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November 17, 2022

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

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

Aloha Senate 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 (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 Labor and Industrial Relations, Disability Compensation Division's Modernization Project – Electronic Case Management System.

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

Sincerely,

Douglas Murdock (Nov 17, 2022 10:53 HST)

Douglas Murdock
Chief Information Officer
State of Hawai'i

Attachment

Hawaii Electronic Case Management System (eCMS) Project

Disability Compensation Division (DCD)

IV&V Monthly Status Report – **Final**

For Reporting Period: **October 2022**

Draft Submitted: 11/04/2022

Final Submitted: 11/15/2022

PUBLIC CONSULTING GROUP

Solutions that Matter

Overview

- Executive Summary
- IV&V Findings and Recommendations
- Appendices
  - A – IV&V Criticality Ratings
  - B – IV&V Standard Inputs
  - C – IV&V Details

Executive Summary

The Disability Compensation Division (DCD) Electronic Case Management System (eCMS) Project is scheduled to implement Phase 2 on 11/30/22. State and vendor project teams are working diligently to ensure a successful implementation. A short duration remains before the code freeze on both the Disability Compensation Information System (DCIS) and eCMS systems is enacted. The biggest concerns currently are around User Acceptance Testing (UAT) completion and the amount of time available for validation of migrated data. Parallel activities are underway for Phase 3, and both planning and development are currently in progress.

Aug 2022	Sep 2022	Oct 2022	Category	IV&V Observations
N/A	N/A	N/A	Project and Schedule Management	There were no open findings observed in the Project and Schedule Management category during this reporting period.
N/A	N/A	N/A	Requirements Management	There were no open findings observed in the Requirements Management category during this reporting period.
N/A	N/A	M	Design and Development	There were two medium-level risks observed during this reporting period. The Project was recently made aware that data from the National Council on Compensation Insurance (NCCI), an external system needed as proof for Worker's Compensation (WC), cannot accommodate the needed technology for integration needed for the Phase 2 go-live in November 2022 (**#1**). The team is currently working to implement a workaround. The second risk is a difference in the case number format between DCIS and eCMS. The eCMS case number is expected to incrementally increase in size in the future. This change in case number format will impact external stakeholder processes. All external stakeholders affected by the change should be informed. A contract amendment will be executed to limit the case number to 12 digits (**#2**).

Executive Summary (cont'd)

Aug 2022	Sep 2022	Oct 2022	Category	IV&V Observations
N/A	N/A	N/A	Resource Management	There were no open findings observed in the Resource Management category during this reporting period.
N/A	N/A	M	Testing	Phase 2 Go-Live is scheduled for 11/30/22 and UAT Testing is not complete. DCD has stated that only 4.5% of the UAT test cases have passed. Phase 2 should not be implemented without comprehensive UAT testing and resolution of critical defects. DCD should focus as many resources as possible on Phase 2 UAT testing for the remaining time available before making the Go/No-Go decision and implementation (**#3**). IV&V is currently conducting Sample Testing to assist in validating system functionality. It has also been observed that defects are tracked in multiple environments, which may lead to confusion and complexity in reporting (**#4**).
N/A	N/A	M	Data Management	Currently, there is one week allocated for DCD to complete validation of the Phase 2 migrated data from DCIS. This may not be sufficient time for comprehensive validation of the migrated data. Insufficient validation could lead to data issues in the production environment (**#7**)**.**
N/A	N/A	N/A	Security	There were no open findings observed in the Security category during this reporting period.

Executive Summary (cont'd)

Aug 2022	Sep 2022	Oct 2022	Category	IV&V Observations
N/A	N/A	L	Organizational Change Management	Team members from Maui feel less prepared for the changes coming with the implementation of Phase 2 This upgrade is considered a substantial change, impacting the way stakeholders have been working. It is important that all stakeholders are prepared for the system changes, otherwise, a significant amount of time and effort in managing stakeholder use of the system post-implementation could be experienced (**#8**).
N/A	N/A	N/A	Knowledge Transfer	There were no open findings observed in the Knowledge Transfer category during this reporting period.

Executive Summary

Open IV&V Findings by Category and Priority

IV&V Findings and Recommendations

M Design and Development

#	Key Findings	Criticality Rating
1	**New Risk – Availability of National Council on Compensation Insurance (NCCI) Data to Process Worker's Compensation in Salesforce May Not be Available:** The Project was recently made aware that data from NCCI, an external system needed as proof for Worker's Compensation (WC) cannot accommodate the needed technology for integration. Phase 2 go-live is scheduled for 11/30/22 and without the data from NCCI, determination of WC is in jeopardy. A workaround will be implemented where mapping from DCIS will be used for an updated mapping to Salesforce. Mapping is currently in progress.	M
2	**New Risk – Issue With Case Number Length:** DCD's expectation was that case numbers would remain at 10 digits. The case number format in SalesForce is different, has now increased to 12 digits, and is expected to incrementally increase in size in the future. The case number format cannot be reverted to the original format since the system is already in production. DCD scans the WC- 1 forms and automatically creates the case number in the system. There is a concern associated with the format of the case numbers changing over time. All external stakeholders need to be informed ahead of time to ensure there are no delays to any of their processes. A contract amendment between DCD and Data House will be executed to limit the case number to 12 digits.	M

IV&V Findings and Recommendations

M Design and Development

Recommendations	Status
• DCD and Data House have agreed on a workaround that is currently being implemented. IV&V will monitor to ensure accuracy of the workaround implemented for Phase 2.	In progress
• The Project has currently identified this as a "Critical" issue and is in the process of holding discussions with the Data House team to ensure it gets resolved prior to Go-Live. All external stakeholders affected by the change need to be informed ahead of time to prevent any delays to their processes. IV&V will continue to monitor this issue through Go-Live.	In Progress

IV&V Findings and Recommendations

M Testing

#	Key Findings	Criticality Rating
3	**New Risk – Phase 2 UAT Completion:** Phase 2 Go-Live is scheduled for November 22nd and DCD hasn't completed the UAT Testing. DCD has stated that only 4.5% of the UAT test cases have passed. Phase 2 should not be implemented without comprehensive UAT testing and resolution of critical defects.	H
4	**New Risk – Use of Multiple Locations to Track Defects May Lead to Confusion:** DCD is tracking defects (including Change Requests) in separate Incident Logs in Salesforce for P1 and P2, and in the Quality Log on SharePoint. This separation in defect tracking complicates reporting of defect metrics.	L
5	**New Risk – Entry/Exit Criteria Needed for Phase 3 UAT Plan:** Establishing entry/exit criteria ensures that the objectives of the test strategy and product requirements are met and minimizes project risk.	L
6	**New Risk – Phase 3 UAT Environment Availability:** An additional Large Data Volume (LDV) is needed for Phase 3.	Preliminary Concern

IV&V Findings and Recommendations

M Testing

Recommendations	Status
• DCD should focus as many resources as possible on Phase 2 UAT testing for the remaining time available before making the Go/No-Go decision and implementation. A process to triage questions from testers should be in place. The IV&V team recommends that Data House have a team available to respond to questions that cannot be answered by DCD. IV&V is currently conducting Sample Testing of the test cases previously run by Data House, that have not yet been tested by DCD.	In progress
• The Project should track all defects in one location, to ensure that defects are consistently classified by criticality and there is ease of reporting.	Not Started
• Recommend establishing entry/exit criteria for Phase 3 UAT.	In Progress
• Ensure the LDV will be implemented in time for the UAT environment to be stood up to meet established timelines for P3.	Not Started

IV&V Findings and Recommendations

M Data Management

#	Key Findings	Criticality Rating
7	**New Risk – Validation of Phase 2 Data Migration:** Currently there is one week allocated for DCD to complete validation of the Phase 2 migrated data. This may not be sufficient time for comprehensive validation of the migrated data. Insufficient validation could lead to data issues in the production environment.	M

IV&V Findings and Recommendations

M Data Management

Recommendations	Status
• Determine the sufficient amount of time for validation of the migrated data and ensure that time is allowed or provide support staff to assist with the data validation.	In Progress

IV&V Findings and Recommendations

L Organizational Change Management

#	Key Findings	Criticality Rating
8	**New Risk – Adoption of OCM by all Stakeholders:** It was observed that team members from Maui feel less prepared for the changes coming, as was indicated during their conversations with the Project Team from DCD during the site visit on 09/19/22. From an IV&V perspective, this upgrade is considered a substantial change, impacting the way people have been working. It is important that all stakeholders are encouraged to adopt the defined OCM Strategy, otherwise a significant amount of time and effort in managing readiness issues from stakeholders could be experienced, and ultimately pose a significant risk to the project.	L

IV&V Findings and Recommendations

L Organizational Change Management

Recommendations	Status
• DCD has implemented an OCM strategy that incorporates early outreach to stakeholders from all affected program areas. This is reinforced through regular updates, will help reduce negative impacts such as schedule slippage, and surprises to stakeholders, which will in turn, increase positive impacts such as end-user buy-in and adoption. All stakeholders are provided the required technical and business knowledge, to guide them through the modernization effort. It is integral to ensure there is significant buy-in from all stakeholders. This can help them gain a full understanding of the system, and ensure they are aware of the implications of their decisions downstream. DCD has planned a trip to Maui, to work with stakeholders, conduct targeted training, and ensure that Stakeholders are prepared for the P2 implementation.	In Progress

Appendix A – IV&V Criticality Ratings

See definitions of Criticality Ratings below:

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

Appendix B – IV&V Standard Inputs

Meetings attended during the reporting period:	
1. Training Sessions for Phase 1 (Content, Case) Phase 2 (UAT for Plans, SCF)	9. Training Sessions for Phase 1 (Content, Case) Phase 2 (UAT for Plans, SCF)
2. Case Management Production User Feedback Standup Call	10. Case and Content Drop down Lists meetings
3. eCMS Testing Roundtable	11. Executive Steering Committee meetings
4. eCMS Phase 3 - Meeting with Mana'olana Team	12. IV&V Touchpoint meetings with DCD
5. Phase 2: Content Management Training for PHC Updates	13. Content Management Training for PHC
6. Phase 3 - Web Portal Standing Meeting	14. Meeting with Jamie
7. Weekly PM Meeting	15. Meeting with Data House
8. IV&V Mtg w/DCD & ETS	16. Content Management Training for TDI
	17. Phase 2: Sprint 10.1 Review with Group 1 - Correspondence

Appendix B – IV&V Standard Inputs

Artifacts reviewed during the reporting period:	
OCM Plan – Phases 2 & 3	
Project Plan	
Quality Log	
UAT Case Management PH1B, PH2	

To keep abreast of status throughout the project, IV&V regularly:

- **Attends the project meetings**
- **Reviews the project documentation**
- **Utilizes Eclipse IV&V® Base Standards and Checklists**

Appendix C – IV&V Details

- 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 IV&V 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.

Note: This report is a point-in-time document with findings accurate as of the last day in the reporting period.

Solutions that Matter