers and Product Owners.	In process
<ul style="list-style-type: none">DHS consider adding staff to the project team with 'deep' BESSD business knowledge to work hand-in-hand with the product owners and development team.	In process

IV&V Findings and Recommendations



Configuration and Development


#	Key Findings	Criticality Rating
16	<p>Issue – Lack of clear understanding of the DDI approach may reduce effectiveness of all SDLC Processes.</p> <p>The ASI's subcontractor has stated they have transferred their ALM tool data to the ASI's ALM instance, however, the ASI has yet to validate that all information has been transferred. Until this transfer occurs, DHS will have limited visibility into ASI development progress, cadence, and overall SI subcontractor productivity. The ASI has yet to clarify DHS utilization of ALM tools, data conversion activities, and how designating ASI resources as product owners can ensure their design decisions fully meet DHS needs and expectations.</p>	

Recommendations	Progress
<ul style="list-style-type: none">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.	Not started
<ul style="list-style-type: none">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	<p>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.</p> <p>The project began the CMM Workflow JAD sessions with multiple BESSD SME's in attendance this month. However, it remains unclear if all instances of functionality that could benefit from workflow have been identified. Further, DHS and IV&V have observed that some JAD sessions productivity was less than optimal as the SI struggled at times to elicit information from DHS given the amount of time that has passed, the content from the previous JAD sessions may not have been thoroughly documented, and some SI BA's that led previous sessions are no longer with the project. Therefore, IV&V is updating this finding from a risk to an issue.</p>	
Recommendations		Progress
• ASI to quickly define how the workflow/task functionality will flow and provide training to the facilitators.		Not started
• Introduce Workflow SME's to review workflow/task functionality and integrate into systems designs with input from DHS.		Not started

IV&V Findings and Recommendations



System Design

#	Key Findings	Criticality Rating
53	<p>Issue – The System Architecture documentation is scheduled for completion after multiple releases are in development, and some releases are already completed.</p> <p>The architecture team continues to make progress on documentation and feedback incorporation. The Physical architecture document is complete and the comments from the architecture overview chapter have been addressed. The FMM/CMM SSO and API management architecture and documentation is currently in progress and review of the Shared Services and CMM architecture is underway. IV&V will continue to attend weekly architecture meetings to monitor outstanding architectural decisions and any impact they may have on the project schedule.</p>	

Recommendations	Progress
<ul style="list-style-type: none">Recommend completing and approving the BI-12 System Architecture deliverable prior to development of source code.	In process
<ul style="list-style-type: none">If completing the BI-12 deliverable prior to development of code is not possible for any reason, ensure that all portions of the architecture that are directly or indirectly related to the source code development efforts, standards, and processes be submitted for approval by DHS in draft form prior to code development, and subsequently followed up with final completion of BI-12 in accordance with the project schedule.	In process

IV&V Findings and Recommendations



Deployment

#	Key Findings	Criticality Rating
40	<p>Risk - The planning and approach of the ASI Release Management practices were identified as an area to improve during early releases.</p> <p>As of the end of November:</p> <ul style="list-style-type: none">• Release 0.1 has been completed• Release 0.2 UAT is complete and deliverables are in progress• Release 0.3 development is continuing and draft deliverables are being developed• Release 0.4 held its kickoff event. <p>Release planning continues to need to account for the deliverables associated with a release in addition to the software development activities within the planned duration and timeframes of any given release. IV&V has seen some improvement in the management of releases and will continue to monitor as the releases get significantly larger and more complex from Release 0.4 through Release 0.6.</p>	

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.	In process
• Ensure that release planning includes all deliverables within a release, in addition to the software development efforts.	In process
• Update the Release 0.1 Lessons Learned action plan to include owners and due dates.	In process

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IV&V Status

IV&V Engagement Status



IV&V Engagement Area	Sept	Oct	Nov	Comments
IV&V Budget				
IV&V Schedule				
IV&V Deliverables				PCG submitted the final October IV&V Monthly Status Report. PCG provided DHS an Updated IV&V Plan and Org Chart
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				
IV&V Scope				PCG developed and presented an overview of the FNS and CMS Requirements to secure BES Federal Funding to the DHS PM staff.
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 in the November reporting period:
 - Completed – October Monthly Status Report
 - Ongoing – Review the BES Project Artifacts and Deliverables
 - Ongoing – Attend ASI 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 December 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-12 Physical Architecture Chapter	11/12/2020	Draft (1.7)
BI-22b Release 0.2 UAT Evaluation Report	11/17/2020	Draft (0.2)
BI-10 Release 0.3 SSP - Application Management	10/30/2020	Draft
BI-12 System Audit Architecture	11/16/2020	1.3
BI-12 Architectural Overview - Resubmission	11/17/2020	1.3
BI-21 R0.2 Updated and Completed Detailed F&T RTM Resubmission	11/12/2020	1.6
BI-17 – Validated Results of Data Conversion Testing Release 0.2 - Resubmission	11/10/2020	1.4
BI-14 Release 0.2 Technology Design Documents SSP - Resubmission	11/6/2020	1.7
UI Standards Release 0.1 - Resubmission	11/6/2020	1.3
BI-12 System Architectural Overview	11/2/2020	1.0
BI-12 System Audit Architecture	11/2/2020	1.0
BI-21 R0.2 Updated and Completed Detailed F&T RTM - Resubmission	11/2/2020	1.3

Deliverables Reviewed - Continued



Deliverable Name	Deliverable Date	Version
BI-12 Shared Services Chapter	11/9/2020	1.3
BI-12 CMM System Architecture	11/18/2020	0.3
BI-10 Release 0.3 CF - Alerts and Notifications	11/24/2020	1.0
BI-12 Physical Architecture Chapter	11/24/2020	1.0
BI-12 Architectural Overview - Resubmission	11/24/2020	1.6
BI-10 Release 0.3 OPA – Food and Financial Rules Management	11/25/2020	0.1
BI-22b Release 0.2 UAT Evaluation Report	11/30/2020	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	11/03/2020 11/10/2020 11/17/2020 11/24/2020	BES Risks and Issues Log



Meetings and/or Sessions Attended/Observed:

1. BES Daily UAT Huddle (Multiple throughout the month)
2. R0.3 Common Functions: Prototype Review (11/02/2020)
3. PCG Internal BES Project Meetings x9 (11/02/2020, 11/05/2020, 11/09/2020, 11/11/2020, 11/12/2020, 11/16/2020, 11/17/2020, 11/23/2020, 11/20/2020)
4. BES R0.3 Prototype Review - SEC: Single Sign On (11/04/2020)
5. BESSD PM Team, IV&V Weekly Meeting x3 (11/04/2020, 11/18/2020, 11/25/2020)
6. BES Status Meetings x3 (11/04/2020, 11/18/2020, 11/25/2020)
7. BES Schedule Review Meetings x3 (11/10/2020, 11/17/2020, 11/24/2020)
8. BES DHS DDI Architecture Review Meeting x3 (11/10/2020, 11/17/2020, 11/24/2020)
9. BES Functional Meeting x3 (11/20/2020, 11/17/2020, 11/24/2020)
10. BES Data Conversion Meetings x3 (11/05/2020, 11/06/2020, 11/17/2020)
11. BES CCB Meeting (11/04/2020)
12. BES Implementation Planning Meeting x3 (11/6/2020, 11/16/2020, 11/30/2020)
13. R0.3 SSP Prototype Review x2 (11/09/2020, 11/23/2020)
14. ASI Touch Base (11/12/2020)
15. DHS/ASI IV&V Monthly Report Meeting (11/10/2020)
16. BI-22 Review Meetings x2 (11/04/2020, 11/05/2020)
17. BI-10 R0.3 SSP Application Management Walkthrough x4 (11/02/2020, 11/05/2020, 11/12/2020, 11/19/2020)
18. BES UAT Weekly Meeting (11/05/2020)
19. BI-10 R0.3 CMM-OPA Prototype Review (11/10/2020)
20. BES Dev Stand Up x3 (11/04/2020, 11/11/2020, 11/25/2020)
21. Release 0.4 Kickoff (11/17/2020)
22. BES Workflow JADs x3 (11/18/2020, 11/19/2020, 11/24/2020)
23. BI-22b R0.2 Walkthrough (11/19/2020)

Additional Inputs - Continued



Meetings and/or Sessions Attended/Observed:




- 24. DHS PM/IV&V – CMS OBC Check-in (11/09/2020)
- 25. Executive Steering Committee Meeting (11/19/2020)
- 26. Enterprise Operations Meeting (11/24/2020)
- 27. BES Monthly Sprint Demo (11/20/2020)
- 28. BES Offshore Access Meeting (11/5/2020)
- 29. Introduction to the Unisys CFSO (11/19/2020)
- 30. Weekly Platform Security Status Meeting x2 (11/5/2020, 11/19/2020)

The background is a solid blue gradient. It is decorated with various geometric shapes: squares and rectangles of different sizes and shades of blue (some solid, some outlined). Some shapes are connected by thin white lines, creating a network-like pattern. The shapes are scattered across the page, with a higher concentration on the left side.

Appendices



Appendix A – IV&V Criticality Ratings

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

Appendix B – Findings Log



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



Solutions that Matter

Finding Number	Title	Reporter	Finding Type	Identified Date	Category	Observation	Significance	Recommendation	Event Horizon	Impact	Probability	Analyst Priority	Finding Status	Date Retired	Status Update	Client Comments	Vendor Comments				
						AS-is Workflow JAD sessions have been held for CIMA, with the following concerns being observed: - No clear introduction to all participants on the goal of the JAD, overview on the process and the importance of their participation. - On many occasions the conversation needed to be driven by leading questions, as expected, but was instead led by business users. - Too much passive time when participants did not know the answer to a question, several occasions where complete silence on the call for 30 seconds or more. - Lack of thought leadership from the ASO as how workflow could be designed to enable/improve process for client.	The CMM Workflow JAD sessions initiated in November. DHS indicated some concern regarding the CMM Workflow JAD sessions, specifically: (1) Do the JAD participants understand how the Case will be managed through workflow? (2) What improvements will be made in the new BES to support the users and clients? Incomplete or unclear JAD sessions with insufficient documentation could lead to a poor design, lacking the details needed to support business requirements, as well as missing opportunities to improve workflow and related system design.	JAD sessions should be lead by experienced senior BA's - JAD sessions should start by clarifying the goals of JAD, as well as how the process will work and expectations of the participants. The facilitator should ask their expertise to drive discussions through leading questions. Questions that are not addressed in the session should be captured and documented as follow-up action item with owners and due dates. Summary of results captured during sessions should be sent out to participants for review within a few days of session's completion	ASAP	4	4	Med	Open								
61	Poorly planned and executed JAD sessions could lead to gaps in system design, requiring more work and causing schedule delays.	Brad	Concern	11/30/2020	System Design	The BES Modules (CMM, FMA, SP5) are developed by separate teams and don't as system components interact separately with each release. Integration points between the modules are currently established and the ASO has yet to demonstrate integration of the modules and end-to-end functionality.	System integration has historically followed a 'big bang' model where all system components arrive simultaneously towards the end of the project, resulting in a flawed and immature delivery of the system. Integration is expected to occur instantaneously. In reality, a 'big bang' integration strategy results in a flawed and incomplete system test process and a system that is focused on individual components rather than system capabilities.	IVV recommends adopting a continuous integration model and embedding a member of the DevOps team on each development team to ensure team-wide integration and delivery of the BES system in its entirety. Each release demo should be a collaborative effort across all modules (end-to-end solution) and verified against system-level requirements. If the ASO needs all the remaining releases to demonstrate an end-to-end solution of the identified business processes across all modules, IVV recommends planning and communicating the mitigation strategy for handling risks associated with a 'big bang' release.													
60	System integration of the BES Modules (CMM, FMA, SP5) will be developed in the later releases as a continuous integration model within each release.	John	Concern	9/30/2020	Integration and Interface Management	The Project's Critical Path does not include release / functionality dependencies, resulting in most tasks and activities not being on the critical path until Release 0.6. Considerations: A. Resource activities are not maintained by the ASO within the project schedule. B. The schedule has minimal to no dependencies between releases (work is being performed on multiple releases simultaneously). C. The volume of work planned to be accomplished in parallel releases increases in later releases (R2, R3, R4, etc.). D. The scope of work for Release 0.3 through 0.6 increases significantly. E. The BES Optimization Kickoff presentation describes the project as having task and activity dependency relationships from one release to the next. However, releases largely 'overlap' with each other, resulting in unclear functional or other dependencies between releases.	A critical path is determined by identifying the longest stretch of dependent activities and measuring the time required to complete them from start to finish. As the project progresses with the 7 planned releases, the volume of available task time decreases in the later releases. It is potential that downstream delays in the project will impact the critical path and push the schedule, and/or cause resource reassignment concerns with little to no time to react or adjust, other than scope reduction or other DHS concessions.	IVV recommends that the ASO, DHS PMO, and BES/D collaboratively review the most layer of detail showing the 'big picture', including key milestones dates for each release, the concurrent overlap of releases, the volume of available tasks across all releases to identify potential additional risks to the project. IVV recommends that functional dependencies be considered on the critical path. IVV questions remain on specific changes that may apply. IVV will continue to monitor this finding. 10/12/2020 - The Project's Critical Path does not include release / functionality dependencies, resulting in most tasks and activities not being on the critical path until Release 0.6. IVV recommends that the ASO consider establishing a critical path for each release in addition to the critical path for the overall project schedule.	N/A	4	4	High	Open								
59	The Project's Critical Path does not include release / functionality dependencies.	Darren	Concern	9/30/2020	Project Management	The Data Conversion effort appears to lack leadership for both the ASO and DHS. IVV has become aware that while DHS used a Data Governance Workshop for the MDM release, it has not been active and has not been formalized for DHS. Last, the project does not have a Data Conversion Lead assigned to lead the project. DHS has stated that the ASO should lead this effort and communicate with DHS where they are needed to assist. Multiple data change actions and decisions between the ASO and DHS have flowed for several weeks, with the lack of leadership and communication suggested as the root cause. As examples, it was announced in mid-month that the R2 data conversion effort would result in actual conversion of data, and that the validation for R2 would be limited to being done on paper. DHS was unaware that the ASO had a plan that did not include actually converting data. IVV will continue to monitor.	Data Conversion is often considered as one of the longest and most complex tasks in a CDO project. The lack of a Project Conversion Lead, coupled with communication challenges on tasks, activities, and decisions can, and already has, led to schedule delays.	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. Investigate and resolve communication issues that are suspected to be delaying the data conversion effort. Prioritize the conversion activities to validate the key tasks are addressed early to avoid further delays considering the complexity of the later releases. The ASO should develop reports with metrics that accurately measure the Data Conversion progress.	04/2020	4	4	High	Open								
58	The Data Conversion effort lacks Leadership, consistency in Data Governance, and effective communications.	Darren	Concern	9/30/2020	Project Management	Due to DHS staffing constraints, the ASO is filling the role of Product Owner and Product Manager, and the ASO staff define the staff assigned and the roles and responsibilities of the ASO Product Managers and Product Owners. DHS consider adding staff to the project team with 'deep' BES/D data conversion knowledge to work hand-in-hand with the product owners/managers and development team.	DHS and BES/D need to establish a clear communication path with the BES Product Managers and Owners to ensure the functionality required is being met.	Update the Communication Plan to support the revised Product/Owner/Manager matrix. DHS and the ASO should define the staff assigned and the roles and responsibilities of the ASO Product Managers and Product Owners. DHS consider adding staff to the project team with 'deep' BES/D data conversion knowledge to work hand-in-hand with the product owners/managers and development team.	04/2020	3	3	Med	Open								
57	Roles and responsibilities of the BES "Product Owner" and communication of this role's activities with DHS and the project team is not clear.	Brad	Finding - Risk	7/22/2020	Project Management	It appears that test cases are being created and executed without acceptance criteria from the design phase of the project that was provided in ARJ/ARJ sessions. As previously stated in a finding in IVV finding #18 DHS stakeholders commented an unclear approach to Design, Development, and Implementation (DDI). This may still be a concern and extending into test case creation and execution.	If stories are written without clear acceptance criteria, then the test cases may not provide full coverage to the required functionality.	P20 recommends that details resulting from ARJ/ARJ sessions be provided in the Test Results documentation to help ensure that acceptance criteria that was agreed upon is met.	ASAP	4	4	High	Open								
55	Test Case creation without functionality acceptance from JAD/AR sessions.	Earl Burba	Concern	7/29/2020	Project Management	Poorly planned and executed User Acceptance Testing (UAT) could lead to implementation delays and delivery of a solution that may not meet all business needs. During this reporting period, UAT was initiated. However, several deliverables that support the UAT process were not provided and/or approved prior to UAT, which impacted DHS' ability to proceed with testing. Outstanding predecessor deliverables include: Approval of system test scripts (R2-20). Delivery and approval of system test results (R2-21). Delivery and approval of the R2 deliverables (R2-10, R2-14, R2-15, R2-21). The ASO plans to address this challenge, as well as other opportunities for improvement evidenced during R0.4 as 'Lessons learned' during future releases. IVV notes that DHS staff will be required to enter UAT test scripts into pre-defined spreadsheets, which will be imported into Jira by the ASO. DHS staff will enter defects directly into Jira, which may necessitate a deeper level of training for use of the toolset, in addition to the demonstration previously provided by the ASO.	UAT gives DHS the chance to test the BES release using both real-world examples and those people who will be using the application day to day. It is the first stage of the implementation process, conducted to ensure that system requirements meet business needs and allowing for any issues to be fixed before the system goes live. A UAT that is not comprehensive could result in defects being found post go-live, leading to expensive solution updates and reduction of user confidence in the solution.	ASO agreed upon actions to resolve issues called out in Lessons Learned should be added to project schedule as adequate timing is provided to support UAT preparation and execution. The ASO further develop the action plan to include target completion dates. Report progress in the weekly status meeting. The ASO could conduct a virtual meeting with DHS after UAT and UAT have completed, summarizing work completed and follow-up actions required from ASO and DHS.	Immediately	3	4	Med	Open								
54	Poorly planned and executed User Acceptance Testing (UAT) could lead to implementation delays and delivery of solution that does not meet business need.	Brad	Finding - Risk	6/24/2020	Project Management	The System Architecture documentation is scheduled for completion after 5 of 7 releases are already in progress, and 2 releases completed.	The System Architecture document is a foundational technical document, intended to provide the standards and guidelines for all solution hardware and software components that will reside in the solution. This foundational document should be completed and agreed to prior to any code development, to ensure the code meets with the architectural principles and overall design. The System Architecture document is scheduled for completion after 5 of 7 releases are already in progress, and 2 releases completed.	Recommend completing and approving the R0.1 System Architecture deliverable prior to development of source code. If completing the R0.1.2 deliverable prior to development of code is not possible for any reason, ensure that all portions of the architecture that are directly or indirectly related to the source code development efforts, standards, and processes be submitted for approval by DHS at draft prior to code development, and subsequently followed up with final completion of R0.1.2 in accordance with the project schedule.	Immediately	4	3	Med	Open								
53	The System Architecture documentation is scheduled for completion after multiple releases are in development, and some releases are already completed.	John	Finding - Issue	5/21/2020	System Design																
									June 2020	5	4	Med	Open								

