December 7, 2020

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

The Honorable Scott K. Saiki,
Speaker, and
Members of The House of Representatives
Thirtieth State Legislature
Hawaii State Capitol, Room 431
Honolulu, Hawaii  96813

Dear President Kouchi, Speaker Saiki, and Members of the Legislature:

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

Attachment (1)
Disability Compensation Division’s Modernization Project – Electronic Case Management System (eCMS)
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<td>Monthly On-site IV&amp;V Review Report Final updated to address comments submitted in Appendix F. IV&amp;V focus areas on page 3 revised to align to changes in the project schedule.</td>
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EXECUTIVE SUMMARY

BACKGROUND

The State of Hawaii (State), Department of Labor and Industrial Relations (DLIR) contracted DataHouse Consulting, Inc. (DataHouse) for the Disability Compensation Division’s (DCD) Electronic Case Management System Project (eCMS Project). DLIR contracted Accuity LLP (Accuity) to provide Independent Verification and Validation (IV&V) services for the eCMS Project.

The Initial On-Site IV&V Review Report (IV&V Initial Report) was issued on August 30, 2019 and provided an initial assessment of project health as of June 30, 2019. Refer to the full Initial Report for additional background information on the eCMS Project and IV&V. The Monthly On-Site IV&V Review Reports (IV&V Monthly Reports) build upon the Initial Report to update and continually evaluate project progress and performance. Refer to Appendix E: Prior IV&V Reports for a listing of prior reports.

Phase 1 development and testing activities and Phase 2 planning and requirements gathering activities continued. The focus of our IV&V activities for this report included the completion of a two-month in-depth assessment of risk management and the beginning of a two-month assessment of training and system development. IV&V has areas of limited visibility or access to project activities and documentation that may prevent a complete identification of project risks.

The IV&V Dashboard on the following two pages provides a quick visual and narrative snapshot of both the project status and project assessment as of October 23, 2020. Additional explanation is included in Findings and Recommendations by Assessment Area for new findings and in Appendix D: Prior Findings Log for prior report findings. Refer to Appendix A: IV&V Criticality and Severity Ratings for an explanation of the ratings.

“Tell me and I forget, teach me and I may remember, involve me and I learn.”

- Benjamin Franklin
Deficiencies were observed that merit attention and remediation in a timely manner.
### Overall
The eCMS Project continues to move forward at an increased project pace. Phase 1 development and testing for both Content Management and Case Management and Phase 2 requirements gathering efforts are all occurring simultaneously. DLIR project resources are doing their best to keep up with the current pace of the project, but the lasting impact of the COVID-19 pandemic on their capacity to perform project work is preventing the timely completion of some tasks. Additionally, DataHouse and DLIR are currently evaluating the impact of recent technical issues on the November 25, 2020 go-live for the Phase 1 Content Management component system. Managing risks and limited project resources are critical for minimizing further schedule delays.

#### Project Schedule:
There are delays in some Phase 1 and Phase 2 tasks. DataHouse and DLIR are evaluating project schedule impacts. Accuity is unable to fully assess schedule variances (refer to finding 2019.07.PM13).

#### Project Costs:
Contract costs are within the total contract amounts; however, payment schedules were not revised for changes in deliverable timelines. Accuity is unable to fully assess cost variances (refer to finding 2019.07.PM12).

#### Quality:
DLIR established success metrics but has not yet finalized quality metrics (refer to finding 2019.07.IT05). Accuity will evaluate progress towards achieving project goals when DLIR begins to collect metrics data.

### Program Governance
The eCMS Project Executive Steering Committee (ESC) convened for the monthly meeting to discuss major risks, issues, and cost saving options.

### Project Management
Phase 1 Content Management training began but some sessions were postponed due to technical issues. DataHouse and DLIR are currently evaluating the project schedule for potential impacts to the upcoming Content Management go-live. DataHouse is conducting the last of the Phase 2 requirements gathering sessions. Limited availability of some DLIR project resources delayed the completion of the Phase 2 requirements deliverable as scheduled. DLIR and DataHouse also continued efforts to address prior IV&V findings (refer to Appendix D: Prior Findings Log) related to a number of foundational project management processes. The most critical project management prior findings include resource, risk, schedule, communications, requirements, and cost management.

### Technology
Development of the Phase 1 Content Management solution is nearly complete; however, DataHouse is currently investigating recent technical issues and evaluating the impact on go-live. DataHouse completed the Content Management system testing. DLIR is behind on drafting the test cases for the upcoming user acceptance testing (UAT) but did draft a preliminary testing and cutover checklist. Phase 1 Case Management Epic 4 development is progressing as scheduled. Details of the Case Management data conversion scope, approach, and resources still need to be discussed and evaluated. IV&V does not have adequate visibility of development, testing, and data conversion activities to fully assess methodologies and progress. DLIR also continued to evaluate and implement various security tools and controls as part of the security management plan.
**FINDINGS AND RECOMMENDATIONS BY ASSESSMENT AREA**

**OVERALL RATING**

The overall rating is assigned based on the criticality ratings of the IV&V Assessment Categories and the severity ratings of the underlying findings (see Appendix A: IV&V Criticality and Severity Ratings). The tables below summarize the criticality ratings for each IV&V Assessment Category in the three major IV&V Assessment Areas. Two IV&V Assessment Categories improved and two declined from the prior report. DLIR and DataHouse continued the increased momentum in executing Phase 1 and Phase 2 activities simultaneously; however, the overall rating also reflects the need to improve many foundational project processes, the lasting impact of the COVID-19 pandemic on DLIR project resources, recent technical issues, and the quickly approaching Phase 1 Content Management go-live in November 2020.

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<td>Business Process Reengineering (BPR)</td>
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## Findings and Recommendations

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<tr>
<td>G</td>
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<td>Governance</td>
<td>The eCMS Project Executive Steering Committee (ESC) meets monthly to discuss project updates, risks, issues, and cost saving options. Continued ESC guidance and oversight are critical for providing workable options with the limited budget and resources and helping the project to maintain current momentum.</td>
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<tr>
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<td>Benefits Realization</td>
<td>No significant updates since the prior report. DLIR still needs to begin collecting and monitoring success metrics data (2019.07.PG05).</td>
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Findings and Recommendations

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**Project Organization and Management**

DLIR and DataHouse continue to work together to coordinate and execute Phase 1 and Phase 2 activities at an increased project pace. Regular meetings were scheduled to improve collaboration (2019.07.PM02) with Phase 1 Content Management and electronic submission pilot group stakeholders. DataHouse also clarified some of the project management plan details and processes (2020.08.PM01). With the increased pace of the project and with the COVID-19 pandemic continuing to impact availability of DLIR project resources (2020.03.PM01), strong foundational project management processes are critical for anticipating changes, identifying project performance issues, and minimizing impacts to the project. DLIR and DataHouse continued efforts to address prior IV&V findings (refer to Appendix D: Prior Findings Log) related to a number of foundational project processes (2020.07.PM01).

Key change requests (2019.09.PM01) and deliverable reviews (2019.07.PM03) related to Phase 1 Content Management are still pending and should be finalized as a part of the acceptance in November 2020.
DataHouse is conducting the last of the Phase 2 requirements gathering sessions. Limited availability of some DLIR project resources delayed the completion of the Phase 2 requirements deliverable in October 2020. DataHouse is now targeting November 2020 for completion. Draft user stories for Phase 2 appear to be more complete as compared to Phase 1, however, it is unclear how some types of requirements will be captured. IV&V will review the final Phase 2 requirements deliverable due in November for completeness and traceability.

DataHouse updated the requirements traceability matrix (RTM) for the Phase 1 Content and Case Management changes. Phase 1 requirements traceability (2019.10.PM01) and documentation (2019.07.PM10) still need improvement. DLIR’s review of their third-party vendor’s requirements assessment results is still pending.

The lasting impact of the COVID-19 pandemic on DLIR project resources’ capacity to perform project work is preventing the timely completion of some tasks (2020.03.PM01). Additionally, recent technical issues postponed some Phase 1 Content Management activities. DataHouse and DLIR are currently evaluating project schedule impacts. With Phase 1 and Phase 2 scheduled to run concurrently through June 2021 and with limited DLIR project resources (2019.07.PM14), effective resource management (2019.09.PM02) and schedule management processes (2019.07.PM13) are key to minimizing further delays. DLIR and DataHouse continue to actively manage select project costs. Improvements are still needed to better track and monitor all project costs and adjust payment schedules for changes in deliverable timelines (2019.07.PM12).
### Findings and Recommendations

#### AUG SEP OCT IV&V ASSESSMENT CATEGORY IV&V OBSERVATION

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<tr>
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<th>Risk Management</th>
<th>DLIR and DataHouse continued regular discussions of risks as well as efforts to address previously identified IV&amp;V risks and issues (refer to Appendix D: Prior Findings Log). Timely execution of remediation plan tasks is still needed (2019.07.PM09).</th>
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<td>Communications Management</td>
<td>Improvements in stakeholder communications were made by implementing standing meetings with Phase 1 Content Management and electronic submission pilot group stakeholders. Effective and timely communications with all impacted stakeholders (2019.07.PM07) and within the project team (2019.07.PM06) are still needed.</td>
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<td>Organizational Change Management (OCM)</td>
<td>Some OCM is occurring as an indirect result of other project communications and participation in on-going project meetings. A more structured OCM approach is still needed (2019.07.PM08) to ensure stakeholders accept and embrace changes.</td>
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<td>Business Process Reengineering (BPR)</td>
<td>DataHouse facilitated discussions of BPR improvements and opportunities throughout the Phase 2 requirements gathering sessions. IV&amp;V does not have a complete understanding of BPR processes and will review the final Phase 2 requirements deliverable due in November to further assess BPR. However, as seen with Phase 1, BPR continues to occur during the design and development stages.</td>
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<tr>
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<td>Y</td>
<td>Training and Knowledge Transfer</td>
<td>DataHouse completed the Phase 1 Content Management training deliverables. The training sessions began but some sessions were postponed to early November due to technical issues. IV&amp;V does not have adequate understanding of the training approach and knowledge transfer strategy. IV&amp;V will continue an evaluation of training and knowledge transfer as a focus area in November 2020.</td>
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## Findings and Recommendations

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<td><strong>System Software, Hardware, and Integrations</strong></td>
<td>Development of the Phase 1 Content Management solution is nearly complete, however, DataHouse is currently investigating recent technical issues and evaluating the impact on go-live. DataHouse provided a deployment checklist and DLIR drafted a preliminary testing and cutover checklist. With the Content Management go-live quickly approaching, complete and clear go/no-go criteria need to be finalized (2020.09.IT01). Phase 1 Case Management Epic 4 development is progressing as scheduled. The interface solution remains unclear (2019.07.IT02). IV&amp;V does not have adequate visibility of development and integration activities to assess the system development methodologies.</td>
</tr>
<tr>
<td><strong>Design</strong></td>
<td>No significant updates since the prior report. DataHouse refines the Content Management and Case Management design during development and periodically updates design documents. IV&amp;V does not have adequate visibility of development activities or access to current builds to assess changes and updates to design. Security design is covered in the Security IV&amp;V Assessment Category.</td>
</tr>
<tr>
<td><strong>Data Conversion</strong></td>
<td>DataHouse updated the data conversion plans for changes to the data taxonomy mapping. DLIR is exploring options for paper file conversion, but details of the Phase 1 Case Management data conversion scope, approach, and resources still need to be discussed (2019.11.IT01). IV&amp;V does not have adequate visibility of data conversion activities to assess the progress or approach for data conversion. Additionally, an unsupported legacy system may impact data conversion (2019.09.IT03).</td>
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### Findings

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### TECHNOLOGY

- **System Software, Hardware, and Integrations**
  - Design
  - Data Conversion
  - Quality Management and Testing
  - Configuration Management
  - Security
# Findings and Recommendations

## AUG SEP OCT IV&V ASSESSMENT CATEGORY IV&V OBSERVATION

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### Quality Management and Testing
DataHouse continues to perform various system and integration testing and recently completed the Phase 1 Content Management system testing. DLIR is behind on drafting Phase 1 Content Management test cases but did draft a preliminary testing and cutover checklist. IV&V does not have adequate visibility of DataHouse or DLIR testing activities or documentation to fully assess methodologies and progress. Additionally, DLIR’s draft test plan (2019.10.IT01) is pending finalization. DLIR’s review of DataHouse’s test plan is also pending and clarification of DataHouse’s test plan is still needed (2020.02.IT01). The DataHouse and DLIR quality management plans and approach have also not yet been finalized (2019.07.IT05).

### Configuration Management
No significant updates since the prior report. A comprehensive configuration management plan including the DLIR approval process is still pending (2019.07.IT06).

### Security
DLIR continues to evaluate and implement various security tools and controls as part of the security management plan. DLIR and ETS meet regularly to discuss and align plans for implementing security policies and procedures. DLIR outlined some tasks for a high-level security timeline and plans to perform a security risk assessment (SRA) by early November 2020. DLIR’s formal security management plan (2019.07.IT07) and security policies (2019.10.IT02) are still pending.
**Appendix A: IV&V Criticality and Severity Ratings**

**IV&V CRITICALITY AND SEVERITY RATINGS**

Criticality and severity ratings provide insight on where significant deficiencies are observed and immediate remediation or risk mitigation is required. Criticality ratings are assigned to the overall project as well as each IV&V Assessment Area and IV&V Assessment Category. Severity ratings are assigned to each risk or issue identified.

**Criticality Rating**

The criticality ratings are assessed based on consideration of the severity ratings of each related risk and issue within the respective IV&V Assessment Area and IV&V Assessment Category, the overall impact of the related findings to the success of the project, and the urgency of and length of time to implement remediation or risk mitigation strategies. Arrows indicate trends in the project assessment from the prior report and take into consideration areas of increasing risk and approaching timeline. Up arrows indicate adequate improvements or progress made. Down arrows indicate a decline, inadequate progress, or incomplete resolution of previously identified findings. No arrow indicates there was neither improving nor declining progress from the prior report.

A **RED**, high criticality rating is assigned when significant severe deficiencies were observed and immediate remediation or risk mitigation is required.

A **YELLOW**, medium criticality rating is assigned when deficiencies were observed that merit attention. Remediation or risk mitigation should be performed in a timely manner.

A **GREEN**, low criticality rating is assigned when the activity is on track and minimal deficiencies were observed. Some oversight may be needed to ensure the risk stays low and the activity remains on track.

A **GRAY** rating is assigned when the category being assessed has incomplete information available for a conclusive observation and recommendation or is not applicable at the time of the IV&V review.

**Terms**

**Risk**
An event that has not happened yet.

**Issue**
An event that is already occurring or has already happened.
Severity Rating

Once risks are identified and characterized, Accuity will examine project conditions to determine the probability of the risk being identified and the impact to the project, if the risk is realized. We know that a risk is in the future, so we must provide the probability and impact to determine if the risk has a Risk Severity, such as Severity 1 (High), Severity 2 (Moderate), or Severity 3 (Low).

While a risk is an event that has not happened yet, an issue is something that is already occurring or has already happened. Accuity will examine project conditions and business impact to determine if the issue has an Issue Severity, such as Severity 1 (High/Critical Impact/System Down), Severity 2 (Moderate/Significant Impact), or Severity 3 (Low/Normal/Minor Impact/Informational).

Findings that are positive or preliminary concerns are not assigned a severity rating.
# Appendix B: Industry Standards and Best Practices

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<td>ADKAR®</td>
<td>Prosci ADKAR: Awareness, Desire, Knowledge, Ability, and Reinforcement</td>
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<td>BABOK® v3</td>
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<td>DAMA-DMBOK® v2</td>
<td>DAMA International's Guide to the Data Management Body of Knowledge</td>
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<td>CMS Minimum Acceptable Risk Standards for Exchanges – Exchange Reference Architecture Supplement</td>
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<td>MITA v3.0</td>
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<td>Project Management Institute (PMI) Project Management Body of Knowledge</td>
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<td>Institute of Electrical and Electronics Engineers (IEEE) Standard for Configuration Management in Systems and Software Engineering</td>
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## Appendix C: Interviews, Meetings, and Documents

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<td>09/29/20</td>
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<td>Phase 2 Requirements Gathering Session</td>
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<td>Phase 1 Case Management Sprint 4.1 Review and 4.2 Planning Session</td>
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<td>IV&amp;V Prior Findings Working Session</td>
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MEETINGS (CONTINUED)

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<td>10/22/20</td>
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<td>Phase 1 Content Management Training Session DCD Part 1</td>
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<td>10/23/20</td>
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DOCUMENTS

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<tr>
<td>Request for Proposal</td>
<td>State of Hawaii DLIR DCD RFP No. RFP-17-002-DCD (Release Date 04/12/18)</td>
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<tr>
<td>DataHouse Proposal</td>
<td>DataHouse eCMS Best and Final Offer (BAFO) Proposal (Dated 06/20/18)</td>
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<td>Request for Proposal</td>
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<td>Contract</td>
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<td>Weekly Status Meeting Agenda Minutes (09/29/20)</td>
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<td>Weekly Status Meeting Agenda Minutes (10/06/20)</td>
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<tr>
<td>Project Management</td>
<td>Weekly Status Meeting Agenda Minutes (10/13/20)</td>
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<td>Change Request (CR012) New Columns Filing Dates for Sort</td>
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<td>Risk and Issues</td>
<td>RAID (Risk Action Issue Decision) Log (Updated 10/23/20 by DataHouse Project Manager)</td>
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<tr>
<td>Risk and Issues</td>
<td>RAID (Risk Action Issue Decision) Log (Updated 10/23/20 by DCD Risk Manager)</td>
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<tr>
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<td>DataHouse Development Team Status Meeting Minutes for 09/30/20</td>
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<td>Requirements Traceability Matrix (Revision Date 10/12/20)</td>
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<td>Requirements Traceability Matrix (Revision Date 10/25/20)</td>
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<td>Phase 1 Case Management User Story by Sprint Report (10/23/20) (2 files)</td>
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<td>Phase 1 Epic 4 Sprint 4.1 Documentation (Planning list, scrum notes, session notes, review notes, and retrospective notes) (10 files)</td>
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<td>Development</td>
<td>Phase 1 Epic 4 Sprint 4.2 Documentation (Planning list and session notes) (3 files)</td>
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<td>Integrations</td>
<td>Phase 1 Case Management DataHouse Electronic Submission Presentation (09/30/20)</td>
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<td>Data Conversion</td>
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<td>Testing</td>
<td>Content Management Test Scripts (10/14/20) (19 files)</td>
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<td>Testing</td>
<td>DLIR Test Plan Working Draft Version 1.0 (Updated 10/23/20)</td>
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<tr>
<td>Governance</td>
<td>eCMS ESC Meeting Agenda (10/09/20)</td>
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Appendix D: Prior Findings Log
**DataHouse's updated project management plan and project schedule was scheduled for completion in July 2020. The task is not yet completed and there is no estimated timeline for completion.**

To help ensure improved project management, the following additional tasks need to be completed:

- Consider developing a more detailed Phase 2 project schedule and improvements in project management processes to optimize effectiveness and efficiencies of upcoming requirements gathering sessions.

The Case Management development team also monitors progress with stats on the number of user stories completed in each sprint and the number in the backlog. Accuity will continue to evaluate progress to address open findings.

Although significant uncertainty due to the COVID-19 pandemic makes it difficult to know the exact road ahead, proactive planning and contingency planning are critical for anticipating changes and minimizing impacts to the project.

### Appendix D: Prior Findings Log

<table>
<thead>
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<th>ASSESSMENT</th>
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<tbody>
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<td>CATEGORY</td>
<td>FINDING</td>
<td>SEVERITY</td>
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| OpenProject | 2019.07.PM03 | Moderate | Inadequate cost management and cost management processes may result in reoccurring issues and delays. Incremental progress was made for many findings but a majority are still open. Progress was limited by availability of project resources and competing organizational and project priorities. Inadequate cost management and cost management processes may result in reoccurring issues and delays. Incremental progress was made for many findings but a majority are still open. Progress was limited by availability of project resources and competing organizational and project priorities. | Moderate | Inadequate planning and lack of a project management plan and project schedule were scheduled for completion in July 2020. The task is not yet completed and there is no estimated timeline for completion. Consider developing a more detailed Phase 2 project schedule and improvements in project management processes to optimize effectiveness and efficiencies of upcoming requirements gathering sessions. | 2020.08.PM01 | Open | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. Some of the more critical areas requiring improvements include cost management, scheduled management, resource management, and planning on these processes impact many aspects of the project execution and completion. As a result, a project management plan and project schedule were scheduled for completion in July 2020. The task is not yet completed and there is no estimated timeline for completion. Consider developing a more detailed Phase 2 project schedule and improvements in project management processes to optimize effectiveness and efficiencies of upcoming requirements gathering sessions. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes. | 09/28/20 | DataHouse updated the project management plan to include some additional details regarding Phase 2 schedule and project management processes.
### ASSESSMENT CATEGORY

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### FINDING STATUS UPDATE

**OPEN**

- **Findings ID: 2020.03.PM01.R1**
  - **Explore possible ways to keep the project moving forward with available resources.**
  - **Evaluate DLIR SMEs availability and bandwidth to work on the project.**
  - **Consider reshuffling of user stories in current and upcoming sprints and how to best utilize available DLIR SMEs.**

**Project Organization and Management**

- The COVID-19 pandemic has created uncertainty with respect to the timely completion of the project and its cost. Understandably, DLIR has diverted project resources to the UI Division to support the processing of unemployment claims.
- DataHouse and DLIR, with input from the ESC, must come together to decide on how to best proceed.
- Carefully assess the situation and individually log all of the specific impacts to the project.
- Familiarize yourself with the June 2020 IV&V Monthly Report for status updates prior to July 2020.

**Other updates:**

- 08/21/20: DataHouse kicked-off Phase 2 requirements gathering sessions.
Refer to the June 2020 IV&V Monthly Report for status updates prior to July 2020.

07/29/20 and 08/21/20: DataHouse is currently performing various system and integration testing; however, IV&V does not have adequate visibility into DataHouse testing activities or test documentation to provide an assessment.

09/28/20: DLIR plans to clarify the testing that DataHouse will be performing.

10/23/20: No updates to report. Accuity will reassess when meetings are held regarding the DataHouse test approval. The test plan does not include or clearly explain the following:

- The scope of the test plan is incomplete ...
- A naming convention of test documentation files is not established for easy retrieval and location.
- A lack of clarity of DataHouse’s testing approach may not allow DLIR to appropriately develop their own test plan or ensure testing activities are adequately performed.
- Additionally, a lack of mutual understanding and inadequate test management processes could impact the execution of testing activities.

07/29/20: The Content Management data conversion plan v1.4 was updated and does not adequately inform DLIR of the testing approach and scope which may impact the execution of data conversion.

08/21/20: DataHouse and DLIR have a meeting planned for late August to discuss Content Management data conversion processes and the DLIR data conversion testing scheduled for September 2020.

Accuity will evaluate data conversion plans as progress is made.

The IV&V recommendations made at 2019.07.PM02.R3 and 2019.07.PM13.R2 regarding DataHouse including DLIR in project activities and adding detailed tasks to the project schedule will also address this finding. Below are additional recommendations to further improve data conversion plans and activities.

**ASSESSMENT**

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<th>CLOSED DATE</th>
<th>CLOSURE REASON</th>
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<tr>
<td>Management and Testing</td>
<td>2020.02.IT01.R1</td>
<td>Clarify the test approach.</td>
<td>• Perform a deliverable review (refer to finding 2019.07.PM03) to ensure necessary steps are in place to ensure DataHouse can perform relevant testing.</td>
<td>Open</td>
<td>Refer to the June 2020 IV&amp;V Monthly Report for status updates prior to July 2020.</td>
<td>IV&amp;V did not observe or have access to information to verify any progress made in the current month.</td>
<td>• Consider identifying high-level requirements that duplicate more detailed requirements to reduce redundancy in testability by design or planning.</td>
<td>• Require data conversion plans to identify high-level requirements for design, development, and testing.</td>
<td>Closed</td>
<td>07/29/2020</td>
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<td>All recommendations are updated as of this date.</td>
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<td></td>
<td>2020.02.IT01.R2</td>
<td>Develop adequate test management processes and procedures</td>
<td>• Evaluate the impact on operations and project success of different data conversion scanning approach options.</td>
<td>Open</td>
<td>Refer to the June 2020 IV&amp;V Monthly Report for status updates prior to July 2020.</td>
<td>IV&amp;V did not observe or have access to information to verify any progress made in the current month.</td>
<td>• Consider the following options: • Use a requirements management tool with greater functionality. • Evaluate the impact on operations and project success of different data conversion scanning approach options.</td>
<td>• Ensure that the RTM is up-to-date and reflects all changes to the project schedule.</td>
<td>Closed</td>
<td>07/29/2020</td>
<td>08/21/2020</td>
<td>All recommendations are updated as of this date.</td>
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<td>2019.10.PM01.R1</td>
<td>Improve requirements traceability.</td>
<td>• Trace contract requirements to requirements subsets used by the DataHouse development teams to ensure all necessary requirements are identified, listed, and scheduled before being added to the RTM.</td>
<td>Open</td>
<td>Refer to the June 2020 IV&amp;V Monthly Report for status updates prior to July 2020.</td>
<td>IV&amp;V did not observe or have access to information to verify any progress made in the current month.</td>
<td>• Evaluate the impact on operations and project success of different data conversion scanning approach options.</td>
<td>• Ensure that the RTM is up-to-date and reflects all changes to the project schedule.</td>
<td>Closed</td>
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<td>08/21/2020</td>
<td>All recommendations are updated as of this date.</td>
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<td>2019.10.PM01.R2</td>
<td>Formulate DLIR Case Management data conversion requirements</td>
<td>• Evaluate the impact on operations and project success of different data conversion scanning approach options.</td>
<td>Open</td>
<td>Refer to the June 2020 IV&amp;V Monthly Report for status updates prior to July 2020.</td>
<td>IV&amp;V did not observe or have access to information to verify any progress made in the current month.</td>
<td>• Evaluate the impact on operations and project success of different data conversion scanning approach options.</td>
<td>• Ensure that the RTM is up-to-date and reflects all changes to the project schedule.</td>
<td>Closed</td>
<td>07/29/2020</td>
<td>08/21/2020</td>
<td>All recommendations are updated as of this date.</td>
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Refer to the June 2020 IV&V Monthly Report for status updates prior to July 2020. 07/29/20 and 08/21/20: DLIR's lite UAT review of Epic 2 and 3 builds is still ongoing. DLIR needs to re-evaluate the adequacy of the IV&V SME activities and resources.

AUDIT MANAGEMENT AND TESTING

FINDING ID CATEGORY FINDING UPDATE CLOSED DATE CLOSURE REASON
2019.07.PM14.R1 High Document changes in Change Requests for data conversion and testing. 07/29/20, 08/21/20, and 09/28/20: No updates to report. 10/23/20: The change request to document the major change to the Content Management Plan was approved on 10/22/20. 10/26/20: The change to the IV&V Change Request was approved on 10/22/20.

AUDIT MANAGEMENT AND TESTING

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AUDIT MANAGEMENT AND TESTING

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RISK MANAGEMENT

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RISK MANAGEMENT

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2019.09.PM01.R1 Document changes in Change Requests for testing. 07/29/20: The review of the draft security policies is still on hold due to unavailability of DLIR project resources. 08/21/20: The necessary DLIR SMEs were able to participate in the Phase 2 project activities; however, it is unclear if DLIR SMEs had adequate time to perform the Phase 1 Case Studies. 10/23/20: DLIR plans to formalize security requirements as per the Project Management Plan (version 1.3), and the resulting security requirements should be determined immediately to prevent further delay of the project.

RISK MANAGEMENT

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Refer to the June 2020 IV&V Monthly Report for status updates prior to July 2020.

07/29/20 and 08/21/20: Progress on the success metrics stalled due to shifting priorities and changes in DLIR project resources.

09/28/20: DLIR updated success metric goals and plans for collecting baseline success metric data. DLIR presented the updated metrics at the weekly project managers meeting but should also document these plans for M&O review and ensure that new stakeholders are included in the discussions moving forward.

Accuity will continue to evaluate the collection and monitoring of success metrics data.

Open The eCMS Project does not have a project charter that would have helped to formalize the project goals, target benefits, and success metrics at the start of the project. Based on informal discussions with project stakeholders, it is clear that there are no formal roles and responsibilities for managing the project. This may impact the project’s ability to effectively manage project risks and opportunities and to align project decisions and discussions (e.g., requirements gathering) with project goals. 10/23/20: No updates to report. Accuity will continue to evaluate M&O as roles and responsibilities are clarified.

Benefits Realization

2019.07.PG05
Risk High Moderate
The eCMS Project has failed to achieve team synergy between DLIR and DataHouse (refer to finding 2019.07.PG03), physical separation of the project team, and limited collaboration or DLIR and DataHouse project team members. This has also led to ineffective communications within the project team (refer to finding 2019.07.PM06).

Open Refer to the June 2020 IV&V Monthly Report for status updates prior to July 2020.

2019.09.IT03
Risk Moderate High
Refer to the June 2020 IV&V Monthly Report for status updates prior to July 2020.

2019.09.IT02
Risk Moderate High
Clarify M&O roles and responsibilities.

Open Refer to the June 2020 IV&V Monthly Report for status updates prior to July 2020.

Case Management may impact the execution of data conversion activities. (Updated)

2019.07.PG05.R1
Formalize measurable goals and success metrics in a project charter.

2019.07.PG05.R2
Collect baseline and project performance data.

2019.07.PM02.R1
Clarify roles and responsibilities.

2019.07.PM02.R2
The DataHouse Project Manager should work with DataHouse to gain understanding of the DataHouse Project Manager’s role with the eCMS Project.

2019.07.PM02.R3
Include DLIR in project activities and communications to increase DLIR and DataHouse project team cohesion.

2019.07.PM02.R4
Include DLIR in project activities and communications to increase DLIR and DataHouse project team cohesion.

2019.07.PM02.R5
Include DLIR in project activities and communications to increase DLIR and DataHouse project team cohesion.

OPEN

IV&V Monthly Report

2019.09.IT02.RI
Clarify M&O roles and responsibilities.

• Discuss terms of DataHouse support option to understand level of support, cost structure, and timing of transition.

• Consider any shared responsibility with ETS and enterprise tools that can be leveraged.

• Consider the need to include an outline of DataHouse and DataHouse roles and responsibilities in a contract modification letter to DataHouse.

ASSESSMENT

ORIGINAL

CURRENT

FINDING

CATEGORY FINDING ID TYPE

SEVERITY

SEVERITY

FINDING ANALYSIS

RECOMMENDATION ID

RECOMMENDATION

SUPPLEMENTAL RECOMMENDATION

STATUS

FINDING

STATUS UPDATE

CLOSED DATE

CLOSURE REASON

2019.07.PG05
System Software,
Hardware and Integrations

2019.07.PM02
Organization and Management

2019.07.PM02
Organization and Management

5 of 13
2019.07.PM03 Moderate Moderate The acceptance process has contributed to project delays and resulted in the acceptance of deliverables that do not meet industry standards.

Project Organization and Management

As DLIR has had limited involvement in project activities or the preparation of deliverables (refer to finding 2019.07.PM01), lack of a quality management process and resource to verify deliverables (refer to finding 2019.07.PM02), and moderate to high deliverable review meeting attendance (refer to finding 2019.07.PM03), a lack of a quality management process and resource to verify deliverables (refer to finding 2019.07.PM02), and some tasked project managers (refer to finding 2019.07.PM03) also contribute to an insufficient deliverable review and acceptance process. The delay in the approval of deliverables has been cited by the 420A Project team as one of the contributing factors to project delays and resource constraints. DLIR and DataHouse started to implement joint deliverable review meetings beginning June 2019.

2019.07.PM04 High Moderate DataHouse’s ineffective and untimely response to the IV&V recommendations made at 2019.07.PM02.R2 and 2019.07.PM02.R3 regarding DataHouse working on-site and including DLIR in project activities will also address this finding. Below are additional recommendations to further improve project team communications.

The IV&V recommendations made at 2019.07.PM02.R2 and 2019.07.PM02.R3 regarding DataHouse working on-site and including DLIR in project activities will also address this finding. Below are additional recommendations to further improve project team communications.

Communications management

2019.07.PM05 High Moderate DLIR's ineffective and limited communications with the DLIR Project Team contributed to DLIR’s incomplete understanding of the technical solution, potential risks, and upcoming project activities.

Communication activities listed in the Project Management Plan (version 1.0) did not occur as planned as the weekly project status meetings did not begin until April 2019 and the first progress review was on September 14, 2019.

Additionally, there has been a lack of communications regarding the upcoming build stage activities (refer to finding 2019.07.PM06). The IV&V recommendations made at 2019.07.PM06.R1 and 2019.07.PM06.R2 regarding Datashare’s ineffective and untimely response to the IV&V recommendations made at 2019.07.PM02.R2 and 2019.07.PM02.R3 regarding DataHouse working on-site and including DLIR in project activities will also address this finding. Below are additional recommendations to further improve project team communications.

2019.07.PM06 Issue Issue DLIR reviewed and approved the recent Phase 1 Content Management Training Guide deliverables. A deliverable walk through meeting was not held and IV&V does not have adequate visibility to DLIR’s review and approval process. DLIR review of the Datashare Test Plan deliverable is still pending.

Communications management

2019.07.PM07 Risk Moderate Moderate The lack of tailored project communications for all impacted stakeholders may reduce user adoption and stakeholder buy-in.

Communications management is a part of the Project Management Plan developed by DataHouse; however, the plan is not comprehensive and primarily reflects project meetings, status reporting, and issue reporting. The improved Project Management Plan (version 2.0) was updated to include communications management requirements.

The communications management needs to be established and defined in the project schedule for communication activities and assigned resources.

In formal project communications engagements, there was not a formal project communications engagement to ensure the information needs of internal and external project stakeholders are met.

There is no process to measure the frequency of communication activities and assign responsibilities.

In formal project communications engagements, there was not a formal project communications engagement to ensure the information needs of internal and external project stakeholders are met.

There is no process to measure the frequency of communication activities and assign responsibilities.

Communication requirements were not defined in the project schedule for communication activities and assigned resources.


2019.07.PM07.R1 Further refine communication management plans.

10/23/20: Accuity decreased the severity rating from Level 1 (High) to Level 2 (Moderate). Regular meetings for Phase 1 Content Management and electronic submission were scheduled and other standing project meetings are continuing to occur.

2019.07.PM07.R2 Establish deliverable acceptance criteria.

2019.07.PM03.R2 Hold joint DLIR and DataHouse deliverables review meetings to walk through deliverables.

2019.07.PM03.R3 Implement formal deliverable review and approval processes.

Consider including acceptance criteria in the quality management plan.

Implement daily touch point meetings between DataHouse and DLIR Project Managers.

ASSESSMENT

ORIGINAL

CURRENT

FINDING

CATEGORY

FINDING ID

TYPE

SEVERITY

FINDING ANALYSIS

RECOMMENDATION ID

RECOMMENDATION

SUPPLEMENTAL

STATUS

FINDING STATUS

UPDATE

CLOSED

DATE

CLOSURE

REASON

2019.07.PM03

Establish deliverable acceptance criteria.

2019.07.PM03.R1

to ensure that deliverables are accepted.

DLIR needs to establish acceptance criteria and scope validation and quality control processes.

If deliverables do not meet acceptance criteria, the quality of the technical solution and outcomes of the project will be compromised.

Implement daily touch point meetings between DataHouse and DLIR Project Managers.

2019.07.PM05.R1

Establish project communication plan.

2019.07.PM05.R2

Implement project communication plan.

As part of the project communications plan, the project team will:

- Establish clear, objective deliverable acceptance criteria.

- Establish project communication plan.

- Establish clear, objective deliverable acceptance criteria.

- Implement project communication plan.

- Assess and verify the effectiveness of the deliverable review and acceptance processes.

- Assess and verify the effectiveness of the deliverable review and acceptance processes.

2019.07.PM06.R1

To ensure that deliverables are accepted.

2019.07.PM06.R2

To ensure that deliverables are accepted.

2019.07.PM07.R1

Further refine communication management plans.

2019.07.PM07.R2

Further refine communication management plans.

2019.07.PM07.R3

Further refine communication management plans.
Organizational

There is no formal OCM plan or approach. DataHouse’s BAFO lists various OCM activities but these were not formalized in a plan or processes. There are no OCM specific tasks or resources assigned. The project management plan does not include any formal OCM documentation or processes. While OCM risk management communication and learning activities are included in the Phased Implementation Plan, these are not included in the Phased Contractual Definitions and Phased Requirements Management Documents, and are not tracked as OCM risks and issues.

The risk management plan does not identify pockets of resistance or adequately enable individual change. There are no formal OCM approaches to support change. The business case and related requirements documentation includes some references to the need for an OCM approach, but these were not formalized in a plan or processes. Although the project management plan lists OCM risks and issues, these are not tracked as OCM risks and issues. ACCUITY and DLIR have observed pockets of resistance and noted that early in the project, some project team members and key stakeholders were not aware of the project’s requirements or did not have a clear understanding of the project’s goals.

Moderate

Risks and issues have not been clearly identified, tracked, or reported resulting in the lack of understanding of potential impacts across project team members and there are no mitigation plans to adequately address them.

Open

The project to date with no history of any risks being closed. DLIR project team was not tracking any of its own risks or issues. Requirements are not being properly identified and prioritized, resulting in the lack of understanding of potential impacts across project team members.

Close

A formalized process should clearly define responsibilities and steps in identification, resolution and action items tracking, and escalation procedures. The project team must encourage open, transparent discussion about risks and issues.

ACCUITY will continue to monitor the risk management process.

Requirements Management

The requirements for both Content Management and Case Management have already been approved; however, the requirements are incomplete (e.g. do not incorporate all contract requirements, including compliance with Hawaii Revised Statues, Hawaii Administrative Rules and security requirements).

As requirements are the foundation for proper system design, the requirements are critical to project success, a formal process should be implemented before moving forward in the project.

Close

The Business Management and Leadership team should:

- Ensure that there is a clear understanding between DataHouse and DLIR regarding who is responsible for identifying and tracking different types of requirements.
- Develop a process for prioritizing and reporting requirements.
- Develop a process for tracing requirements to specific system design elements.
- Create and mobilize a change coalition group of managers, supervisors, and key influencers. Also ensure that there is a clear understanding between DataHouse and DLIR regarding the requirements management process.
- Collect baseline change awareness and readiness measurements through surveys or interviews.
- Develop a process for prioritizing and reporting requirements.
- Ensure requirements documentation includes all requirements listed in the Hawaii Revised Statutes, Hawaii Administrative Rules and security requirements.
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<th>STATUS</th>
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<tbody>
<tr>
<td>2019.07.PM12.R1 Prepare a comprehensive project budget and a schedule of long-term operational costs (e.g., licenses, subscriptions, maintenance, cloud services).</td>
<td>Open</td>
<td>Document and approve revisions to project schedule deliverables, milestones, and go-live dates in accordance with the Project Management Plan.</td>
</tr>
<tr>
<td>2019.07.PM12.R2 Prepare regular cost reports for management and the executive steering committee.</td>
<td>Open</td>
<td>Document and approve revisions to project schedule deliverables, milestones, and go-live dates in accordance with the Project Management Plan.</td>
</tr>
<tr>
<td>2019.07.PM12.R3 Clarify DataHouse payment terms and adjust payment schedules for schedule delays.</td>
<td>Open</td>
<td>Document and approve revisions to project schedule deliverables, milestones, and go-live dates in accordance with the Project Management Plan.</td>
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<tr>
<td>2019.07.PM13.R1 Document and approve revisions to project schedule deliverables, milestones, and go-live dates in accordance with the Project Management Plan.</td>
<td>Open</td>
<td>Document and approve revisions to project schedule deliverables, milestones, and go-live dates in accordance with the Project Management Plan.</td>
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<tr>
<td>2019.07.PM13.R2 Refine the project schedule with details of tasks, durations, phases, and assigned resources.</td>
<td>Open</td>
<td>Document and approve revisions to project schedule deliverables, milestones, and go-live dates in accordance with the Project Management Plan.</td>
</tr>
</tbody>
</table>

Refer to the June 2020 IV&V Monthly Report for status updates prior to July 2020.

- 07/29/20: DLIR and DataHouse are actively monitoring and managing AWS environment costs.
- 10/23/20: DLIR and DataHouse continue to actively manage select project costs. Improvements are still needed to better track and monitor all project costs. DataHouse's contract payment schedule were not reviewed for changes in completion of milestones and deliverables resulting in prepayment of contract funds.
- DLIR will continue to monitor project costs including the proposed payment schedule, new AWS costs (from finding 2019.07.IT01), and cost management practices.

**Finding:** The Phase 1 go-live dates were delayed 1-2 months from the start of the project with the Content Management go-live delayed four months with the Case Management go-live delayed five months. The delays were due to unexpected technical issues and resource constraints.

**Finding:** A comprehensive project budget and schedule of long-term operational costs (e.g., licenses, subscriptions, maintenance, cloud services) was not created.

**Finding:** There is no formal cost management plan. A comprehensive total project budget is not created, tracked, or reported. Currently, payments are tracked for the two main eCMS Project contracts: DataHouse and Team Accuity. Additionally, total project costs and funding sources are not formally reported.

**Finding:** The DataHouse contract states that payments are contingent upon receipt of services, deliverables, and steps in accordance to the milestones that identify the specific services, deliverables, and steps. The contract states that DataHouse makes monthly payment requests and the DataHouse invoices the Team on a bi-weekly basis. In addition, the contract states that it is DataHouse’s responsibility to monitor project costs and submit regular cost reports for management review.

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**Finding:** There is no formal cost management plan. A comprehensive total project budget is not created, tracked, or reported. Currently, payments are tracked for the two main eCMS Project contracts: DataHouse and Team Accuity. Additionally, total project costs and funding sources are not formally reported.
Resource management is included in the Project Management Plan and states that “resources will be provided based on project needs. This will be reviewed with DCD on a quarterly basis.” The Project Status Reports prepared by DataHouse do not note any resource issues. The Project Management Plan and assigned quality assurance resources may impact the quality of project deliverables. The Content Management Design (version 1.0) document was approved by DLIR on May 6, 2019. Case Management is currently in the design phase and design documents have not been provided. Although the Quality Management Plan is currently in progress, the project interface design has not been defined. The interfaces between Content and Case Management are integral to the success of the project and should be fully defined in design documents in accordance with industry standards.

As it is almost eleven months into the eCMS Project and several deliverables were already approved and many are pending approval, it is important to finalize and as development progress using the actual solution components is made.

An unclear interface solution may impact the design process and require additional effort to correct. The Quality Management Plan (version 0.1) was drafted by DataHouse on 07/29/20, 08/21/20, 09/28/20, and 10/23/20: IV&V does not have adequate visibility of integration activities or access to current builds to be able to better assess and identify potential risks and issues. Accuity will continue to evaluate the interface solution as additional details are finalized and as development progresses using the actual solution components is made.

A configuration management plan was planned and the configuration management plan was assigned to perform quality management activities.

The configuration management plan has not yet been started. The plan is intended to control and manage the configuration items throughout the project life cycle. However, the current (07/23) configuration management plan is not properly defined, detailed and does not align to the project goals.

This plan should be reviewed with the executive steering committee.

Inadequate assigned project resources

The Content Management Design (version 1.0) document was approved by DLIR on May 6, 2019. Case Management is currently in the design phase and design documents have not been provided. Although the Quality Management Plan is currently in progress, the project interface design has not been defined. The interfaces between Content and Case Management are integral to the success of the project and should be fully defined in design documents in accordance with industry standards.

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This plan should be reviewed with the executive steering committee.
### Project Organization and Management

**Finding:**
- The DataHouse Case Management development team works very collaboratively with DLIR and demonstrates commitment to continuous improvement resulting in improved efficiency and increased transparency.
- The Scrum methodology employed by the DataHouse Case Management development team inherently promotes collaboration, open communication, transparency, and process improvement through quick turn-arounds and retrospectives. Change and control mechanisms, the Case Management development team members don’t go through the approval process for small issues or changes, which allows for more efficient processes.
- The DataHouse team’s actions have helped to minimize impacts and further delays to the project schedule. They have also built positive momentum in moving the project forward.

**Recurrence of Findings:**
- N/A for positive findings.
- N/A for positive findings.

**Recommends:**
- Closed N/A.
- Closed as this is a positive finding.

### System Software, Hardware and Integrations

**Finding:**
- Many members of the DataHouse team have contributed to the following successes:
  - Secured a replacement Content Management hosting infrastructure solution. This included presenting the replacement option to the stakeholders and leading the selection process.
  - DLIR and ETS have even proposed ways to further improve the solution leveraging their extensive technical knowledge and experience.
- The DataHouse team’s actions have helped to minimize impacts and further delays to the project schedule.

**Recurrence of Findings:**
- N/A for positive findings.
- N/A for positive findings.

**Recommends:**
- Closed N/A.
- Closed as this is a positive finding.

### Governance Effectiveness

**Finding:**
- The DCD Executive Sponsor is highly engaged and plays an active and visible role in guiding, monitoring, and championing the eCMS Project.
- The DCD Executive Sponsor’s close involvement in the project has provided strong leadership that has, to an extent, compensated for the lack of formal governance (refer to finding 2019.07.PG01). However, as important as good sponsorship is, this factor alone can not be relied upon to guarantee project success.

**Recurrence of Findings:**
- N/A for positive findings.
- N/A for positive findings.

**Recommends:**
- Closed N/A.
- Closed as this is a positive finding.

### Security

**Finding:**
- DataHouse performed remediation of AWS vulnerability scan findings and DLIR, with the assistance of ETS, reviewed and approved the results. Additionally, DataHouse and DLIR agreed on a process for conducting the performance and review of periodic AWS sandboxes every 30 days to develop high level framework and tasks for developing the security management plan in August.
- DLIR and ETS are meeting regularly to develop the security management plan including reference of the security tools and frameworks. DLIR plans to complete the high level security framework and tasks in August.
- DLIR continues to evaluate, select, and implement various security tools and cures apart of the security management plan. DLIR observed first phase for a high level security maturation; however, decisions about which tools must be completed by the upcoming Phase 2. Contact Management got be concluded as per the Critical risk of the project.
- DLIR plans to do a security risk assessment (SRA) with the assistance from ETS in October 2020 to audit any gaps in security.
- The completion of the SRA was pushed back to early November 2020.

**Recurrence of Findings:**
- Open

**Recommends:**
- Finalize the security management plan.

**Notes:**
- The completion of the SRA was pushed back to early November 2020.
The MOU with DHS for Datacap and FileNet licenses is close to being finalized. DLIR received a draft from DHS on September 1, 2019 and it was sent to the Attorney General’s office on September 17, 2019. Accuity has observed that DLIR has led the contract discussions and negotiations with AWS. The procurement of the Blue Jays ticketing software by the MOU Project was terminated. The Blue Jays and Distributec contract does not clearly outline expected deliverables, evaluation criteria, and close identification of risks and responsibilities. There has already been cancellation of the contract due to the lack of necessary contract management experience and competencies. There have also been insufficient contract terms to provide additional information on the contract. The Blue Jays ticketing software implementation has been delayed due to the necessary contract management experience and competencies. There have also been insufficient contract terms to provide additional information on the contract. The Blue Jays ticketing software implementation has been delayed due to the necessary contract management experience and competencies. There have also been insufficient contract terms to provide additional information on the contract. The Blue Jays ticketing software implementation has been delayed due to the necessary contract management experience and competencies. There have also been insufficient contract terms to provide additional information on the contract.

The eCMS Project's primary modernization objective is to move to a BAFO without obtaining a written letter of intent between DataHouse and DHS. Furthermore, the eCMS Project advanced for DLIR and DHS and reliance on the DataHouse Project Sponsor to lead the discussions due to her experience with DHS.

• Consider including key project documents as deliverables such as a project plan, project approval, and project milestones.
• Consider including measurable success metrics (refer to finding 2019.07.PG05).
• Consider the need to outline roles and responsibilities between DLIR and DataHouse (refer to finding 2019.07.PM02).

The lack of a formal executive steering committee and change control board may limit the effectiveness of project governance. The DLIR EDPSO and reviewed by ETS. The RFP and DataHouse contract does not clearly outline expected deliverables, evaluation criteria, and close identification of risks and responsibilities. There has already been cancellation of the contract due to the lack of necessary contract management experience and competencies. There have also been insufficient contract terms to provide additional information on the contract. The Blue Jays ticketing software implementation has been delayed due to the necessary contract management experience and competencies. There have also been insufficient contract terms to provide additional information on the contract. The Blue Jays ticketing software implementation has been delayed due to the necessary contract management experience and competencies. There have also been insufficient contract terms to provide additional information on the contract.
### Security Architecture

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<th>CLOSURE REASON</th>
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<tr>
<td>Case Management</td>
<td>Design</td>
<td>2019.07.IT01.R1</td>
<td>Evaluate other total solution alternatives for an alternate solution.</td>
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<td>2019.07.IT01.R2</td>
<td>Prepare a comprehensive technical analysis of the alternative solution.</td>
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<td>2019.07.IT03.R1</td>
<td>Update the Content Management design documents.</td>
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<td>2019.07.IT03.R3</td>
<td>Include a technical analysis of the alternative solution to project plans, requirements, implementation, operation, and maintenance.</td>
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### Data Conversion

**Finding Date:** 2019.07.IT04

**Severity:** Moderate

**Finding Analysis:**
Data conversion is the process of converting data from one source to suit the system requirements of another. It is important that the data conversion plan is based on accurate system requirements. Changes in system requirements after a certain point in the project may cause additional effort to re-factor the migration design process.

**Recommendation:**
- Update the Content Management data conversion plan.
- Consider updates for revised requirements documents (refer to finding 2019.07.PM10).

**Update History:**
- **Closed 09/20/19:** Accuity has kept the severity rating as Level 2 (Moderate). The Content Management Conversion and Migration Plan (version 1.1) was updated on 09/05/19 before the Content Management Design Documents (version 1.5) were updated on 09/11/19 to include additional changes to the high-level Content Management requirements. This ensures that the updated requirements are accounted for on the conversion and migration plans and the detailed taxonomy mapping.
- **10/25/19:** DataHouse evaluated the new requirements and determined that there is no impact to the high-level Content Management conversion requirements included in the Conversion and Migration Plan.
- **11/22/19:** Accuity reviewed the taxonomy mapping with the primary stakeholder and confirmed that changes in system requirements will not have a significant impact on the high-level content data conversion plan as the legacy system has limited data fields that are currently used.
- **11/22/2019 Closed as changes in system requirements do not appear to significantly impact the Content Management data conversion plan.**
## Appendix E: Prior IV&V Reports

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<td>Monthly On-Site IV&amp;V Review Report</td>
</tr>
<tr>
<td>05/22/20</td>
<td>Monthly On-Site IV&amp;V Review Report</td>
</tr>
<tr>
<td>06/26/20</td>
<td>Monthly On-Site IV&amp;V Review Report</td>
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<tr>
<td>07/29/20</td>
<td>Monthly On-Site IV&amp;V Review Report</td>
</tr>
<tr>
<td>08/21/20</td>
<td>Monthly On-Site IV&amp;V Review Report</td>
</tr>
<tr>
<td>09/28/20</td>
<td>Monthly On-Site IV&amp;V Review Report</td>
</tr>
</tbody>
</table>
Appendix F: Comment Log on Draft Report
# Appendix F: Comment Log on Draft Report

<table>
<thead>
<tr>
<th>ID #</th>
<th>Page #</th>
<th>Comment</th>
<th>Commenter’s Organization</th>
<th>Accuity Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td><strong>Project Management &gt; “… but sessions were postponed…”</strong> - Write up sounds as if all sessions were postponed to technical issues. Half of the sessions were completed by 10/23/2020.</td>
<td>DataHouse</td>
<td>Accuity revised wording to “some sessions were postponed” on page 5 and 10.</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
<td><strong>Technology &gt; System Software, Hardware, and Integrations</strong> – Project plan dates reflect the dates in the production deployment checklist. Tone sounds as if it was just “drafted”, which it was not.</td>
<td>DataHouse</td>
<td>The checklist was still in draft form at the end of the reporting period as DLIR was still confirming dates with stakeholders. Accuity revised wording to “provided a deployment checklist” on page 11 and added the additional explanation to Appendix D in finding 2020.09.IT01.</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td><strong>Technology &gt; Data Conversion</strong> – Taxonomy updates were made for both the Content Management and Case Management Migration and Conversion. For Content Management, these were updates based on user feedback during its Migration User Acceptance Test. For Case Management, these were updates based on the Case Management application’s Build of Epic 3 for Hearings. Both of these taxonomy updates were done to keep the migration documentation current with what is being done.</td>
<td>DataHouse</td>
<td>Accuity retained original language on page 11 and added the additional explanation of updates made to Appendix D in finding 2019.11.IT01.</td>
</tr>
</tbody>
</table>
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DataHouse: Organization and Hardware

<table>
<thead>
<tr>
<th>FINDING ID</th>
<th>FINDING</th>
<th>MODERATE</th>
<th>INADEQUATE</th>
<th>COMPLETE PHASE 2 PLANNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/28/20:</td>
<td>DataHouse updated the project management plan to include some</td>
<td></td>
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<td></td>
<td>planning and lack of a detailed</td>
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<td></td>
<td>planning stage and plans to add</td>
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<td></td>
<td>more specific project interim</td>
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<td></td>
<td>and final goals. In general, project</td>
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<td></td>
<td>performance metrics are not</td>
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<td></td>
<td>collected or monitored.</td>
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<td></td>
<td>Instead DataHouse primarily uses</td>
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<td></td>
<td>the project schedule to manage</td>
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<td>project performance and project</td>
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<td></td>
<td>success. Identified deficiencies</td>
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<td></td>
<td>contributed to project timing</td>
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<td></td>
<td>delays.  DataHouse has not yet</td>
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<td>added the detailed tasks for</td>
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<td>Phase 2 beyond the planning</td>
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<td>stage and plans to add more</td>
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<td>specific project interim and</td>
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<td></td>
<td>final goals.</td>
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</table>

**RECOMMENDATION:**

- Provide adequate details of Phase 2 in the project schedule.

**AUDIT REPORTS:**

- The criteria for go/no-go decision are not completely and clearly defined.
- There is no estimated timeline for completion. Some of the details of the go/no-go criteria such as all requirements meet acceptance criteria and are approved by DLIR, and user testing is completed, are still up for discussion and assurance of follow-up.

**CONCLUSION:**

- Consider setting up a cross-functional project team to monitor and manage the go-live tasks.
- DataHouse plans to develop an adequate cutover plan to provide additional information about pre and post go-live tasks.

**FINDING STATUS UPDATE:**

- Progress was limited by availability of project resources and conflicting resource allocation.
- DataHouse began developing the project team to monitor and manage the go-live tasks.
- DataHouse plans to develop an adequate cutover plan to provide additional information about pre and post go-live tasks.
- The need for a more detailed Phase 2 project schedule is identified.

**FINDING ID:**

- 08/28/20: DataHouse updated the project management plan to include some planning and lack of a detailed planning stage and plans to add more specific project interim and final goals. In general, project performance metrics are not collected or monitored. Instead DataHouse primarily uses the project schedule to manage project performance and project success. Identified deficiencies contributed to project delays experienced in Phase 1 and Phase 2, and delays continued into the last week of October 2020. Additional follow-up meetings were not yet established.

**CONCLUSION:**

- Consider setting up a cross-functional project team to monitor and manage the go-live tasks.
- DataHouse plans to develop an adequate cutover plan to provide additional information about pre and post go-live tasks.

**FINDING ID:**

- 10/23/20:Closed as DataHouse and DLIR discussed and clarified project management processes. The need for a more detailed Phase 2 project schedule is identified.

**CONCLUSION:**

- Consider setting up a cross-functional project team to monitor and manage the go-live tasks.
- DataHouse plans to develop an adequate cutover plan to provide additional information about pre and post go-live tasks.

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- Consider setting up a cross-functional project team to monitor and manage the go-live tasks.
- DataHouse plans to develop an adequate cutover plan to provide additional information about pre and post go-live tasks.
## Finding ID
### Issue
High
Formulate a plan for how to respond

### Analysis
The COVID-19 pandemic is impacting project execution throughout the state of Hawaii. As efforts to keep employees safe, the state and county are implementing stay-at-home orders and work from home policies. This has made it difficult for the project moving forward with available resources. DataHouse’s progress on eCMS project has been slowed and the following IV&V recommendations are based on a project-focused perspective, with an understanding that higher DLIR project managers must limit the project moving forward with available resources. The severity rating and the following IV&V recommendations are based on a project-focused perspective, with an understanding that higher DLIR project managers must limit the project moving forward with available resources. The severity rating and the following IV&V recommendations are based on a project-focused perspective, with an understanding that higher DLIR project managers must limit the project moving forward with available resources.

#### Finding ID: 2019.07.PM13
#### Type: Project Organization and Management
#### Status: Closed
#### Date: 08/21/20
#### Reason: The following IV&V recommendations are based on a project-focused perspective, with an understanding that higher DLIR project managers must limit the project moving forward with available resources. The severity rating and the following IV&V recommendations are based on a project-focused perspective, with an understanding that higher DLIR project managers must limit the project moving forward with available resources. The severity rating and the following IV&V recommendations are based on a project-focused perspective, with an understanding that higher DLIR project managers must limit the project moving forward with available resources.

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<tbody>
<tr>
<td>Explore possible ways to keep the project moving forward with available resources.</td>
<td>Consider adjusting the frequency of communications and reviews of response plans to support the pace of evolving circumstances.</td>
<td>Consider reshuffling of user stories in current and upcoming sprints and future sprints.</td>
<td>Evaluate DLIR SMEs availability and bandwidth to work on the project.</td>
<td>Estimate of potential impacts to project costs and schedule have not yet been determined and project resources have not been able to develop mitigation plans.</td>
<td>Consider implementing a plan to keep the project moving forward with available resources.</td>
<td>Evaluate alternative courses of action and contingency plans for each aspect of project execution.</td>
<td>Explore possible ways to keep the project moving forward with available resources.</td>
<td>Estimate of potential impacts to project costs and schedule have not yet been determined and project resources have not been able to develop mitigation plans.</td>
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</tbody>
</table>

#### Finding ID: 2019.07.PM14
#### Type: Project Organization and Management
#### Status: Closed
#### Date: 09/28/20
#### Reason: The following IV&V recommendations are based on a project-focused perspective, with an understanding that higher DLIR project managers must limit the project moving forward with available resources. The severity rating and the following IV&V recommendations are based on a project-focused perspective, with an understanding that higher DLIR project managers must limit the project moving forward with available resources. The severity rating and the following IV&V recommendations are based on a project-focused perspective, with an understanding that higher DLIR project managers must limit the project moving forward with available resources.

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<td>Explore possible ways to keep the project moving forward with available resources.</td>
<td>Estimate of potential impacts to project costs and schedule have not yet been determined and project resources have not been able to develop mitigation plans.</td>
</tr>
</tbody>
</table>

---

**Key Project Resources and Possible Work from Home Arrangements**

#### Office of Enterprise Technology Services (ETS)
- Electronic Data Conversion (EDC) - DLIR Electronic Data Conversion Project Manager, returned to the project on a limited basis and additional DLIR project resources will always be needed. Making improvements for identified change management (2019.07.PM17) will be necessary due to COVID-19. DLIR ceased actively performing or participating in key project resources and possible work from home arrangements are essential to maintaining further delays.

---

**COVID-19 Response and Plans**

1. Evaluate DLIR SMEs availability and bandwidth to work on the project.
2. Consider reshuffling of user stories in current and upcoming sprints and future sprints.
3. Evaluate alternative courses of action and contingency plans for each aspect of project execution.
4. Explore possible ways to keep the project moving forward with available resources.
5. Estimate of potential impacts to project costs and schedule have not yet been determined and project resources have not been able to develop mitigation plans.

---

**COVID-19 Response and Plans**

1. Explore possible ways to keep the project moving forward with available resources.
2. Consider adjusting the frequency of communications and reviews of response plans to support the pace of evolving circumstances.
3. Consider reshuffling of user stories in current and upcoming sprints and future sprints.
4. Evaluate DLIR SMEs availability and bandwidth to work on the project.
5. Estimate of potential impacts to project costs and schedule have not yet been determined and project resources have not been able to develop mitigation plans.

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**COVID-19 Response and Plans**

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2. Consider adjusting the frequency of communications and reviews of response plans to support the pace of evolving circumstances.
3. Consider reshuffling of user stories in current and upcoming sprints and future sprints.
4. Evaluate DLIR SMEs availability and bandwidth to work on the project.
5. Estimate of potential impacts to project costs and schedule have not yet been determined and project resources have not been able to develop mitigation plans.
FINDING ID

SUPPLEMENTAL RECOMMENDATION
High
High
FINDING STATUS UPDATE

Improve requirements traceability.
•Trace contract requirements to requirements subsets used by the Develop adequate test management DataHouse Test Plan is incomplete

RECOMMENDATION

Improve DLIR understanding of the The current RTM documentation and tool

ANALYSIS

Formalize DLIR data conversion test The Content Management Conversion and Migration (version 1.2 pending design, development, and testing.

Risk
The current RTM documentation and tool provides context and expectations for solution fulfills all requirements and also added to the RTM but have not yet been traced to the requirements management process. The requirements documentation did not provide sufficient detail to determine the requirements management process.

Risk
A lack of clarity of the DataHouse's testing approach may not allow DLIR to prepare properly testing the data conversion activities. Additionally, a lack of mutual understanding and transparency on test management processes could impact the execution of test activities.

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A lack of clarity of DataHouse's testing approach may not allow DLIR to prepare properly testing the data conversion activities. Additionally, a lack of mutual understanding and transparency on test management processes could impact the execution of test activities.

In July 2019 and July 2020, IV&V reviewed the requirements documentation and found the requirements for the data conversion activity were not complete and did not provide sufficient detail to determine the requirements management process. The requirements documentation did not provide sufficient detail to determine the requirements management process.

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In July 2019 and July 2020, IV&V reviewed the requirements documentation and found the requirements for the data conversion activity were not complete and did not provide sufficient detail to determine the requirements management process. The requirements documentation did not provide sufficient detail to determine the requirements management process.
Develop procedures to estimate and mitigate risk. Identify applicable test standards and requirements. According to the Project Management Plan (version 1.3), the DataHouse test strategy should be communicating with assigned resources and their supervisors, one time for the project and each subsequent job. Developing and assessing risk mitigation strategies and tasks for all impacted stakeholders. The Project Management Plan (version 1.3) documents the change management process for greater clarity and effectiveness. Document changes in Change Management related documents, such as the IV&V Management Plan.

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The Project Management Plan (version 1.3) documents the change management process for greater clarity and effectiveness. Document changes in Change Management related documents, such as the IV&V Management Plan. Note: Accuity will review the change requests as they are finalized and evaluate them for completeness, or progress. DLIR plans to clarify the testing that DataHouse will be performing and the test documentation DataHouse will be providing in order to develop DLIR's test plan.

Security requirements for the cloud environment must be identified and compared before further development can be finalized. Cloud-based resources are not formally documented in Change Requests or a Change Management Plan. DLIR will request further details on the proposed security policies for use of cloud services and data protection (e.g., security logging and monitoring, MFA, remote access, encryption of data-at-rest and data-in-transit) as soon as the documents are finalized. Accuity will evaluate DLIR's test plan when finalized. Note: Accuity will review the change requests as they are finalized and evaluate them for completeness, or progress. DLIR plans to clarify the testing that DataHouse will be performing and the test documentation DataHouse will be providing in order to develop DLIR's test plan.

Security requirements for the cloud environment must be identified and compared before further development can be finalized. Cloud-based resources are not formally documented in Change Requests or a Change Management Plan. DLIR will request further details on the proposed security policies for use of cloud services and data protection (e.g., security logging and monitoring, MFA, remote access, encryption of data-at-rest and data-in-transit) as soon as the documents are finalized. Accuity will evaluate DLIR's test plan when finalized. Note: Accuity will review the change requests as they are finalized and evaluate them for completeness, or progress. DLIR plans to clarify the testing that DataHouse will be performing and the test documentation DataHouse will be providing in order to develop DLIR's test plan.
<table>
<thead>
<tr>
<th>FInding</th>
<th>Analysis</th>
<th>Recommendation</th>
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<tbody>
<tr>
<td>Explore use of tools for resource calendars and tracking of team member assignment progress and completion.</td>
<td>a trial run of sample cases and a decision on what cases must be converted by go-live is needed (refer also to finding 2019.11.IT01). Additionally, DLIR needs to perform an analysis to determine how many resources will be acquired with budgeted funds and whether those acquired resources will be able to complete necessary data conversion activities by the targeted go-live date. DLIR has not yet completed a test plan (refer to finding 2019.10.IT01). Estimated resource requirements for testing, in particular for users for scheduling testers. The IV&amp;V recommendations made at 2019.07.PM14.R1 and 2019.07.PM14.R2 regarding evaluating resource needs and resource impacts will also address this finding. Below are additional recommendations to further improve data conversion plans and activities.</td>
<td>10/23/20: DLIR project resources are mostly able to participate in Phase 1 and Phase 2 project activities; however, the lasting impact of the COVID-19 pandemic on DLIR project resources is preventing the timely completion of some tasks. Effective resource management is key to minimizing further project delays. Accuity will continue to evaluate resource management practices.</td>
</tr>
</tbody>
</table>
**FINDING ID**
- Consider working with ETS or other State agencies still using Lotus Notes

**Preliminary Clarify roles and responsibilities**

**SUPPLEMENTAL RECOMMENDATION**
- High
- Refer to the June 2020 IV&V Monthly Report for status updates prior to July

**FINDING STATUS UPDATE**
- Explore options for obtaining support.
- Low
- Refer to the June 2020 IV&V Monthly Report for status updates prior to July

**RECOMMENDATION**
- Risk
- 2019.07.PG05
- Unsupported IBM Lotus Notes Domino
- 2019.09.IT03
- Include DLIR in project activities and responsibilities to improve project performance.
- Moderate
- Moderate
- Formalize measurable goals and success metrics in a project charter.

**ANALYSIS**
- High
- ASSESSMENT
- Management
- Data Conversion
- Integrations

**ORIGINAL**
- 2019.07.PM02
- ORIGINAL SEVERITY
- CURRENT SEVERITY
- Performance.
- Expected at project completion.
- Performance may reduce benefits and success metric data.
- Not defining, tracking, or using clear and measurable goals and success metrics makes it difficult to determine if the project and technical solution will achieve the desired level of improvement or benefits that justify the project's financial investment.
- Goals and success metrics need to be defined before going any further in the project.
- Based on informal recommendations made by Team Accuity and DLIR's licenses for the product ended in June 2019 and DLIR is unable to purchase the licenses for the product.
- DLIR presented the updated metrics at the weekly project managers meeting but should also share and periodically remind all eCMS stakeholders.
- Further clarification of testing roles and responsibilities is still needed.
- 07/29/20: This was changed to a risk in the July 2020 IV&V Monthly Report.
- 08/21/20: DLIR began clarifying responsibility and enterprise tools with ETS and DataHouse in September 2020.
- 09/28/20: DLIR drafted a M&O assumptions template that DataHouse reviewed and agreed to. M&O assumptions and responsibilities in writing with DataHouse and ETS.
- 10/22/20: No updates to report.
- Acctly will continue to monitor M&O as roles and responsibilities are clarified.

**RECOMMENDATION**
- Risk
- 2019.07.IT03
- Include DLIR in project activities and responsibilities to improve project performance.
- Medium
- Medium
- Formalize measurable goals and success metrics in a project charter.
- Consider leveraging enterprise tools such as legacy systems, operations, and internal stakeholders.
- This was added to the risk in the 2020 IV&V Monthly Report.
- 08/21/20, 09/28/20, and 10/22/20: No updates to report.
- Acctly will continue to monitor the preliminary concern.

**RECOMMENDATION**
- Risk
- 2019.07.PG05
- Unsupported IBM Lotus Notes Domino
- 2019.09.IT02
- Include DLIR in project activities and responsibilities to improve project performance.
- Medium
- Medium
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- Acctly will continue to monitor the preliminary concern.

**RECOMMENDATION**
- Risk
- 2019.07.PM02
- Unsupported IBM Lotus Notes Domino
- 2019.09.PM02
- Include DLIR in project activities and responsibilities to improve project performance.
- High
- High
- Formalize measurable goals and success metrics in a project charter.
- Consider leveraging enterprise tools such as legacy systems, operations, and internal stakeholders.
- This was added to the risk in the 2020 IV&V Monthly Report.
- 08/21/20, 09/28/20, and 10/22/20: No updates to report.
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- Risk
- 2019.07.PG05
- Unsupported IBM Lotus Notes Domino
- 2019.09.PM02
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- High
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- Consider leveraging enterprise tools such as legacy systems, operations, and internal stakeholders.
- This was added to the risk in the 2020 IV&V Monthly Report.
- 08/21/20, 09/28/20, and 10/22/20: No updates to report.
- Acctly will continue to monitor the preliminary concern.
Moderate Risk Implement formal deliverable review procedures.

CLOSURE REASON

TYPE

ANALYSIS

Moderate Establish deliverable acceptance procedures.

Issue Hold joint DLIR and DataHouse deliverable acceptance meetings.

Moderate

FINDING STATUS UPDATE

ASSESSMENT

Management Organization and stakeholder buy-in.

2019.07.PM07

High

SEP.2019.07.PM06

Cited by the eCMS Project team as one of the reasons the Phase 1 go-live was delayed.

Team contributed to DLIR's incomplete communications with the DLIR Project Management Office (PMO) and other internal stakeholders. There is not a process to ensure the timely distribution of information to all stakeholders are grouped together for three broad communication categories: Project Managers, developers, and claimants, insurance agencies). Communication is a part of the Project Management Plan (PMP) and includes policies, procedures, and guidelines for communications, including the definition of communication requirements and responsibilities. For example, if the project has a strong technical or commercial focus, it might require more detailed documentation than if it is less technical or commercial in nature.

DataHouse prepares project deliverables and submits to DLIR for review. As stated in the finding, DataHouse has implemented joint deliverable review meetings with DLIR, with the goal of improving the technical solution and development of the project. A formal communication requirements analysis was not conducted prior to this implementation. However, this informal approach does not include all internal stakeholders or external resources.

DataHouse and DLIR started to implement joint deliverable review meetings in May 2019. The delay in the approval of deliverables has been cited by the eCMS Project team as one of the reasons the Phase 1 go-live was delayed. Additionally, the informal approach to these joint deliverable review meetings, as opposed to established joint deliverable review meetings that are used by other stakeholders, may result in a lack of communication between DataHouse, DLIR, and other stakeholders. This can be a problem if there are any differences in the interpretation of the deliverables. Regular meetings between DataHouse and DLIR are recommended to improve the coordination of project deliverables and to ensure that all stakeholders are informed of any changes or updates. The DLIR Project Manager returned to the project on a full-time basis on 10/23/20. Additionally, the DLIR Project Manager returned to the project on a part-time basis on 10/23/20. Regular meetings for Phase 1 Case Management deliverables will resume but periodic Content Management check-in meetings are needed for smooth project execution.

2019.07.PM03.R3

2019.07.PM03.R1

2019.07.PG03), or in Deliverable Expectation Documents (DED).

In a contract amendment (refer to finding 2019.07.IT.05), in a contract amendment procedures for the DLIR DELIVER project.

Accuity will continue to evaluate project communication plans and activities. Implement daily touch point meetings with Phase 1 Content Management and electronic submission pilot group stakeholders.

07/29/20: DLIR made some updates to the project website.

09/28/20: DLIR and DataHouse joint standing meetings will resume. The DLIR Project Manager returned to full-time status on the project on 10/23/20. Additionally, the DLIR Project Manager returned to the project on a part-time basis on 10/23/20. Regular meetings for Phase 1 Case Management deliverables will resume but periodic Content Management check-in meetings are needed for smooth project execution.

08/21/20: DataHouse and DLIR held an initial meeting with a limited group of stakeholders (Moderate).  Regular meetings for Phase 1 Content Management and electronic submission were scheduled and other standing project meetings are continuing to occur.

08/21/20: The DLIR Project Manager returned to full-time status on the project on 10/23/20. Additionally, the DLIR Project Manager returned to the project on a part-time basis on 10/23/20. Regular meetings for Phase 1 Case Management deliverables will resume but periodic Content Management check-in meetings are needed for smooth project execution.

07/29/20: The weekly status meetings for Phase 1 Case Management deliverables are currently occurring monthly with key stakeholders. Phase 1 Case Management deliverables will resume but periodic Content Management check-in meetings are needed for smooth project execution.

08/21/20: The DLIR Project Manager returned to full-time status on the project on 10/23/20. Additionally, the DLIR Project Manager returned to the project on a part-time basis on 10/23/20. Regular meetings for Phase 1 Case Management deliverables will resume but periodic Content Management check-in meetings are needed for smooth project execution.

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07/29/20: The weekly status meetings for Phase 1 Case Management deliverables are currently occurring monthly with key stakeholders. Phase 1 Case Management deliverables will resume but periodic Content Management check-in meetings are needed for smooth project execution.
FINDING ID
Missing key OCM steps or activities may be adversely affect outcomes of OCM strategies.

ANALYSIS
Develop and implement a structured OCM approach.

2019.07.PM09

CLOSURE REASON
Moderate
Issue

Refer to the June 2020 IV&V Monthly Report for status updates prior to July 2020.

TYPE
Risk

Improve requirements management.

Risks and issues have not been clearly and adequately addressed. There are no OCM focused processes to aid in the identification and mitigation of resistance.

CATEGORY
Organizational Management

ASSESSMENT
Documents are incomplete. Management requirements adequately address them.

SEVERITY
ORIGINAL
Moderate

Impact across project team members the lack of understanding of potential impacts of new requirements. Adequately enable individual change.

ORIGINAL
Moderate

Not identify pockets of resistance or mitigate negative impacts prior to moving forward in the project.

2019.07.PM09.R2

ASSESSMENT
Requirements management not adequately address resistance to project changes. Throughout the project.

SEVERITY
MODIFIED
High

Identify resistance to project changes.

2019.07.PM10

ASSESSMENT
Requirements management not adequately address resistance to project changes.

SEVERITY
MODIFIED
High

Identify resistance to project changes.

2019.07.PM10.R2

ASSESSMENT
Requirements management not adequately address resistance to project changes.

SEVERITY
MODIFIED
High

Identify resistance to project changes.

2019.07.PM11

ASSESSMENT
Requirements management not adequately address resistance to project changes.

SEVERITY
MODIFIED
High

Identify resistance to project changes.

2019.07.PM12

ASSESSMENT
Requirements management not adequately address resistance to project changes.

SEVERITY
MODIFIED
High

Identify resistance to project changes.

2019.07.PM13

ASSESSMENT
Requirements management not adequately address resistance to project changes.

SEVERITY
MODIFIED
High

Identify resistance to project changes.

2019.07.PM14

ASSESSMENT
Requirements management not adequately address resistance to project changes.

SEVERITY
MODIFIED
High

Identify resistance to project changes.

2019.07.PM15

ASSESSMENT
Requirements management not adequately address resistance to project changes.

SEVERITY
MODIFIED
High

Identify resistance to project changes.

2019.07.PM16

ASSESSMENT
Requirements management not adequately address resistance to project changes.

SEVERITY
MODIFIED
High

Identify resistance to project changes.

2019.07.PM17

ASSESSMENT
Requirements management not adequately address resistance to project changes.

SEVERITY
MODIFIED
High

Identify resistance to project changes.

2019.07.PM18

ASSESSMENT
Requirements management not adequately address resistance to project changes.

SEVERITY
MODIFIED
High

Identify resistance to project changes.
<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>ASSESSMENT</th>
<th>ISSUE</th>
<th>FINDING</th>
<th>RECOMMENDATION</th>
<th>SUPPLEMENTAL RECOMMENDATION</th>
<th>FINDING STATUS UPDATE</th>
<th>CLOSED DATE</th>
<th>REASON FOR CLOSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource</td>
<td>Cost, Schedule and Management</td>
<td>SUPPLEMENTAL RECOMMENDATION</td>
<td>Clarify DataHouse payment terms</td>
<td>Ensure regular cost reports are prepared and distributed</td>
<td></td>
<td>06/2020</td>
<td>06/21/2020</td>
<td>No updates to report.</td>
</tr>
<tr>
<td>Risk</td>
<td>Cost, Schedule and Management</td>
<td>SUPPLEMENTAL RECOMMENDATION</td>
<td>Ensure regular cost reports are prepared and distributed</td>
<td>Ensure regular schedule reports are prepared</td>
<td></td>
<td>10/2020</td>
<td>10/23/2020</td>
<td>No updates to report.</td>
</tr>
</tbody>
</table>

The DataHouse contract states that payments are contingent upon receipt of invoices, deliverables, and adequate information that reflects the status of project work. The project manager has indicated that the go-live dates are based on the project schedule deliverables, or detailed tasks, for Phase 2 and 3. Inadequate schedule management and the executive steering committee were leading to project delays. The DataHouse contract states that payments are contingent upon receipt of invoices, deliverables, and adequate information that reflects the status of project work. The project manager has indicated that the go-live dates are based on the project schedule deliverables, or detailed tasks, for Phase 2 and 3. Inadequate schedule management and the executive steering committee were leading to project delays.

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**FINDING ID**

**Risk**

**CLOSED DATE**

**ANALYSIS**

Refer to the June 2020 IV&V Monthly Report for status updates prior to July.

- Develop a formal configuration management plan. (Refer to finding 2019.07.IT06)
- Update the project schedule to define project resources and dates. (Refer to finding 2019.07.PM13)

**ASSESSMENT**

Management and integrations

- Resources are needed to define and apply to the project schedule information (refer to finding 2019.07.PM13); however, project schedule information is in progress. The necessary DLIR SMEs were able to participate in the Phase 1 Case Management review. As Phase 1 and Phase 2 activities are scheduled to occur simultaneously through June 2021, adequate project resources are needed to prevent further delays at resource burnout.

- DLIR project resources' capacity to perform project work is preventing the timely completion of some tasks. To include UAT testing and resources for testing and data conversion activities. Acquit will continue to assess the adequacy of project resources.

**STATUS**

**FINDING**

**Open**

**Risk**

**Moderate**

Refer to the June 2020 IV&V Monthly Report for status updates prior to July.

- Ensure the plan is in accordance with IEEE 828-2012 – Standard for the Planning Process for Software Engineering Projects. (Refer to finding 2019.07.IT05)
- Perform quality management activities on previously approved or submitted deliverables. (Refer to finding 2019.07.PM13)

**ASSESSMENT**

Management and Integrations

- Resources are needed to define and apply to the project schedule information (refer to finding 2019.07.PM13); however, project schedule information is in progress. The necessary DLIR SMEs were able to participate in the Phase 1 Case Management review. As Phase 1 and Phase 2 activities are scheduled to occur simultaneously through June 2021, adequate project resources are needed to prevent further delays at resource burnout.

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**STATUS**

**FINDING**

**Open**

**Risk**

**High**

Refer to the June 2020 IV&V Monthly Report for status updates prior to July.

- Evaluate the interface-related activities. Resources are needed to define and apply to the project schedule information (refer to finding 2019.07.PM13); however, project schedule information is in progress. The necessary DLIR SMEs were able to participate in the Phase 1 Case Management review. As Phase 1 and Phase 2 activities are scheduled to occur simultaneously through June 2021, adequate project resources are needed to prevent further delays at resource burnout.

- DLIR project resources' capacity to perform project work is preventing the timely completion of some tasks. To include UAT testing and resources for testing and data conversion activities. Acquit will continue to assess the adequacy of project resources.

**STATUS**

**FINDING**

**Open**

**Risk**

**Moderate**

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- Ensure the plan is in accordance with IEEE 828-2012 – Standard for the Planning Process for Software Engineering Projects. (Refer to finding 2019.07.IT05)
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**STATUS**

**FINDING**

**Open**

**Risk**

**Moderate**

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- DLIR project resources' capacity to perform project work is preventing the timely completion of some tasks. To include UAT testing and resources for testing and data conversion activities. Acquit will continue to assess the adequacy of project resources.
The DataHouse team’s rapid and adaptive response to the identified security and privacy risks demonstrates their commitment to continuous improvement in meeting project execution and increased transparency.

The root cause methodology identified by the initial risk management plan and the subsequent items are collectively contributing to the project’s improvements. This includes regular risk management plan updates and addressing the identified risks through actionable tasks and recommendations. The DataHouse and DLIR teams have demonstrated their commitment to DLIR and project success through their continuous engagement and communication.

The data management plan includes a high level of detail on the system’s security requirements and is regularly reviewed and updated to ensure alignment with the project’s needs. The DataHouse and DLIR teams have collaborated effectively to ensure the plan meets specific standards.

The DataHouse team’s swift and adaptive response to issues and risks minimized impacts and further delays to the project schedule. They have also built positive momentum in delivering the solution.

The team’s actions have helped to minimize impacts and further delays to the project schedule. They have also built positive momentum in delivering the solution.

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<table>
<thead>
<tr>
<th>ASSESSMENT CATEGORY</th>
<th>FINDING ID</th>
<th>UPDATING</th>
<th>UPDATING SECURITY</th>
<th>FINDING</th>
<th>ANALYSIS</th>
<th>RECOMMENDATION</th>
<th>FURTHER RECOMMENDATION</th>
<th>FINDING STATUS</th>
<th>FINDING STATUS UPDATE</th>
<th>CLOSURE DATE</th>
<th>CLOSURE REASON</th>
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<tbody>
<tr>
<td>Governance</td>
<td>2019.07.PG01</td>
<td>PG01</td>
<td>N/A</td>
<td>Governance</td>
<td>Effectiveness</td>
<td>The DCD Executive Sponsor is highly engaged and plays an active and visible role in guiding, monitoring, and championing the eCMS Project.</td>
<td>The DCD Executive Sponsor’s close involvement in the project has provided strong leadership that has, to an extent, compensated for the lack of formal governance (refer to finding 2019.07.PG02) and other project deficiencies noted throughout this report. However, as important as good sponsorship is, this factor alone cannot be relied upon to guarantee project success.</td>
<td>N/A</td>
<td>N/A for positive findings.</td>
<td>Closed</td>
<td>N/A</td>
</tr>
</tbody>
</table>
FINDING ID: Risk

Assemble and formalize an executive recommendation

Low

N/A

Closed

The lack of guidelines, checklists, and formalized procedures to ensure a smooth transition to the new system increases the risk of delays. The need for a contract may arise if the current contract is not sufficient to cover the new requirements. The project lead must ensure that all necessary agreements are finalized. It is recommended that the project lead consult with legal counsel to confirm that contracts for all agreements are in place.

RECOMMENDATION

Evaluate the need for a contract to ensure smooth transition

Low

N/A

Closed as the eCMS ESC was formalized.

Closed as DLIR will address through updates of the project plan.

9/20/19: DLIR has decided to address this finding through updates of the project plan and that contractors will be held accountable for ensuring the new system aligns with the statutes.

ASSESSMENT

Organization and Governance

Evaluation of the need for a contract to ensure smooth transition

Low

N/A

Closed as discussions occurred with the DataHouse Project Sponsor to lead discussions due to her experience with the DataHouse Project.

Furthermore, the eCMS Project advanced the project lead who works collaboratively with the DataHouse Project Sponsor to lead discussions. The DataHouse Project Sponsor is a dedicated project manager who ensures that alternatives are viable and prevent further delays. DLIR should finalize all necessary agreements to ensure that the alternative solution is viable and prevent further delays.

High

N/A

Closed as DLIR has a plan to align the statutes to project and organizational objectives.

The DLIR Project Manager is hardworking and has continually demonstrated dedication to the project and an eagerness to learn. Additionally, the DLIR Project Manager has some of the necessary leadership qualities that make him ideal for the project lead position. DLIR has already prepared certain project agreements and project resources will be working to provide a partial solution while they are waiting for the final agreement.

Low

N/A

Closed as DLIR has a plan to align the statutes to project and organizational objectives.

The procurement of the System Integrator (SI) for the eCMS Project was completed in 2019. The SI was selected based on their experience with similar projects and their ability to meet the project's requirements. The SI has completed some of the control and monitoring provisions (refer to finding 2019.07.PG06.R1) and is currently working on the remaining components. The SI has also conducted some of the control and monitoring provisions (refer to finding 2019.07.PG07). The project lead has discussed the timeline for completing the remaining components of the SI's work, and the timeline is expected to be completed by the end of the year. The SI has also provided some of the control and monitoring provisions (refer to finding 2019.07.PG07) and the project lead has discussed the timeline for completing the remaining components of the SI's work, and the timeline is expected to be completed by the end of the year. The SI has also provided some of the control and monitoring provisions (refer to finding 2019.07.PG07) and the project lead has discussed the timeline for completing the remaining components of the SI's work, and the timeline is expected to be completed by the end of the year.

Closed as DLIR has a plan to align the statutes to project and organizational objectives.

The benefit of the eCMS Project is the ability to automate and streamline the claims process. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The eCMS Project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims. The project's primary modernization objective is to move to a faster and more efficient way of processing claims.
Project: Organization and Management

FINDING

N/A
Closed as a replacement solution

RECOMMENDATION

Prepare a comprehensive technical analysis of the new solution and ensure there are adequate requirements/user stories to be covered by each sprint. Assign Product Owners. The Scrum team has been formalized and was monitored under the 2019.07.PM07 recommendation.

FINDING

FINDING STATUS UPDATE

Moderate
Closed

CLOSED DATE

09/20/19: Accuity has kept the severity rating as Level 2 (Moderate). Although the project planning phase is complete, the Scrum team is working to improve the build timing of Phase 1 and transition to the Scrum methodology. Although the current Scrum development methodology looks to delay the build time of the system, there is no assurance regarding the transition to the Scrum methodology. The organization has not yet determined the number, length, and duration of sprints.

The project schedule also does not yet reflect the agile sprint cycles or identify resources who are expected to participate.

The project team and stakeholders must work together with the DLIR project team and stakeholders to identify resources who are expected to participate. The project team must also work with the DLIR project team to develop an overall project plan for each sprint. A lack of clarity on DataHouse’s and stakeholder requirements will result in project delays and to ensure that the delivered system will meet operational requirements. There is no formal plan for BPR activities. DataHouse’s approach to BPR is to start with the current state process maps, walkthrough the process maps, and make updates to the processes maps. As a result of discussions, DLIR provided DataHouse process maps; however, their Acuity was unable to clearly understand how processes were impacted due to change; issues were identified, or processes were impacted (e.g., reduction of manual tasks).

Business process improvement is a key deliverable in the new solution. As a result, the current phase must be completed to the project and outlined as a part of the current phase. The team is not able to clearly understand how the data will be provided to them. The BP team must also determine how this data will be sourced; validated; and made available to the processes maps. As a result of discussions, DLIR provided DataHouse process maps; however, their Acuity was unable to clearly understand how processes were impacted due to change; issues were identified, or processes were impacted (e.g., reduction of manual tasks).

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The Transportation and Management category is being updated.


don't hallucinate.
<table>
<thead>
<tr>
<th>DESIGNATION</th>
<th>FINDING ID</th>
<th>TYPE</th>
<th>SEVERITY</th>
<th>FINDING</th>
<th>ANALYSIS</th>
<th>RECOMMENDATION</th>
<th>SUPPLEMENTAL RECOMMENDATION</th>
<th>FINDING STATUS</th>
<th>FINDING STATUS UPDATE</th>
<th>CLOSED DATE</th>
<th>CLOSURE REASON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>2019.07.IT03</td>
<td>Issue</td>
<td>High</td>
<td>The Content Management design documents were based on incomplete, inaccurate, and outdated requirements. The Content Management Design Document (version 1.0) was drafted by DataHouse on June 13, 2019 and was based on requirements documentation that is incomplete. Even prior to this development, the Content Management design documents were drafted based on requirements documentation that is incomplete (refer to finding 2019.07.PM10). The requirements document deficiencies should be remediated immediately and the design documents updated accordingly.</td>
<td>2019.07.IT03.R1</td>
<td>Update the Content Management design documents.</td>
<td>Consider updates for revised requirements documents (refer to finding 2019.07.PM10) and for the alternative Content Management hosting infrastructure solution (refer to finding 2019.07.PM10).</td>
<td>2019.07.PM10</td>
<td>Closed</td>
<td>09/20/19</td>
<td>Accuity decreased the severity rating from Level 1 (High) to Level 2 (Moderate). DataHouse updated the Content Management Design Document to include additional, more detailed requirements. As noted above at finding 2019.07.PM10, DataHouse is in the process of updating the requirements documentation to include all requirements from the DataHouse contract. 09/20/19: The Content Management Design Document (version 1.2) was updated to refine or add requirements.</td>
</tr>
<tr>
<td>Data Conversion</td>
<td>2019.07.IT04</td>
<td>Risk</td>
<td>Moderate</td>
<td>A Content Management data conversion plan that is based on incomplete, inaccurate, and outdated requirements documents may impact the data migration design process and require additional effort to correct. The Content Management conversion plan that is based on current data structure documents have not yet been drafted. The Content Management Conversion and Migration Plan (version 0.0) was drafted by DataHouse on June 13, 2019 and was based on requirements documentation that is incomplete (refer to finding 2019.07.PM10). Furthermore, the Content Management Conversion and Migration Plan (version 0.0) document included a note that changes to the requirements after a certain point in the project may cause additional effort to correct the requirements.</td>
<td>2019.07.IT04.R1</td>
<td>Update the Content Management data conversion plan.</td>
<td>Consider updates for revised requirements documents (refer to finding 2019.07.PM10).</td>
<td>2019.07.PM10</td>
<td>Closed</td>
<td>09/20/19</td>
<td>Accuity has kept the severity rating as Level 2 (Moderate). DataHouse updated the Content Management Conversion and Migration Plan (version 1.0) and the Content Management Design Document (version 1.0) to include updated requirements. Changes to requirements would be evaluated for the impacted systems and applications involved in the detailed taxonomy mapping. 09/19/19: DataHouse evaluated the new requirements and determined that there is no impact to the high level Content Management data conversion plan. 11/22/19: Accuity reviewed the taxonomy mapping with the primary stakeholders and confirmed that changes to system requirements will not have a significant impact on the overall data migration plan as the legacy system has limited data fields that are currently used.</td>
</tr>
</tbody>
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