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April 18, 2023

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


The Honorable Scott K. Saiki
Speaker and Members of the
House of Representatives
Thirty-Second 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 (Apr 18, 2023 12:33 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: December 2022 and January 2023

Draft Submitted: 3/9/2023

Final Submitted: 3/10/2023

Overview

- Executive Summary
- IV&V Findings and Recommendations
- Appendices
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 - B – IV&V Standard Inputs
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Executive Summary

The Disability Compensation Division (DCD) Electronic Case Management System (eCMS) Project implemented Phase 2 on 1/10/23. Identified defects and conversion issues were quickly resolved by the State and vendor project teams. Phase 2 UAT testing will continue until a 100% pass rate is achieved, to ensure system quality. The Phase 3 internal soft-launch occurred on 1/11/23 and select external users will begin testing Phase 3 on 3/20/23. This soft launch contained limited functionality, and additional functionality and stakeholders will be phased-in throughout 2023. The biggest concerns currently are around P2 User Acceptance Testing (UAT) completion and completion of the NCCI interface mapping.

Oct 2022	Nov 2022	Dec/Jan 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.
M	M	M	Design and Development	The National Council on Compensation Insurance (NCCI) interface mapping is in progress, but not yet complete. It is essential that this mapping is completed and tested prior to the P2 implementation (#2). The planned workaround will not require manual entry of data. The NCCI file will be loaded to SQL Server, and fields will be extracted and uploaded to Salesforce. This finding has been reduced from High to Medium priority.



Executive Summary (cont'd)

Oct 2022	Nov 2022	Dec/Jan 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.
M	H	H	Testing	Phase 2 (P2) implementation occurred on 1/10/23. P2 User Acceptance Testing (UAT) is not complete. DCD reported that 28.42% of the P2 UAT test cases had passed by the end of January. UAT testing is critical for identification and resolution of defects prior to implementation. P2 UAT testing will continue until a 100% pass rate is achieved, to ensure system quality (#4). It is recommended that entry and exit criteria be established for Phase 3 (P3) UAT and documented in the P3 UAT Test Plan. Establishing entry/exit criteria ensures that the objectives of the test strategy and product requirements are met and minimizes project risk. (#6).
M	M	M	Data Management	There is a short duration allocated for DCD to complete validation of the Phase 2 migrated data from DCIS. However, the delay of the Phase 2 implementation to 1/10/23 allowed additional time for validation. Two categories could not be fully validated, and validation is in progress. Comprehensive validation of the migrated data is essential to prevent data issues in the production environment (#8).



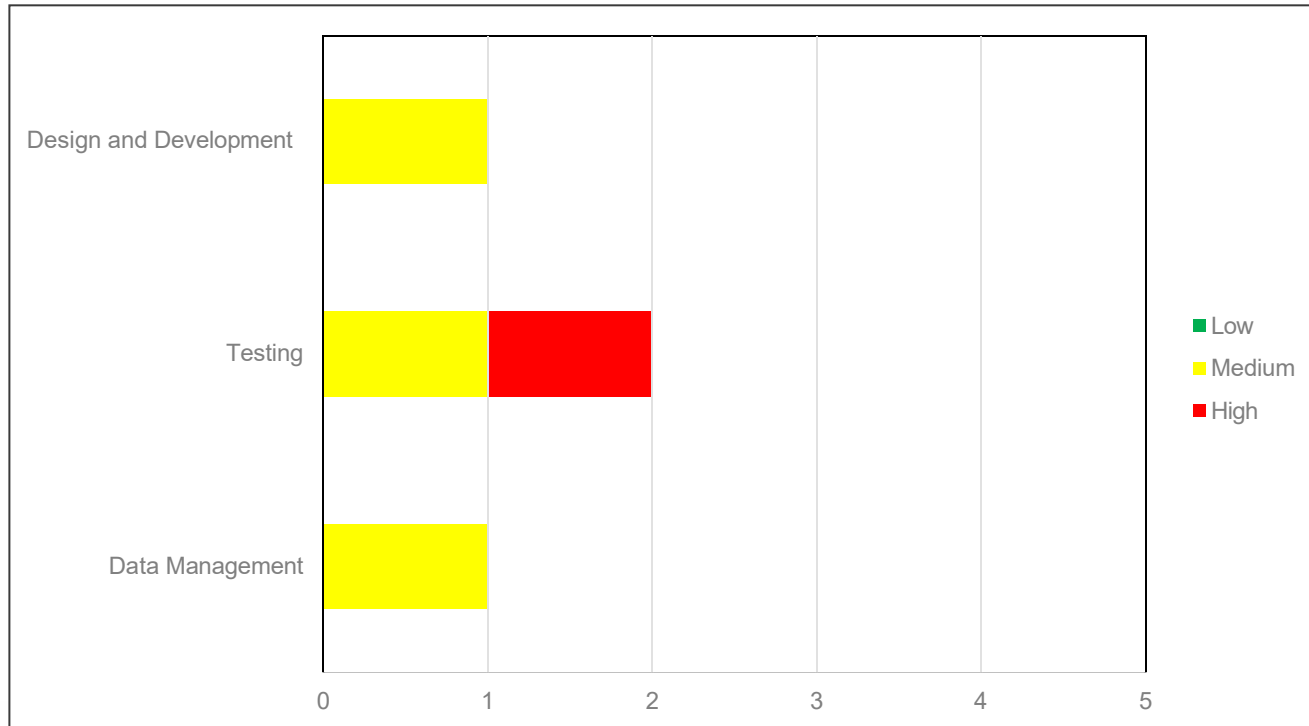
Executive Summary (cont'd)

Oct 2022	Nov 2022	Dec/Jan 2022	Category	IV&V Observations
N/A	N/A	N/A	Security	There were no open findings observed in the Security category during this reporting period.
L	L	N/A	Organizational Change Management	There were no open findings observed in the Organizational Change Management category during this reporting period.
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
2	<p>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. Mapping from DCIS will be used for an updated mapping to Salesforce. Mapping is currently in progress.</p> <ul style="list-style-type: none"> 01/10/23 - <i>There is no manual entry needed. The following workaround will be put in place: DCD gets the file from NCCI, which has extra fields, then it's loaded into SQL Server, fields are extracted, and uploaded to SF. This workaround will be in place until NCCI is ready. This finding has been reduced from High to Medium priority.</i> 	M
3	<p>Closed 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.</p> <ul style="list-style-type: none"> 01/16/23 - <i>This has been reviewed with external stakeholders and has been determined to be a non-issue. Finding closed.</i> 	L



IV&V Findings and Recommendations

M Design and Development

Recommendations	Status
<ul style="list-style-type: none">DCD and Data House have agreed to a mapping process from DCIS to Salesforce that is currently being implemented. IV&V will monitor to ensure accuracy of the mapping implemented for Phase 2.	In progress
<ul style="list-style-type: none">All external stakeholders affected by the change need to be informed ahead of time to prevent any delays to their processes. Recommend memorializing the agreement to limit the case number to 12 digits through a contract amendment or a change request.	Complete



IV&V Findings and Recommendations




H Testing

#	Key Findings	Criticality Rating
4	<p>Risk – Phase 2 UAT Completion: Phase 2 Go-Live has been moved to December 20th. DCD has stated that only 18% of the UAT test cases have passed. Phase 2 should not be implemented without comprehensive UAT testing and resolution of critical defects.</p> <ul style="list-style-type: none"> 01/31/23 - As of the end of January, the pass rate for Phase 2 UAT was 28.42%. 	
9	<p>Closed Risk – Phase 3 UAT Environment Availability: The go-live date for P3 soft launch is scheduled for 12/20/22. DataHouse stated that the UAT environment would be available on 12/5/22. The system read-only mode is planned for 12/6/22, which will not allow time for identification and resolution of any critical defects resulting from UAT. Given the holiday season and limited resource availability after the launch, it is imperative that the release is thoroughly tested.</p> <ul style="list-style-type: none"> 01/31/23 - The go-live date for P3 was delayed, allowing for additional time for UAT and resolution of identified defects. In addition, a phased implementation approach for P3 was established. UAT exit criteria were established for each phase. Finding closed. 	
6	<p>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.</p> <ul style="list-style-type: none"> 01/31/23: Entry/Exit Criteria are not documented in the UAT Plan. 	M



IV&V Findings and Recommendations

Testing

#	Key Findings	Criticality Rating
12	<p>Closed Risk - Project Plan Does Not Reflect the Phased Approach for Phase 3 Web Portal implementation: The Project Plan shows the P3 design is completed but it doesn't reflect the phased approach that is going to happen for the P3 Web Portal implementation. Only basic features will be released on 12/20/22 - file upload and case status. DCD and Data House have agreed to a phased testing and implementation approach.</p> <ul style="list-style-type: none">• 01/31/23: A separate timeline has created for the P3 implementation. Finding closed.	  

IV&V Findings and Recommendations

Testing

Recommendations	Status
<ul style="list-style-type: none">• 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. Also recommend prioritizing the most critical test cases to be tested prior to go-live.	In progress
<ul style="list-style-type: none">• Data House should make the UAT environment available to DCD at the earliest for testing and training activities to begin.	Complete
<ul style="list-style-type: none">• Recommend establishing entry/exit criteria for Phase 3 UAT	In progress
<ul style="list-style-type: none">• New tasks should be added to the Project Schedule to reflect the new approach. The design document should display the features that will be released for the 12/20/22 launch and also the features that are scheduled to be released in 2023.	Complete



IV&V Findings and Recommendations

M Data Management

#	Key Findings	Criticality Rating
11	<p>Closed Risk - P2 Data Migration Scope Concerns: Although data has been migrated to the new database, there are not fields in SalesForce to display all migrated data. In addition, the taxonomy mapping document shows "Do not Migrate" for some fields, but the status for those fields is marked 100% complete. This is because Data House sourced some data from different fields than the originally agreed mapping. DCD is currently reviewing the mapping and data sources to determine if this has caused any problems. Data House has requested that DCD alert them of any additional concerns identified as soon as possible, so they can determine any impacts to the overall design.</p> <ul style="list-style-type: none"> 01/31/23: All data has been migrated. Some cosmetic issues are still present, but critical issues have been resolved. Has been stable since January. Finding closed. 	M
8	<p>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.</p> <ul style="list-style-type: none"> 01/31/23: Contact & Parties could not be fully validated, and validation is currently in progress. There were a total of 20 types. 01/06 - 12 available, 01/09 – 17 available, 01/10 – 18 will be available. 	M

IV&V Findings and Recommendations

Data Management

Recommendations	Status
<ul style="list-style-type: none">Fields should be added to SalesForce screens that display the required migrated data. Also, the team should ensure that questions are documented, discussed with Data House, and prioritized.	Complete
<ul style="list-style-type: none">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




Training

#	Key Findings	Criticality Rating
10	Positive Finding - Training Sessions Hosted by DCD: DCD has scheduled the training session every Monday, Wednesday and Thursdays and Roundtable session every Tuesday and Thursday. During these sessions they go through the functionality of each form in Salesforce and also use these sessions to answer the questions from the audience. Training sessions continue to be productive with good discussion.	N/A



Appendix A – IV&V Criticality Ratings

See definitions of Criticality Ratings below:

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



Appendix B – IV&V Standard Inputs

Meetings attended during the reporting period:

1. Weekly PM Meeting	5. IV&V Mtg w/DCD & ETS
2. Phase 2: Case Management Conversion UAT Standup Call	6. Training Sessions
3. eCMS Testing Roundtable	7. Executive Steering Committee Meeting
4. Phase 2: Sprint 10.2 Review with Plans for User Feedback - Reporting	8. IV&V, OETS and Data House Status update for eCMS meeting



Appendix B – IV&V Standard Inputs

Artifacts reviewed during the reporting period:	
UAT Case Management PH1B, PH2	
Phase 3 Test Cases	

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