STATE OF HAWAI'I | KA MOKU'ĀINA O HAWAI'I DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES | KA 'OIHANA LOIHELU A LAWELAWE LAULĀ

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES | KE'ENA HO'OLANA 'ENEHANA

P.O. BOX 119, HONOLULU, HAWAII 96810-0119

July 17, 2025

The Honorable Ronald D. Kouchi President of the Senate and Members of the Senate Thirty-Third State Legislature State Capitol, Room 409 Honolulu, Hawai'i 96813 The Honorable Nadine K. Nakamura Speaker and Members of the House of Representatives Thirty-Third State Legislature State Capitol, Room 431 Honolulu, Hawaii 96813

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

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

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

Sincerely,

Christine M. Sakuda Chief Information Officer State of Hawai'i

Attachments (2)



Hawaii Department of Human Services Systems Modernization Project

Final IV&V Status Report for Reporting Period: June 1 – 30, 2025

Submitted: July 16, 2025



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



Executive Summary

Executive Summary



The BES project achieved a significant milestone this month - On June 20, 2025, DHS approved the ASI to begin System Integration Testing (SIT) with some contingency items to resolve. The SIT phase of the project is planned to execute for six months, with other project critical workstreams (Training and Organizational Change Management) planned to restart in preparation for User Acceptance Testing (UAT) and BES Pilot Release. Project risks with the potential to impact the cost, timeline, or scope of work for the BES Pilot Release include:

- Security: The ASI completed all draft system-level policies and provided them to DHS for review. However, the project team continues to be challenged in resolving security findings within required timeframes.
- Requirements Management: Working sessions continued throughout the month, focused on improving the accuracy of requirement information and performing updates needed to defer functionality based on approval from DHS. While not entirely accurate or complete, the ASI provided revised RTM reports for DHS to review.
- Testing: Although DHS approved starting SIT, additional discussion continued regarding a subset of existing defects, which the ASI agreed to address at the beginning of SIT. DHS also highlighted gaps in end-to-end testing scripts, which the ASI agreed to create.
- Interfaces: Planning and script creation started for Technical interface testing for Release 0.13, which will be executed during SIT. Ideally, this testing would have started before SIT, as any major issues or delays may impact the completion of SIT or cause rework.

The project team will focus on two key areas: SIT testing/defect resolution and preparing for UAT and BES Pilot. DHS and the ASI are restarting the "Planning for Maintenance and Operations" to effectively identify, document, and manage the changes necessitated by the BES Implementation. The recent change requests developed by ASI require updates to the BES training materials. They also provide essential information that enables OCM to effectively document and manage changes for BES Operations, including preparing DHS staff for the User Acceptance Testing and Pilot phases

Apr	May	Jun	Category	IV&V Observations
M	M	L	Project Management	Stability of the schedule lead to the closing of the Schedule finding. Additionally, ASI PMO worked with DHS to finalize additional design and system configuration deliverable reviews.

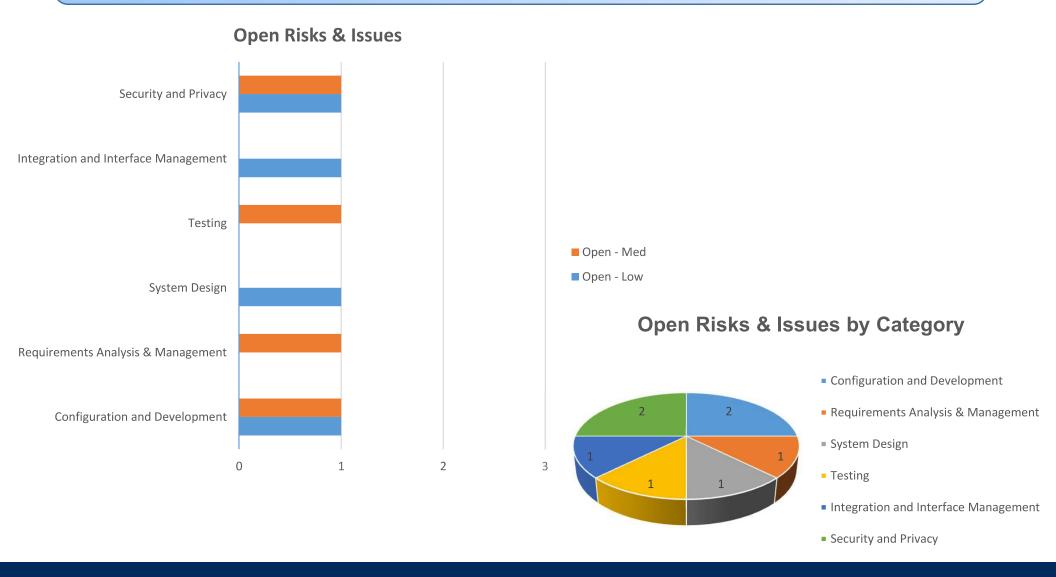
Executive Summary



Apr	May	Jun	Category	IV&V Observations	
L	L	L	System Design	Final review of design and system configuration deliverables was performed by DHS throughout the month, with no major concerns raised by DHS.	
M	M	M	Configuration and Development	Configuration management preparations are still in progress. IV&V remains concerned that SIT has begun without configuration management being fully implemented which could hinder developers' ability to track down the root cause of bugs discovered in SIT that resulted from system or infrastructure changes. The lack of good configuration management could hinder defect repair efforts and lead to project delays.	
L			Integration and Interface Management	DHS validated they now have access needed to the electronic Death Registration System (eDRS) after gaining approval from Food and Nutrition Services (FNS). The ASI has started planning their technical interface testing and test script development for execution during SIT.	
M	M	M	Testing	The ASI received approval from DHS to start Systems Integration Testing, contingent on the ASI performing research regarding a grouping of open defects and reporting the results to DHS.	
M	M	M	Security and Privacy	The ASI completed draft system-level policies and submitted them to DHS, and both parties are now reviewing and preparing these policies for final signature using a process established in April. Additionally, BES had several critical and high-rated security findings outside their remediation timeframes.	
M	M	M	Requirements Analysis & Management	The ASI continued working sessions with DHS, FNS and IV&V, focused on addressing outstanding requirement updates – which are a prerequisite to generate an accurate Requirements Traceability Matrix (RTM) Deliverable.	

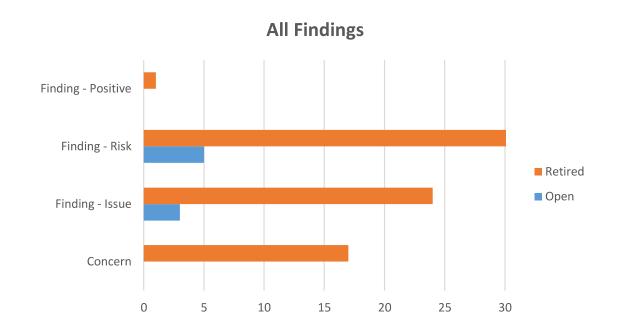


As of the June 2025 reporting period, PCG is tracking 8 open findings (5 risks, 3 issues) and has retired 83 findings. Of the 8 open findings, 4 are Medium, and 4 are Low.





The following figure provides a breakdown of the 91 IV&V findings (positive, risks, issues, concerns) by status (open, retired).





Findings Opened During the Reporting Period

#	Finding	Category
	None	



Findings Retired During the Reporting Period

#	Finding	Category
107	Risk - Delays in getting FNS approval to use the eDRS interface may result in not having this ready for SIT, delaying access to this functionality FNS has approved the FNS-674 form and established the necessary accounts for BES. The ASI Development teams have received credentials, and access to the eDRS interface has been successfully tested. The ASI is proceeding with integration activities as planned, this finding is now retired.	Integration and Interface Management
74	Issue – A BES Project schedule based on inaccurate estimations diminishes effective planning and resource management, which could result in late deliverables, cost increases, and a late go-live. The BES Project Schedule has been stable over the last few months. DHS agreed to the current level of detail in the schedule for the activities and tasks; therefore, IV&V is retiring this finding.	Project Management



Preliminary Concerns Investigated and Retired During the Reporting Period

#	Finding	Category
	None	



System Design

#	Key Findings	Criticality Rating
	Risk – The planned BES infrastructure is complex which could be difficult to implement and maintain and could lead to schedule/cost impacts.	
73	IV&V remains concerned that changes to the DHS shared services platform could negatively impact the BES project schedule. Governance over the platform has yet to be formalized. The project team has stated concerns about the recent lack of effective communication around the recent changes shared services.	L

Recommendations	
 ASI develop a process to closely monitor cloud and other product changes (software updates/new releases), manage changes, and regression test once updates are applied. 	In Process
 The project team work to establish strong governance over the utilization and maintenance of various tools/components. 	In Process
 ASI allot time in the schedule to conduct proof of concepts to assure infrastructure components work as expected. 	In Process
 ASI maintain a detailed schedule for DevOps implementation tasks to avoid unexpected delays that could delay project milestones and the critical path. 	In Process



Configuration and Development

#	Key Findings	Criticality Rating
	Risk – Insufficient configuration management could lead to development confusion and reduce the effectiveness of defect resolution.	
70	The ASI continues to make progress in building out its Configuration Management, including leveraging ServiceNow to automate some processes to streamline deployments. However, it remains unclear if the configuration management database will be robust enough to offer developers clear root cause traceability to correlate bugs to system or infrastructure configuration changes. This could hinder defect tracing and delay repair efforts and lead to project delays.	L

Recommendations	Progress
 ASI adhere to plans for configuration management as documented in BI-6 DDI Plan, Section 5.2 and clarify details and/or any changes with DHS. 	In Process
 ASI validate plans for configuration management with DHS and agree on a meaningful set of configuration items or settings they will track. 	In Process



Configuration and Development

#	Key Findings	Criticality Rating
80	It remains unclear to IV&V whether there has been meaningful improvement in ASI's code quality. While the ASI stated that unresolved defect counts were low enough to meet the criteria (below 20% of all reported defects) for entering SIT, IV&V raised questions regarding the inclusion of defects that existed prior to INT that were not answered by the end of June. The level of defects could elevate development and system stability risks, which could lead to slowed development and unexpected project delays.	M

Recommendations	
 ASI provides DHS with the time needed to effectively evaluate the software demonstrations (demos) and elicit productive design discussions with DHS attendees during each demo. 	In Process
 IV&V recommends the project closely monitor progress on the customer correspondence CR and create a mitigation strategy to avoid delays. 	In Process



Integration and Interface Management

#	Key Findings	Criticality Rating
93	Risk – Due to the lack of physical and technical (Transport Layer) testing of the interfaces and data transfer failure, conditions may exist with data format, boundaries, and dependencies. These failures may result in intermittent and hard-to-isolate problems or errors. The ASI SIT test team has begun test planning and test script development. Testing is intended to occur during System Integration Testing (SIT), which is already underway. While this represents progress, IV&V notes that finalizing and executing interface test scripts during SIT compresses the testing timeline and may limit the opportunity to address defects before UAT.	L

Recommendations	Progress
API interfaces should be tested for failure conditions during connection and transfer operations.	In Process
FTP and file interfaces should be tested for data and file integrity.	In Process
 Test data fields for system impacts resulting from data that is poorly formatted, out of range, or other unexpected data transmission errors. 	In Process



Testing

#	Key Findings	Criticality Rating
	Issue – Gaps in test coverage and slower-than-expected progress in testing may result in schedule delays if subsequent test phases uncover a higher volume of defects and user feedback than initially anticipated.	
83	On June 20, 2025, DHS provided the go decision for R0.13 to move to the SIT phase, which officially began on June 23, 2025. A contingency required the ASI to review a subset of DHS-identified defects, and several defects were agreed to be addressed at the beginning of the SIT phase.	M
	DHS highlighted gaps in end-to-end coverage within the existing SIT test suite. The ASI and DHS met to discuss the needed E2E test coverage and identified the tests that the ASI will create and send for review to DHS. Ensuring complete coverage and reducing defect leakage risk into UAT remain challenges. IV&V is analyzing potential areas where test coverage is needed.	

Recommendations	Progress
 DHS and ASI revisit the testing approach to prioritize completion of remaining test activities and conduct comprehensive System Integration testing (SIT) to minimize defect leakage to User Acceptance Testing (UAT). In Progress



Security and Privacy

#	Key Findings	Criticality Rating
	Issue – The lack of technical documentation may lead to incorrect implementation statements or delay the System Security Plan (SSP).	
82	The ASI completed all draft system-level policies and gave them to DHS. DHS and the ASI are currently progressing using the process created in April to review and prepare the policies for final signature. The ASI Security Team completed the SSP Control Implementation validation with DevOps at the end of June. The ASI will utilize the information gathered during the validation initiative to update the SSP, commencing in July. Additionally, the ASI demoed the Secure Enclave to DHS on June 17th.	L

Recommendations	Progress
 Collaborate and communicate with SSP authors about when reliable and correct documentation will be available. 	In Process
 Include the Secure Enclave within the work breakdown structure along with the known tasks related to the Assessment to continue receiving FTI in BES. 	e IRS In Process



Security and Privacy

#	#	Key Findings	Criticality Rating
		Risk – Critical and high vulnerability and configuration scan findings are not remediated within the documented timeframes, potentially impacting the project schedule and causing delays.	
10)6	As of June 30th, 2025, BES had 31 critical findings in an open state outside the 15-day remediation timeframe, and eight critical findings were within the timeframe. BES had 62 high-rated findings in an open state outside the 30-day remediation timeframe, and four high-rated findings were within the timeframe. As a side note, the ASI had noted that several environments have been shut down for cost savings. Currently, 10 critical POAMs and 32 high-finding POAMS appear on the POAM tracking list that appear to be impacted by the shutdown of several environments. As these systems are not functioning, they pose no risk to the network.	M

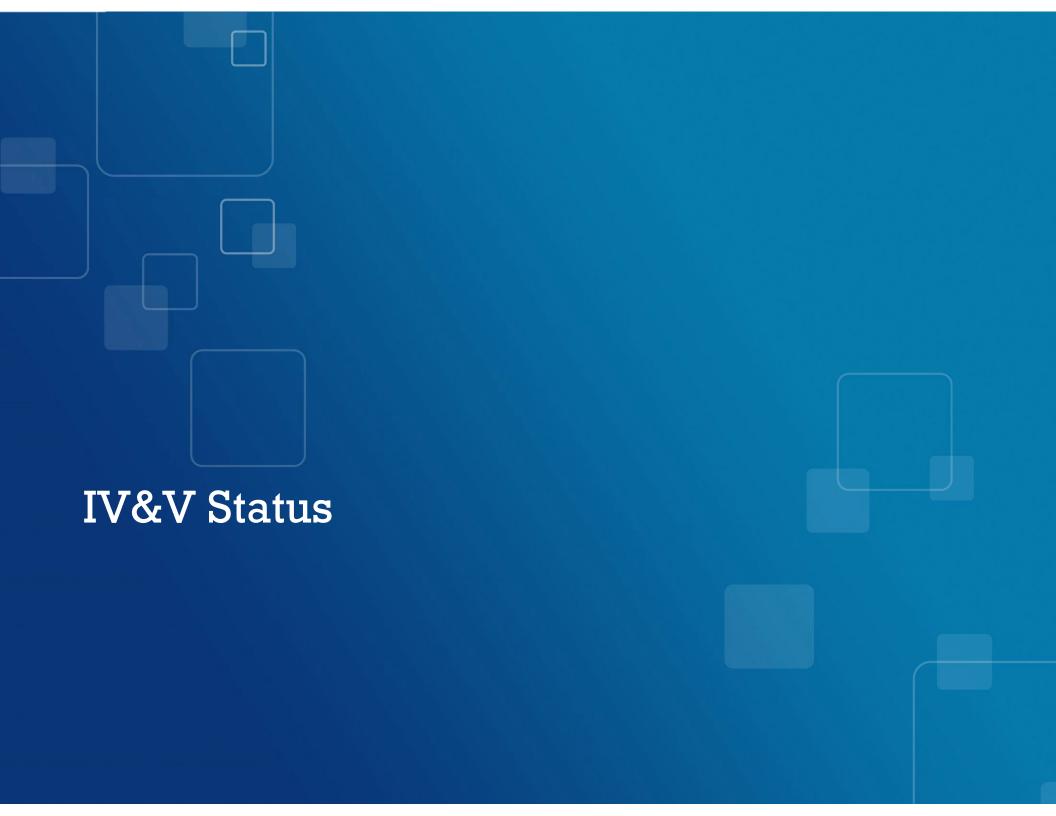
Recommendations	Progress
Implement an escalation process to involve senior leadership if deadlines are missed.	In Progress



Requirements Analysis & Management

#	Key Findings	Criticality Rating
	Risk - The lack of an effective way to validate BES requirements could lead to project delays and unfulfilled user needs if DHS later identifies unmet contractual requirements.	
94	DHS and the ASI held four working sessions to jointly review and agree upon the labeling of the contract requirements. This will help ensure complete and accurate traceability of the contract requirements in the JIRA tool that will be used to generate the Requirements Traceability Matrix (RTM) Deliverable. The Project Team documented via Controlled Correspondence the agreement to defer several requirements in the areas of LIHEAP, MDM, Appeals, Consent Management and EBT. Meetings will continue to review and agree upon the MQD, KOLEA, Referral Management, Enhancements, Reports, Technical and Implementation contract requirements. An agreed upon set of requirements must be established soon to validate all required BES functionality and other supporting requirements were developed and will be tested in the current and future testing phases. Missed or misunderstood requirements may lead to rework, new development and/or project schedule delays.	M

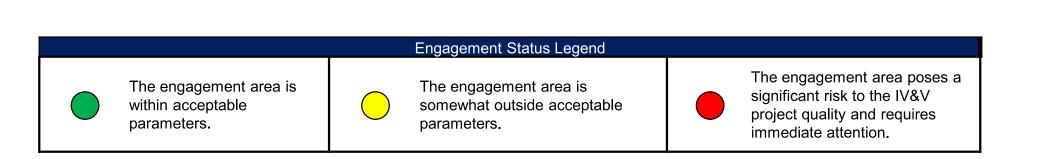
Recommendations	Progress
 Develop a document that provides DHS with a feasible and effective way to map contract requirements to passed test cases, and, per the BI-19 (Complete and Final Test Plan),"Maps the implementation, functional and technical requirements to the test cases and test scripts". 	In Process
 Ensure test scripts thoroughly and comprehensively test the system to assure each requirement has been fully met. 	In Process
 Develop a deliverable that provides an audit trail for changes to the requirements from the contract such as obsoleted requirements, when that decision was made, and the change requests. 	In Process
 Provide weekly updates about the clean-up efforts in JIRA regarding incorrect statuses of epics, use case, and requirements. 	In Process



IV&V Engagement Status



IV&V Engagement Area	Apr	May	Jun	Comments
IV&V Budget				
IV&V Schedule				
IV&V Deliverables				PCG submitted the final May IV&V Monthly Status Report.
IV&V Staffing				Neetu Kalsi left the project, and Justin Ho was added to the PCG IV&V Team.
IV&V Scope				



IV&V Activities



- IV&V activities in the June reporting period:
 - Completed May Monthly Status Report
 - Ongoing Review the BES Project Artifacts and Deliverables
 - Ongoing Attend BES Project meetings, (see <u>Additional Inputs</u> pages for details)
 - Ongoing Review available ASI contracts and contract amendment documentation
- Planned IV&V activities for the July 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 Security meetings
 - Ongoing Monthly IV&V findings meetings with the ASI
 - Ongoing Monthly IV&V Draft Report Review with DHS, ETS and ASI
 - Ongoing Participate in Bi-Weekly DHS and IV&V Touch Base meetings
 - Ongoing Review BES artifacts and deliverables

Deliverables Reviewed



Deliverable Name	Deliverable Date	Version
BI-05 Project Schedule	06/07/2025, 06/14/2025, 06/21/2025, 06/28/2025	N/A
BI-14 Technical Designs Deliverable	06/02/2025	N/A
BI-02 Project Status Report	06/04/2025, 06/11/2025, 06/18/2025, 06/25/2025	N/A
BI-15 Release 1.0 Fully Configured and Developed System	06/10/2025	N/A
BI-20 Test Scenarios, Cases, and Scripts Deliverable	06/12/2025	N/A
IF32 SSP-BES Integration ICD - Shared Interfaces	06/20/2025	N/A
SSP Interface Consumption Module Technical Designs and Addendums	06/20/2025	N/A

Additional Inputs – Artifacts



Artifact Name	Artifact Date	Version
FNS Handbook 901	01/2020	V2.4
NIST Special Publication 800-53 Security and Privacy Controls for Information Systems and Organizations	12/20/2020	Rev.5
R0.13 SIT Defect Dashboard	N/A	N/A
Interface Dashboard – Confluence page	N/A	N/A
Jira Requirements Details	N/A	N/A
Jira Testing Lists	N/A	N/A
BES R0.13 System Testing Results - CRs and Pending Epics	N/A	N/A
BES R0.13 System Testing Results - Core	N/A	N/A
INT Testing Dashboard	N/A	N/A

Additional Inputs



Meetings and/or Sessions Attended/Observed:

- 1. IV&V Team Meeting 6/2/2025, 6/9/2025, 6/11/2025, 6/16/2025, 6/23/2025
- 2. IV&V/ASI May Pre-draft Review 6/6/2025
- 3. HI DHS BES May Draft IV&V Report Review 6/16/2025
- 4. Bi-Weekly DHS BES PMO/IV&V Check-in 6/5/2025, 6/19/2025
- 5. Bi-Weekly DHS and IV&V Touch Base 6/10/2025
- 6. Weekly BES Infrastructure meeting 6/6/2025, 6/13/2025, 6/20/2025, 6/27/2025
- 7. Weekly Client BES 2023 Project Status Meeting 6/4/2025, 6/18/2025
- 8. Security Touchpoint 6/18/2025, 6/25/2025
- 9. (Externa(I) Weekly Interfaces Touchpoint 6/2/2025, 6/9/2025, 6/16/2025, 6/23/2025, 6/30/2025
- 10. (External) Bi-weekly BES CCB Meeting 6/12/2025, 6/25/2025
- 11. (External) BES CCB Working Session #6 6/6/2025
- 12. (External) C!A Current Monthly Checkpoint 6/3/2025
- 13. (External) BES M&O Working Group 6/4/2025
- 14. (External) Weekly BES Testing Workgroup Meeting 6/5/2025, 6/12/2025, 6/18/2025, 6/19/2025, 6/26/2025
- 15. (External) BES: FNS Connect 6/5/2025
- 16. (External) HARI/BES: OP Claims Conversion 6/6/2025, 6/20/2025
- 17. HI DHS BES Testing check in with IV&V-6/13/2025
- 18. (External) INT Demo 6/16/2025, 6/17/2025, 6/18/2025
- 19. (External) BES 1.0 SIT Go/No-Go Meeting 6/20/2025
- 20. (External) Review Low and Medium Defects 6/25/2025





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.
 - 2. Research and Analysis Research and analysis is conducted in order to form an objective opinion.
 - 3. Clarification Clarification from project team members is sought to ensure agreement and concurrence of facts between the State, the Vendor, and PCG.
 - 4. **Delivery of Findings** Findings, observations, and risk assessments are documented in this monthly report and the accompanying Findings and Recommendations log. These documents are then shared with project leadership on both the State and Vendor side for them to consider and take appropriate action on.

IV&V Assessment Categories for the BES Project

- Project Management
- Requirements Analysis & Management
- System Design
- Configuration and Development
- Integration and Interface Management
- Data Management and Conversion

- Security and Privacy
- Testing
- OCM and Knowledge Transfer
- Pilot Test Deployment
- Deployment

Ending Slide



Solutions that Matter