

#### OFFICE OF ENTERPRISE TECHNOLOGY SERVICES

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August 11, 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 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: July 1 - 31, 2021

Submitted: August 11, 2021



#### Overview

- Executive Summary
- IV&V Findings and Recommendations
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# **Executive Summary**

# **Executive Summary**



In July, several releases were in various stages of the Software Development Life Cycle and Change Orders were being refined. IV&V notes improvements in the following areas:

- The ASI's subcontractor has taken a major step to report the velocity of the CMM and FMM development teams by establishing development estimates meaning the velocity reports may be available mid-September.
- The integration plans for CMM with SSP and Workflow were updated to demonstrate the module integrations in the next releases.
- The ASI and their subcontractor have added leadership, business and systems analysts and development staff to the
  project team.
- The Project Team continues to update/streamline the SDLC processes.

DHS/ASI stopped the Release 0.4 UAT prior to completion due to several issues. IV&V notes that the majority of the UAT defects were resolved however, the number and types of defects identified in UAT remains a concern. The ASI is planning to conduct a root cause analysis and DHS and the ASI are currently reviewing options to revise the testing approach. The project schedule has not yet been approved to adjust for the delays due to the KOLEA ATC impact (the CMS required KOLEA modifications are causing a delay of the integration with BES) and CMM Interview.

May	Jun	Jul	Category	IV&V Observations
Н	Н	Н	Project Management	The criticality rating for this category remains high due to the absence of an approved schedule and the ASI's inability to report on the velocity of FCM (CMM and FMM modules) development, which drives project planning.
M	M	M	System Design	The project proposed revisions to the SDLC process to include "Design Sprint" sessions to support early identification of potential design issues. IV&V will monitor the effectiveness of these changes in upcoming reporting periods.

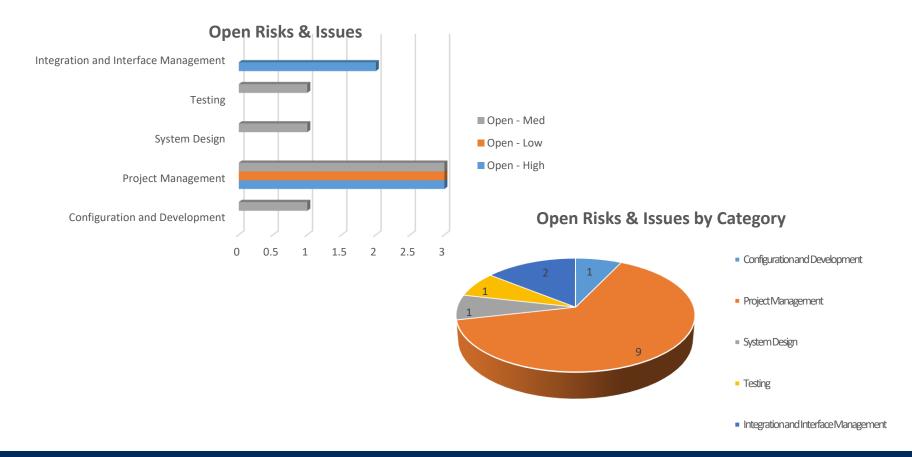
# **Executive Summary**



May	Jun	Jul	Category	IV&V Observations
M	M	M	Configuration and Development	The ASI proposed SDLC process modifications as part of the revisions to the project schedule. Details of these changes are being developed and reviewed with DHS; IV&V will review when the information is available.
Н	Н	Н	Integration and Interface Management	The project team continued to update the communication plans for the interface partners. The detailed interface schedule along with the testing approach and plan is in progress. The timing of the integration between the BES Modules (SSP, CMM, FMM) and interface partners remains a high criticality rating.
M	M Testing IV&V. Release 0.4 UAT had numerous defects and was stopped by DHS and the A to completion. The project team is currently evaluating options to improve the quality		The Root Cause Analysis from the Release 0.3 UAT has not yet been made available to IV&V. Release 0.4 UAT had numerous defects and was stopped by DHS and the ASI prior to completion. The project team is currently evaluating options to improve the quality of the BES application and the ASI reported they plan to conduct a Release 0.4 Root Cause Analysis with DHS and IV&V.	

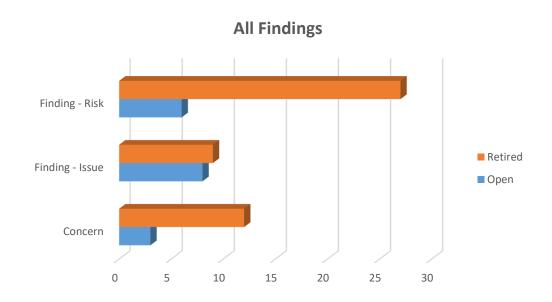


As of the July 2021 reporting period, PCG is tracking 14 open findings (6 risks and 8 issues) and has retired a total of 48 findings. Of the 14 open findings, 9 are related to Project Management, 2 in Integration and Interface Management, 1 each in System Design, Configuration and Development, and Testing.





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





#### Findings Retired During the Reporting Period

#	Finding	Category
38	<b>Issue</b> - 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.  The ASI indicated they have addressed the workflow analysis that was deferred in the initial JAD sessions and will continue to attempt to do so. Therefore, IV&V is closing this finding.	Systems Design
48	<b>Risk</b> - The CMS Outcomes-Based Certification requirements have not been published by CMS, which may impact the project schedule and funding.  DHS received confirmation from CMS that there are no CMS Certification requirements for this project, therefore IV&V retired this finding.	Project Management



# Preliminary Concerns Investigated During the Reporting Period

#	Finding	Category
67	New – The Americans With Disabilities Act (ADA) Section 508 compliance tool has not been identified for the project, which may cause significant rework in order to meet the ADA compliance guidelines.	Testing
68	New – Insufficient planning/execution of the BES Security Plan activities may lead to delays in gaining FNS approval for the BES to begin the Pilot Phase.	Security and Privacy
69	New – Lack of visibility/transparency into the Regression Testing approach and results may cause defects/rework within the BES application for functionality that previously passed testing.	Testing



#### **New Findings**

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



#	Key Findings	Criticality Rating
2	Issue – Late Delivery of project deliverables may cause schedule delays.  Revisions to the project schedule continued this month. DHS and the ASI are currently evaluating SDLC process changes that may require further schedule updates. Additionally, the schedule impact of the KOLEA	Н
	ATC changes is not yet final however, the ASI is planning on gaining DHS approval on the revised schedule next month.	

Recommendations	Progress
<ul> <li>DHS and the ASI agree and publish the revised schedule based on the KOLEA ATC impact, CMM development delays and any other changes to address the potential SDLC Process adjustments.</li> </ul>	In process



#	Key Findings	Criticality Rating
	Issue - Uncertainty and/or a lack of communication around long term architecture decisions could impact the project budget, schedule, system design, and planning decisions.	
2	The ASI has completed cost estimates for the 2 portal change order but are continuing efforts to refine the implementation plan. Many DHS stakeholders remain unclear on how the cost estimates were derived and the basis of allocating the cost between MQD and BESSD. Therefore, it is unclear if these plans and estimates were fully communicated and socialized prior to the CCB meeting.	L

Recommendations	Progress
DHS should finalize the Portal strategy and communicate the strategy with the stakeholders and project teams.	In process
<ul> <li>The project should continue to vet possible architectural change impacts to the platform, M&amp;O, MQD, and BES systems before finalizing architectural decisions.</li> </ul>	In process
<ul> <li>DHS continue to request ASI perform due diligence in any recommendation for foundational architecture change decisions and continue to review with appropriate DHS stakeholders to assure a common understanding of the implications of these decisions.</li> </ul>	In process
The project should continue to ensure communication between development leads and architecture leads to assure optimal collaboration on possible architecture changes that could impact decisions in each area.	In process
<ul> <li>Maintain current communication processes to ensure regular communication between the architecture team and the rest of the project team to assess impacts of architecture decisions to the project.</li> </ul>	In process



#	Key Findings	Criticality Rating
43	Issue - DHS PMO project team members have transitioned off the project, which may cause gaps in knowledge transfer and leadership on the project.  There are no material updates in this reporting period.	Н

Recommendations	Progress
DHS continue to work with the appropriate organizations to identify the funds necessary to fill these positions.	In process



#	Key Findings	Criticality Rating
	Risk – The COVID-19 pandemic and the related "stay at home" order could hinder project activities and negatively impact the project schedule and budget.	
47	The ASI reported that their off-shore (India) team is back to full strength after experiencing challenges with COVID. IV&V remains concerned that some communications between the project team could be hindered due to not being able to work in closer proximity.	L

Recommendations	
<ul> <li>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.</li> </ul>	In process
<ul> <li>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.</li> </ul>	In process
<ul> <li>Project leadership continue to encourage independent phone conversations to enhance and accelerate communications, and for team members not wait for meetings to converse.</li> </ul>	In process



#	Key Findings	Criticality Rating
	Issue – Poor quality project deliverables may impact system design, testing artifacts and the project schedule.	
49	The project deliverables published this month appeared to have most comments focused on functionality vs. format/grammar/spelling. This implies improvement however, without published ASI metrics on the quality of the deliverables, IV&V is unable to validate.	L

Recommendations	
• 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



#	Key Findings	Criticality Rating
	Risk – User Acceptance Testing (UAT) processes and timing of inputs required for UAT could lead to implementation delays and delivery of a solution that does not meet business needs or requirements.	
54	DHS/ASI stopped Release 0.4 UAT before it completed due to several issues and are currently evaluating UAT options that may impact the SLDC process and schedule. IV&V completed the "Shadow Activity" with some of the UAT testers, resulting in observations and recommendations for the project team to consider in future testing activities.	M

Recommendations	Progress
<ul> <li>Provide IV&amp;V with the Root Cause Analysis conducted for the Release 0.3 UAT defects.</li> </ul>	Not started
<ul> <li>Evaluate the process and/or schedule to determine if adjustments could streamline the process for the UAT test team to plan and create UAT test cases, minimizing rework.</li> </ul>	In process
• Designs need to be solidified prior to developing the scripts - should establish a cut-off date for the design.	In process
<ul> <li>Include the IV&amp;V team as SDLC processes are modified based on the Release 0.4 UAT activities.</li> </ul>	In process
Include the IV&V team when the Release 0.4 UAT Activity Root Cause Analysis session is scheduled.	Not started



#	Key Findings	Criticality Rating
	Risk – The data conversion effort lacks leadership, consistency in data governance, and effective communications which may impact the schedule.	
58	The Data Conversion team continued to perform data mapping and cleansing activities. The ASI is currently working through some security issues related to using converted data during testing. Additionally, the ASI is developing metrics to accurately report status and indicate the progress of data conversion through implementation.	M

Recommendations	
<ul> <li>Prioritize the conversion activities to validate the key tasks are addressed early to avoid further delays considering the complexity of the later releases.</li> </ul>	In process
<ul> <li>The ASI should develop reports with metrics that accurately measure the Data Conversion progress along with a high-level pictorial view of conversion activities planned for each release.</li> </ul>	In process
<ul> <li>The DHS Data Governance committee needs to clarify the usage of MDM so the BES conversion team aligns to the planned governance structure.</li> </ul>	In process
<ul> <li>The Data Conversion team should evaluate the Just In Time (JIT) approach to determine if there are risks to the project that should be monitored/managed.</li> </ul>	In process



#	Key Findings	Criticality Rating
62	Issue – Inability to measure development team velocity may impact the projects' ability to forecast the delivery date of the remaining features.  IV&V observed improvement in planning estimations for SSP in release 0.5 Sprint 5, and although the sprint is not finished, the planned vs actual velocity chart is trending in the right direction. There were major improvements this reporting period regarding FCM (FMM/CMM) work estimations in Aha! Use case estimates are now in Aha! for the current and follow-on release. The FCM team is tracking story points in an	Н
	MS-Excel worksheet as they validate their estimates, which will be moved into Jira so they can track and report FCM velocity once the validation is complete. IV&V will continue to monitor the progress on the SSP and FCM sprint teams' ability to track velocity.	

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



#	Key Findings	Criticality Rating
65	Risk - DHS BESSD knowledgeable staff are needed on the project to ensure the BES solution is designed to meet the business needs and requirements.  DHS continues to recruit the BES PM position.	M

Recommendations	Progress
DHS continue to identify BESSD SME's to support the project as the project progresses.	In process
Identify and on-board a replacement BES Project Manager.	In process
<ul> <li>Continue coaching the new BES Product Owners to ensure the new system takes advantage of new technologies and aligns to the planned business processes.</li> </ul>	In process



#### 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. In this reporting period, IV&V observed improvement in the integration planning of the BES core modules. In each of the upcoming releases, demonstrations of the first integration points between CMM/SSP and CMM/Current (Workflow tool) are planned. The ASI provided the steps towards mitigating this risk, which IV&V will review/verify.	Н

Recommendations	Progress
<ul> <li>Prioritize the build of integration points within each module and the creation of scripts (API calls) required for integration.</li> </ul>	In process
• 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.	In process



#### Integration and Interface Management

#	Key Findings	Criticality Rating			
	Risk – The lack of early planning and coordination with interface partners may result in schedule delays.				
63	The project team continues to update the interface planning documents. IV&V conducted another review of the Communication Plans and found that 2 interface partners' contacts have not been documented, 3 MOAs have not been approved, 12 need unit test dates confirmed, 13 need system test and UAT dates confirmed, 27 need pilot and production cutover dates confirmed. In addition, IV&V reviewed the SSA process and found that the BES project team may have to satisfy several requirements in order to pass the security assessment, which may delay the scheduled completion of the SSA interface.	Н			

Recommendations	Progress
Establish a communication plan for each interface partner for the duration of the BES DDI activities.	In process
Identify and document all interface partners' contacts	In process
• Define a detailed schedule for each interface to include milestone dates, coordination, and execution and share with the interface partners.	In process
<ul> <li>Determine which deliverable will include the details associated with the planned connectivity and detailed technical designs of all interfaces.</li> </ul>	In process
Complete all MOAs and obtain approval.	In process
Confirm testing dates with interface partners in writing.	In process
Distribute preparation procedures for interface implementation to the interface partners.	In process
Develop a mitigation plan to address the unavailability of Interface Partners during interface implementation	Not started



## Configuration and Development

	#	Key Findings	Criticality Rating
		Issue – Lack of clear understanding of the DDI approach may reduce effectiveness of all SDLC Processes.	
1	16	The ASI stated they will continue to provide the DHS and their development teams with updates to the SDLC processes via their monthly release updates. However, it remains unclear whether this will effectively communicate the methodology to DHS project team members such that they become more productive/participatory in the SDLC process or provide effective feedback to the ASI regarding design decisions, optimal testing processes, and other important SDLC activities. For example, if product owners do not fully understand the consequences of their design decisions, systems designs could require rework and the project could be faced with unexpected change orders.	M

Recommendations	Progress
<ul> <li>ASI provide an additional DDI approach overview session for stakeholders who still may be unclear on elements of the methodology, especially new product owners.</li> </ul>	In process
<ul> <li>ASI make available their DDI approach documentation/materials for stakeholders to review and/or refresh their knowledge on demand.</li> </ul>	In process
<ul> <li>The project monitor DHS product owner productivity, ability/willingness to provide effective feedback to the ASI for design and other important decisions and provide coaching as needed to assure their effectiveness in their role.</li> </ul>	In process



## System Design

#	Key Findings	Criticality Rating
61	Issue – Poorly executed JAD and "design sessions" could lead to inaccurate design and rework.  Design sessions were conducted this month along with the corresponding Draft Functional Design Documents. It is IV&V's understanding the project is planning to initiate "Design Sprints" to identify design issues earlier and will include DHS/ASI Product Owners, and IV&V. IV&V will assess the process when it is provided and observe the Design Sprint sessions.	M

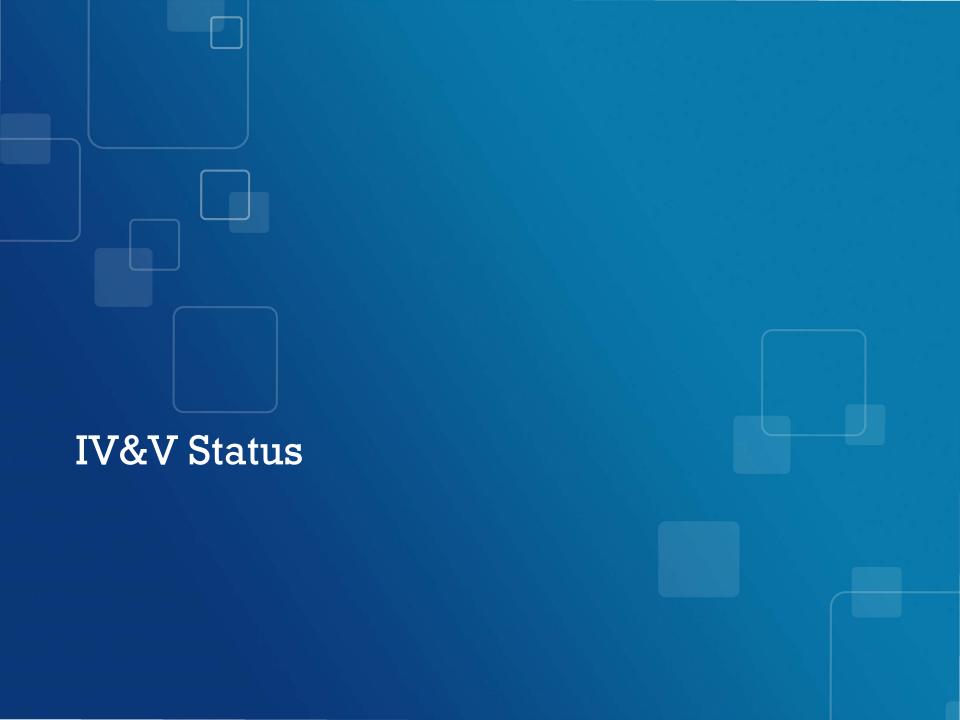
Recommendations	Progress
<ul> <li>JAD and design sessions should be led by experienced senior BAs, with goals, objectives and results communicated to all participants.</li> </ul>	In process
The facilitator should use their expertise to drive discussions through leading questions.	In process
<ul> <li>The DHS and ASI product owners should actively participate to ensure the system meets the requirements, designed taking advantage of new technology and aligns to the 'to be' business process.</li> </ul>	In process
• The ASI should back-track significant differences in design direction to determine the root cause in an effort to identify these items as early in the SDLC as possible.	In process
<ul> <li>The Product Owners should have more direct interaction with the development team, proactively seeking collaboration.</li> </ul>	In process
<ul> <li>The Functional Design Document process, to include the Design Sprint concept, should be clearly defined and shared with all project team members.</li> </ul>	In process



#### **Testing**

#	Key Findings	Criticality Rating
66	Issue – The number of issues/defects found in UAT may cause planned work in the future sprints to be delayed due to the prioritization of the resolution of issues/defects found in UAT.  In this reporting period, DHS and the ASI agreed to stop Release 0.4 UAT prior to completion due to several issues. The project leadership team is evaluating and discussing options to determine the best path forward to thoroughly test BES prior to Pilot and Statewide Implementation. The project team has reported to IV&V multiple actions taken to resolve this however, quality of the BES code and application is not meeting expectations, nor has IV&V received the results of the RCA reported by the ASI to be complete on the Release 0.3 UAT results. On a positive note, the ASI is researching and planning to report quality	M
	on the Release 0.3 UAT results. On a positive note, the ASI is researching and planning to report quality metrics which may identify more specific activities to improve the quality of BES.	

Perform a joint Release 0.4 UAT (DHS/ASI/IV&V) Root Cause Analysis (RCA) to identify and take corrective actions.				
<ul> <li>Perform a joint Release 0.4 UAT (DHS/ASI/IV&amp;V) Root Cause Analysis (RCA) to identify and take corrective actions.</li> </ul>	Not started			
<ul> <li>Adjust the project plan and provide reasonable scope for UAT for subsequent releases taking into account the number of defects and testing time needed.</li> </ul>	In process			
Validate all UAT defects are retested in SIT to ensure they are included in Regression Testing.	In process			
System and Integration testing be executed more rigorously.	In process			
The ASI should report testing metrics and DHS should monitor this Key Performance Indicator (KPI).	Not started			



# IV&V Engagement Status



IV&V Engagement Area	Apr	May	Jun	Comments
IV&V Budget				
IV&V Schedule				
IV&V Deliverables				The Release 0.3 Draft Code Review results were published. The results of the Release 0.4 UAT Team Shadowing activity were provided to DHS.
Centers for Medicare and Medicaid Services (CMS) IV&V Progress Reports				DHS confirmed with CMS that IV&V Progress Reports are not required, therefore IV&V will remove this line item in future reports.
CMS Milestone Reviews				DHS confirmed with CMS that Certification Milestone Reviews are not required, therefore IV&V will remove this line item in future reports.
IV&V Staffing				
IV&V Scope				

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

#### **IV&V** Activities



- IV&V activities in the July reporting period:
  - Completed June Monthly Status Report
  - Ongoing Review the BES Project Artifacts and Deliverables
  - Ongoing Attend BES project meetings, (see <u>Additional Inputs</u> pages for details)
  - Reviewed available ASI Original Contract and BES Optimization contract amendment documentation
- Planned IV&V activities for the August reporting period:
  - Ongoing Observe BES Design and Development sessions as scheduled
  - Ongoing Observe Bi-Weekly Project Status meetings
  - Ongoing Observe Weekly Architecture meetings
  - Ongoing Observe Weekly/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-15 Release 0.4 Fully Configured and Developed System — DRAFT	7/23/2021	Draft
BI-10 R0.6 Common Functions Special Indicators – DRAFT	7/26/2021	Draft
BI-13 Security Plan DED	7/26/2021	Pre-Draft
BI-10 R0.5 Case Management Module - D-SNAP (Iteration 2)	7/27/2021	1.2
BI-10 R0.5 Case Management Module - D-SNAP deliverable (Iteration 1)	7/16/2021	1.0
BI-10 R0.5 SSP Renewals, Administrative Hearing, Case Management, Document Management - DRAFT	7/13/2021	Draft
BI-22 Release 0.4 System Test Report (Iteration 2)	7/16/2021	1.0
BI-22 Release 0.4 System Test Report (Iteration 1)	7/7/2021	1.0
BI-10 R0.5 Case Management Module - D-SNAP – DRAFT	7/2/2021	Draft
BI-14 Release 0.4 Technical Design Document - SSP (Iteration 1)	6/30/2021	1.0

# Additional Inputs – Artifacts



Deliverable Name	Artifact Date	Version
Unisys Contract Amendment 3	4/17/2020	N/A
Two Portal Change Request	7/14/2021	1.0
FNS Handbook 901	01/2020	V2.4
BES Risks and Issues Log	07/07/2021 07/14/2021 07/21/2021 07/28/2021	N/A
BES Weekly Schedule (BI-5)	07/06/2021 07/13/2021 07/20/2021 07/27/2021	N/A
BES Weekly Status Report	07/07/2021 07/14/2021 07/21/2021 07/28/2021	N/A
Java Code Standards	09/11/2020	1.6
BES Shared Interfaces	N/A	N/A
R0.3 Codebase	05/11/2021	0.3

# **Additional Inputs**



#### **Meetings and/or Sessions Attended/Observed:**

- 1. Weekly Platform Status Meeting 7/6/2021, 7/13/2021, 7/20/2021, 7/27/2021
- 2. Weekly Architecture Meeting 7/21/2021, 7/28/2021
- 3. Bi-Weekly Project Status Meeting 7/7/2021, 7/21/2021
- 4. Weekly BES PMO and IV&V Touch Base –
- 5. Weekly BES Dev Stand-up 7/7/2021, 7/14/2021, 7/21/2021, 7/28/2021
- 6. Weekly SSP Backlog Grooming Session 7/7/2021, 7/14/2021, 7/22/2021, 7/28/2021
- 7. BES Data Conversion Meeting 7/12/2021, 7/19/2021, 7/23/2021, 7/26/2021
- 8. Weekly Schedule Review Meeting 7/6/2021, 7/13/2021, 7/20/2021, 7/27/2021
- 9. IV&V Team Meeting 7/1/2021, 7/6/2021, 7/8/2021, 7/12/2021, 7/15/2021, 7/19/2021, 7/22/2021, 7/26/2021
- 10. Weekly UAT Status 7/8/2021, 7/15/2021, 7/22/2021, 7/29/2021
- 11. BES UAT Shadow CMM App Reg 7/6/2021, 7/7/2021, 7/9/2021
- 12. BES UAT Shadow SSP RAC 7/1/2021, 7/6/2021, 7/8/2021, 7/9/2021
- 13. BES UAT Shadow SSP Case Management-7/2/2021, 7/7/2021, 7/8/2021
- 14. DHS and IV&V Touch Base 7/7/2021, 7/19/2021, 7/29/2021
- 15. Sprint Demo SSP 7/6/2021
- 16. R0.4 UAT Daily Huddle 7/9/2021-7/23/2021
- 17. R0.5 Screen Prototype-CMM CO05n Manage Absent Parent Information 7/1/2021
- 18. [BES] Release Checkpoint Meeting 7/1/2021
- 19. [BES] R0.5 Screen Prototype CMM CO05h and CO05u 7/1/2021
- 20. [BES] R0.5 Screen Prototype SSP CS11 and CS33 7/1/2021
- 21. [BES] R0.5 Sprint Demo CMM CO05s Manage Veterans Information 7/2/2021
- 22. [BES] R0.7 Release Kickoff 7/8/2021
- 23. [BES] RO.6 Screen Prototype CF CF10 Manage Special Indicator 7/9/2021
- 24. HI DHS BES June Draft IV&V Report Review 7/13/2021
- 25. [BES] R0.5 BI-10 Walk-Through CMM DSNAP 7/13/2021
- 26. UAT Shadow Draft Results Review 7/14/2021
- 27. BES CCB Monthly Meeting 7/14/2021
- 28. [BES] R0.5 Screen Prototype CMM CO05i Manage Expense Information 7/15/2021
- 29. HI BES ASI and IV&V Touch Base Technical 7/15/2021
- 30. [BES] R0.5 Screen Prototype CMM CO05h and CO05u 7/15/2021
- 31. [BES] R0.5 Sprint Demo CMM CO26 & CO26a 7/16/2021
- 32. Monthly ASI Functional and IV&V Check-in 7/20/2021

# Additional Inputs - Continued



#### **Meetings and/or Sessions Attended/Observed:**

- 33. Implementation Planning 7/20/2021
- 34. ASI and IV&V Mid-Month Check-in 7/21/2021
- 35. R0.5 BI-10 Walk-Through SSP Renewals, Administrative Hearing, Case Management, Document Management 7/21/2021
- 36. BES BI-13 Security Plan with DHS, ASI and IV&V 7/22/2021
- 37. Lunch and Learn 7/23/2021
- 38. [BES] Release 0.8 Kick-off 7/26/2021
- 39. DHS-Unisys Security Touchpoint 7/27/2021
- 40. Monthly Project Risk and Issue Review Meeting 7/28/2021
- 41. [BES] R0.6 Screen Prototype CMM CO05z and CO05i 07/29/2021
- 42. [BES] R0.6 Screen Prototype CMM CO05p, CO08, CO08a 7/29/2021
- 43. BES Project Schedule Discussion Follow-up (Session 1) 7/29/2021
- 44. [BES] R0.6 Sprint Demo CMM CO05q Manage School Information 7/30/2021
- 45. [BES] R0.6 Sprint Demo CMM CO05l Manage Disability 7/30/2021





# Appendix A – IV&V Criticality Ratings

Criticality Rating	Definition
Н	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.
  - 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	Owner Finding To	pe Identified Dat Category	Observation	Significance	Recommendation	Event Hor	rizo: Impact 9	obability salvet	Prior Finding S	itatus Date Rotice	ed Status Update	ient Comments	Vendor Comments
9	Lack of viability/transparency into the Regression Festing approach and results may case defectly-rower with the fest application for functionality that previously passed testing application for functionality that previously passed testing	es	•	6/23/2021. The response/feedbask addressed the NV questions but did not address two the results through Robot farmeow's NEMA/DMI, regord and XV Ray integration. It is understood that the ASI has imported having built a regression table and observed in heating table and representation of the ASI has imported being built and representation of the Robot R	project that defect correction or continued development may negatively affect previously correct functionality.	DHS be informed of all regression testing results of those passed and failed test cases and that a failed test cases be analyzed to determine if code or configurations need to be made.	ny				n Date leur		un Committee	N an Commun
68	Insufficient planning/execution of the BLS Security Plan activities may lead to delays in gaining PKS approval for the BLS to begin the Pilot Phase.	Manny Baranc Concern	7/28/2021 Security and Prive	Security Lead staffing changes. DHS and the ASI agreed to modify the BH-3 Security Plan Deliverable Expectation Document (DED) last month and are currently revising if to align to the requirements and changes to the project since inception.	The BS project must have a clear path to define, implement, test, and validated all Security Requirements/Control poir to entering the Pilicip Jass. There are many standards that must be met, and the project team plans to utilize the BS Security Control implementation Workbook to document the statule of acid control. The Beauty Control migrantation Workbook must be detailed and allow for ease of referencing to the Security Policies, Standards, Controls, and implementation plan along with evidence for each control.	issues, evidence) if Dist and the Asl agree to use tools different than the BES Project. It is also recommended to complete the GPC Planes Request to migrate the BES evidenments had to the ASI to help ensure current and future BI-13 documentation is accurately reflects desired or and responsibilities.	d ks, ESI oles	3			n	7/30/2013 - On July 22, 2012, USS, the ASS, there focusing fulcontraster and VIAV are to distinus and enterest the correct state of the BMS section (Plant Plant Tell RS) project team is planning to adopt the MS-facet workbook to track the detailed SOLC components of each requirement along with attasts. Several questions required follow-up and may be incorporated into the revised DID. Additionally, SSA has adopted a envised process to indicate a detailed questionmake to be completed joint to appared to implainment this setted men with the ES applications. Additionally and the second process of the properties of the properties of the properties of the completed joint to appared to implainment this setted row with the ES applications.		
67	The Americans With Disabilities Act (ADA) Section 508 complaince tool has not been identified for the project, which may cause significant rework to meet the ADA complaince guidelines.		•	complete the AS confirmed that there is currently no working tool installed and the Section DSS compliance testing has not been performed. This risk has been discussed with the AS over the past several months, but then have been no results to deta. The ASS over the past several months, but there have been no results to deta. The discharge tool of ASA compliance. WAY that no revolved my data to demonstrate the disk-top tool results nor if it provides coverage for all ADA compliance items.	There is a contractual obligation and requirement for BES to meet the system acceptance oritors of "all applicable State and Revisal policies, now, regulations, and Standards, including without limitation the Electronic and Information Technology Accessibility Standards associated with Section 508 of the Rehabilition Act.", which was swelfide in the Unitry proposal Technical Requirements Approach that states. "The system comples with DIVS branding standards as defined by DIVS and Approach that states." The system comples with DIVS branding standards and entire by MIC and Approach that states are supported to the standards of the Americans with Disabilities Act (DIA), nondiscrimination safequarbs in GIV R.S. "If the Naway guidelines (National Act (DIA), nondiscrimination safequarbs in GIV R.S. "If the Naway guidelines (National Act (DIA), nondiscrimination safequarbs in GIV R.S. "If the Naway guidelines (National Act (DIA) and Commission (National Act (DIA) and Commission (National Act (DIA) and Commission (National Act (DIA)) and (National Act (DIA) and Commission (National Act (DIA) and Commission (National Act (DIA) and Commission (National Act (DIA)) and (National Act (DIA) and Commission (National Act (DIA) and Commission (National Act (DIA)) and (National Act (DIA) and Commission (National Act (DIA) and (National Act (DIA) and Commission (National Act (DIA) and (National Act (DIA) and Commission (National Act (DIA) and (National Act (DIA) and (DIA) an	complainer tool to be researched, evaluated, installed, tested, and executed for upcoming release. In That responsibility bould include the certain of a plan and schedule for delivering the tool and reports related to the final solution for Section 508 complaines and accessibility. Other the plan is seen to the section of the section 508 complaines and accessibility. Other the plan is plant to DISS and NV.	ses.	o fin 4	S Hig	h Oper	n			
66	The number of issues/defects found in LMT may gue asset planned work in the future spirits to be delayed due to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI and the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of issues/defects found in UAI to the prioritization of the resolution of t			3/39/2022 at the conclusion of file 3.5 spmt 3 there were 10.6 reported defects (4 right of 10 Medium, and 25 years 5 late "Turneofers") are a decumented as "those 1 better", and 17 are marked as "Door." Since the functionality had continued to the second of the secon		or release staling into account the number of defects and estating time needs as reflected in current retending of ULT progress. Validates all ULT defects are restarted in STI to ensure they are included Regression Testing. System and integration testing the executed more regionally. The SAI report and a state of the state of th	nt jin e eria esss	3	3 Me		n	UAT prior to completion die for several issues. The project leadership stars is evaluating and disconsing options to determine the best path forward to throughly test BES prior to Ploit and Statewide Implementation. The project team has reported to VVII multiple actions there to resolve this however, qualify of the BES code and application is not meeting expectations, nor has IVV received the results of the KCN reported by the ACD to be complete on the Release G. SLUT when the results of the KCN reported by the ACD to be complete on the Release G. SLUT meeting the ACD actinizes to the results of the three base non material update to this finding the ACD actinizes to conduct a root cause analysis. Concern still remains that defects reported in UAT accessed the number of defects approach during System Ests also whom through defect leakage merics. S/25/2011 – An industry standard metric used to identify the efficiency of System Testing is defect leakage, i.e., Now many defects are considered and the System stream of the Control		7/10/12 RAP - In registers to the specific recommendation, we have get the charge deal following decimes. Recommendation: 1 We will gettern RAP active global ship morth. Recommendation 2: the progress, we are currently planning to include the LAP and TI teams show a single team that will participate in a join this 7 and 57 teams show a single team that will participate in a join this 7 and 57 teams show a single team that will participate in a join this 7 and 57 teams show a single team that will be provided in the LAP and 1 and
65	DHS BESSO stiff with expanive business knowledge or availability are needed on the project to ensure business need are sufficiently captured so that the BIS solution is designed meet the business needs and requirements.	eds.	nk 3/2/2021 Project Managen	me As the Bit System in designed, A appears there is a lack cited BESSS staff with expansive bountes knowledge and availability to work on the project to ensure the BES system meets the business need and requirements.	BISSOs staff with expansive business knowledge and availability are critical to the project to ensure business needs and requirements are effectively documented as the new system is designed and developed.	DHS continue to identify BESDS SME's to support the project as the project progresses. DHS on a project tasm list in the identifies the participant identify with the project progresses of the control of the project	be -	9 3	3 Med	Oper	n	7/28/0013 - DHS continues to neural the RESPM position. 06/30/0013 - In the 06/00/0013 - In the 06/0013 - In the 06/00/0013 - In the 06/0013 - In the 06/00/0013 - In the 06/00/0013 - In the 06/00/0013 - In the 06/0013 - In the		4/21/21 RAP - Difs has added a number of product owners to the project over the past few months and given them the authority to make design docsoons for the department. This has resulted in improvement in the turn around frem let describe hely made.
63	The lack of early planning and coordination with interface partners may result in schedule delays.	Al Pangelinan Finding - R	isk 1/21/2021 Integration and I	API Gateway; however, there is no evidence that details have been determined or documented in this regardThere is little evidence of active and sufficient communication with interface partners for coordination, design, and testing activities	along with milestone dates may minimize the risk of possible delays. In addition, after planning has s been completed, interface partners will have to be available during interface implementation to ensure that the interfaces are properly tested before deploying the system to production.	activities. 2. Define a detailed schedule for each interface to include milestone dates, coordinatic and execution and share with the interface partners 3. Determine which deliverable will include t	on, the	21 5	3 Hig	h Oper		doctores is leave to foreign admiss, accrets stockes and contact today of an americany of doctorments. We conducted another review of the Communication Plans and found that 2 interface parties' contacts have not been doctormented, 3 MOAs have not deates confirmed, 22 med pilot and production cactore detain confirmed, in addition, NV reviewed the SAP process and found that the BES Project Team may have to satisfy several requirements to pass the security assessment; this process may delay the scheduled completion of the SAP interface, 07/12/2003. The project team continues to sudget the interface planning documents. NV project team continues to sudget the interface planning documents. NV and testing-pilot-glorous desirab New not been anothered by 3 of the interface partners' contacts have not been documented, 4 MOAs have not been approved, and testing-pilot-glorous desirab New not been confirmed for 26 of the interface partners' contacts have not been documented, 4 MOAs have not been approved, and testing-pilot-glorous desirab New not been confirmed for 26 of the interface; Invariant to the continues to update the interface partners' contacts have not been confirmed for 20 of the interface. Not conducted another review of the Communication Plans and found that 3 interface partners' contacts have not been confirmed for 20 of the interface. Not conducted another review of the Communication Plans and found that 3 interface partners' contacts have not been confirmed for 20 of the interface. Not consists have not documents. However, I/W reviewed the Communication Plans and found that 21 interface partners' contacts have not been consistent for 3 of the interface. Not received the Consistence of the contract of th		7/20/21 BAP. The AS team requests that the VBX reseases the severary of this risk in light of the following restorus, a light ASC several field in the ST of the ASC schedule centroism has made the ungenoty for skalling these tasks less than it was before that started lessening the scheduler risk, by the the increase from Medium to high in New Was based on a misundestranding of the current state of the MOA's and constant memory. C, substantial progress has made gears each of the interestic, call the started in the ST of t

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Inability to measure development team webcity may impact. John the projects ability for forecast the delivery date of the remaining features.	Finding - Issue 12/28/2000 Project Manageme The subcontractor development teams don't currently track and report Sprint velocito the ASI.	forecast how many iterations the team will need to complete the remaining work. Development teams use velocity to avoid over-committing to work infuture Sprints. Velocity can also be an early indicator that the project needs more time or resources to meet the planned release dates. If the ASI does not track development team's velocity, they cannot accurately forecast the delivery date of the remaining features, which may place the project cost and critical path at risk.	velocity from past iterations to be used as a historical reference. Moving forward, the development teams should provide the ASI with Sprint and Product Burndown charts at the end of every iteration. The Sprint Burndown chart provides the ASI with a visual representation of the planned vs actual	7 4	4 High	Open	release 0.5 Sprint 5, and although the sprint is not finished yet, the planned vs actual velocity char is trending in the right direction. There were major improvements this reporting print of grading EVA (MAM/CMM) work estimations in Ahu. Libe case estimates are now in Ahal for the current and follow on release. The EVA team is triviling duty position in alth Eva Eva Workhold Service with the print of the Control of the EVA (MAM/CMM) work estimations in Ahu. Libe case estimates are now in Ahal for the current and follow on release. The EVA team is studied upon plant in an Index Eva Workhold in the Vision of Vi	7/20/21. RAP – First in regards to the statement from the IVBV that "Vedocity is being tracked for the SSP againt team but they consistently commit to more work that their vedocy indicates the carn complete in a single sprint. This is a symptom of not using vedocity as a planning tool furth sprint planning "summer facts in the strength of the sprint planning short planning short planning webords as a planning tool furth sprint planning short planning webords as a planning tool furth sprint planning short planning webords as a planning tool form to print their sprint problem for reprofiting vedocity on legit facts also where problem for reprofiting vedocity on legit facts also where the sprint webords are sprint and underreporting of story points for logs work. By we had fewer point until more sprint sprinted for legit work being reduced to compounding the problem stated in a. We have fined both of the compounding the problem stated in a. We have fined both of the service of the sprint planning season with the same shall be sprint planning season with feature of the same shall sprint planning season. My direction to the team is that if in happy when we get to 40-000 cd commitments. This is to lege up to from having discressories late in 47-22/21 as p — The shifting of use cases in March to future releases had nothing to do with development stated works, instead, they were based on the unavailability of reconcess needed by the design and development stated works, in the development that works, in the design and development that works, that development that works, in the development that works, in the development that works, in the development that works, in a case of the development that works, in the develop
Poorly executed IAO and design sessions could lead to Brad inaccurate design and rework.  Brad inaccurate design and rework.	overview on the process and the importance of their participation. On many occasions the conversation needed to be derively lyeding ejections, as expected, the varieties of the conversation of the other or the conversation of	the CMM Worlflow IAO sessions, specifically, (1) Do the IAO participants understand how the Case Will be managed through worldow (1) What improvements will be an easy of the session of the Case William (1) and the Case Wi	results communicated to all participants. The facilitator should use their expertise to drive decisionation through diseafers. The SIS and ASI product novers should actively results of the size of	ASAP 2		Open	the ability of forecast the number of intention needed to complete any veraning corresponding Draft Functional Draft policy floating profession needed to complete any veraning corresponding Draft Functional Draft policy floating profession and the project is planning to initiate "Design Springs" to dereify design issues entirer and will midsued Draft Springs and the project of profession of the project of prosts as the process when a Draft Springs of the Project of prosts as the project of profession of the Project of prosts as the project of profession of the Springs of the Project of prosts as change to conduct design sprints in concert with the project schedule revisions. In addition, the ASI subcontracted order they have many state of the Project of prosts and project of the Springs of the Project of prosts and project of the Springs of the Spri	7/20/21 RAP - "Design fessions" did occur both in the last reporting period as well as in this one. They are flow as review sessions with the Product Owners following the processes on the project. The AS was also as the project of the AS was also as the session of the project of the AS was also as the project of the session. In a part of the recommendations, for Recommendations, for Recommendations are communicated to applications. Coals, objectives, and results are communicated tool applications. One applications are communicated tool applications on a registration of the project beautiful as the session, they are prepared before the session by the functional Activities to COM/19 MAD of the Product Manager for SP as well as considered from the ASI of the Product Manager for SP as well as considered complete. Recommendation SP. A number of stays have been task by IDFs and the ASI to align the design to the to be processes. We will continue to look for integration than ASI of the functional architect, and the BESIO inductivity team to align at this good and the production of the propersion of the processes. We will continue to look for integration and the team of the team of the processes were also as the propersion of the processes. We will continue to look for integration of the team of the production of the processes. We will continue to look for integration of the processes will be considered to the resulting to the second of the resulting of the processes. We will continue to look for integration of the processes of the processes will proprocesses the propriet of the processes will be processed to the processes of the p
System integration of the BES Modules (CMM, PMM, SSP) will John be developed in the later feases vs. a commount integration model within each refesse which may cause schedule delays.	Finding - Risk 9/80/2020 Integration and Int. The BES Modules (CMM, FMM, SSP) are developed by separate teams and demo's a conducted separately with each release. Integration point in thesement modules an accurrently stubbed and the ASI has yet to demonstrate integration of the modules an end-to-end functionality.	simultaneously (usually towards the end of the project) resulting in a flawed and immature delivery. In theory, integration is expected to occur instantaneously, in reality, a 7big bang' integration strategy results in a rushed and incomplete system test process and a system that is focused on individual components rather than system capabilities.	1/27/2021. AVV recommends prioritizing the build of integration points within each module and the creation of scripts (Acida) Required for integration Each release feet advantage of the creation of scripts (Acida) Required for integration Each release feet across all modules (each of solution), demonstrating the understanding of every the creation of the cre	N/A 4	4 High	Open	efforts for the integration of the BES core modules. Each of the upcoming releases plan to decommisstrate the first integration points between CMM/SP and CMM/Current (Workflow Tool). The AS provided IV with steps towards and CMM/Current (Workflow Tool). The AS provided IV with steps towards and the content of the CMM/Current (Workflow Tool). The AS provided IV with steps towards and content of the CMM/Current (Workflow Tool). The AS provided IV with reviewed the SSP integrations document in Confinence that coulties the integration approaches for the identified SSP integration points. The document was designed as a reference for developers and contains the expected low-level towards and the content of the CMM/Comment was designed as a series of the CMM/Comment of	7/30/21 RAP - Integration of the core modules (SSP & CMM and CMM & RAMA) will continue to evolve in future releases. 8.0 & will demonstrate the first strategistion points between CMM & SSP. This ray four fruit releases before the first planned development release. The strategistion is not severe to the first planned development release. The strategistic releases before the first planned development release. It is mitigaring the risk started by the V6V at a ways: 1 gaining agreement from both development releases. It is mitigaring the risk started by the V6V at a ways: 1 gaining agreement from both development teams on the integration methods, and severice contracts as noted in the July report from the V6V. 2) providing a performent communication from the developers to discuss and plan for the integration and to discuss the service contracts that will implement the ringing companies of the service contracts that will implement the ringing companies of the recommendation. The release planned work in the Redese plann to mere Recommendation #1. We are happy to review that recommendation with the V6V of more dead upon request, it is also available for the recommendation. We diagrad development amendation with the V6V of which is a variety of the view of the V6V of any time. Recommendation with the V6V of
The bast Commission effort lacks Leadership, consistency in Brad that Gommission and effective communications which may impact the schedule.	Finding - Risk  9/30/2020 Project Managems The Data Convention rifer on speed to lack lead of Miss. Polymer of Miss December 1997.  In the Convention of Mis	The lack of a Project Convenion Lead, coupled with communication challenges on tasks, activities, and decisions care, and already has, led to schedule delays.	Jobagos, adelizated project labori va activity mrangue at layers of this Data Convenion effort.  Consider a full time groundown entitle hash convenions efforts completed closed 79/0021- [Investigate and resolve communication issues that are suspected to be delivering the data conversion effort.] Gloved 79/0021- Profession that complexity of the later releases.  Light and the project base Convenions meeting from every-other week to weekly.]  Lightset the iming of the project base Convenion meeting from every-other week to weekly.]  Lightset the first of the project base Convenion meeting from every-other week to weekly.]  Somerosion organis. "Ided detailed Convertion labels to the Project Schodies. [Closed 79/0021- The DIS Data Convenion accommittee needs to suffy the busses of MoMs so the BS Convenion  team allights to the planned governance structure The Data Convenion team should evaluate the  Just 1 Time (117) garpost to determine if there are risks to the project that should be  monitored/managed.	Q4 2020 3	2 Med	Open	Div gared further insight reperties the yearem architecture and glammed cleaning achieves. The All Survey and the street of the	is a like barry release plan, interprations will be built in each of 7/20/12 RAP — The ASI conversion team continues to refine weekly metric as associated with the conversion in order to provide more transparency on the propries associated with conversion in order to provide more transparency on the propries associated with conversion in order to provide more transparency on the propries associated with conversion activated address this topic this morth. There are security concerns related loading it to specific more more than the conversion of t

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User Acceptance Testing (UAT) processes and timing of inputs Brad	Finding - Risk 6/24/2020 Project Manageme 11/30/2020 - Applications changes applied in UAT need to be reflected in update BI-	UAT gives DHS the chance to test the BES release using both real-world examples and those people	- [All agreed upon actions to resolve issues called out in Release 0.2 Lessons Learned should be immediately	3 2 Med	ed Op	en	issues and are currently evaluating options regarding UAT that may impact the		7/20/21 RAP - The ASI and DHS are planning to revamp the UAT
required for UAT could lead to implementation delays and delivery of a solution that does not meet business needs or requirements.	<ol> <li>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 ILEE was initiated. However, squeat deliverables</li> </ol>	who will be using the application of aly to day. It is the final stage of the implementation process, conducted to ensure that system enquirement meet business needs and allowing for any insues to be fined before the system goes live. A LIAT 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.	added to project schedule so adequate timing is provided to support UAT preparation and execution.] Closed 7/30/2021 - Provide IVV with the Root Cause Analysis conducted for the Release		,		SIDC process and schedule activities. Additionally, NV completed the "Shadow Activity" with some of the UAT Tester, resulting in a summary of the process, observations and recommendations for the project team to consider in future testing activities. 26(3)(2012). Resear Out 140 Region on June 28th and the results of the Release O3 Season Learned survey were distributed by the ASI, the action plans are planned to be developed in Ayi 2012. Although the action plans are planned to the developed field and sense of the schedule of the ASI		process ignificantly in this reporting period. The LMT existing team will be integrated with the AST bestift gene and introlved entire in the testing process. Regarding the recommendations: Recommendation II: Lessons learned are not schedule and will continue to be worked as part of our normal release processes as they have been for previous releases. It is under why the NZW team in recommending that we continue to do what we have planned to dis. Recommendation 32: If the action resulting from the leasons learned process require sufficient work (>4000 to warrant indication in the project schedule, we will induce them.  The result of the continue to the continue to do what we have planned to discovered schedule, we will induce them.  The results of the continue to the cont
							with DHS, during Release 0.3 UAT, Functional Design Documents (FDDs) were is a being updated during SIT, making it very difficult for the UAT test team to create accurate and complete test cases. IVV will continue to monitor. 03/31/2021 - DH	atte. Discussed the pre-regideliverables, and the need to state, Early darks to deliverables long created for review. It is a simple state of does not want to entire UAT test cases into Jan, will be a fine to the control of the con	minimize rework in the future in developing test script, in addition it to our understanding with the PWAV has ander recommendation of test script development to the DNS team that requires significant increase in effort and will keep increase in revort. The ASI recommendation is that the VVAV team reconsider those recommendation.  47,23/21 RAP - During this period, UAT for RO3 completed. We will implement recommendation in 81 by the end of the review period. Recommendation of 81 by the end of the review period. Recommendation feet to review period.  Recommendation feet to review and categories. "Amount of the review period.
Poor quality project deliverables may impact system design, Brad testing artifacts and the project schedule.	submitted for each of these deliverables. The documents exhibited erroneous	caused schedule delays due to the associated rework needed for mendiation. If poor quality deliverables continue to be produced and submitted for review, this can continue to result in unproductive use of time, unanticipated rework, misguided development and testing activities, potentially unfulfilled functionality, and additional schedule delays.	[INV recommends that a facilitated not cause analysis be performed by the ASI with DNS and VIV in standards. Cashifty sizes are rarring reserved by a single entity in a project, to there could perform the performance of the current condition. Once the root cause() are desired, VIV recommends immediate action the engipted to recommend the condition of the condition of the current condition. Once the root cause() are desired, VIV recommends immediate action the engipted to recommend the condition of the current condition. Once the root cause() are written than the performance of the current condition. The condition of the current condition. The current condition of the current condition of the current condition of the current condition of the current condition. The current condition of t	2 2 Low	O <sub>P</sub>	en	most comments focused on functionality vs. formaty grammar/papiling. This implies improvement however, without published Alf metrics to the quality of the deliverables, IVV is unable to validate. (AJDO/D21-14 on material update under the published Alf metrics to the quality of the deliverable profit of the deliverable and the validate of the published Alf metrics of the value of published Alf metrics of the value of published Alf metrics of the value of value of the value of value of the value of	/30/2020 - New deliwerables this month included Bit 30 and Bit 10	7/30/21 AAP - The ASI team will review and respond to this issue again when a natisfiel update is made by the VIW. We also recommend the rethinking of the first recommendation based on the assessment from the VIW but this is a lower. All the one personned to the rethinking of the first recommendation based on the assessment from the VIW but this is a lower. All the one personned by the VIW for a number of months now to be low. 4/3/214 apr. The ASI steam agrees that the fill emblaces by the project of the Confluence tool has improved the deliverable management process. We agree that their risk of poor quality deliverables impacting the project will remain four if all parties concluded the view of the confluence tools and the view of the confluence tools are considered to the project of the view of th
							deliverable quality improvement. The Project Team began several Lessons issu Learned initiatives aimed at increasing both the speed and quality of deliverables, form	ues were corrected. DHS is not comfortable with BI-10 re-	January were inconsistent with document quality results. The IV&V assessment that technical deliverables showed improved quality as
project schedule and budget.  OHS PMO project team members have transitioned off the Ryan	Undear if the order will extend beyond that date.  Finding-lisuse 1/10/2020 Project Manageme As reported in various project meetings, several key DHS PMO, BIS and ASI project.	such as design sessions may be facilitated remotely which may impact the quality of the sessions. Obligation forms, must record any process actives will more than falley be conducted remotely until this will retire on 18/02/20 and another key member in June 2002. Dit's has consens that the state con- presentation of the session of t	technology (e.g., MS Team/Skyps)Compilers -Suggest the project and Disc creates detailed, documented with militarious strings, and political tractices Project resources Update the COM Plan to Include any new soliticial resources and politicists or updates to begind directly related to project resources Update the COM Plan to Include any new soliticists or updates to begind activation so and the organization through this COM/D-19 pandemic in the short and long term Compilers - Send broad communications to statisticistic so a base used seat and professions to the statistic soliticists and the statists and the statistic soliticists and the statistic soliticists and the statistic soliticists and the statists and the sta	2 2 Low		en	strength again after having some challenges with COVID. (MV remains concerned that some communications between the project stam could be inhered due to not being able to work in closer proximity. (MV recommends project leadership continue to secure great proximation between the continue to the council proximation of the continue to the council proximation of the continue to the council proximation of the council proximatio	/JB/2020 - Office opening may be delayed until	7,90/12 ReP - The AGI agrees that COVID at this time is lakely a low risk to bein schedule and budget for the project despite some increases related to the delta variant. The AGI team continues to maintain social distancing in the office in level 50 attent morning and maintain social distancing in the office in level 50 attent morning in concentrations, the team has essentially restrict the new normal in concentrations of the concentration of the property of the concentration of the property of the proper
project, which may cause gaps in knowledge transfer and leadership on the project.	team members are planning to retire or leave the project within the next few months	solutions, and business processes, along with a level of consistency and continuity to the extended project team. This experience and knowledge is critical for the BES DDI and KOLEA Modifications,	necessary to fill these positions. The state should document a transition plan for the project and				pentiol. 4,70/2021- DNS reported the "hiring freeze has been littled and are working to secure the budget for these positions." IV will continue to monitor. 3/11/2021- No material update to this finding in this reporting period. 3/12/2021- No material update to this finding in this reporting period. 3/12/2021- No material update to this finding in this reporting period. 3/12/2021- No material update to this finding in this reporting period. 3/12/2021- No material update to this finding in this reporting period. 3/12/2021- No material update to the finding in the reporting period so cannot be sufficient to the support of the supp	ticality rating on this Finding (#43) and DHS rolled out the DMF obduct Owner Roles and Responsibilities to the DHS team on muary 29, 2021. (Gary provided the Final DHS Product Owner less and Responsibilities document to IV on 20/2/2021). (30/2020 - Mark Dhe is becoming more involved in the topict. Involved in Arch decisions and PM decisions around to I, siture vision, etc. Days to day PM working diosely w/ Sary	impact and severity of impact and lower the overall rating for this risk.3/3/2020. The ASI PM stated the Project Coordinator position filled and they will begin work on 3/9/2020, transition activities fro Donna will begin next week. ASI PM also stated they are currently filling the ASI PM and ASI Engagement Manager Roles and is

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Uscarbais, andiz a last of communication around long term infors architecture decision could impact the project budget, schedule, system design, and planning decisions.	Finding - Issue \$7,82/019  Project Manageme Some platform and ESS system inchesteurs decision have per to be made and the consideration the argument of the control of the	ance details as they become available and with any architectural changes are finalized Complete DHS w. If continue to request ASI perform due diligence in any recommendation for foundational architecture	2 2 tow	Open	are continuing efforts to refine the implementation plan. Many DHS Stakeholders remain unclear on how the cost estimates were devined and the basis of allocating remains unclear on how the cost estimates were devined and the basis of allocating the cost of the cost o	4/23/21 ap - The ASI and DNS continue to refine the the two portal vision. We expect that fixed decision made during this reporting period and communicat The ASI refers the NVBV to our February update register. Recommendation BLF from our prespectue all need complete. If the VNBV does not believe it is Complete. Supporting decision and the Complete and ASI refers the NVBV our Expectual for the two two portal visions when the the two portal visions will be associated and accision made during this reporting period and communicate The ASI refers the VNBV to our Exhausy update register and the NVBV our period visions when the VNBV our period visions will be the VNBV our period visions will be Complete. If the VNBV does not believe it is Complete supporting detail.  2/5/21 ap - The ASI recommends that this risk be AXI this point, there is little unknown about the final
					need to apply for BSSD services. 2/2A/2021. The project continues to clarify the DHS potal startegy. The projects appears posted to select a container security- tool. Weekly ASI/DHSZB architecture and other architecture and security-related meetings have served to communicate subheteur deedisions. Therefore, Will reduced the criticality rating of this finding from medium to low. IV remains concerned with the complexity and number of tools that are being stillated and if Ulfersy, F.	architecture. Regarding the recommendations, 311 32) This should complete in February, 33) This is com- 202 - Combined application is still plasmed. Ago still not statebolized, 41 this is complete, the Stand both by DOIL. From Anch perspective, we see healing and the statebolized, 41 this is complete, between the Fedure integration of the potatals is still to be much but in ord more complete than originally plasmed for changes, 44, This is complete, see the
Lack of clear understanding of the DDI approach may reduce mfors	Finding - Issue 12/17/2018 Configuration and Several DHS stakeholders have commented that the SI Design, Development, and Lack of stakeholder understanding and buy-in to the SI DDI approach and project activity obje		3 3 Med	Open	development teams with updates to the SDLC processes via their monthly release	published Confluence. They continue to evolve in re
effectiveness of all SDLC Processes.	Implementation (DDI) approach is unclear. While stakeholders can observe SI activity may reduce the effectiveness of JAR and JAD sessions as well as other BES project activities a	d approach overview session for stakeholders who still may be unclear on elements of the			updates. However, it remains unclear whether this will effectively communicate	lessons learned, project schedule impacts, and retro
	and have participated in some \$1 activities, they do not understand how it all fits decisions.  together and some activity objectives seem undear. The \$1 conducted a DOI acrossch	methodology, especially new product owners. • ASI make available their DDI approach documentation/materials for stakeholders to review and/or refresh their knowledge on demand. •			the methodology to DHS project team members such that they become more	feedback from the development teams. We will lev
	together and some activity objectives seem unclear. The SI conducted a DIVI approach puse-niew seession during an ainstilla IAS execution, however not skabeholders were	documentation/materials for stakeholders to review and/or refresh their knowledge on demand. •  The project monitor DHS product owner productivity, ability/willingness to provide effective			productive in their participation in the SDLC process or that they provide effective	monthly release updates like we did for the R0.4 up
	present. I'V did not locate any DDI approach documentation or materials that could	feedback to the ASI for design and other important decisions and provide coaching as needed to			feedback to the ASI with regard to design decisions, optimal testing processes, and other important SDLC activities. For example, if product owners do not fully	communicate these changes to the development to 4/23/31 RAP - The ASI requests that the IV&V inter
	be referenced by stakeholders who may have missed to the overview session, by new	assure their effectiveness in their role.			understand the consequences of their design decisions, systems designs could	4/23/31 RAP - The ASI requests that the IV&V Inter- stakeholders regarding this risk and refresh recomn
	members of the team, or by other interested parties.				require rework and the project could be faced with unexpected change orders.	understanding of this risk. We contend that there is
					6/28/21 - The ASI is in the process drafting changes to their current development	understanding of the SDLC among project stakehold
					approach to address some DHS concerns. Details of the changes have yet to be	Recommendation #3 should be updated to Closed.
					fully delivered, vetted, and communicated to the DHS project team. IVV will review proposed changes once more details become available. 5/27/21 - DHS and	more significant update against the Recommendati the next reporting period. We think that the IV&V s
					the ASI continue to make efforts to bring their new product owners up to speed	Recommendation #2 to reference Confluence rathe
					with both the methodology and expectations of their role. It remains unclear	since it is now the project's knowledge repository. A
					whether DHS product owners will be able to meet project expectations to assure	there are new concerns that are related, we recomm
					their product owner responsibilities are fully met. 4/28/2021 - The ASI and IVV	be logged as distinct items rather than morphing the
					agree that continuing to educate the DHS product owners in Agile and other software development processes can increase the quality of design sessions and	other related topics.
					productivity of their role. 3/31/2021 - No update for this reporting period.	
					2/24/2021 - The ASI has stated their intention to reconcile the differences in	2/25/21 rap - The ASI made considerable progress of
					approach between their 2 software development teams (Unisys India and	January and February 2021. The CMM/FMM team I
						Note. During the 01-02-18 [sic] status meeting, DHS did similar collaboration approach with product owners
						ine the offer and made suggestions. To my that the SSP development team uses. Additionally t
						Discussion. It was suggested by DHS that the pre-JAD the recommenations, #1) the ASI will look to compl
					SME effectiveness and ability to make informed decisions. 1/27/2021 - The ASI packet be	e placed in the SharePoint project site. For new recommendation in March as time allows, #2) the A
						ints in the JADs, a separate orientation before the JAD — design process information on the project teams Co
ate delivery of project deliverables may cause schedule Ryan	Finding - Issue 11/28/2018 Project Manageme Based upon the project schedule dated 11/26/18 (refer to schedule for specifics), Without a PMP that depicts all Project Management processes, the Project can suffer unplan	A PROPERTY OF THE PROPERTY OF	4 5 High	0	approach and whether they will be able to provide DHS with accurate project should be	
ste delivery or project deliverables may cause schedule kyan elavs.	Hinding - Issue 11/28/2018 Project Manageme lasaed upon the project sciencial cost of 11/26/18 (refer to sciencial cost of 11/26/18) (refer to sciencial cost of 11/26/18) without a Privir that depicts all Project Management processes, the Project can surer unplant several due dates for project deliverables have been missed. As of the date of this consequences in score, schedule, cost, schedule, cost, and quality canneters. Without a schedule that pro		4 5 High	Upen	ASI are currently evaluating SDLC processes changes that may require further	based on feedback from DHS and the IV&V while w
<del></del>	report, these deliverables include the Project Management Plan (PMP), which is the the required level of detail to manage the work, the project is at risk to be successful.	that may be late Complete 4/30/2021 and 7/29/2021 - DHS and the ASI agree and publish the			schedule updates. Additionally, the schedule impact of the KOLEA ATC changes is not yet final however, the ASI is planning on gaining DHS approval on the revised	the final change request for the ATC which is nearin Regarding the recommendations: Recommendation
	formal document that is used to manage the execution of the project. In some	revised schedule based on the KOLEA ATC impact, CMM development delays and any other changes			schedule next month. 6/30/2021 - The ASI published a draft revised schedule on	progress made to date, the ASI is hopeful, that we o
	instances, this risk may be compounded by a backlog of Deliverable Expectation	to address the SDLC process adjustments. 9/30/2020 Recommendation - IVV recommends the			6/17/2021. The ASI is currently reviewing the comments and questions	principle on the ATC change request in July and hav
	Documents (DED) requiring approval and acceptance from the State.	project team evaluate the estimating process to determine if changes should be made to reduce the			submitted by DHS and IVV. The project team is moving forward with the revised	published by the end of the month. Recommendati
		number of late tasks and-or conduct a root cause analysis to determine and address the root cause(s) Closed 8/31/2020 Recommendations; - Prior to acceptance of the new baseline, finalize			schedule understanding that further changes may be applied prior to DHS	has reinstituted every other week schedule meeting
		the needed updates to the project schedule to address the outstanding items/issues identified by			acceptance. 5/31/2021 - There are no material updates to this finding in this	actions be taken on late work on a weekly basis.
		DHS, the ASI, and IVV to include the Release 0.1 lessons learned Closed - Establish the process for			reporting period, the revised project schedule is under development. 4/30/2021 - The revised Project Schedule has not been published to reflect the full scope of the	4/23/21 rap - The ASI acknowledges that in this per periods that some deliverables have been late; how
		DHS and the ASI to mutually agree to the revised project schedule baseline Complete - Establish			project due to the KOLEA ATC impact (the CMS required KOLEA modifications are	had little to no impact on the project critical path u
		the process for on-going schedule management and weekly updates, utilizing the Schedule			causing a delay of the integration with BES) and CMM development delays. IVV	The delay in the interview design sessions has impa
		Management sub-plan of the Project Management Plan (BI-04) Complete 5/31/2020 - Finalize the updates to the project schedule to address the outstanding items/issues identified by DHS and			notes the project team revised the Release 0.4 schedule in this reporting period	project schedule. Additionally, the ATC upgrade on
		IVV Closed. 5/31/2020 - Establish the process for DHS and the ASI to mutually agree to the revised			and the Release 0.5 schedule is in process. It remains unclear why updates to the schedule continue to be delayed. A residual impact of not having a project	project will have a significant impact to the project to late deliverables). We recommend that the IV&V
		project schedule baseline Closed 3/31/2020 - Add all tasks that have been performed or planned			schedule continue to be delayed. A residual impact of not having a project schedule is the loss of project team momentum, which is occurring based on the	to late deliverables). We recommend that the IV&V primary description of this risk. We agree that then
		to be performed in the interim schedule. Closed 5/30/2020 - effective 5/15/2020 the ASI is no			reduction of project meetings and deliverable reviews. 3/31/2021 - The	risks to the project schedule; however, late delivera
		longer maintaining the interim schedule. IVV recommends that the ASI complete the Project			schedule remained static through this reporting period as the project team	contributor compared to other risks that aren't pro
		Management Plan deliverable, work with DHS and IVV for review and edit as needed, and attain approval of the PMP. This will help ensure that all processes within the project management entity			continued to work through challenges regarding the Release 0.4 CMM Interview,	documented in the IV&V report.
		approval of the PMP. This will help ensure that all processes within the project management entity are thoughtfully and collaboratively developed and implemented to meet the needs of the project.			KOLEA MDM and Single Sign-on development activities. During this reporting	2/25/21 rap - The ASI agrees that this risk if it occu
		are thoughtfully and collaboratively developed and implemented to meet the needs of the project.  Review and update the project schedule to capture and discuss the late deliverable and tasks and			period, some deliverables were late. The project team is researching options and assessing the schedule impact. 2/28/2021 - In the February 17, 2021 status	high impact to the project; however, the ASI notes, probability of this impact over January and Februar
		delivery thereof; needed mitigation actions along with identification and agreement with DHS on			assessing the schedule impact. 2/28/2021 - In the February 17, 2021 status meeting, the project team reported challenges regarding the Release 0.4 CMM	probability of this impact over January and Februar be low. While there were some deliverables that w
		DDI to resolve the late activities and tasks Closed Updated Recommendation 10/10/2019			Interview, KOLEA MDM and Single Sign-on development activities. The project	by a couple of days, Technical Design by a couple of
		Continue to manage and track the schedule to ensure deliverables are provided as planned Closed			team is researching options and assessing the schedule impact. As a result, some	were completed in time to avoid any impact to the
		- Review the schedule critical path in the weekly schedule review meeting Closed - Continue to			deliverables were late. Consequently, IVV retains this as a high criticality issue.	R0.3. The Training plan development is well off the
		meet weekly with DHS to convey new schedule changes, obstacles, and document the corrective			Additionally, the ASI reported that they completed an internal root cause analysis	security plan does remain behind schedule but we a
		actions that will be taken to address schedule delays and obstacle resolution Closed - Determine			and conduct a weekly internal meeting to review the schedule details to identify	the revised due date. Regarding the recommendati

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