



Judicial Council of California

ADMINISTRATIVE OFFICE OF THE COURTS

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December 22, 2010

Hon. Mark Leno
Chair, Joint Legislative Budget Committee (JLBC)
Chair, Senate Budget and Fiscal Review Committee
California State Senate
State Capitol, Room 4061
Sacramento, California 95814

Hon. Robert Blumenfield
Chair, Assembly Budget Committee
California State Assembly
State Capitol, Room 6026
Sacramento, California 95814

Re: Independent Project Oversight Reports for the California Court Case Management System
as Required by Government Code Section 68511.8(b)

Dear Senator Leno and Assembly Member Blumenfield:

Attached are the independent project oversight (IPO) reports and independent validation and verification (IV&V) reports for the California Court Case Management System issued in 2010 and subsequent to the reports provided in last year's report. These reports are submitted under the requirements of Government Code section 68511.8(b). Consistent with the statutory requirement, the reports include "descriptions on actions taken to address identified deficiencies."

Hon. Mark Leno
Hon. Bob Blumenfield
December 22, 2010
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The report on the status of the California Court Case Management System, required under subdivision (a) of Government Code section 68511.8 will reference this report and be submitted shortly.

If you have any questions regarding the information provided in this report, please contact Ms. Donna Hershkowitz, Assistant Director, AOC Office of Governmental Affairs, at 916-323-3121 or donna.hershkowitz@jud.ca.gov.

Sincerely,



William C. Vickrey
Administrative Director of the Courts

WCV/jj

Enclosures

cc: Members of the Judicial Council
Ronald G. Overholt, AOC Chief Deputy Director
Hon. Jim Nielsen, Vice-chair, Assembly Budget Committee
Diane F. Boyer-Vine, Legislative Counsel
Gregory Schmidt, Secretary of the Senate
E. Dotson Wilson, Chief Clerk of the Assembly (electronic copy)
Brian Brown, Consultant, Senate Budget and Fiscal Review Committee
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Joe Stephenshaw, Consultant, Assembly Budget Committee
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Report title: Independent Project Oversight and Independent Verification and Validation Reports for the California Court Management System (CCMS) Development Project

Statutory citation: Government Code section 68511.8(b)

Date of report: December 22, 2010

The Judicial Council has submitted a report to the Legislature in accordance with Government Code section 68511.8(b).

The following summary of the report is provided under the requirements of Government Code section 9795.

Sjoberg Evashenk Consulting, Inc. (SEC), under the supervision of the Administrative Office of the Court's Internal Audit Services and on behalf of the CCMS Executive Sponsor in the AOC's Regional Office, performed Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) services for the final CCMS product currently in development. The objectives of the IPO and IV&V are to monitor the activities, deliverables, milestones, deadlines, and design of the CCMS project; and communicate status, progress, issues, and challenges to the success of the project as designed. SEC issues monthly IPO/IV&V reports intended to capture and assess current project activities to determine whether the established process and procedures used to build and manage the CCMS application are followed and adhere to industry standards, as well as that potential risks and issues are known by project decision makers at a specific point in time. This report to the Legislature includes each of the monthly IPO/IV&V reports issued in 2010 through the report issued as of November 30.

The descriptions on actions taken to address recommendations made by SEC can found in *Appendix A: Matrix of Areas of Concern (Open)* and *Appendix B: Matrix of Areas of Concern (Closed)* in each report.

The full report can be accessed here: www.courtinfo.ca.gov/reference/legislaturereports.htm.

A printed copy of the report may be obtained by calling 415-865-7454.

The Judicial Council of California, Administrative Office of the Courts

Independent Project Oversight (IPO) and
Independent Verification and Validation (IV&V)
For the CCMS-V4 Development Project

Status Report as of January 31, 2010

SJOBERG  **EVASHENK**
CONSULTING, INC

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Executive Summary

Realizing the importance of independent oversight for high criticality technology projects, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) services for the California Case Management System (CCMS)-V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the CCMS Executive Sponsor in the Regional Program Office (RPO), our objectives are to monitor the activities, deliverables, milestones, deadlines, and design of the CCMS-V4 project and communicate status, progress, issues, and challenges to the success of the project as designed. Our monthly IPO/IV&V reports are intended to capture and assess current project activities to determine whether process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards, as well as that potential risks and issues are known by project decision makers at a specific point in time; thus, the monthly items reported are in-flux, continually evolving, and will change over the course of the project.

Period Highlights:

During the month of January 2010, the CCMS-V4 Project Team was heavily focused on the Integration Testing Cycle of the development; however, Integration Testing continues to be a concern for Deloitte, the AOC, and the IPO/IV&V Team. Those involved with the process have appropriately noted and monitored script execution problems and defects; specifically, issues include the Deloitte testers not identifying defects that are identified by Court SMEs, number of script defects, and general stability of the application. According to Deloitte Integration Test Reports, approximately 35% of all defects are script errors. Per the approved Integration Test Plan, both Deloitte and the SMEs jointly wrote the Integration Test scenarios and then jointly wrote the Integration Test Scripts. While the Integration Test Scripts were developed and delivered by Deloitte and accepted by the AOC prior to the beginning of Integration Testing, this high of an error rate is unusual and may partially indicate that the scripts were not reviewed as thoroughly as needed. The lack of a thorough review may have been due to the tight schedule, the design still being finalized while the scripts were being reviewed, non-availability of Court resources, or various other reasons.

The AOC, in conjunction with Deloitte, is taking actions to resolve the script errors by embarking on a Test Script clean-up effort — scheduled for completion in March 2010. Actions being taken include side-by-side walkthroughs, global defect tracking and resolution, and increased collaboration between Deloitte, Court, and AOC Test Teams. According to an update provided at the most recent Steering Committee meeting, the goals are to clean up issues before the application enters PAT, as well as to provide assurance that the application will work as intended. As such, the IPO/IV&V Team will monitor the process utilized for defect analysis and root cause analysis as discussed and resolved between the AOC and Deloitte project management teams. The AOC continues to assert that they will not move from Integration Testing to PAT while the test results from the Court/AOC testers contradict the Deloitte test results, and while open items remain unresolved from Integration Testing.

Detailed Observations, Impact, and Recommendations

The Southern California Regional Program Office (RPO) staff, AOC staff, individual court staff, and Deloitte Consulting continue to practice solid project management and systems-engineering practices in the identification and resolution of issues, risks, items for management attention, and modification and change requests.

The continued diligence employed by the RPO staff, AOC staff, Court staff, and Deloitte Consulting in addressing issues and following established project management processes has been consistent. As part of our efforts, we offer the following observations and areas of concern.

Project Oversight Focus Areas

Communication Management:

There do not appear to be any current communication concerns noted by the CCMS-V4 Project Team or the IPO/IV&V Team.

Schedule Management:

The IPO/IV&V Team does not anticipate the schedule becoming any less aggressive for the duration of the project. Some schedule changes are currently being worked on including a seven week effort for the test script clean-up. The RPO and AOC staff understands the IPO/IV&V Team concerns regarding this high risk project for the AOC and the courts and have accepted the risk since the budget and schedule for the CCMS-V4 project cannot be changed. The IPO/IV&V Team will continue to monitor the current project activities as the project progresses to monitor the potential impact on the project's already compressed schedule.

Scope Management:

Scope management items raised by the CCMS-V4 Project Team are being actively managed through eRoom.

Risk Management:

During the month of January, eRoom risk status was updated with a number of risks being placed in an accept/monitor status. As of January 31, 2010, the risks identified below by the CCMS-V4 Project Team remain active. No new risks were added, and no risks were closed.

Risk Number	Risk Title	Activity Performed	Target Resolution Date
27	SME Testing Staffing Plan	The AOC/Court testing resources are not adequate to execute testing. This is an accepted risk and will continue to be monitored on a weekly basis. At this time, no mitigation actions are required.	03-29-10
34	CCMS-V4 & ISB TIBCO Versions	There is potential for errors when ISB common services move from the ISB environment to the CCMS-V4 environments. This is an accepted risk and will continue to be monitored on a weekly basis. At this time, no mitigation actions are required.	03-29-10
35	CCMS-V3 Resources	There is an ongoing effort to combine V3 and V4 project schedules to evaluate staffing needs. This is an accepted risk and will continue to be monitored on a weekly basis. At this time, no mitigation actions are required.	10-08-10
37	Justice Partner Readiness	Reference Implementation constraint schemas have been published. This is an accepted risk and will continue to be monitored on a weekly basis. At this time, no mitigation actions are required.	03-29-10
38	System Response Time Matrix	The CCMS-V4 Core Stress Test Plan deliverable was resubmitted for conditional acceptance on 12/16/09.	03-29-10

Issue Management:

As of January 31, 2010, there were no open issues being tracked by the CCMS-V4 Project Team. The following issue was closed during January 2010.

Issue Number	Issue Title	Resolution
27	Two common services (the DaTS ISB common service to support large document attachments and the E-Filing ISB common service) will not be completed by ISD in time to include the DX related functionality in R1.0.	The "NIEM Scope Deal" has been agreed to in principle; therefore, this item was closed.

Resource Management:

All parties continue to be concerned that the CCMS-V4 Project requires more resources to complete the product Development and Testing phases. The AOC and the courts have accepted this risk and are monitoring it on a weekly basis.

Cost Management:

For January, there were no new IPO/IV&V issues with respect to Cost Management that have not already been discussed in previous reports.

Technical Focus Areas

Quality Management:

In November, the IPO/IV&V Team commented on the Quality Assurance Report #7 and related that the report continues to be more of a management-level report for reviewing how the project was progressing and was presented from a high-level point of view.

The following is an extract from the Deloitte QA Report #7 which includes Deloitte's internal observations and recommendations about the project. The IPO/IV&V Team's comments are shown below the recommendation from Deloitte. QA Report #8 is scheduled to be delivered in February 2010 and our observations will be updated when the report is delivered.

- **Deloitte's QI01 Observation:** Deliverable reviews do not currently require the amount of effort that would be expected to thoroughly review deliverables of the size and scope produced by the project.

Deloitte's Recommendation: Deliverable review processes could be improved to require a more thorough review of each deliverable. The project's PMO should look into ways of improving these processes.

IPO/IV&V Team Comment: It is not known whether Deloitte's project PMO has addressed this issue and how the suggested process improvements will impact future deliverables. However, in the Monthly CCMS-V4 Development Services Status Report 31, ending January 29, 2010, Deloitte identified that this QA observation is closed but it is unclear to the IPO/IV&V Team what action was performed.

- **Deloitte's QI02 Observation:** Although the defect analysis by severity and root cause analysis are being conducted, they are not formally documented.

Deloitte's Recommendation: Implement a process to formally document these activities.

IPO/IV&V Team Comment: Integration Testing continues to be a concern. The process utilized for defect analysis and root cause analysis should be further investigated and discussed between the AOC and Deloitte project management teams since the Court/AOC testing results do not validate Deloitte's testing results. More detail of this item is discussed in the Testing Practices and Progress section below. However, in the Monthly CCMS-V4 Development Services Status Report 31, ending January 29, 2010, Deloitte identified that this QA observation is closed but it is unclear to the IPO/IV&V Team what action was performed.

The following are IPO/IV&V Team observations based on graphs in the Deloitte QA Report #7. QA Report #8 is scheduled to be delivered in February 2010 and our observations will be updated when the report is delivered.

- **Deloitte's System Test Metrics Graphs:**

IPO/IV&V Team Observation: The System Test metrics for Portals/SWRDW are for managers who need to understand the amount of work that needs to be done. However, the Test Script Pass Rate metric converging to 50% should give some concern because of the high percentage of failures being reported.

IPO/IV&V Team Observation: For the System Test metrics for the Core product, it appears that Track 2 may have some problems based on the number of open defects (around 575) when the average for the other tracks is around the 150 level. However, the Track 2 Test Script Pass Rate is similar to the other tracks averaging approximately 76%. Thus, a 76% pass rate with about 575 defects should be investigated because of the high number of reported defects. While Track 2 may be significantly larger than the other tracks, the high volume of defects for the track should be investigated.

- **Deloitte's Integration Test Metrics Graphs:**

IPO/IV&V Team Observation: For the Integration Test metrics for Core Cycle 1, the area with the largest number of open defects was FMI, with approximately 850 defects—next, were the Juvenile and Fiscal areas with approximately 600 open defects each. However, the Integration Test script pass rates for all areas were around 90%. In Cycle 2, Juvenile led with about 160 open defects with Probate and FMI reporting approximately 140 and 135 defects respectively. It's interesting to note that in Cycle 2, the test script pass rate dropped to about 75%. This may indicate a change in the test script execution process between Cycle 1 to Cycle 2 to still have a lower number of open defects while the pass rate dropped. There is a potential that previously successfully executed tests scripts were not regression tested during Cycle 2 but that is currently unknown.

The following comments made by Deloitte in their QA Report #7 are unclear and should be investigated by AOC. QA Report #8 is scheduled to be delivered in February 2010 and our observations will be updated when the report is delivered

- **CMMI Status Report - Measurement and Analysis:**

1. "The Metrics Plan must be updated to more accurately list the metrics collected on the project. The project will revise the plan to identify and delete metrics that are no longer used."
2. "For every metric detailed in the Metrics Plan, a threshold value must be defined. The current version of the Metrics Plan does not contain several of these thresholds. The project will identify and populate all missing thresholds."

IPO/IV&V Team Observation: All metrics should be associated with a threshold that should then trigger some event if the threshold is breached. Thus, the IPO/IV&V Team believes both the threshold and the event should be defined.

- **CMMI Status Report – Quality Assurance:**

1. "Because Milestone and deliverable based audits are no longer used on the project, the project team will remove those two audits from the QA Plan."

IPO/IV&V Team Observation: Deliverable and milestone based QA Audits are a fundamental aspect of Quality Assurance and Control. If the Audits are truly not needed and quality is assured in some other way, then the other audits should be removed to avoid duplication. However, removing audits just because they are not currently being performed is unacceptable to the IPO/IV&V Team and could materialize as a long-term risk to the project.

- **CMMI Status Report – Technical Solution:**

1. "The Code Review Checklists for CCMS-V4-PRJ03, DWRPT-042, CCMS-V4-EFL22 contain open defects although these checklists were listed as completed. The project will review these checklists and close all open defects."

IPO/IV&V Team Observation: The point of code reviews is to identify issues or potential problems with the code or the code documentation. Without tracking the code review issues to closure, the IPO/IV&V Team believes the value of code reviews is significantly diminished. At this point in time items remain open and the AOC has stated that they will not move from Integration Testing to PAT until the code review findings are resolved.

- **CMMI Status Report – Verification:**

IPO/IV&V Team Observation: A positive CMMI note is that Deloitte matched one of the identified concerns under the CMMI Verification section that states “Some of the deliverables are reviewed at high rate of # pages per hour. The project will revise the deliverable review process to allow for more thorough reviews.” Obviously without thorough review of the deliverables, the project exposes itself to a great deal of risk, and potential fault, which will have been agreed to by the project team.

Quality Architecture:

There are no open issues with Architecture for the month of January and the Architecture Team with Deloitte, AOC, ISD, and other Court members continues to do a good job of identifying and defining the architecture as well as architectural tradeoffs, raising issues for resolution, and generally creating a solid CCMS-V4 architecture.

Configuration Management:

There are no open issues with Configuration Management. Configuration Management for documentation is being well controlled through eRoom and JCC Web Sites that have built-in controls for Configuration Management.

System Engineering Standards and Practices:

Since Deloitte Consulting appears to be following currently accepted systems engineering standards and practices, even as defined in IEEE Standard 1220, there are no system engineering standards and practices concerns at this point in time.

Requirements Identification and Traceability:

There are no new issues with Requirements Identification and Traceability that have not already been discussed in previous reports.

Detailed Design Review:

There are no open issues with the Detailed Design Review that have not already been discussed in previous reports.

System Development Quality and Progress:

The completeness of the Architecture Team decisions cannot be verified by the IPO/IV&V Team due to the absence of an Architectural Decision Tradeoff Matrix which would document the options, tradeoffs, decisions, and underlying rationale for the approach taken.

Testing Practices and Progress:

The IPO/IV&V Team continues to highlight a potential issue with respect to Court resources necessary to complete PAT. Specifically, there is a major deficiency between the staffing level proposed by Deloitte and what the Courts can provide. The AOC and the courts have accepted this risk and will continue to monitor this risk weekly. As such, the IPO/IV&V Team will monitor and assess the PAT resource efforts as a plan is devised by Deloitte and the AOC.

In a January 7, 2010 email from the AOC to Deloitte, the AOC expressed concern with the script execution problems and defects, the Deloitte testers missing defects, the script defects/Day 0 problems, and the general stability of the system. In this email, the RPO stated that they “would not move from Integration Testing to PAT while the test results from our Court/AOC testers contradict the Deloitte test results.” Since both Deloitte and the SMEs developed, wrote, and reviewed the scripts, this high of an error rate is unusual and may partially indicate that the scripts were not reviewed as thoroughly as needed (especially given the large volume of scripts that had to be reviewed). The lack of a thorough review may have been due to the tight schedule, the design still being finalized while the scripts were being reviewed, non-availability of Court resources, or various other reasons. While the Integration Test Scripts developed by Deloitte were submitted to the AOC for final review and were accepted prior to the start of Integration Testing, the IPO/IV&V Team still finds more than 1,000 scripts on the JCC site that have a “ready for review” status. At this point, we are uncertain whether those scripts are still awaiting review, or whether they have been reviewed and just not moved from the “ready for review” folder. Many test scripts have been uploaded to Deloitte’s eRoom site over the last few weeks, and the IPO/IV&V Team will follow-up on this area to seek clarification.

To eliminate script defects and Integration Test errors, the AOC and Deloitte have jointly embarked on a Test Script clean-up effort that is scheduled for completion in March 2010. Actions being taken include side-by-side walkthroughs, global defect tracking and resolution, and increased collaboration between Deloitte, Court, and AOC Test Teams. According to an update provided at a recent Steering Committee meeting, the goals are to clean up issues before the application enters PAT and provide assurances that the application will work as intended.

As a result of this information surrounding Integration Testing, the IPO/IV&V Team will continue to monitor the status of the application and whether it is sufficiently integration tested to proceed forward into the PAT phase. With the current Integration Test extension and the clean-up effort on the test scripts still in progress, additional data collected by re-running the cleaned test scripts is required before the IPO/IV&V Team can make a valid assessment. Currently, the 35% reported script error defects overwhelm all other defects (the closest other type defect at 12%), and the system effects of partially executed test scripts is unknown. Therefore, additional data collected after the scripts are cleaned will provide more information that can be assessed by the IPO/IV&V Team on the completeness of testing and the “quality” of the application. Once data is available in February, the IPO/IV&V Team will review the data and report its assessment.

Appendix A: Matrix of Areas of Concern (Open)

The matrix below provides a current listing of all open areas of concern, our recommendations, and the action taken by the CCMS-V4 Project Team. As items are resolved, they will be moved to Appendix B. Key statistics are summarized below:

- **No new areas of concern were identified this month that are not already being covered in the Project Issues and Risks. The IPO/IV&V Team strongly believes that this project will continue to be a high risk project due to the constraints imposed by the budget, schedule, and resources.**

Appendix B: Matrix of Areas of Concern (Closed)

The matrix below provides a listing of all closed areas of concern, our recommendations, and the action taken to resolve the issues by the CCMS-V4 Project Team. Key statistics are summarized below:

- **No areas of concern were closed this month.**

Item Number	Area of Concern	Recommendation	Action Taken
Jul07.1	Aggressive schedule	The schedule should be reviewed to ensure that ample time has been allocated to each phase of the project.	<p>09-2007 - No action taken that SEC is aware of.</p> <p>10-2007 – At this point in the project it is difficult to determine if there is ample time allocated to each phase of the project. This item will remain in a watch status (e.g., once Test Planning activities have begun, it will be easier to determine if enough time is allocated to testing activities).</p> <p>11-2007 to 04-2008 – Although 12 weeks were added to the schedule, there is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>05-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>06-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>07-2008 – There is concern that there is not enough time to complete the review of the FFD. In addition, there is concern that there is insufficient time allocated to testing and that test planning has not been fully engaged. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>08-2008 – 27 additional days were added to the schedule for review of the FFD. It is unknown at this point whether the additional days are sufficient to allow a thorough review and better ensure the highest quality product possible. Moreover, because test planning is slow to start, SEC still has concerns about the time allocated to the testing phase. This item will remain in watch status.</p> <p>09-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>10-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>11-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>12-2008 – It is unclear how the extended review timeframe will impact the overall schedule. This item will remain in watch status.</p> <p>1-2009 – The Core application, Portals, and Statewide Data Warehouse portions of the FFD will be completed by March 30, 2009. The Data Exchanges portion is expected to be completed by April 15, 2009. This item will remain in watch status.</p> <p>2-2009 – All portions of the FFD are on track for completion by March 30, 2009 and April 15, 2009, respectively. This item will remain in watch status.</p> <p>3-2009 – The Portals and Statewide Data Warehouse will be accepted by March 31, 2009. The Core application will be completed by March 31, 2009. Data Exchanges will not be completed until the end of April. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>4-2009 – The FFD was signed off May 1, 2009. The Data Exchanges are expected to be completed by May 22, 2009.</p> <p>5-2009 – The Data Exchanges are expected to be completed by June 5, 2009.</p> <p>6-2009 – While the IPO/IV&V Team believes the schedule is aggressive and will remain aggressive for the duration of the project adding to project risk, the RPO and AOC have extended the schedule through contract amendments. At this point, the RPO and AOC have accepted the project risk as neither the schedule nor the budget can be changed.</p>
Aug07.1	JAD Schedule	<p>There does not appear to be a comprehensive schedule of JADs so that participants can plan time accordingly. Thus, Deloitte Consulting should prepare a detailed schedule that sets realistic timeframes needed to JAD each functional area and ensure the schedule is agreed to by all relevant parties.</p>	<p>09-2007 – The schedule should be completed in October 2007.</p> <p>10-2007 – A revised schedule was completed in October 2007. While the schedule provides more details than previous versions, it still does not address the detailed planning that must be conducted to ensure coverage of all functional areas and the workflows associated with each.</p> <p>11-2007 to 04-2008 – JAD scheduling has improved to the point that this is no longer an area of concern. Consequently, this item has been closed. Over the past few months, Deloitte Consulting has been diligent in setting and adhering to its JAD schedule. As the project enter the final design stage, participants appear able to plan time accordingly to ensure they are available to participate in tracks as needed and share their subject matter expertise. Meetings were also held to hear concerns that more time was needed to review developing requirements—resulting in more time added to the overall project development schedule.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Sep07.1	Requirements Gathering	Ensure that a detailed JAD schedule includes a plan for how the workflow interrelationships will be addressed.	<p>10-2007 – While the workflows and interrelationships have not yet been addressed, the AOC has instituted cross-track meetings as part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements are being gathered.</p> <p>11-2007 to 04-2008– The cross-track meetings have proven to be an essential, needed part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements were being gathered. However, to SEC's knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>05-2008– To SEC's knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas. This step should help address some of our concerns. However, since the final design is nearing completion, there is little value in fully mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.1	Project Oversight Activities	Assign person in role of day to day project management responsible for ensuring that issues are resolved timely, do not impact downstream work efforts, and are not in conflict with other project activities, legal provisions, or branch policy.	<p>11-2007 to 04-2008– It was explained that Bob Steiner, the AOC Project Manager, performs these activities and that a Project Management Consultant familiar with V2 and V3, Sean Yingling, will be assigned to assist the Development Project Manager (Bob). This item will remain in watch status over the next month to ensure the activities are being performed.</p> <p>05-2008– SEC will continue to monitor this item until a Responsibility Matrix indicating the project management component responsibilities that are designated to Sean and Bob is developed. The matrix will ensure that no workload gaps exist.</p> <p>06-2008– To date, a Responsibility Matrix has not been provided to SEC for review.</p> <p>07-2008– SEC will work with Bob Steiner and Sean Yingling to better understand the project management responsibilities.</p> <p>08-2008– Bob and Sean have established a seamless working relationship. Bob has ultimate responsibility for all project management activities. Sean’s focus rests with coordinating the FFD review, reporting to the Steering Committee, and following up on issues with the V4 Court Project Managers.</p>
Oct07.2	JAD Session Documentation	Utilize new template or other mechanism to document detailed JAD Session minutes including areas of discussion, results or actions taken, agreements reached, and issues raised as well as distribute timely for approval.	<p>11-2007 to 04-2008 – Starting in mid-April, the JAD tracks created a new template to ensure consistency across JADs for documenting decisions reached and meeting outcomes. However, since it appears that the new template is only used in isolated instances, this item will remain in watch status over the next month.</p> <p>05-2008 – It is not clear whether an AOC CCMS member will be appointed to monitor and summarize decisions made in the JAD sessions and elevate those of potential interest to the Steering Committee, especially those that may require higher level buy-in.</p> <p>06-2008 – Since the final design is nearing completion, there is little value in mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.3	Governance Structure and Escalation Process	Clarify and establish the complete governance structure to eliminate confusion related to issue escalation process and decision-making.	<p>11-2007 to 04-2008 – The CCMS Governance Model was distributed to committee members. This item will remain in watch status over the next month to ensure its use.</p> <p>05-2008 – The CCMS Governance Model appears to be in use and effective in allowing participation in project decisions regarding project scope, cost, and schedule.</p>
Apr08.1	Unclear Requirements	<p>Review the requirements to determine the types of clarifications needed for understanding in order to avoid confusion during downstream activities such as coding and preparing for testing.</p> <p>As of our 09-2008 review of the FFD, we have suggested the following additional recommendations:</p> <ol style="list-style-type: none"> 1. Identify and evaluate subjective text in FFD (such as may or could) and clarify within the context of use; 2. Perform a traceability exercise to link use cases to business rules—again to reduce need for individual interpretation; 3. Review business rule part of each section to ensure complete and clear rules have been incorporated into the use case. 4. Evaluate pre and post-conditions to ensure they are correct and complete. 	<p>04-2008 – New this month.</p> <p>05-2008 – It is not clear whether action has been taken on this issue.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas). This item will remain in watch status over the next month to review this process.</p> <p>07-2008 – This item remain in watch status until a better understanding can be achieved and SEC evaluates the review process.</p> <p>08-2008 – SEC will assess this item during their review of the FFD deliverable.</p> <p>09-2008 – SEC has begun to assess this item and will continue to evaluate progress during the AOC/Court review of the FFD deliverable.</p> <p>10-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>11-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>12-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>1-2009 – The RPO Management Team is currently developing plans to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>2-2009 – The RPO Management Team continues to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>3-2009 – The RPO Management Team continues to discuss the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>4-2009 – An updated resource schedule is being developed that will forecast resource needs between now and the beginning integration testing. This item will remain in watch status.</p> <p>5-2009 – An estimate of the number of Court SMEs needed for testing has been provided. However, more SMEs with Family and Juvenile expertise will be needed. This item will remain in watch status.</p> <p>6-2009 – The IPO/IV&V Team has continued to express their concern that the ambiguity surrounding the interpretation of final requirements presents a risk to the construction and testing phases of the project. Data is being captured by the AOC Software Quality Assurance Team during early testing that should assist in defining the extent of the problem and any future concerns will be raised as part of the testing assessment.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Dec08.1	Standardization and Configuration	It is not clear what impact the Standardization and Configuration requirements will have on the FFD and on long-term maintenance of the application. Once all Standardization and Configuration requirements have been defined, the requirements should be traced back into the FFD and reviewed again.	<p>12-2008 – New this month.</p> <p>1-2009 – In the month of January, a Court Executive Management work group was established to address the concerns surrounding the standardization and configuration requirements.</p> <p>2-2009 – The RPO Management Team reported that the Standards and Configuration Management Group will determine whether configurable items are statewide standards or local configurations and that these decisions will not impact the FFD.</p>
Dec08.2	Single Point of Contact for ISD	A single point of contact should be established for AOC that can track and manage daily progress on ISD-related activities	<p>12-2008 – New this month.</p> <p>1-2009 – It is not clear where the roles and responsibilities are documented and whether David Corral, selected as the single point of contact, has the authority to make decisions on behalf of ISD. Virginia Sanders-Hinds will work with IPO/IV&V to better understand the ISD roles and responsibilities within the project.</p> <p>2-2009 – It was clarified that Virginia Sanders-Hinds is the single point of contact with the authority to make decisions on behalf of ISD.</p>
Mar09.1	Justice Partners (Interfaces) Plan	Determine the state and progress of the common “State” interfaces which are currently being reviewed by the Justice Partners and assess the progress for project schedule impact.	<p>4-2009 – The “State” interfaces are being addressed with the Justice Partners. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p> <p>5-2009 – The “State” interfaces are being addressed with the Justice Partners at both the State and local levels. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off (now anticipated for 6-5-09) and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>6-2009 – The “Statewide” interfaces are being addressed with the Justice Partners. – A plan has been defined for day-one critical exchanges and each Justice Partner will be given a Microsoft Project Plan to follow. The AOC will continue to work closely with each Justice Partner to anticipate any potential challenges. However, it is not clear if and when the Justice Partners will participate in PAT. This item will remain in watch status.</p> <p>7-2009 - The CCMS-V4 Project Team has clarified that the Statewide Justice Partners will participate in PAT. This item will be closed out.</p>
Mar09.2	Document Management Plan	Determine the state and progress of the agnostic “generic” interface to support any existing document management solution and assess the progress for project schedule impact.	<p>4-2009 – The “generic” interface is currently under development. This item will remain in watch status. The RPO Management Team has stated that the requirements for document management were gathered during design and have been signed off. The AOC is in the process of standardizing the document management interface for all courts but is unsure whether this effort will be complete prior to Go Live for CCMS-V4. This item will remain in watch status.</p> <p>5-2009 – The “generic” interface is currently under development. This item will remain in watch status.</p> <p>6-2009 – The “generic” interface is currently under development and will have a solution that supports the courts at Go Live. Currently, the early adopter court uses FileNet and is scheduled to test this interface during PAT. For each of the remaining Courts, the agnostic “generic” document management interface will be finalized, if needed, during the deployment effort. This item will remain in watch status.</p> <p>7-2009 – The CCMS-V4 Project Team has clarified that the Lead Courts which use FileNet are scheduled to test this interface during PAT. This item will be closed out.</p>

Appendix C: Project Oversight Review Checklist

To assist us in determining whether the CCMS-V4 project is on track to be completed within the estimated schedule and cost, the Project Oversight Review Checklist is used to identify and quantify any issues and risks affecting these project components.

The checklist format provides a quick reference for the assessment of the project management practices and processes in place over the CCMS-V4 project and will assess the adequacy or deficiency of the area. Further, the checklist may provide comments on the specific items reviewed, interviews conducted, and general practices observed for requirements presented under the five categories identified below. These requirements are consistent with industry standards and accepted best practices such as the Project Management Institute (PMI)'s Project Management Body of Knowledge (PMBOK) and the Institute of Electrical and Electronic Engineers (IEEE) standards. Use of these checklists will assist us in commenting on the effectiveness of the project activities.

- Planning and Tracking
- Procurement
- Risk Management
- Communication
- System Engineering

No updates were made to the Project Oversight Review Checklist this month.

Project Oversight Review Checklist

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		The business case has been finalized. The project goals, objectives, and expected outcomes are documented in the Deloitte Consulting Statement of Work. The key stakeholders and sponsors are identified and documented in the Project Management Plan for CCMS-V4.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project plan that has been approved is loaded into Microsoft Project. Deloitte Consulting will update the schedule with construction and testing details after the requirements are complete.
Is completion of planned tasks recorded within the PM software?	X		Completion of milestones are tracked within Microsoft Project.
Are actual hours expended by task recorded at least monthly within PM software?		X	Actual hours for Deloitte Consulting staff are tracked weekly within Playbook Navigator, but are not shared with the AOC as this is a fixed price development contract. The AOC has historically not tracked this information.
Are estimated hours to complete by task recorded at least monthly within PM software?		X	Estimated hours to complete for Deloitte Consulting staff are tracked weekly but are not shared with the AOC as this is a fixed-price development contract. Any deviations occurring to planned dates are discussed at an internal weekly meeting between AOC and Deloitte Consulting.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans?	X		There is a formal staffing plan for Deloitte Leads that is shared with the AOC. Deloitte Consulting tracks internal project staffing with respect to acquisition, schedule for arrival and departure of specific staff, and staff training plans. The AOC does not currently have a CCMS-V4 Staffing Plan; staff are allocated at the CCMS level and not at the specific project level.
Have project cost estimates, with supporting data for each cost category, been maintained?	X		While development costs are tracked internally by Deloitte Consulting, they are not shared with the AOC since this is a fixed-price development contract. The AOC tracks the project budget, monies encumbered, and monies expended to date in an Access database.
Are software size estimates developed and tracked?	X		Deloitte Consulting has included estimates for Final Design, Final Construction, Testing, and Conversion.
Are two or more estimation approaches used to refine estimates?	X		A Bottom Up estimate is performed by the Deloitte Consulting Project Manager and a Top Down estimate is performed by the Lead.
Are independent reviews of estimates conducted?	X		There are multiple internal reviewers consisting of Deloitte Consulting, AOC, and Court staff.
Are actual costs recorded and regularly compared to budgeted costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Currently, AOC costs are tracked at the overall CCMS level. At this point, a daily (or on-demand) Access database report can be printed showing project budget, monies encumbered, monies expended to date, and monies forecasted to be spent.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Planning and Tracking			
Is supporting data maintained for actual costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Yet, the RPO has invoice level data to support its actual cost data tracked in its Access database.
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	X		This information is reported weekly, monthly, and quarterly.
Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration mgmt plan?	X		The CCMS-V4 Configuration Management Plan outlines the process and procedures followed for Configuration Management.
Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?	X		This information is tracked in eRoom and in the weekly, monthly, and quarterly status reports.
Is user satisfaction assessed at key project milestones?		X	Deloitte Consulting has stated that user satisfaction is assessed at key project milestones in the form of deliverable review. All deliverable comments are logged, reviewed, and categorized to indicate if a response is needed. According to Deloitte Consulting, all defects or other comments that require a response are addressed and tracked through closure. Other validation processes include proof of concepts, UI prototypes, design sessions, design council sessions, and cross track meetings. As such, Deloitte Consulting believes that acceptance of the deliverable is evidence of user satisfaction. While there are no satisfaction surveys used or assessments performed at key project milestones, the AOC agrees that there are several opportunities to talk through and resolve deliverable disagreements on a case by case basis.
Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?	X		Planning is in compliance with a formal system development life-cycle (SDLC) methodology.
Is there a formal enterprise architecture in place?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point in time, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project. SEC will be investigating the AOC enterprise architecture further as the project progresses.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	X		Project Closeout activities are planned to occur and we will evaluate and comment whether the planned activities occurred at the project closeout. In the interim, Lessons Learned sessions are being conducted at various project phases to identify possible process improvements.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, "alternative procurement") and their required processes followed?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Is a detailed written scope of work for all services included in solicitation documents?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Are detailed requirement specifications included in solicitation documents?	X		Detailed requirements were included in Exhibit B of the Statement of Work. These will be expanded upon during Detailed Design. Thus, we will review or evaluate those requirements when developed.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. For ongoing SOWs, independent third-party vendors are used to review and recommend procurement planning and execution practices.
For large-scale outsourcing, is qualified legal counsel obtained?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. The AOC utilized outside council for the V4 Development Contract.
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X		The Risk Management Plan contains the process and procedures for risk. Risks are tracked within eRoom and are discussed during the weekly and monthly status meetings. In addition, the Deloitte Consulting Project Manager meets with the CCMS Product Director weekly to discuss risks.
Does the management team review risks and mitigation progress at least monthly?	X		The management team reviews risks at weekly and monthly status meetings.
Are externally developed risk identification aids used, such as the SEI "Taxonomy Based Questionnaire?"		X	Additional risk identification aids are internal to Deloitte Consulting and are not shared with the AOC. The AOC is not using any other risk identification aids.
Communication			
Is there a written project communications plan?	X		This information is contained in the CCMS-V4 Communication Management Plan.
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		Written weekly, monthly, and quarterly status reports are prepared and discussed with the project management team as well as the Steering Committee/Oversight Committee. In addition, there are executive meetings held to brief the Lead Court CIOs.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Communication			
Are there written escalation policies for issues and risks?	X		This CCMS-V4 Project Management documentation contains this information.
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		The Product Management Group has primary responsibility for working through the issues and risks. Additionally, issues and status are shared with lead court information officers, court executive officers at bi-weekly steering committee meetings as well as with selected presiding judges at the quarterly oversight committee meetings. The RPO is also working diligently to seek input and have stakeholders assume an active ownership role in the development process.
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		AOC and Court staff are planned to be involved from requirements gathering through testing and into implementation.
Do users formally approve/sign-off on written specifications?	X		The requirements will be approved by the AOC and Court staff.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		The RPO Management Team has reported that Deloitte Consulting is using Clear Quest and Clear Case to manage defects and Rational Requisite Pro to track requirements.
Do software engineering standards exist and are they followed?	X		This CCMS-V4 development standards documentation has been reviewed by SEC and found to be adequate.
Is a formal system development life-cycle (SDLC) methodology followed?		X	Deloitte is using an overlapped waterfall SDLC as evidenced by the structure of their project plan and the manner in which activities are performed. CMMI Level 3 requirements require that a defined, standard, consistent process and process measurement be followed. This would require that: <ul style="list-style-type: none"> • Technical processes are defined in writing; • Project roles are clearly defined; • Staff are trained in standard methods and process activities before they are assigned to roles; and • Technical management activities are guided by defined processes. It is not clear where the processes and roles are documented and whether the CCMS-V4 Project is CMMI Level 3 compliant.
Does product defect tracking begin no later than requirements specifications?	X		Product defect tracking occurs during deliverable review. Users submit defects by entering comments in the deliverable. Each defect is tracked to closure within the deliverable. Any corresponding response is attached to the original defect in the body of the deliverable. Before approval of the deliverable, the AOC confirms that all defects have been appropriately addressed.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

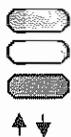
Practices and Products	Practice in Use	Practice Not in Use*	Notes:
System Engineering			
Are formal code reviews conducted?		X	Two levels of code reviews are conducted. Automated reviews of code are conducted using the JCART tool which checks for and highlights unacceptable coding practices. Any issues identified through the JCART execution have to be resolved before the code can be included in the build. Additionally, manual code reviews are conducted by the Architecture Leads (Technical Analysts, Development Leads and the Framework Team). Code review checklists are created and stored in ClearCase. Deloitte should implement a process for ensuring that the coding standards are adhered to as opposed to the AOC assessing the compliance after completion.
Are formal quality assurance procedures followed consistently?	X		The quality assurance documentation was updated to include CCMS-V4. As more QA related data is collected and reported by Deloitte Consulting, the IPO/IV&V Team will be reviewing these reports to assess how data is represented in the reports—such as through metrics—and identify issues with processes if the metrics indicate negative trends.
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	AOC and the Court staff will sign-off on acceptance test results. Acceptance criteria have been established as 0 Severity-1 incidents, 0 Severity-2 incidents, and not more than 50 Severity-3 incidents. We will evaluate these activities when appropriate in the project.
Is the enterprise architecture plan adhered to?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project.
Are formal deliverable inspections performed, beginning with requirements specifications?	X		All deliverables are approved by the AOC and Court staff.
Are IV&V services obtained and used?	X		SEC has been hired to perform IV&V.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Appendix D: IPO/IV&V Project Scorecard

For January 1, 2010 - January 31, 2010 Time Period

Process Area	AUG 2009	SEP 2009	OCT 2009	NOV 2009	DEC 2009	JAN 2010	REMARKS
Communication Management							Day-to-day communication continues to be strong.
Schedule Management							The schedule remains aggressive.
Scope Management							Project scope is managed and controlled through a variety of avenues.
Risk Management							Risks are reported, discussed, and managed on a weekly basis.
Issue Management							Issues are discussed/reported weekly at various project management and Executive Committee meetings.
Resource Management							AOC and Deloitte project resources appear to be insufficient during testing.
Cost Management							ISD costs and RPO costs are maintained in separate databases and there is no effort to combine these in the near future.
Quality Management (Client Functionality)							We are unable to conclude on the quality of the client functionality due to the absence System test defect data related to Deloitte's execution of the System Test scripts.
Quality Architecture							Quality Architecture is currently adequately defined from an industry-sound SEI approach.
Configuration Management							CM, for documentation, is being well controlled through the eRoom and JCC web sites that have built-in controls for CM.
System Engineering Standards and Practices							Deloitte Consulting appears to be following currently accepted systems engineering standards and practices.
Requirements Identification and Traceability							The IPO/IV&V Team has concerns with the lack of traceability between use cases and business rules.
Detailed Design Review							The Technical Design documentation was delivered to the RPO but is an artifact and not a deliverable and therefore, the Detailed Design cannot be assessed.
System Development Quality and Progress							The technical architecture and design is proceeding on the defined schedule with only minor changes.
Testing Practices and Progress							Testing continues to be a concern.



Green – On Track
 Yellow – Warning
 Red – Significant Problems

Appendix E: IPO/IV&V Background, Scope, and Methodology

The California Case Management System (CCMS) is a statewide initiative to bring the courts together to use one application for all case types. CCMS is managed by the Administrative Office of the Courts (AOC) Southern Regional Office (SRO) in Burbank with the participation of the AOC Information Services Division and superior courts in the planning, design, and development sessions. Over the next 2 years, the AOC plans to expand the functionality of the current interim CCMS applications and develop the next phase—CCMS-V4—that will include family law, juvenile dependency, and juvenile delinquency case types as well as incorporate the V2 and V3 products and update the system’s technical architecture and environments. Toward this end, the AOC has executed a contract with Deloitte Consulting to design and develop the V4 component—yet, the success of the V4 Project relies on every party working in harmony toward common goals.

Background:

For all high criticality technology projects such as CCMS-V4, industry best practices strongly encourage independent oversight. Ideally, the independent project oversight process begins during the feasibility study and continues through project closeout. Deficiencies, issues, findings, and recommendations identified by the oversight process should be incorporated into the appropriate project management processes. As the project progresses, the independent review and assessment approach should track the disposition of findings and recommendations in terms of corrective action and implementation of oversight recommendations.

An Independent Project Oversight (IPO) effort is intended to audit system development, acquisition, and maintenance controls to assure a structured project management methodology is adhered to and managed through activities such as project scheduling, risk management, and change management. A primary goal is to provide impartial oversight of the responsibilities and activities of the project office. Similarly, the Independent Verification and Validation (IV&V) provides unbiased oversight of the technical deliverables such as program code, test scripts and results, and network configurations and processes used to create the product. It is intended to evaluate products against system requirements and whether processes used follow the intended life cycle methodology.

However, these efforts are not designed to guarantee success of the CCMS-V4 application nor will the IPO/IV&V efforts ensure the completeness of business requirements designed by the CCMS-V4 team or the ability of the end system functionality of the application built to meet court needs statewide.

Appendix E: Continued

Scope and Methodology

In July 2007, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) Services over the California Case Management System (CCMS) V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the Regional Administrative Director and CCMS Product Director at the Southern Regional Office (SRO), our objectives are to monitor the services, deliverables, milestones, deadlines, and functionality of the CCMS-V4 project and communicate status, progress, issues, and potential challenges to the success of the project as designed. The IPO/IV&V efforts are designed to give assurance, from an independent and unbiased perspective, that the process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards as well as that potential risks and issues are known by project decision makers. The IPO/IV&V effort cannot require change, but any identified and reported findings and results should be considered by the project sponsors.

To provide appropriate and independent review, analysis, and oversight on the CCMS-V4 project, SEC will generally provide monitoring efforts from July 2007 through June 30, 2010 relative to the following areas:

- Project management and System Development Life Cycle (SDLC) processes, procedures, and communication
- Adherence to schedule
- Techniques and processes employed for risk management, issue management, and communication strategies
- Requirements gathering as part of JAD Sessions
- Completeness of Functional Design and Technical Design
- Traceability of requirements from one SDLC phase to the next
- Testing techniques and processes employed
- Compliance with project management and technical contract requirements

However, the IPO/IV&V efforts will not review or address the completeness of the business requirements being developed cooperatively by Deloitte Consulting, SRO staff, and court Subject Matter Experts (SMEs) as part of functional design joint application development (JAD) sessions. While business requirements will be reviewed from a technical perspective to assess whether they contain sufficient levels of specificity to ensure proper coding and end-user functionality as planned, SEC cannot ensure that all critical business processes and steps are appropriately captured in the business requirements to meet court needs.

Appendix E: Continued

Additionally, our efforts do not address the management surrounding the application developer's budget. Because the AOC awarded Deloitte Consulting a fixed-price contract, a time and material type review and analysis is not warranted in this situation.

Moreover, to provide appropriate and independent review, analysis, and oversight over the CCMS-V4 project, the following parameters need to be met in allowing SEC to perform activities unimpeded:

- Understanding/agreement by all project participants on our independent role and importance of timely information sharing and meeting scheduling;
- Inclusion as a seamless member of the project team;
- Timely knowledge of and inclusion in all project meetings;
- Commitment from all project participants to attend meetings scheduled with the IPOC/IV&V;
- Unfiltered access to all documents, data, deliverables, and personnel deemed relevant by the IPOC/IV&V Team; and
- Full disclosure of project knowledge including items such as project issues, risks, change requests.

If there are challenges in adhering to those parameters, we will escalate our issues and/or concerns to the Internal Audit Services Manager, CCMS Product Director, RAD, CCMS Steering Committee, and CCMS Oversight Committee as necessary or appropriate. Working in conjunction and coordination with the AOC's Internal Audit Services to complete this Statement of Work, we will perform the following tasks:

IPO Specific Tasks

- Conduct meetings, as needed, with key project staff to obtain first-hand information as to the objectives of the project, identify the key players and their roles, and the interrelationship and communication structure between all parties as well as review documents such as organization charts and governance structure.
- Attend meetings, as needed, key court/AOC and vendor personnel to obtain information on their responsibilities, objectives, communications, and schedules.
- Conduct observations, on-going interviews, and document examinations to monitor meeting timelines, deliverables, and milestones as described in the schedule.
- Review project planning/management deliverables and documentation to comment on compliance with industry best practices and adherence to documented project processes
- Perform initial assessment of Project Management processes and documents (project management plan, communication plan, change management plan, implementation plan, etc).

Appendix E: Continued

- Participate in certain critical requirements gathering and physical design sessions (JAD sessions) as deemed necessary or at the direction of the Internal Audit Services Manager to provide expertise courtroom operations (family law, criminal, and traffic), finance, distributions, and audit as well as on the V2 and V3 retrofit and validate processes are being followed.
- Provide an Implementation Strategy Review. This review would consist of an analysis of the implementation approach and the action plan for accomplishing implementation.

IV&V Specific Tasks

- Review Requirement Traceability and Contract at end of Functional Design, Technical Design, and Test Preparation.
- Provide a Functional Design and Requirements Traceability Review. The Functional Design review would consist of an analysis of the Functional Design Specification to assess the readability, consistency, and testability of the design. The Functional Design review will identify issues such as non- testable requirements, vague requirements, requirements that are in conflict or not consistent with each other, etc. The Requirements Traceability review will ensure that all of the contractual requirements have been addressed and are accounted for.
- Provide a Technical (software) Design and Requirements Traceability Review. The Technical Design review would consist of an analysis of the Technical Design Specification to assess the readability, consistency, and testability of the technical design as well as identification of any potential weaknesses in the design. The Technical Design review will identify where the Technical Design may be in conflict with the Functional Design. The Requirements Traceability review will ensure that the design has addressed all of the functional requirements.
- Provide a Test Methodology and Requirements Traceability Review. The Test Methodology review would consist of an analysis of the Test Methodology and a sampling of test scripts which will be traced to the requirements and to the design specification as well as reviewing the data elements necessary for the scripts. The Requirements Traceability Review will ensure that all of the test cases/scripts have been developed to test the design and the functional requirements.
- Review a statistically valid sample of source code (coded based on requirements documented in JAD sessions). Approximately 40 modules will be reviewed which would provide early feedback on compliance to coding standards and comparisons to the design requirements.

Appendix E: Continued

- Review a statistically valid sample of test scripts (unit, integration, system, user acceptance, product acceptance) for compliance with requirements from both a technical perspective and from a court operations perspective (testing enough scenarios/scripts covering critical and most frequent business cases both on a positive/ideal flow and on an exception basis).

IPO/IV&V Combined Tasks

- Assess Systems Development Life Cycle (SDLC) practices to comment on compliance with industry best practices and adherence to documented project processes.
- Review agreed-upon vendor deliverables including, but not limited to Functional Design, Technical Design, Test Methodology, Implementation Strategy, V2 Requirements and V3 Requirements, to comment on compliance with Deliverable Expectations Document (DED).
- Identify and assess any new or ongoing challenges, barriers, risks, or issues.
- Attend meetings, as needed, where deliverables, strategies, timelines, and status are being considered.
- Maintain a log tracking IPO/IV&V issues that delineates any challenges, barriers, risks, issues, defects, milestones changed or missed, and observations warranting discussion and monitoring; monitor the resolution of such issues; document the resolution and closure of each matter.
- Conduct bi-weekly briefings with the RAD and designated Project Manager(s) discussing all previous work and any updates or new developments.
- Compile the results of the IPO/IV&V monitoring efforts in writing. In addition to compliance issues, the report will also contain any other significant findings, conclusions, and recommendations including the identification of risks, lessons learned, best practices, or performance exceeding minimum requirements as well as comment on severity or criticality and impact or consequence of items discussed.
- Ascertain and report on follow-up efforts taken on corrective actions needed and implementation of oversight recommendations.
- Provide reports to the RAD and designated Project Manager(s) on a monthly basis, or more frequent if necessary, based on project stage criticality.

Appendix F: SEC Activities - Performed & Planned

During January, SEC performed the following activities:

- Monitored QA Metrics;
- Monitored Integration Testing;
- Attended weekly and monthly Project Management Meetings and Steering Committee Meeting as well as participated in CCMS-V4 IPO/IVV Project Meetings;
- Performed analysis of areas in the Project Oversight Review Checklist Appendix C;
- Identified and tracked potential risks, observations, and issues as well as discussed and prepared monthly IPO/IV&V written status reports.

Planned SEC Activities for February 2010

SEC plans to conduct the following activities over the next month:

- Attend, observe, and participate in a variety of CCMS-V4 meetings including weekly Project Management Meetings, monthly Project Management Meeting, monthly RPO Management Meeting, monthly ISD Meeting, bi-weekly Steering Committee Meetings, weekly Technical Architecture Meetings, CIO Meetings, and monthly IPO/IVV Project Meeting;
- Review technical documents prepared and discussed at weekly meetings as well as other documents distributed as part of weekly and monthly meetings;
- Continue review and comment on the Testing Documentation in terms of sufficiency of detail including implementation of integration test plan and PAT plan;
- Monitor results of product testing in terms of progress in script executions, frequency and severity of defects identified, and resolution of defects.
- Prepare monthly IPO/IV&V status report that identifies and tracks new risks or issues as well as accomplishments and review prior issue resolution.

The Judicial Council of California, Administrative Office of the Courts

Independent Project Oversight (IPO) and
Independent Verification and Validation (IV&V)
For the CCMS-V4 Development Project

Status Report as of February 28, 2010

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Executive Summary

Realizing the importance of independent oversight for high criticality technology projects, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) services for the California Case Management System (CCMS)-V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the CCMS Executive Sponsor in the Regional Program Office (RPO), our objectives are to monitor the activities, deliverables, milestones, deadlines, and design of the CCMS-V4 project and communicate status, progress, issues, and challenges to the success of the project as designed. Our monthly IPO/IV&V reports are intended to capture and assess current project activities to determine whether process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards, as well as that potential risk/issues are known by decision makers at a specific point in time; thus, the monthly items reported are in-flux, continually evolving, and will change over the course of the project.

Period Highlights:

With the Design and Build phases complete, the CCMS-V4 Project Team activities this month have focused on testing. Integration Testing, PAT planning, and the overall project schedule completion dates are in-flux due to a four-to-six week functional assessment and re-planning effort being conducted by four members of Deloitte's Senior Management Team. The team is comparing the functionality in the Final Functional Design (FFD) to the actual code to determine where gaps might exist. Consequently, the October 8, 2010 completion date is no longer valid. Once the re-planning effort has been completed, a new date will be announced. As of the date this report was written, the AOC and Deloitte were in discussions regarding the re-planning effort for the project. We expect that our findings will be different next month with the finalization of the re-planning effort.

The CCMS-V4 Quality Assurance (QA) Report #8, version 1, was delivered to the AOC on February 26, 2010 for review. Since the QA Report has just been delivered and is undergoing its initial review by the AOC, the IPO/IV&V Team will not formally comment on it in this Monthly IPO/IV&V Status Report. However, the IPO/IV&V Team will review the initial QA Report and provide informal feedback to the AOC on our observations. Once the AOC provides its feedback to Deloitte and the QA Report is revised and accepted by the AOC, the IPO/IV&V Team will formally comment on the revised QA Report.

From the IPO/IV&V Team's analysis of the Integration Test Reports published in eRoom dated 1 February 2010 and 18 February 2010 (the date of the last report published), the reports reflect a drop in the total number of open defects in the 17-day period of 1,493 defects, or approximately 88 defects per calendar day. Yet, the 18 February 2010 report identifies 3,601 open defects—at this rate, it will take 41 calendar days to close all of the reported open defects, assuming no additional defects reported. However, with the current test script clean-up being performed and then the retesting effort, it is unlikely that no new defects will be reported.

Detailed Observations, Impact, and Recommendations

The Southern California Regional Program Office (RPO) staff, AOC staff, individual court staff, and Deloitte Consulting continue to practice solid project management and systems-engineering practices in the identification and resolution of issues, risks, items for management attention, and modification and change requests.

The continued diligence employed by the RPO staff, AOC staff, Court staff, and Deloitte Consulting in addressing issues and following established project management processes has been consistent. As part of our efforts, we offer the following observations and areas of concern.

Project Oversight Focus Areas

Communication Management:

There do not appear to be any current communication concerns noted by the CCMS-V4 Project Team or the IPO/IV&V Team.

Schedule Management:

The IPO/IV&V Team does not anticipate the schedule becoming any less aggressive for the duration of the project. Four Deloitte Senior Management staff have recently joined the project to partner with Kevin Kelly, Jon Guereña, Ron Dostal, and Bruce Scheffel in an assessment and re-planning effort. The team is currently comparing the Final Functional Design (FFD) to the actual code to determine where gaps exist. Both the AOC and Deloitte agree that a re-planning effort is warranted and that it makes sense to create a true plan rather than adjust the end date of the contract periodically. Consequently, the October 8, 2010 completion date is no longer valid. Once the re-planning effort has been completed, a new date will be announced.

Scope Management:

Scope management items raised by the CCMS-V4 Project Team are being actively managed through eRoom.

Risk Management:

During the month of February, one new risk was identified (Risk 39- Large Number of Integration Testing Defects) by the CCMS-V4 Project Team. As of February 28, 2010, the risks identified below by the CCMS-V4 Project Team remain active.

Risk Number	Risk Title	Activity Performed	Target Resolution Date
27	SME Testing Staffing Plan	The AOC/Court testing resources are not adequate to execute testing. This is an accepted risk and will continue to be monitored on a weekly basis. At this time, no mitigation actions are required.	03-29-10
35	CCMS-V3 Resources	There is an ongoing effort to combine V3 and V4 project schedules to evaluate staffing needs. This is an accepted risk and will continue to be monitored on a weekly basis. At this time, no mitigation actions are required.	10-08-10
37	Justice Partner Readiness	Reference Implementation constraint schemas have been published. This is an accepted risk and will continue to be monitored on a weekly basis. At this time, no mitigation actions are required.	03-29-10
38	System Response Time Matrix	An alternative strategy for resolving the disagreements surrounding this deliverable is now being introduced. AOC/Court review is needed to gain further information regarding the desired response times for the many transactions detailed in the plan.	03-29-10
39	Large Number of Integration Testing Defects	A test script cleanup effort is underway in order to reduce the number of defects and to improve overall product quality. Deloitte is working with the AOC to re-plan the effort, finalize the schedule, and update contract documentation.	03-12-10

The following risk was closed during February 2010.

Issue Number	Issue Title	Resolution
34	CCMS-V4 & ISB TIBCO Versions	No significant issues have arisen regarding the differing version of TIBCO. Consequently, the PM group closed this risk.

Issue Management:

As of February 28, 2010, there were no open issues being tracked by the CCMS-V4 Project Team.

Resource Management:

All parties continue to be concerned that the CCMS-V4 Project requires more resources to complete the product Development and Testing phases. The AOC and the courts have accepted this risk and are monitoring it on a weekly basis.

Cost Management:

For February, there were no new IPO/IV&V issues with respect to Cost Management that have not already been discussed in previous reports.

Technical Focus Areas

Quality Management:

The CCMS-V4 Quality Assurance Report #8, version 1, was delivered to the AOC on February 26, 2010 for review. Since the QA Report has just been delivered and is undergoing its initial review by the AOC, the IPO/IV&V Team will not formally comment on it in this Monthly IPO/IV&V Status Report. Concurrently with the AOC, the IPO/IV&V Team will also be reviewing the initial QA Report and provide informal feedback to the AOC on our observations. Once the AOC provides its feedback to Deloitte and the QA Report is revised and accepted by the AOC, the IPO/IV&V Team will then formally comment on our findings with respect to the AOC accepted version of the QA Report.

In the quality management section of our January 2010 Monthly IPO/IV&V Status Report, we noted that the Deloitte QA Observations identified in QA Report #7 were reported as closed in the Monthly CCMS-V4 Development Services Status Report 31; the specific Deloitte Observations were QI01 and QI02. However, as we also reported in that January 2010 Monthly IPO/IV&V Status Report, there was no identification or description of what actions were taken to allow the Observations to be closed. Thus, this remains an open issue for the IPO/IV&V Team and we will be working with the AOC Team to understand the actions taken for each Observation and the process of documenting and closing Observations.

- *The following are IPO/IV&V Team observations based on graphs in the Deloitte QA Report #7. QA Report #8 was delivered in late February 2010 for initial AOC review and our observations will be updated when the final report is delivered and accepted by the AOC. However, at this point, the RPO has rejected QA Report #8 and is awaiting a revised deliverable.*
- **Deloitte's System Test Metrics Graphs:**

IPO/IV&V Team Observation: The System Test metrics for Portals/SWRDW are for managers who need to understand the amount of work that needs to be done. However, the Test Script Pass Rate metric converging to 50% should give some concern because of the high percentage of failures being reported.

IPO/IV&V Team Observation: For the System Test metrics for the Core product, it appears that Track 2 may have some problems based on the number of open defects (around 575) when the average for the other tracks is around the 150 level. However, the Track 2 Test Script Pass Rate is similar to the other tracks averaging approximately 76%. Thus, a 76% pass rate with about 575 defects should be investigated because of the high number of reported defects. While Track 2 may be significantly larger than the other tracks, the high volume of defects for the track should be investigated.

- **Deloitte's Integration Test Metrics Graphs:**

IPO/IV&V Team Observation: For the Integration Test metrics for Core Cycle 1, the area with the largest number of open defects was FMI, with approximately 850 defects—next, were the Juvenile and Fiscal areas with approximately 600 open defects each. However, the Integration Test script pass rates for all areas were around 90%. In Cycle 2, Juvenile led with about 160 open defects with Probate and FMI reporting approximately 140 and 135 defects respectively. It's interesting to note that in Cycle 2, the test script pass rate dropped to about 75%. This may indicate a change in the test script execution process between Cycle 1 to Cycle 2 to still have a lower number of open defects while the pass rate dropped. There is a potential that previously successfully executed tests scripts were not regression tested during Cycle 2 but that is currently unknown.

The following comments made by Deloitte in their QA Report #7 are unclear and should be investigated by AOC. QA Report #8 was delivered in late February 2010 for initial AOC review and our observations will be updated when the final report is delivered and accepted by the AOC. However, at this point, the RPO has rejected QA Report #8 and is awaiting a revised deliverable.

- **CMMI Status Report - Measurement and Analysis:**

1. "The Metrics Plan must be updated to more accurately list the metrics collected on the project. The project will revise the plan to identify and delete metrics that are no longer used."
2. "For every metric detailed in the Metrics Plan, a threshold value must be defined. The current version of the Metrics Plan does not contain several of these thresholds. The project will identify and populate all missing thresholds."

IPO/IV&V Team Observation: All metrics should be associated with a threshold that should then trigger some event if the threshold is breached. Thus, the IPO/IV&V Team believes both the threshold and the event should be defined.

- **CMMI Status Report – Quality Assurance:**

1. “Because Milestone and deliverable based audits are no longer used on the project, the project team will remove those two audits from the QA Plan.”

IPO/IV&V Team Observation: Deliverable and milestone based QA Audits are a fundamental aspect of Quality Assurance and Control. If the Audits are truly not needed and quality is assured in some other way, then the other audits should be removed to avoid duplication. However, removing audits just because they are not currently being performed is unacceptable to the IPO/IV&V Team and could materialize as a long-term risk to the project.

- **CMMI Status Report – Technical Solution:**

1. “The Code Review Checklists for CCMS-V4-PRJ03, DWRPT-042, CCMS-V4-EFL22 contain open defects although these checklists were listed as completed. The project will review these checklists and close all open defects.”

IPO/IV&V Team Observation: The point of code reviews is to identify issues or potential problems with the code or the code documentation. Without tracking the code review issues to closure, the IPO/IV&V Team believes the value of code reviews is significantly diminished. At this point in time items remain open and the AOC has stated that they will not move from Integration Testing to PAT until the code review findings are resolved.

- **CMMI Status Report – Verification:**

IPO/IV&V Team Observation: A positive CMMI note is that Deloitte matched one of the identified concerns under the CMMI Verification section that states “Some of the deliverables are reviewed at high rate of # pages per hour. The project will revise the deliverable review process to allow for more thorough reviews.” Obviously without thorough review of the deliverables, the project exposes itself to a great deal of risk, and potential fault, which will have been agreed to by the project team.

Quality Architecture:

There are no open issues with Architecture for the month of February and the Architecture Team with Deloitte, AOC, ISD, and other Court members continues to do a good job of identifying and defining the architecture as well as architectural tradeoffs, raising issues for resolution, and generally creating a solid CCMS-V4 architecture.

Configuration Management:

There are no open issues with Configuration Management. Configuration Management for documentation is being well controlled through eRoom and JCC Web Sites that have built-in controls for Configuration Management.

System Engineering Standards and Practices:

Since Deloitte Consulting appears to be following currently accepted systems engineering standards and practices, even as defined in IEEE Standard 1220, there are no system engineering standards and practices concerns at this point in time.

Requirements Identification and Traceability:

There are no new issues with Requirements Identification and Traceability that have not already been discussed in previous reports.

Detailed Design Review:

There are no open issues with the Detailed Design Review that have not already been discussed in previous reports.

System Development Quality and Progress:

The completeness of the Architecture Team decisions cannot be verified by the IPO/IV&V Team due to the absence of an Architectural Decision Tradeoff Matrix which would document the options, tradeoffs, decisions, and underlying rationale for the approach taken.

Testing Practices and Progress:

The IPO/IV&V Team continues to highlight a potential issue with respect to Court resources necessary to complete PAT. Specifically, there is a major deficiency between the staffing level proposed by Deloitte and what the Courts can provide. The AOC and the courts have accepted this risk and will continue to monitor this risk weekly. As such, the IPO/IV&V Team will monitor and assess the PAT resource efforts as a plan is devised by Deloitte and the AOC.

In a January 7, 2010 email from the AOC to Deloitte, the AOC expressed concern with the script execution problems and defects, the Deloitte testers missing defects, the script defects/Day 0 problems, and the general stability of the system. In this email, the RPO stated that they “would not move from Integration Testing to PAT while the test results from our Court/AOC testers contradict the Deloitte test results.” Since both Deloitte and the SMEs developed, wrote, and reviewed the scripts, this high of an error rate is unusual and may partially indicate that the scripts were not reviewed as thoroughly as needed (especially given the large volume of scripts that had to be reviewed).

The lack of a thorough review may have been due to the tight schedule, the design still being finalized while the scripts were being reviewed, non-availability of Court resources, or various other reasons. While the Integration Test Scripts developed by Deloitte were submitted to the AOC for final review and were accepted prior to the start of Integration Testing, the IPO/IV&V Team still finds more than 1,000 scripts on the JCC site that have a “ready for review” status. At this point, we are uncertain whether those scripts are still awaiting review, or whether they have been reviewed and just not moved from the “ready for review” folder. Many test scripts have been uploaded to Deloitte’s eRoom site over the last few weeks, and the IPO/IV&V Team will follow-up on this area to seek clarification.

To this end, the AOC and Deloitte are jointly working through the Test Script clean-up effort. With approximately 20,000 test scripts (including Data Warehouse and Efiling), the anticipated date for completion of the Test Script clean-up effort is March 12, 2010. As for Release 1.1, the Test Script clean-up effort kicked off 2-1-10 and will take approximately 7 weeks. The IPO/IV&V Team will monitor the status of the Test Script clean-up efforts. Additional data collected after the scripts are cleaned will provide more information that can be assessed by the IPO/IV&V Team on the completeness of testing and the “quality” of the application. In addition, the re-planning effort will change the focus of the IPO/IV&V Team’s review to a review of the Re-Plan which should change the testing efforts for the project and should significantly change next month.

From the IPO/IV&V Team’s analysis of the Integration Test Reports published in eRoom dated 1 February 2010 and 18 February 2010 (which is the date of the last report published), the reports reflect a drop in the total number of open defects in the 17-day period of 1,493 defects. However, the 18 February 2010 report identifies 3,601 open defects—at this rate of approximately 88 closed defects per calendar day, it will take 41 calendar days to close all of the reported open defects, assuming no additional defects reported.

Additionally, out of the total number of defects reported in the 18 February 2010 report, 3,601, there are 1,519 available for retest and 2,024 that are not available for retest; 58 defects are in PM Review. Further, the ratio of the number of defects ready for retest to the total number of open defects in the 18 February 2010 report is 0.42, which is greater than that reported in the 1 February 2010 report which had a ratio of 0.39. This is an indication that the defects are getting resolved for retest, but at a relatively slow rate; at this rate, it will take 74 calendar days to have retests available for all of the defects not available for retest, assuming no more defects are reported. Therefore, while the number of open defects being closed is at a rate of 88 defects per calendar day, the ability to correct the defects and have them available for retest will likely slow down the defect closure rate.

Appendix A: Matrix of Areas of Concern (Open)

The matrix below provides a current listing of all open areas of concern, our recommendations, and the action taken by the CCMS-V4 Project Team. As items are resolved, they will be moved to Appendix B. Key statistics are summarized below:

- **No new areas of concern were identified this month that are not already being covered in the Project Issues and Risks. The IPO/IV&V Team strongly believes that this project will continue to be a high risk project due to the constraints imposed by the budget, schedule, and resources.**

Appendix B: Matrix of Areas of Concern (Closed)

The matrix below provides a listing of all closed areas of concern, our recommendations, and the action taken to resolve the issues by the CCMS-V4 Project Team. Key statistics are summarized below:

- **No areas of concern were closed this month.**

Item Number	Area of Concern	Recommendation	Action Taken
Jul07.1	Aggressive schedule	The schedule should be reviewed to ensure that ample time has been allocated to each phase of the project.	<p>09-2007 - No action taken that SEC is aware of.</p> <p>10-2007 – At this point in the project it is difficult to determine if there is ample time allocated to each phase of the project. This item will remain in a watch status (e.g., once Test Planning activities have begun, it will be easier to determine if enough time is allocated to testing activities).</p> <p>11-2007 to 04-2008 – Although 12 weeks were added to the schedule, there is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>05-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>06-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>07-2008 – There is concern that there is not enough time to complete the review of the FFD. In addition, there is concern that there is insufficient time allocated to testing and that test planning has not been fully engaged. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>08-2008 – 27 additional days were added to the schedule for review of the FFD. It is unknown at this point whether the additional days are sufficient to allow a thorough review and better ensure the highest quality product possible. Moreover, because test planning is slow to start, SEC still has concerns about the time allocated to the testing phase. This item will remain in watch status.</p> <p>09-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>10-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>11-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>12-2008 – It is unclear how the extended review timeframe will impact the overall schedule. This item will remain in watch status.</p> <p>1-2009 – The Core application, Portals, and Statewide Data Warehouse portions of the FFD will be completed by March 30, 2009. The Data Exchanges portion is expected to be completed by April 15, 2009. This item will remain in watch status.</p> <p>2-2009 – All portions of the FFD are on track for completion by March 30, 2009 and April 15, 2009, respectively. This item will remain in watch status.</p> <p>3-2009 – The Portals and Statewide Data Warehouse will be accepted by March 31, 2009. The Core application will be completed by March 31, 2009. Data Exchanges will not be completed until the end of April. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>4-2009 – The FFD was signed off May 1, 2009. The Data Exchanges are expected to be completed by May 22, 2009.</p> <p>5-2009 – The Data Exchanges are expected to be completed by June 5, 2009.</p> <p>6-2009 – While the IPO/IV&V Team believes the schedule is aggressive and will remain aggressive for the duration of the project adding to project risk, the RPO and AOC have extended the schedule through contract amendments. At this point, the RPO and AOC have accepted the project risk as neither the schedule nor the budget can be changed.</p>
Aug07.1	JAD Schedule	<p>There does not appear to be a comprehensive schedule of JADs so that participants can plan time accordingly. Thus, Deloitte Consulting should prepare a detailed schedule that sets realistic timeframes needed to JAD each functional area and ensure the schedule is agreed to by all relevant parties.</p>	<p>09-2007 – The schedule should be completed in October 2007.</p> <p>10-2007 – A revised schedule was completed in October 2007. While the schedule provides more details than previous versions, it still does not address the detailed planning that must be conducted to ensure coverage of all functional areas and the workflows associated with each.</p> <p>11-2007 to 04-2008 – JAD scheduling has improved to the point that this is no longer an area of concern. Consequently, this item has been closed. Over the past few months, Deloitte Consulting has been diligent in setting and adhering to its JAD schedule. As the project enter the final design stage, participants appear able to plan time accordingly to ensure they are available to participate in tracks as needed and share their subject matter expertise. Meetings were also held to hear concerns that more time was needed to review developing requirements—resulting in more time added to the overall project development schedule.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Sep07.1	Requirements Gathering	Ensure that a detailed JAD schedule includes a plan for how the workflow interrelationships will be addressed.	<p>10-2007 – While the workflows and interrelationships have not yet been addressed, the AOC has instituted cross-track meetings as part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements are being gathered.</p> <p>11-2007 to 04-2008– The cross-track meetings have proven to be an essential, needed part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements were being gathered. However, to SEC’s knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>05-2008– To SEC’s knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas. This step should help address some of our concerns. However, since the final design is nearing completion, there is little value in fully mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.1	Project Oversight Activities	Assign person in role of day to day project management responsible for ensuring that issues are resolved timely, do not impact downstream work efforts, and are not in conflict with other project activities, legal provisions, or branch policy.	<p>11-2007 to 04-2008– It was explained that Bob Steiner, the AOC Project Manager, performs these activities and that a Project Management Consultant familiar with V2 and V3, Sean Yingling, will be assigned to assist the Development Project Manager (Bob). This item will remain in watch status over the next month to ensure the activities are being performed.</p> <p>05-2008– SEC will continue to monitor this item until a Responsibility Matrix indicating the project management component responsibilities that are designated to Sean and Bob is developed. The matrix will ensure that no workload gaps exist.</p> <p>06-2008– To date, a Responsibility Matrix has not been provided to SEC for review.</p> <p>07-2008– SEC will work with Bob Steiner and Sean Yingling to better understand the project management responsibilities.</p> <p>08-2008– Bob and Sean have established a seamless working relationship. Bob has ultimate responsibility for all project management activities. Sean’s focus rests with coordinating the FFD review, reporting to the Steering Committee, and following up on issues with the V4 Court Project Managers.</p>
Oct07.2	JAD Session Documentation	Utilize new template or other mechanism to document detailed JAD Session minutes including areas of discussion, results or actions taken, agreements reached, and issues raised as well as distribute timely for approval.	<p>11-2007 to 04-2008 – Starting in mid-April, the JAD tracks created a new template to ensure consistency across JADs for documenting decisions reached and meeting outcomes. However, since it appears that the new template is only used in isolated instances, this item will remain in watch status over the next month.</p> <p>05-2008 – It is not clear whether an AOC CCMS member will be appointed to monitor and summarize decisions made in the JAD sessions and elevate those of potential interest to the Steering Committee, especially those that may require higher level buy-in.</p> <p>06-2008 – Since the final design is nearing completion, there is little value in mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.3	Governance Structure and Escalation Process	Clarify and establish the complete governance structure to eliminate confusion related to issue escalation process and decision-making.	<p>11-2007 to 04-2008 – The CCMS Governance Model was distributed to committee members. This item will remain in watch status over the next month to ensure its use.</p> <p>05-2008 – The CCMS Governance Model appears to be in use and effective in allowing participation in project decisions regarding project scope, cost, and schedule.</p>
Apr08.1	Unclear Requirements	<p>Review the requirements to determine the types of clarifications needed for understanding in order to avoid confusion during downstream activities such as coding and preparing for testing.</p> <p>As of our 09-2008 review of the FFD, we have suggested the following additional recommendations:</p> <ol style="list-style-type: none"> 1. Identify and evaluate subjective text in FFD (such as may or could) and clarify within the context of use; 2. Perform a traceability exercise to link use cases to business rules—again to reduce need for individual interpretation; 3. Review business rule part of each section to ensure complete and clear rules have been incorporated into the use case. 4. Evaluate pre and post-conditions to ensure they are correct and complete. 	<p>04-2008 – New this month.</p> <p>05-2008 – It is not clear whether action has been taken on this issue.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas). This item will remain in watch status over the next month to review this process.</p> <p>07-2008 – This item remain in watch status until a better understanding can be achieved and SEC evaluates the review process.</p> <p>08-2008 – SEC will assess this item during their review of the FFD deliverable.</p> <p>09-2008 – SEC has begun to assess this item and will continue to evaluate progress during the AOC/Court review of the FFD deliverable.</p> <p>10-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>11-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>12-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>1-2009 – The RPO Management Team is currently developing plans to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>2-2009 – The RPO Management Team continues to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>3-2009 – The RPO Management Team continues to discuss the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>4-2009 – An updated resource schedule is being developed that will forecast resource needs between now and the beginning integration testing. This item will remain in watch status.</p> <p>5-2009 – An estimate of the number of Court SMEs needed for testing has been provided. However, more SMEs with Family and Juvenile expertise will be needed. This item will remain in watch status.</p> <p>6-2009 – The IPO/IV&V Team has continued to express their concern that the ambiguity surrounding the interpretation of final requirements presents a risk to the construction and testing phases of the project. Data is being captured by the AOC Software Quality Assurance Team during early testing that should assist in defining the extent of the problem and any future concerns will be raised as part of the testing assessment.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Dec08.1	Standardization and Configuration	It is not clear what impact the Standardization and Configuration requirements will have on the FFD and on long-term maintenance of the application. Once all Standardization and Configuration requirements have been defined, the requirements should be traced back into the FFD and reviewed again.	<p>12-2008 – New this month.</p> <p>1-2009 – In the month of January, a Court Executive Management work group was established to address the concerns surrounding the standardization and configuration requirements.</p> <p>2-2009 – The RPO Management Team reported that the Standards and Configuration Management Group will determine whether configurable items are statewide standards or local configurations and that these decisions will not impact the FFD.</p>
Dec08.2	Single Point of Contact for ISD	A single point of contact should be established for AOC that can track and manage daily progress on ISD-related activities	<p>12-2008 – New this month.</p> <p>1-2009 – It is not clear where the roles and responsibilities are documented and whether David Corral, selected as the single point of contact, has the authority to make decisions on behalf of ISD. Virginia Sanders-Hinds will work with IPO/IV&V to better understand the ISD roles and responsibilities within the project.</p> <p>2-2009 – It was clarified that Virginia Sanders-Hinds is the single point of contact with the authority to make decisions on behalf of ISD.</p>
Mar09.1	Justice Partners (Interfaces) Plan	Determine the state and progress of the common “State” interfaces which are currently being reviewed by the Justice Partners and assess the progress for project schedule impact.	<p>4-2009 – The “State” interfaces are being addressed with the Justice Partners. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p> <p>5-2009 – The “State” interfaces are being addressed with the Justice Partners at both the State and local levels. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off (now anticipated for 6-5-09) and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>6-2009 – The “Statewide” interfaces are being addressed with the Justice Partners. – A plan has been defined for day-one critical exchanges and each Justice Partner will be given a Microsoft Project Plan to follow. The AOC will continue to work closely with each Justice Partner to anticipate any potential challenges. However, it is not clear if and when the Justice Partners will participate in PAT. This item will remain in watch status.</p> <p>7-2009 - The CCMS-V4 Project Team has clarified that the Statewide Justice Partners will participate in PAT. This item will be closed out.</p>
Mar09.2	Document Management Plan	Determine the state and progress of the agnostic “generic” interface to support any existing document management solution and assess the progress for project schedule impact.	<p>4-2009 – The “generic” interface is currently under development. This item will remain in watch status. The RPO Management Team has stated that the requirements for document management were gathered during design and have been signed off. The AOC is in the process of standardizing the document management interface for all courts but is unsure whether this effort will be complete prior to Go Live for CCMS-V4. This item will remain in watch status.</p> <p>5-2009 – The “generic” interface is currently under development. This item will remain in watch status.</p> <p>6-2009 – The “generic” interface is currently under development and will have a solution that supports the courts at Go Live. Currently, the early adopter court uses FileNet and is scheduled to test this interface during PAT. For each of the remaining Courts, the agnostic “generic” document management interface will be finalized, if needed, during the deployment effort. This item will remain in watch status.</p> <p>7-2009 – The CCMS-V4 Project Team has clarified that the Lead Courts which use FileNet are scheduled to test this interface during PAT. This item will be closed out.</p>

Appendix C: Project Oversight Review Checklist

To assist us in determining whether the CCMS-V4 project is on track to be completed within the estimated schedule and cost, the Project Oversight Review Checklist is used to identify and quantify any issues and risks affecting these project components.

The checklist format provides a quick reference for the assessment of the project management practices and processes in place over the CCMS-V4 project and will assess the adequacy or deficiency of the area. Further, the checklist may provide comments on the specific items reviewed, interviews conducted, and general practices observed for requirements presented under the five categories identified below. These requirements are consistent with industry standards and accepted best practices such as the Project Management Institute (PMI)'s Project Management Body of Knowledge (PMBOK) and the Institute of Electrical and Electronic Engineers (IEEE) standards. Use of these checklists will assist us in commenting on the effectiveness of the project activities.

- Planning and Tracking
- Procurement
- Risk Management
- Communication
- System Engineering

No updates were made to the Project Oversight Review Checklist this month.

Project Oversight Review Checklist

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		The business case has been finalized. The project goals, objectives, and expected outcomes are documented in the Deloitte Consulting Statement of Work. The key stakeholders and sponsors are identified and documented in the Project Management Plan for CCMS-V4.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project plan that has been approved is loaded into Microsoft Project. Deloitte Consulting will update the schedule with construction and testing details after the requirements are complete.
Is completion of planned tasks recorded within the PM software?	X		Completion of milestones are tracked within Microsoft Project.
Are actual hours expended by task recorded at least monthly within PM software?		X	Actual hours for Deloitte Consulting staff are tracked weekly within Playbook Navigator, but are not shared with the AOC as this is a fixed price development contract. The AOC has historically not tracked this information.
Are estimated hours to complete by task recorded at least monthly within PM software?		X	Estimated hours to complete for Deloitte Consulting staff are tracked weekly but are not shared with the AOC as this is a fixed-price development contract. Any deviations occurring to planned dates are discussed at an internal weekly meeting between AOC and Deloitte Consulting.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans?	X		There is a formal staffing plan for Deloitte Leads that is shared with the AOC. Deloitte Consulting tracks internal project staffing with respect to acquisition, schedule for arrival and departure of specific staff, and staff training plans. The AOC does not currently have a CCMS-V4 Staffing Plan; staff are allocated at the CCMS level and not at the specific project level.
Have project cost estimates, with supporting data for each cost category, been maintained?	X		While development costs are tracked internally by Deloitte Consulting, they are not shared with the AOC since this is a fixed-price development contract. The AOC tracks the project budget, monies encumbered, and monies expended to date in an Access database.
Are software size estimates developed and tracked?	X		Deloitte Consulting has included estimates for Final Design, Final Construction, Testing, and Conversion.
Are two or more estimation approaches used to refine estimates?	X		A Bottom Up estimate is performed by the Deloitte Consulting Project Manager and a Top Down estimate is performed by the Lead.
Are independent reviews of estimates conducted?	X		There are multiple internal reviewers consisting of Deloitte Consulting, AOC, and Court staff.
Are actual costs recorded and regularly compared to budgeted costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Currently, AOC costs are tracked at the overall CCMS level. At this point, a daily (or on-demand) Access database report can be printed showing project budget, monies encumbered, monies expended to date, and monies forecasted to be spent.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Planning and Tracking			
Is supporting data maintained for actual costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Yet, the RPO has invoice level data to support its actual cost data tracked in its Access database.
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	X		This information is reported weekly, monthly, and quarterly.
Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration mgmt plan?	X		The CCMS-V4 Configuration Management Plan outlines the process and procedures followed for Configuration Management.
Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?	X		This information is tracked in eRoom and in the weekly, monthly, and quarterly status reports.
Is user satisfaction assessed at key project milestones?		X	Deloitte Consulting has stated that user satisfaction is assessed at key project milestones in the form of deliverable review. All deliverable comments are logged, reviewed, and categorized to indicate if a response is needed. According to Deloitte Consulting, all defects or other comments that require a response are addressed and tracked through closure. Other validation processes include proof of concepts, UI prototypes, design sessions, design council sessions, and cross track meetings. As such, Deloitte Consulting believes that acceptance of the deliverable is evidence of user satisfaction. While there are no satisfaction surveys used or assessments performed at key project milestones, the AOC agrees that there are several opportunities to talk through and resolve deliverable disagreements on a case by case basis.
Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?	X		Planning is in compliance with a formal system development life-cycle (SDLC) methodology.
Is there a formal enterprise architecture in place?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point in time, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project. SEC will be investigating the AOC enterprise architecture further as the project progresses.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	X		Project Closeout activities are planned to occur and we will evaluate and comment whether the planned activities occurred at the project closeout. In the interim, Lessons Learned sessions are being conducted at various project phases to identify possible process improvements.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, "alternative procurement") and their required processes followed?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Is a detailed written scope of work for all services included in solicitation documents?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Are detailed requirement specifications included in solicitation documents?	X		Detailed requirements were included in Exhibit B of the Statement of Work. These will be expanded upon during Detailed Design. Thus, we will review or evaluate those requirements when developed.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. For ongoing SOWs, independent third-party vendors are used to review and recommend procurement planning and execution practices.
For large-scale outsourcing, is qualified legal counsel obtained?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. The AOC utilized outside council for the V4 Development Contract.
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X		The Risk Management Plan contains the process and procedures for risk. Risks are tracked within eRoom and are discussed during the weekly and monthly status meetings. In addition, the Deloitte Consulting Project Manager meets with the CCMS Product Director weekly to discuss risks.
Does the management team review risks and mitigation progress at least monthly?	X		The management team reviews risks at weekly and monthly status meetings.
Are externally developed risk identification aids used, such as the SEI "Taxonomy Based Questionnaire?"		X	Additional risk identification aids are internal to Deloitte Consulting and are not shared with the AOC. The AOC is not using any other risk identification aids.
Communication			
Is there a written project communications plan?	X		This information is contained in the CCMS-V4 Communication Management Plan.
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		Written weekly, monthly, and quarterly status reports are prepared and discussed with the project management team as well as the Steering Committee/Oversight Committee. In addition, there are executive meetings held to brief the Lead Court CIOs.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Communication			
Are there written escalation policies for issues and risks?	X		This CCMS-V4 Project Management documentation contains this information.
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		The Product Management Group has primary responsibility for working through the issues and risks. Additionally, issues and status are shared with lead court information officers, court executive officers at bi-weekly steering committee meetings as well as with selected presiding judges at the quarterly oversight committee meetings. The RPO is also working diligently to seek input and have stakeholders assume an active ownership role in the development process.
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		AOC and Court staff are planned to be involved from requirements gathering through testing and into implementation.
Do users formally approve/sign-off on written specifications?	X		The requirements will be approved by the AOC and Court staff.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		The RPO Management Team has reported that Deloitte Consulting is using Clear Quest and Clear Case to manage defects and Rational Requisite Pro to track requirements.
Do software engineering standards exist and are they followed?	X		This CCMS-V4 development standards documentation has been reviewed by SEC and found to be adequate.
Is a formal system development life-cycle (SDLC) methodology followed?		X	Deloitte is using an overlapped waterfall SDLC as evidenced by the structure of their project plan and the manner in which activities are performed. CMMI Level 3 requirements require that a defined, standard, consistent process and process measurement be followed. This would require that: <ul style="list-style-type: none"> • Technical processes are defined in writing; • Project roles are clearly defined; • Staff are trained in standard methods and process activities before they are assigned to roles; and • Technical management activities are guided by defined processes. It is not clear where the processes and roles are documented and whether the CCMS-V4 Project is CMMI Level 3 compliant.
Does product defect tracking begin no later than requirements specifications?	X		Product defect tracking occurs during deliverable review. Users submit defects by entering comments in the deliverable. Each defect is tracked to closure within the deliverable. Any corresponding response is attached to the original defect in the body of the deliverable. Before approval of the deliverable, the AOC confirms that all defects have been appropriately addressed.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
System Engineering			
Are formal code reviews conducted?		X	Two levels of code reviews are conducted. Automated reviews of code are conducted using the JCART tool which checks for and highlights unacceptable coding practices. Any issues identified through the JCART execution have to be resolved before the code can be included in the build. Additionally, manual code reviews are conducted by the Architecture Leads (Technical Analysts, Development Leads and the Framework Team). Code review checklists are created and stored in ClearCase. Deloitte should implement a process for ensuring that the coding standards are adhered to as opposed to the AOC assessing the compliance after completion.
Are formal quality assurance procedures followed consistently?	X		The quality assurance documentation was updated to include CCMS-V4. As more QA related data is collected and reported by Deloitte Consulting, the IPO/IV&V Team will be reviewing these reports to assess how data is represented in the reports—such as through metrics—and identify issues with processes if the metrics indicate negative trends.
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	AOC and the Court staff will sign-off on acceptance test results. Acceptance criteria have been established as 0 Severity-1 incidents, 0 Severity-2 incidents, and not more than 50 Severity-3 incidents.
Is the enterprise architecture plan adhered to?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project.
Are formal deliverable inspections performed, beginning with requirements specifications?	X		All deliverables are approved by the AOC and Court staff.
Are IV&V services obtained and used?	X		SEC has been hired to perform IV&V.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Appendix D: IPO/IV&V Project Scorecard

For February 1, 2010 – February 28, 2010 Time Period

Process Area	SEP 2009	OCT 2009	NOV 2009	DEC 2009	JAN 2010	FEB 2010	REMARKS
Communication Management							Day-to-day communication continues to be strong.
Schedule Management							The schedule remains aggressive.
Scope Management							Project scope is managed and controlled through a variety of avenues.
Risk Management							Risks are reported, discussed, and managed on a weekly basis.
Issue Management							Issues are discussed/reported weekly at various project management and Executive Committee meetings.
Resource Management							AOC and Deloitte project resources appear to be insufficient during testing.
Cost Management							ISD costs and RPO costs are maintained in separate databases and there is no effort to combine these in the near future.
Quality Management (Client Functionality)							We are unable to conclude on the quality of the client functionality due to the absence System test defect data related to Deloitte's execution of the System Test scripts.
Quality Architecture							Quality Architecture is currently adequately defined from an industry-sound SEI approach.
Configuration Management							CM, for documentation, is being well controlled through the eRoom and JCC web sites that have built-in controls for CM.
System Engineering Standards and Practices							Deloitte Consulting appears to be following currently accepted systems engineering standards and practices.
Requirements Identification and Traceability							The IPO/IV&V Team has concerns with the lack of traceability between use cases and business rules.
Detailed Design Review							The Technical Design documentation was delivered to the RPO but is an artifact and not a deliverable and therefore, the Detailed Design cannot be assessed.
System Development Quality and Progress							The technical architecture and design is proceeding on the defined schedule with only minor changes.
Testing Practices and Progress							Testing continues to be a concern.

	Green – On Track
	Yellow – Warning
	Red – Significant Problems
↑ ↓	

Appendix E: IPO/IV&V Background, Scope, and Methodology

The California Case Management System (CCMS) is a statewide initiative to bring the courts together to use one application for all case types. CCMS is managed by the Administrative Office of the Courts (AOC) Southern Regional Office (SRO) in Burbank with the participation of the AOC Information Services Division and superior courts in the planning, design, and development sessions. Over the next 2 years, the AOC plans to expand the functionality of the current interim CCMS applications and develop the next phase—CCMS-V4—that will include family law, juvenile dependency, and juvenile delinquency case types as well as incorporate the V2 and V3 products and update the system’s technical architecture and environments. Toward this end, the AOC has executed a contract with Deloitte Consulting to design and develop the V4 component—yet, the success of the V4 Project relies on every party working in harmony toward common goals.

Background:

For all high criticality technology projects such as CCMS-V4, industry best practices strongly encourage independent oversight. Ideally, the independent project oversight process begins during the feasibility study and continues through project closeout. Deficiencies, issues, findings, and recommendations identified by the oversight process should be incorporated into the appropriate project management processes. As the project progresses, the independent review and assessment approach should track the disposition of findings and recommendations in terms of corrective action and implementation of oversight recommendations.

An Independent Project Oversight (IPO) effort is intended to audit system development, acquisition, and maintenance controls to assure a structured project management methodology is adhered to and managed through activities such as project scheduling, risk management, and change management. A primary goal is to provide impartial oversight of the responsibilities and activities of the project office. Similarly, the Independent Verification and Validation (IV&V) provides unbiased oversight of the technical deliverables such as program code, test scripts and results, and network configurations and processes used to create the product. It is intended to evaluate products against system requirements and whether processes used follow the intended life cycle methodology.

However, these efforts are not designed to guarantee success of the CCMS-V4 application nor will the IPO/IV&V efforts ensure the completeness of business requirements designed by the CCMS-V4 team or the ability of the end system functionality of the application built to meet court needs statewide.

Appendix E: Continued

Scope and Methodology

In July 2007, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) Services over the California Case Management System (CCMS) V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the Regional Administrative Director and CCMS Product Director at the Southern Regional Office (SRO), our objectives are to monitor the services, deliverables, milestones, deadlines, and functionality of the CCMS-V4 project and communicate status, progress, issues, and potential challenges to the success of the project as designed. The IPO/IV&V efforts are designed to give assurance, from an independent and unbiased perspective, that the process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards as well as that potential risks and issues are known by project decision makers. The IPO/IV&V effort cannot require change, but any identified and reported findings and results should be considered by the project sponsors.

To provide appropriate and independent review, analysis, and oversight on the CCMS-V4 project, SEC will generally provide monitoring efforts from July 2007 through June 30, 2010 relative to the following areas:

- Project management and System Development Life Cycle (SDLC) processes, procedures, and communication
- Adherence to schedule
- Techniques and processes employed for risk management, issue management, and communication strategies
- Requirements gathering as part of JAD Sessions
- Completeness of Functional Design and Technical Design
- Traceability of requirements from one SDLC phase to the next
- Testing techniques and processes employed
- Compliance with project management and technical contract requirements

However, the IPO/IV&V efforts will not review or address the completeness of the business requirements being developed cooperatively by Deloitte Consulting, SRO staff, and court Subject Matter Experts (SMEs) as part of functional design joint application development (JAD) sessions. While business requirements will be reviewed from a technical perspective to assess whether they contain sufficient levels of specificity to ensure proper coding and end-user functionality as planned, SEC cannot ensure that all critical business processes and steps are appropriately captured in the business requirements to meet court needs.

Appendix E: Continued

Additionally, our efforts do not address the management surrounding the application developer's budget. Because the AOC awarded Deloitte Consulting a fixed-price contract, a time and material type review and analysis is not warranted in this situation.

Moreover, to provide appropriate and independent review, analysis, and oversight over the CCMS-V4 project, the following parameters need to be met in allowing SEC to perform activities unimpeded:

- Understanding/agreement by all project participants on our independent role and importance of timely information sharing and meeting scheduling;
- Inclusion as a seamless member of the project team;
- Timely knowledge of and inclusion in all project meetings;
- Commitment from all project participants to attend meetings scheduled with the IPOC/IV&V;
- Unfiltered access to all documents, data, deliverables, and personnel deemed relevant by the IPOC/IV&V Team; and
- Full disclosure of project knowledge including items such as project issues, risks, change requests.

If there are challenges in adhering to those parameters, we will escalate our issues and/or concerns to the Internal Audit Services Manager, CCMS Product Director, RAD, CCMS Steering Committee, and CCMS Oversight Committee as necessary or appropriate. Working in conjunction and coordination with the AOC's Internal Audit Services to complete this Statement of Work, we will perform the following tasks:

IPO Specific Tasks

- Conduct meetings, as needed, with key project staff to obtain first-hand information as to the objectives of the project, identify the key players and their roles, and the interrelationship and communication structure between all parties as well as review documents such as organization charts and governance structure.
- Attend meetings, as needed, key court/AOC and vendor personnel to obtain information on their responsibilities, objectives, communications, and schedules.
- Conduct observations, on-going interviews, and document examinations to monitor meeting timelines, deliverables, and milestones as described in the schedule.
- Review project planning/management deliverables and documentation to comment on compliance with industry best practices and adherence to documented project processes
- Perform initial assessment of Project Management processes and documents (project management plan, communication plan, change management plan, implementation plan, etc).

Appendix E: Continued

- Participate in certain critical requirements gathering and physical design sessions (JAD sessions) as deemed necessary or at the direction of the Internal Audit Services Manager to provide expertise courtroom operations (family law, criminal, and traffic), finance, distributions, and audit as well as on the V2 and V3 retrofit and validate processes are being followed.
- Provide an Implementation Strategy Review. This review would consist of an analysis of the implementation approach and the action plan for accomplishing implementation.

IV&V Specific Tasks

- Review Requirement Traceability and Contract at end of Functional Design, Technical Design, and Test Preparation.
- Provide a Functional Design and Requirements Traceability Review. The Functional Design review would consist of an analysis of the Functional Design Specification to assess the readability, consistency, and testability of the design. The Functional Design review will identify issues such as non- testable requirements, vague requirements, requirements that are in conflict or not consistent with each other, etc. The Requirements Traceability review will ensure that all of the contractual requirements have been addressed and are accounted for.
- Provide a Technical (software) Design and Requirements Traceability Review. The Technical Design review would consist of an analysis of the Technical Design Specification to assess the readability, consistency, and testability of the technical design as well as identification of any potential weaknesses in the design. The Technical Design review will identify where the Technical Design may be in conflict with the Functional Design. The Requirements Traceability review will ensure that the design has addressed all of the functional requirements.
- Provide a Test Methodology and Requirements Traceability Review. The Test Methodology review would consist of an analysis of the Test Methodology and a sampling of test scripts which will be traced to the requirements and to the design specification as well as reviewing the data elements necessary for the scripts. The Requirements Traceability Review will ensure that all of the test cases/scripts have been developed to test the design and the functional requirements.
- Review a statistically valid sample of source code (coded based on requirements documented in JAD sessions). Approximately 40 modules will be reviewed which would provide early feedback on compliance to coding standards and comparisons to the design requirements.

Appendix E: Continued

- Review a statistically valid sample of test scripts (unit, integration, system, user acceptance, product acceptance) for compliance with requirements from both a technical perspective and from a court operations perspective (testing enough scenarios/scripts covering critical and most frequent business cases both on a positive/ideal flow and on an exception basis).

IPO/IV&V Combined Tasks

- Assess Systems Development Life Cycle (SDLC) practices to comment on compliance with industry best practices and adherence to documented project processes.
- Review agreed-upon vendor deliverables including, but not limited to Functional Design, Technical Design, Test Methodology, Implementation Strategy, V2 Requirements and V3 Requirements, to comment on compliance with Deliverable Expectations Document (DED).
- Identify and assess any new or ongoing challenges, barriers, risks, or issues.
- Attend meetings, as needed, where deliverables, strategies, timelines, and status are being considered.
- Maintain a log tracking IPO/IV&V issues that delineates any challenges, barriers, risks, issues, defects, milestones changed or missed, and observations warranting discussion and monitoring; monitor the resolution of such issues; document the resolution and closure of each matter.
- Conduct bi-weekly briefings with the RAD and designated Project Manager(s) discussing all previous work and any updates or new developments.
- Compile the results of the IPO/IV&V monitoring efforts in writing. In addition to compliance issues, the report will also contain any other significant findings, conclusions, and recommendations including the identification of risks, lessons learned, best practices, or performance exceeding minimum requirements as well as comment on severity or criticality and impact or consequence of items discussed.
- Ascertain and report on follow-up efforts taken on corrective actions needed and implementation of oversight recommendations.
- Provide reports to the RAD and designated Project Manager(s) on a monthly basis, or more frequent if necessary, based on project stage criticality.

Appendix F: SEC Activities - Performed & Planned

During February, SEC performed the following activities:

- Monitored QA Metrics;
- Monitored Integration Testing;
- Attended weekly and monthly Project Management Meetings as well as participated in CCMS-V4 IPO/IVV Project Meetings;
- Performed analysis of areas in the Project Oversight Review Checklist Appendix C;
- Identified and tracked potential risks, observations, and issues as well as discussed and prepared monthly IPO/IV&V written status reports.

Planned SEC Activities for March 2010

SEC plans to conduct the following activities over the next month:

- Attend, observe, and participate in a variety of CCMS-V4 meetings including weekly Project Management Meetings, monthly Project Management Meeting, monthly RPO Management Meeting, monthly ISD Meeting, bi-weekly Steering Committee Meetings, weekly Technical Architecture Meetings, CIO Meetings, and monthly IPO/IVV Project Meeting;
- Review technical documents prepared and discussed at weekly meetings as well as other documents distributed as part of weekly and monthly meetings;
- Continue review and comment on the Testing Documentation in terms of sufficiency of detail including implementation of integration test plan and PAT plan;
- Monitor results of product testing in terms of progress in script executions, frequency and severity of defects identified, and resolution of defects.
- Prepare monthly IPO/IV&V status report that identifies and tracks new risks or issues as well as accomplishments and review prior issue resolution.

The Judicial Council of California, Administrative Office of the Courts

Independent Project Oversight (IPO) and
Independent Verification and Validation (IV&V)
For the CCMS-V4 Development Project

Status Report as of March 31, 2010

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Executive Summary

Realizing the importance of independent oversight for high criticality technology projects, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) services for the California Case Management System (CCMS)-V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the CCMS Executive Sponsor in the Regional Program Office (RPO), our objectives are to monitor the activities, deliverables, milestones, deadlines, and design of the CCMS-V4 project and communicate status, progress, issues, and challenges to the success of the project as designed. Our monthly IPO/IV&V reports are intended to capture and assess current project activities to determine whether process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards, as well as that potential risk/issues are known by decision makers at a specific point in time; thus, the monthly items reported are in-flux, continually evolving, and will change over the course of the project.

Period Highlights:

During March, most of the CCMS-V4 project efforts have been focused on the functional assessment and re-planning efforts to address the test incidents/defect issues noted during Integration Testing. As a result, Integration Testing, PAT planning, and the overall project schedule completion dates are in a state of flux. Preliminary timelines estimate completion of Integration Testing in October 2010 and Product Acceptance Testing by April 2011—although schedule details are still in the planning phase.

It is the IPO/IV&V Team's understanding that Deloitte plans to validate that the application code is built to the functionality in the Final Functional Design (FFD), identify any gaps, and make necessary corrections. Previously, the IPO/IV&V Team had conveyed concerns related to the absence of a traceability matrix between Use Cases (i.e., FFD) and the System Test Cases that would link specific use case steps and the specific use case step that a business rule applied to in the FFD. Without the matrix, the IPO/IV&V Team stated there was greater risk that higher numbers of testing incidents would result due to the developers/coders needing to interpret or guess as to which business rules map to which decision blocks and that the absence of such standard traceability practices might add time to the already compressed schedule.

While Deloitte provided us with four test cases that we validated were included in the use cases, the IPO/IV&V Team could not confirm that the scripts were actually executed during System Test. Since the system test cases are only an artifact and not a deliverable on Deloitte's contract with AOC, the IPO/IV&V Team could not conduct any further analysis to determine whether system testing would verify that all requirements (use cases) were incorporated in the application.

However, after Deloitte completes its planned efforts to validate the code back to the requirements and makes any needed corrections, the application will be placed back into Integration Testing. Upon completion of this re-planning effort, the IPO/IV&V Team will review the re-plan and assess the executability of the plan.

Additionally, the CCMS-V4 Quality Assurance (QA) Report #8, version 1, was delivered to the AOC on February 26, 2010 for review. It is our understanding that the QA Report deliverable was rejected by the AOC. In reviewing version 3 of this report, it does not appear that the IPO/IV&V Team's concerns raised were addressed.

Detailed Observations, Impact, and Recommendations

The Southern California Regional Program Office (RPO) staff, AOC staff, individual court staff, and Deloitte Consulting continue to practice solid project management and systems-engineering practices in the identification and resolution of issues, risks, items for management attention, and modification and change requests.

The continued diligence employed by the RPO staff, AOC staff, Court staff, and Deloitte Consulting in addressing issues and following established project management processes has been consistent. As part of our efforts, we offer the following observations and areas of concern.

Project Oversight Focus Areas

Communication Management:

There do not appear to be any current communication concerns noted by the CCMS-V4 Project Team or the IPO/IV&V Team.

Schedule Management:

Once the re-planning effort has been completed, the IPO/IV&V Team will review the re-plan and assess the executability of the plan/schedule.

Scope Management:

Scope management items raised by the CCMS-V4 Project Team are being actively managed through eRoom.

Risk Management:

During the month of March, no new risks were identified by the CCMS-V4 Project Team. As of March 31, 2010, the risks identified below by the CCMS-V4 Project Team remain active.

Risk Number	Risk Title	Activity Performed	Target Resolution Date
27	SME Testing Staffing Plan	The AOC/Court testing resources are not adequate to execute testing. This is an accepted risk and will continue to be monitored on a weekly basis. At this time, no mitigation actions are required.	03-29-10 This date should be updated.
35	CCMS-V3 Resources	There is an ongoing effort to combine V3 and V4 project schedules to evaluate staffing needs. This is an accepted risk and will continue to be monitored on a weekly basis. At this time, no mitigation actions are required.	10-08-10
37	Justice Partner Readiness	Reference Implementation constraint schemas have been published. This is an accepted risk and will continue to be monitored on a weekly basis. At this time, no mitigation actions are required.	03-29-10 This date should be updated.
38	System Response Time Matrix	An alternative strategy for resolving the disagreements surrounding this deliverable is now being introduced. AOC/Court review is needed to gain further information regarding the desired response times for the many transactions detailed in the plan. AOC/Court responses are due 2/24/10 and will be discussed on 2/25/10.	03-29-10 This date should be updated.
39	Large Number of Integration Testing Defects	A test script cleanup effort is underway in order to reduce the number of defects and to improve overall product quality. This item can be closed upon completion of the re-planning effort. System response time criteria issues (within the Core Stress Test Plan) are targeted for closure by 3/25/10.	04-02-10

Issue Management:

As of March 31, 2010, there were no open issues being tracked by the CCMS-V4 Project Team.

Resource Management:

All parties continue to be concerned that the CCMS-V4 Project requires more resources to complete the product Development and Testing phases. The AOC and the courts have accepted this risk and are monitoring it on a weekly basis.

Cost Management:

In March, the IPO/IV&V Team discussed other cost management procedures with the CCMS Project Manager responsible for budgeting to identify any new or modified procedures being employed. According to this source, the Project Review Board (PRB) Reports used to outline the financial health of the AOC projects are no longer being distributed since the CCMS Project Team is making revisions to the report format in conjunction with the AOC's Finance Division. The IPO/IV&V Team will review the revised PRB Report format in the month of April to allow the CCMS Project Manager responsible for budgeting time to finalize the format.

In 2008, the IPO/IV&V Team had reported SRO costs were being measured and tracked in one database, while ISD captured the technology costs in another with no plan at that time to merge these costs into one central database. According to the CCMS Project Manager responsible for budgeting, costs continue to be tracked at a high-level and manually combined to include both SRO and ISD costs. We were informed that there are several current processes employed to track budget and projections for the CCMS-V4 Development effort—once provided, we will review the documentation. Moreover, there is an effort underway to develop a new cost model with the AOC's Finance Division that encompasses the entire CCMS program, not just the CCMS-V4 Development effort.

Technical Focus Areas

Quality Management:

The CCMS-V4 Quality Assurance (QA) Report #8, version 1, was delivered to the AOC on February 26, 2010 for review. It is our understanding that the QA Report deliverable was rejected by the AOC. In reviewing version 3 of this report, it does not appear that the IPO/IV&V Team's concerns raised were addressed.

In the quality management section of our January 2010 Monthly IPO/IV&V Status Report, we noted that the Deloitte QA Observations identified in QA Report #7 were reported as closed in the Monthly CCMS-V4 Development Services Status Report 31; the specific QA Report #7 Observations were QI01 and QI02. However, as we also reported in the January and February 2010 Monthly IPO/IV&V Status Reports there was no identification or description of what actions were taken to allow the QA Report #7 Observations to be closed. Thus, this remains an open issue for the IPO/IV&V Team and we will be working with the AOC Team to understand the actions taken for each Observation and the process of documenting and closing Observations.

- *The following are IPO/IV&V Team observations based on graphs in the Deloitte QA Report #7—there is no comparison to the AOC rejected QA Report #8.*

- **Deloitte’s System Test Metrics Graphs:**

IPO/IV&V Team Observation: The system Test metrics for Portals/SWRDW are for managers who need to understand the amount of work that needs to be done. However, the Test Script Pass Rate metric converging to 50% should give some concern because of the high percentage of failures being reported.

IPO/IV&V Team Observation: For the System Test metrics for the Core product, it appears that Track 2 may have some problems based on the number of open defects (around 575) when the average for the other tracks is around the 150 level. However, the Track 2 Test Script Pass Rate is similar to the other tracks averaging approximately 76%. Thus, a 76% pass rate with about 575 defects should be investigated because of the high number of reported defects. While Track 2 may be significantly larger than the other tracks, the high volume of defects for the track should be investigated.

- **Deloitte’s Integration Test Metrics Graphs:**

IPO/IV&V Team Observation: For the Integration Test metrics for Core Cycle 1, the area with the largest number of open defects was FMI, with approximately 850 defects—next, were the Juvenile and Fiscal areas with approximately 600 open defects each. However, the Integration Test script pass rates for all areas were around 90%. In Cycle 2, Juvenile led with about 160 open defects with Probate and FMI reporting approximately 140 and 135 defects respectively. It’s interesting to note that in Cycle 2, the test script pass rate dropped to about 75%. This may indicate a change in the test script execution process between Cycle 1 to Cycle 2 to still have a lower number of open defects while the pass rate dropped. There is a potential that previously successfully executed tests scripts were not regression tested during Cycle 2 but that is currently unknown.

The following comments made by Deloitte in their QA Report #7 are unclear and should be investigated by AOC—there is no comparison to the AOC rejected QA Report #8.

- **CMMI Status Report - Measurement and Analysis:**
 1. “The Metrics Plan must be updated to more accurately list the metrics collected on the project. The project will revise the plan to identify and delete metrics that are no longer used.”
 2. “For every metric detailed in the Metrics Plan, a threshold value must be defined. The current version of the Metrics Plan does not contain several of these thresholds. The project will identify and populate all missing thresholds.”

IPO/IV&V Team Observation: All metrics should be associated with a threshold that should then trigger some event if the threshold is breached. Thus, the IPO/IV&V Team believes both the threshold and the event should be defined.

- **CMMI Status Report – Quality Assurance:**

1. “Because Milestone and deliverable based audits are no longer used on the project, the project team will remove those two audits from the QA Plan.”

IPO/IV&V Team Observation: Deliverable and milestone based QA Audits are a fundamental aspect of Quality Assurance and Control. If the Audits are truly not needed and quality is assured in some other way, then the other audits should be removed to avoid duplication. However, removing audits just because they are not currently being performed is unacceptable to the IPO/IV&V Team and could materialize as a long-term risk to the project.

- **CMMI Status Report – Technical Solution:**

1. “The Code Review Checklists for CCMS-V4-PRJ03, DWRPT-042, CCMS-V4-EFL22 contain open defects although these checklists were listed as completed. The project will review these checklists and close all open defects.”

IPO/IV&V Team Observation: The point of code reviews is to identify issues or potential problems with the code or the code documentation. Without tracking the code review issues to closure, the IPO/IV&V Team believes the value of code reviews is significantly diminished. At this point in time items remain open and the AOC has stated that they will not move from Integration Testing to PAT until the code review findings are resolved.

- **CMMI Status Report – Verification:**

IPO/IV&V Team Observation: A positive CMMI note is that Deloitte matched one of the identified concerns under the CMMI Verification section that states “Some of the deliverables are reviewed at high rate of # pages per hour. The project will revise the deliverable review process to allow for more thorough reviews.” Obviously without thorough review of the deliverables, the project exposes itself to a great deal of risk, and potential fault, which will have been agreed to by the project team.

QA Report #8, delivered in late February 2010 for initial AOC review was rejected by the AOC. When the next revision is submitted, the IPO/IV&V Team will be looking for the resolution of QA Report #7 findings. In addition, QA Report #7 identified four issues within the CMMI Status Report section of the report, which were reported in the January

and February 2010 Monthly IPO/IV&V Reports. These issues should also be commented on in QA Report #8 when delivered.

Quality Architecture:

There are no open issues with System Architecture for the month of March and the System Architecture Team with Deloitte, AOC, ISD, and other Court members continues to do a good job of identifying and defining the system architecture as well as architectural tradeoffs, raising issues for resolution, and generally creating a solid CCMS-V4 system architecture.

Configuration Management:

There are no open issues with Configuration Management. Configuration Management for documentation is being well controlled through eRoom and JCC Web Sites that have built-in controls for Configuration Management.

System Engineering Standards and Practices:

Since Deloitte Consulting appears to be following currently accepted systems engineering standards and practices, even as defined in IEEE Standard 1220, there are no system engineering standards and practices concerns at this point in time.

Requirements Identification and Traceability:

There are no new issues with Requirements Identification and Traceability that have not already been discussed in previous reports.

Detailed Design Review:

There are no open issues with the Detailed Design Review that have not already been discussed in previous reports.

System Development Quality and Progress:

The completeness of the Architecture Team decisions cannot be verified by the IPO/IV&V Team due to the absence of an Architectural Decision Tradeoff Matrix which would document the options, tradeoffs, decisions, and underlying rationale for the approach taken.

Testing Practices and Progress:

Most of the CCMS-V4 project efforts this month have been focused on the functional assessment and re-planning efforts to address the defect issues noted during Integration Testing. As a result, Integration Testing, PAT planning, and the overall project schedule completion dates are in a state of flux. Preliminary timelines estimate completion of Integration Testing in October 2010 and Product Acceptance Testing by April 2011—although schedule details are still in the planning phase.

It is the IPO/IV&V Team's understanding that Deloitte plans to validate that the application code is built to the functionality in the Final Functional Design (FFD), identify any gaps, and make necessary corrections. Previously, the IPO/IV&V Team had conveyed concerns related to the absence of a traceability matrix between Use Cases (i.e., FFD) and the System Test Cases that would link specific use case steps and the specific use case step that a business rule applied to in the FFD. Without the matrix, the IPO/IV&V Team stated there was greater risk that higher numbers of testing incidents would result due to the developers/coders needing to interpret or guess as to which business rules map to which decision blocks and that the absence of such standard traceability practices might add time to the already compressed schedule.

While Deloitte provided us with four test cases that we validated were included in the use cases, the IPO/IV&V Team could not confirm that the scripts were actually executed during System Test. Since the system test cases are only an artifact and not a deliverable on Deloitte's contract with AOC, the IPO/IV&V Team could not conduct any further analysis to determine whether system testing would verify that all requirements (use cases) were incorporated in the application.

However, after Deloitte completes its planned efforts to validate the code back to the requirements and makes any needed corrections, the application will be placed back into Integration Testing. Upon completion of this re-planning effort, the IPO/IV&V Team will review the re-plan and assess the executability of the plan.

Appendix A: Matrix of Areas of Concern (Open)

The matrix below provides a current listing of all open areas of concern, our recommendations, and the action taken by the CCMS-V4 Project Team. As items are resolved, they will be moved to Appendix B. Key statistics are summarized below:

- **No new areas of concern were identified this month that are not already being covered in the Project Issues and Risks. The IPO/IV&V Team strongly believes that this project will continue to be a high risk project due to the constraints imposed by the budget, schedule, and resources.**

Appendix B: Matrix of Areas of Concern (Closed)

The matrix below provides a listing of all closed areas of concern, our recommendations, and the action taken to resolve the issues by the CCMS-V4 Project Team. Key statistics are summarized below:

- No areas of concern were closed this month.

Item Number	Area of Concern	Recommendation	Action Taken
Jul07.1	Aggressive schedule	The schedule should be reviewed to ensure that ample time has been allocated to each phase of the project.	<p>09-2007 - No action taken that SEC is aware of.</p> <p>10-2007 – At this point in the project it is difficult to determine if there is ample time allocated to each phase of the project. This item will remain in a watch status (e.g., once Test Planning activities have begun, it will be easier to determine if enough time is allocated to testing activities).</p> <p>11-2007 to 04-2008 – Although 12 weeks were added to the schedule, there is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>05-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>06-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>07-2008 – There is concern that there is not enough time to complete the review of the FFD. In addition, there is concern that there is insufficient time allocated to testing and that test planning has not been fully engaged. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>08-2008 – 27 additional days were added to the schedule for review of the FFD. It is unknown at this point whether the additional days are sufficient to allow a thorough review and better ensure the highest quality product possible. Moreover, because test planning is slow to start, SEC still has concerns about the time allocated to the testing phase. This item will remain in watch status.</p> <p>09-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>10-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>11-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>12-2008 – It is unclear how the extended review timeframe will impact the overall schedule. This item will remain in watch status.</p> <p>1-2009 – The Core application, Portals, and Statewide Data Warehouse portions of the FFD will be completed by March 30, 2009. The Data Exchanges portion is expected to be completed by April 15, 2009. This item will remain in watch status.</p> <p>2-2009 – All portions of the FFD are on track for completion by March 30, 2009 and April 15, 2009, respectively. This item will remain in watch status.</p> <p>3-2009 – The Portals and Statewide Data Warehouse will be accepted by March 31, 2009. The Core application will be completed by March 31, 2009. Data Exchanges will not be completed until the end of April. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>4-2009 – The FFD was signed off May 1, 2009. The Data Exchanges are expected to be completed by May 22, 2009.</p> <p>5-2009 – The Data Exchanges are expected to be completed by June 5, 2009.</p> <p>6-2009 – While the IPO/IV&V Team believes the schedule is aggressive and will remain aggressive for the duration of the project adding to project risk, the RPO and AOC have extended the schedule through contract amendments. At this point, the RPO and AOC have accepted the project risk as neither the schedule nor the budget can be changed.</p>
Aug07.1	JAD Schedule	<p>There does not appear to be a comprehensive schedule of JADs so that participants can plan time accordingly. Thus, Deloitte Consulting should prepare a detailed schedule that sets realistic timeframes needed to JAD each functional area and ensure the schedule is agreed to by all relevant parties.</p>	<p>09-2007 – The schedule should be completed in October 2007.</p> <p>10-2007 – A revised schedule was completed in October 2007. While the schedule provides more details than previous versions, it still does not address the detailed planning that must be conducted to ensure coverage of all functional areas and the workflows associated with each.</p> <p>11-2007 to 04-2008 – JAD scheduling has improved to the point that this is no longer an area of concern. Consequently, this item has been closed. Over the past few months, Deloitte Consulting has been diligent in setting and adhering to its JAD schedule. As the project enter the final design stage, participants appear able to plan time accordingly to ensure they are available to participate in tracks as needed and share their subject matter expertise. Meetings were also held to hear concerns that more time was needed to review developing requirements—resulting in more time added to the overall project development schedule.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Sep07.1	Requirements Gathering	Ensure that a detailed JAD schedule includes a plan for how the workflow inter-relationships will be addressed.	<p>10-2007 – While the workflows and interrelationships have not yet been addressed, the AOC has instituted cross-track meetings as part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements are being gathered.</p> <p>11-2007 to 04-2008– The cross-track meetings have proven to be an essential, needed part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements were being gathered. However, to SEC’s knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>05-2008– To SEC’s knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas. This step should help address some of our concerns. However, since the final design is nearing completion, there is little value in fully mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.1	Project Oversight Activities	Assign person in role of day to day project management responsible for ensuring that issues are resolved timely, do not impact downstream work efforts, and are not in conflict with other project activities, legal provisions, or branch policy.	<p>11-2007 to 04-2008– It was explained that Bob Steiner, the AOC Project Manager, performs these activities and that a Project Management-Consultant familiar with V2 and V3, Sean Yingling, will be assigned to assist the Development Project Manager (Bob). This item will remain in watch status over the next month to ensure the activities are being performed.</p> <p>05-2008– SEC will continue to monitor this item until a Responsibility Matrix indicating the project management component responsibilities that are designated to Sean and Bob is developed. The matrix will ensure that no workload gaps exist.</p> <p>06-2008– To date, a Responsibility Matrix has not been provided to SEC for review.</p> <p>07-2008– SEC will work with Bob Steiner and Sean Yingling to better understand the project management responsibilities.</p> <p>08-2008– Bob and Sean have established a seamless working relationship. Bob has ultimate responsibility for all project management activities. Sean’s focus rests with coordinating the FFD review, reporting to the Steering Committee, and following up on issues with the V4 Court Project Managers.</p>
Oct07.2	JAD Session Documentation	Utilize new template or other mechanism to document detailed JAD Session minutes including areas of discussion, results or actions taken, agreements reached, and issues raised as well as distribute timely for approval.	<p>11-2007 to 04-2008 – Starting in mid-April, the JAD tracks created a new template to ensure consistency across JADs for documenting decisions reached and meeting outcomes. However, since it appears that the new template is only used in isolated instances, this item will remain in watch status over the next month.</p> <p>05-2008 – It is not clear whether an AOC CCMS member will be appointed to monitor and summarize decisions made in the JAD sessions and elevate those of potential interest to the Steering Committee, especially those that may require higher level buy-in.</p> <p>06-2008 – Since the final design is nearing completion, there is little value in mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.3	Governance Structure and Escalation Process	Clarify and establish the complete governance structure to eliminate confusion related to issue escalation process and decision-making.	<p>11-2007 to 04-2008 – The CCMS Governance Model was distributed to committee members. This item will remain in watch status over the next month to ensure its use.</p> <p>05-2008 – The CCMS Governance Model appears to be in use and effective in allowing participation in project decisions regarding project scope, cost, and schedule.</p>
Apr08.1	Unclear Requirements	<p>Review the requirements to determine the types of clarifications needed for understanding in order to avoid confusion during downstream activities such as coding and preparing for testing.</p> <p>As of our 09-2008 review of the FFD, we have suggested the following additional recommendations:</p> <ol style="list-style-type: none"> 1. Identify and evaluate subjective text in FFD (such as may or could) and clarify within the context of use; 2. Perform a traceability exercise to link use cases to business rules—again to reduce need for individual interpretation; 3. Review business rule part of each section to ensure complete and clear rules have been incorporated into the use case. 4. Evaluate pre and post-conditions to ensure they are correct and complete. 	<p>04-2008 – New this month.</p> <p>05-2008 – It is not clear whether action has been taken on this issue.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas). This item will remain in watch status over the next month to review this process.</p> <p>07-2008 – This item remain in watch status until a better understanding can be achieved and SEC evaluates the review process.</p> <p>08-2008 – SEC will assess this item during their review of the FFD deliverable.</p> <p>09-2008 – SEC has begun to assess this item and will continue to evaluate progress during the AOC/Court review of the FFD deliverable.</p> <p>10-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>11-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>12-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>1-2009 – The RPO Management Team is currently developing plans to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>2-2009 – The RPO Management Team continues to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>3-2009 – The RPO Management Team continues to discuss the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>4-2009 – An updated resource schedule is being developed that will forecast resource needs between now and the beginning integration testing. This item will remain in watch status.</p> <p>5-2009 – An estimate of the number of Court SMEs needed for testing has been provided. However, more SMEs with Family and Juvenile expertise will be needed. This item will remain in watch status.</p> <p>6-2009 – The IPO/IV&V Team has continued to express their concern that the ambiguity surrounding the interpretation of final requirements presents a risk to the construction and testing phases of the project. Data is being captured by the AOC Software Quality Assurance Team during early testing that should assist in defining the extent of the problem and any future concerns will be raised as part of the testing assessment.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Dec08.1	Standardization and Configuration	It is not clear what impact the Standardization and Configuration requirements will have on the FFD and on long-term maintenance of the application. Once all Standardization and Configuration requirements have been defined, the requirements should be traced back into the FFD and reviewed again.	<p>12-2008 – New this month.</p> <p>1-2009 – In the month of January, a Court Executive Management work group was established to address the concerns surrounding the standardization and configuration requirements.</p> <p>2-2009 – The RPO Management Team reported that the Standards and Configuration Management Group will determine whether configurable items are statewide standards or local configurations and that these decisions will not impact the FFD.</p>
Dec08.2	Single Point of Contact for ISD	A single point of contact should be established for AOC that can track and manage daily progress on ISD-related activities	<p>12-2008 – New this month.</p> <p>1-2009 – It is not clear where the roles and responsibilities are documented and whether David Corral, selected as the single point of contact, has the authority to make decisions on behalf of ISD. Virginia Sanders-Hinds will work with IPO/IV&V to better understand the ISD roles and responsibilities within the project.</p> <p>2-2009 – It was clarified that Virginia Sanders-Hinds is the single point of contact with the authority to make decisions on behalf of ISD.</p>
Mar09.1	Justice Partners (Interfaces) Plan	Determine the state and progress of the common “State” interfaces which are currently being reviewed by the Justice Partners and assess the progress for project schedule impact.	<p>4-2009 – The “State” interfaces are being addressed with the Justice Partners. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p> <p>5-2009 – The “State” interfaces are being addressed with the Justice Partners at both the State and local levels. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off (now anticipated for 6-5-09) and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>6-2009 – The “Statewide” interfaces are being addressed with the Justice Partners. – A plan has been defined for day-one critical exchanges and each Justice Partner will be given a Microsoft Project Plan to follow. The AOC will continue to work closely with each Justice Partner to anticipate any potential challenges. However, it is not clear if and when the Justice Partners will participate in PAT. This item will remain in watch status.</p> <p>7-2009 - The CCMS-V4 Project Team has clarified that the Statewide Justice Partners will participate in PAT. This item will be closed out.</p>
Mar09.2	Document Management Plan	Determine the state and progress of the agnostic “generic” interface to support any existing document management solution and assess the progress for project schedule impact.	<p>4-2009 – The “generic” interface is currently under development. This item will remain in watch status. The RPO Management Team has stated that the requirements for document management were gathered during design and have been signed off. The AOC is in the process of standardizing the document management interface for all courts but is unsure whether this effort will be complete prior to Go Live for CCMS-V4. This item will remain in watch status.</p> <p>5-2009 – The “generic” interface is currently under development. This item will remain in watch status.</p> <p>6-2009 – The “generic” interface is currently under development and will have a solution that supports the courts at Go Live. Currently, the early adopter court uses FileNet and is scheduled to test this interface during PAT. For each of the remaining Courts, the agnostic “generic” document management interface will be finalized, if needed, during the deployment effort. This item will remain in watch status.</p> <p>7-2009 – The CCMS-V4 Project Team has clarified that the Lead Courts which use FileNet are scheduled to test this interface during PAT. This item will be closed out.</p>

Appendix C: Project Oversight Review Checklist

To assist us in determining whether the CCMS-V4 project is on track to be completed within the estimated schedule and cost, the Project Oversight Review Checklist is used to identify and quantify any issues and risks affecting these project components.

The checklist format provides a quick reference for the assessment of the project management practices and processes in place over the CCMS-V4 project and will assess the adequacy or deficiency of the area. Further, the checklist may provide comments on the specific items reviewed, interviews conducted, and general practices observed for requirements presented under the five categories identified below. These requirements are consistent with industry standards and accepted best practices such as the Project Management Institute (PMI)'s Project Management Body of Knowledge (PMBOK) and the Institute of Electrical and Electronic Engineers (IEEE) standards. Use of these checklists will assist us in commenting on the effectiveness of the project activities.

- Planning and Tracking
- Procurement
- Risk Management
- Communication
- System Engineering

No updates were made to the Project Oversight Review Checklist this month.

Project Oversight Review Checklist

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		The business case has been finalized. The project goals, objectives, and expected outcomes are documented in the Deloitte Consulting Statement of Work. The key stakeholders and sponsors are identified and documented in the Project Management Plan for CCMS-V4.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project plan that has been approved is loaded into Microsoft Project. Deloitte Consulting will update the schedule with construction and testing details after the requirements are complete.
Is completion of planned tasks recorded within the PM software?	X		Completion of milestones are tracked within Microsoft Project.
Are actual hours expended by task recorded at least monthly within PM software?		X	Actual hours for Deloitte Consulting staff are tracked weekly within Playbook Navigator, but are not shared with the AOC as this is a fixed price development contract. The AOC has historically not tracked this information.
Are estimated hours to complete by task recorded at least monthly within PM software?		X	Estimated hours to complete for Deloitte Consulting staff are tracked weekly but are not shared with the AOC as this is a fixed-price development contract. Any deviations occurring to planned dates are discussed at an internal weekly meeting between AOC and Deloitte Consulting.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans?	X		There is a formal staffing plan for Deloitte Leads that is shared with the AOC. Deloitte Consulting tracks internal project staffing with respect to acquisition, schedule for arrival and departure of specific staff, and staff training plans. The AOC does not currently have a CCMS-V4 Staffing Plan; staff are allocated at the CCMS level and not at the specific project level.
Have project cost estimates, with supporting data for each cost category, been maintained?	X		While development costs are tracked internally by Deloitte Consulting, they are not shared with the AOC since this is a fixed-price development contract. The AOC tracks the project budget, monies encumbered, and monies expended to date in an Access database.
Are software size estimates developed and tracked?	X		Deloitte Consulting has included estimates for Final Design, Final Construction, Testing, and Conversion.
Are two or more estimation approaches used to refine estimates?	X		A Bottom Up estimate is performed by the Deloitte Consulting Project Manager and a Top Down estimate is performed by the Lead.
Are independent reviews of estimates conducted?	X		There are multiple internal reviewers consisting of Deloitte Consulting, AOC, and Court staff.
Are actual costs recorded and regularly compared to budgeted costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Currently, AOC costs are tracked at the overall CCMS level. At this point, a daily (or on-demand) Access database report can be printed showing project budget, monies encumbered, monies expended to date, and monies forecasted to be spent.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Planning and Tracking			
Is supporting data maintained for actual costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Yet, the RPO has invoice level data to support its actual cost data tracked in its Access database.
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	X		This information is reported weekly, monthly, and quarterly.
Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration mgmt plan?	X		The CCMS-V4 Configuration Management Plan outlines the process and procedures followed for Configuration Management.
Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?	X		This information is tracked in eRoom and in the weekly, monthly, and quarterly status reports.
Is user satisfaction assessed at key project milestones?		X	Deloitte Consulting has stated that user satisfaction is assessed at key project milestones in the form of deliverable review. All deliverable comments are logged, reviewed, and categorized to indicate if a response is needed. According to Deloitte Consulting, all defects or other comments that require a response are addressed and tracked through closure. Other validation processes include proof of concepts, UI prototypes, design sessions, design council sessions, and cross track meetings. As such, Deloitte Consulting believes that acceptance of the deliverable is evidence of user satisfaction. While there are no satisfaction surveys used or assessments performed at key project milestones, the AOC agrees that there are several opportunities to talk through and resolve deliverable disagreements on a case by case basis.
Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?	X		Planning is in compliance with a formal system development life-cycle (SDLC) methodology.
Is there a formal enterprise architecture in place?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point in time, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project. SEC will be investigating the AOC enterprise architecture further as the project progresses.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	X		Project Closeout activities are planned to occur and we will evaluate and comment whether the planned activities occurred at the project closeout. In the interim, Lessons Learned sessions are being conducted at various project phases to identify possible process improvements.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, "alternative procurement") and their required processes followed?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Is a detailed written scope of work for all services included in solicitation documents?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Are detailed requirement specifications included in solicitation documents?	X		Detailed requirements were included in Exhibit B of the Statement of Work. These will be expanded upon during Detailed Design. Thus, we will review or evaluate those requirements when developed.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. For ongoing SOWs, independent third-party vendors are used to review and recommend procurement planning and execution practices.
For large-scale outsourcing, is qualified legal counsel obtained?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. The AOC utilized outside council for the V4 Development Contract.
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X		The Risk Management Plan contains the process and procedures for risk. Risks are tracked within eRoom and are discussed during the weekly and monthly status meetings. In addition, the Deloitte Consulting Project Manager meets with the CCMS Product Director weekly to discuss risks.
Does the management team review risks and mitigation progress at least monthly?	X		The management team reviews risks at weekly and monthly status meetings.
Are externally developed risk identification aids used, such as the SEI "Taxonomy Based Questionnaire?"		X	Additional risk identification aids are internal to Deloitte Consulting and are not shared with the AOC. The AOC is not using any other risk identification aids.
Communication			
Is there a written project communications plan?	X		This information is contained in the CCMS-V4 Communication Management Plan.
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		Written weekly, monthly, and quarterly status reports are prepared and discussed with the project management team as well as the Steering Committee/Oversight Committee. In addition, there are executive meetings held to brief the Lead Court CIOs.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Communication			
Are there written escalation policies for issues and risks?	X		This CCMS-V4 Project Management documentation contains this information.
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		The Product Management Group has primary responsibility for working through the issues and risks. Additionally, issues and status are shared with lead court information officers, court executive officers at bi-weekly steering committee meetings as well as with selected presiding judges at the quarterly oversight committee meetings. The RPO is also working diligently to seek input and have stakeholders assume an active ownership role in the development process.
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		AOC and Court staff are planned to be involved from requirements gathering through testing and into implementation.
Do users formally approve/sign-off on written specifications?	X		The requirements will be approved by the AOC and Court staff.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		The RPO Management Team has reported that Deloitte Consulting is using Clear Quest and Clear Case to manage defects and Rational Requisite Pro to track requirements.
Do software engineering standards exist and are they followed?	X		This CCMS-V4 development standards documentation has been reviewed by SEC and found to be adequate.
Is a formal system development life-cycle (SDLC) methodology followed?		X	Deloitte is using an overlapped waterfall SDLC as evidenced by the structure of their project plan and the manner in which activities are performed. CMMI Level 3 requirements require that a defined, standard, consistent process and process measurement be followed. This would require that: <ul style="list-style-type: none"> • Technical processes are defined in writing; • Project roles are clearly defined; • Staff are trained in standard methods and process activities before they are assigned to roles; and • Technical management activities are guided by defined processes. It is not clear where the processes and roles are documented and whether the CCMS-V4 Project is CMMI Level 3 compliant.
Does product defect tracking begin no later than requirements specifications?	X		Product defect tracking occurs during deliverable review. Users submit defects by entering comments in the deliverable. Each defect is tracked to closure within the deliverable. Any corresponding response is attached to the original defect in the body of the deliverable. Before approval of the deliverable, the AOC confirms that all defects have been appropriately addressed.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

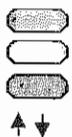
Practices and Products	Practice in Use	Practice Not in Use *	Notes:
System Engineering			
Are formal code reviews conducted?		X	Two levels of code reviews are conducted. Automated reviews of code are conducted using the JCART tool which checks for and highlights unacceptable coding practices. Any issues identified through the JCART execution have to be resolved before the code can be included in the build. Additionally, manual code reviews are conducted by the Architecture Leads (Technical Analysts, Development Leads and the Framework Team). Code review checklists are created and stored in ClearCase. Deloitte should implement a process for ensuring that the coding standards are adhered to as opposed to the AOC assessing the compliance after completion.
Are formal quality assurance procedures followed consistently?	X		The quality assurance documentation was updated to include CCMS-V4. As more QA related data is collected and reported by Deloitte Consulting, the IPO/IV&V Team will be reviewing these reports to assess how data is represented in the reports—such as through metrics—and identify issues with processes if the metrics indicate negative trends.
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	AOC and the Court staff will sign-off on acceptance test results. Acceptance criteria have been established as 0 Severity-1 incidents, 0 Severity-2 incidents, and not more than 50 Severity-3 incidents.
Is the enterprise architecture plan adhered to?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project.
Are formal deliverable inspections performed, beginning with requirements specifications?	X		All deliverables are approved by the AOC and Court staff.
Are IV&V services obtained and used?	X		SEC has been hired to perform IV&V.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Appendix D: IPO/IV&V Project Scorecard

For March 1, 2010 – March 31, 2010 Time Period

Process Area	OCT 2009	NOV 2009	DEC 2009	JAN 2010	FEB 2010	MAR 2010	REMARKS
Communication Management							Day-to-day communication continues to be strong.
Schedule Management							The schedule remains aggressive.
Scope Management							Project scope is managed and controlled through a variety of avenues.
Risk Management							Risks are reported, discussed, and managed on a weekly basis.
Issue Management							Issues are discussed/reported weekly at various project management and Executive Committee meetings.
Resource Management							AOC and Deloitte project resources appear to be insufficient during testing.
Cost Management							ISD costs and RPO costs are maintained in separate databases and there is no effort to combine these in the near future.
Quality Management (Client Functionality)							We are unable to conclude on the quality of the client functionality due to the absence System test defect data related to Deloitte's execution of the System Test scripts.
Quality Architecture							Quality Architecture is currently adequately defined from an industry-sound SEI approach.
Configuration Management							CM, for documentation, is being well controlled through the eRoom and JCC web sites that have built-in controls for CM.
System Engineering Standards and Practices							Deloitte Consulting appears to be following currently accepted systems engineering standards and practices.
Requirements Identification and Traceability							The IPO/IV&V Team has concerns with the lack of traceability between use cases and business rules.
Detailed Design Review							The Technical Design documentation was delivered to the RPO but is an artifact and not a deliverable and therefore, the Detailed Design cannot be assessed.
System Development Quality and Progress							The technical architecture and design is proceeding on the defined schedule with only minor changes.
Testing Practices and Progress							Testing continues to be a concern.



Green – On Track
 Yellow – Warning
 Red – Significant Problems

Appendix E: IPO/IV&V Background, Scope, and Methodology

The California Case Management System (CCMS) is a statewide initiative to bring the courts together to use one application for all case types. CCMS is managed by the Administrative Office of the Courts (AOC) Southern Regional Office (SRO) in Burbank with the participation of the AOC Information Services Division and superior courts in the planning, design, and development sessions. Over the next 2 years, the AOC plans to expand the functionality of the current interim CCMS applications and develop the next phase—CCMS-V4—that will include family law, juvenile dependency, and juvenile delinquency case types as well as incorporate the V2 and V3 products and update the system’s technical architecture and environments. Toward this end, the AOC has executed a contract with Deloitte Consulting to design and develop the V4 component—yet, the success of the V4 Project relies on every party working in harmony toward common goals.

Background:

For all high criticality technology projects such as CCMS-V4, industry best practices strongly encourage independent oversight. Ideally, the independent project oversight process begins during the feasibility study and continues through project closeout. Deficiencies, issues, findings, and recommendations identified by the oversight process should be incorporated into the appropriate project management processes. As the project progresses, the independent review and assessment approach should track the disposition of findings and recommendations in terms of corrective action and implementation of oversight recommendations.

An Independent Project Oversight (IPO) effort is intended to audit system development, acquisition, and maintenance controls to assure a structured project management methodology is adhered to and managed through activities such as project scheduling, risk management, and change management. A primary goal is to provide impartial oversight of the responsibilities and activities of the project office. Similarly, the Independent Verification and Validation (IV&V) provides unbiased oversight of the technical deliverables such as program code, test scripts and results, and network configurations and processes used to create the product. It is intended to evaluate products against system requirements and whether processes used follow the intended life cycle methodology.

However, these efforts are not designed to guarantee success of the CCMS-V4 application nor will the IPO/IV&V efforts ensure the completeness of business requirements designed by the CCMS-V4 team or the ability of the end system functionality of the application built to meet court needs statewide.

Appendix E: Continued

Scope and Methodology

In July 2007, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) Services over the California Case Management System (CCMS) V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the Regional Administrative Director and CCMS Product Director at the Southern Regional Office (SRO), our objectives are to monitor the services, deliverables, milestones, deadlines, and functionality of the CCMS-V4 project and communicate status, progress, issues, and potential challenges to the success of the project as designed. The IPO/IV&V efforts are designed to give assurance, from an independent and unbiased perspective, that the process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards as well as that potential risks and issues are known by project decision makers. The IPO/IV&V effort cannot require change, but any identified and reported findings and results should be considered by the project sponsors.

To provide appropriate and independent review, analysis, and oversight on the CCMS-V4 project, SEC will generally provide monitoring efforts from July 2007 through June 30, 2010 relative to the following areas:

- Project management and System Development Life Cycle (SDLC) processes, procedures, and communication
- Adherence to schedule
- Techniques and processes employed for risk management, issue management, and communication strategies
- Requirements gathering as part of JAD Sessions
- Completeness of Functional Design and Technical Design
- Traceability of requirements from one SDLC phase to the next
- Testing techniques and processes employed
- Compliance with project management and technical contract requirements

However, the IPO/IV&V efforts will not review or address the completeness of the business requirements being developed cooperatively by Deloitte Consulting, SRO staff, and court Subject Matter Experts (SMEs) as part of functional design joint application development (JAD) sessions. While business requirements will be reviewed from a technical perspective to assess whether they contain sufficient levels of specificity to ensure proper coding and end-user functionality as planned, SEC cannot ensure that all critical business processes and steps are appropriately captured in the business requirements to meet court needs.

Appendix E: Continued

Additionally, our efforts do not address the management surrounding the application developer's budget. Because the AOC awarded Deloitte Consulting a fixed-price contract, a time and material type review and analysis is not warranted in this situation.

Moreover, to provide appropriate and independent review, analysis, and oversight over the CCMS-V4 project, the following parameters need to be met in allowing SEC to perform activities unimpeded:

- Understanding/agreement by all project participants on our independent role and importance of timely information sharing and meeting scheduling;
- Inclusion as a seamless member of the project team;
- Timely knowledge of and inclusion in all project meetings;
- Commitment from all project participants to attend meetings scheduled with the IPOC/IV&V;
- Unfiltered access to all documents, data, deliverables, and personnel deemed relevant by the IPOC/IV&V Team; and
- Full disclosure of project knowledge including items such as project issues, risks, change requests.

If there are challenges in adhering to those parameters, we will escalate our issues and/or concerns to the Internal Audit Services Manager, CCMS Product Director, RAD, CCMS Steering Committee, and CCMS Oversight Committee as necessary or appropriate. Working in conjunction and coordination with the AOC's Internal Audit Services to complete this Statement of Work, we will perform the following tasks:

IPO Specific Tasks

- Conduct meetings, as needed, with key project staff to obtain first-hand information as to the objectives of the project, identify the key players and their roles, and the interrelationship and communication structure between all parties as well as review documents such as organization charts and governance structure.
- Attend meetings, as needed, key court/AOC and vendor personnel to obtain information on their responsibilities, objectives, communications, and schedules.
- Conduct observations, on-going interviews, and document examinations to monitor meeting timelines, deliverables, and milestones as described in the schedule.
- Review project planning/management deliverables and documentation to comment on compliance with industry best practices and adherence to documented project processes
- Perform initial assessment of Project Management processes and documents (project management plan, communication plan, change management plan, implementation plan, etc).

Appendix E: Continued

- Participate in certain critical requirements gathering and physical design sessions (JAD sessions) as deemed necessary or at the direction of the Internal Audit Services Manager to provide expertise courtroom operations (family law, criminal, and traffic), finance, distributions, and audit as well as on the V2 and V3 retrofit and validate processes are being followed.
- Provide an Implementation Strategy Review. This review would consist of an analysis of the implementation approach and the action plan for accomplishing implementation.

IV&V Specific Tasks

- Review Requirement Traceability and Contract at end of Functional Design, Technical Design, and Test Preparation.
- Provide a Functional Design and Requirements Traceability Review. The Functional Design review would consist of an analysis of the Functional Design Specification to assess the readability, consistency, and testability of the design. The Functional Design review will identify issues such as non- testable requirements, vague requirements, requirements that are in conflict or not consistent with each other, etc. The Requirements Traceability review will ensure that all of the contractual requirements have been addressed and are accounted for.
- Provide a Technical (software) Design and Requirements Traceability Review. The Technical Design review would consist of an analysis of the Technical Design Specification to assess the readability, consistency, and testability of the technical design as well as identification of any potential weaknesses in the design. The Technical Design review will identify where the Technical Design may be in conflict with the Functional Design. The Requirements Traceability review will ensure that the design has addressed all of the functional requirements.
- Provide a Test Methodology and Requirements Traceability Review. The Test Methodology review would consist of an analysis of the Test Methodology and a sampling of test scripts which will be traced to the requirements and to the design specification as well as reviewing the data elements necessary for the scripts. The Requirements Traceability Review will ensure that all of the test cases/scripts have been developed to test the design and the functional requirements.
- Review a statistically valid sample of source code (coded based on requirements documented in JAD sessions). Approximately 40 modules will be reviewed which would provide early feedback on compliance to coding standards and comparisons to the design requirements.

Appendix E: Continued

- Review a statistically valid sample of test scripts (unit, integration, system, user acceptance, product acceptance) for compliance with requirements from both a technical perspective and from a court operations perspective (testing enough scenarios/scripts covering critical and most frequent business cases both on a positive/ideal flow and on an exception basis).

IPO/IV&V Combined Tasks

- Assess Systems Development Life Cycle (SDLC) practices to comment on compliance with industry best practices and adherence to documented project processes.
- Review agreed-upon vendor deliverables including, but not limited to Functional Design, Technical Design, Test Methodology, Implementation Strategy, V2 Requirements and V3 Requirements, to comment on compliance with Deliverable Expectations Document (DED).
- Identify and assess any new or ongoing challenges, barriers, risks, or issues.
- Attend meetings, as needed, where deliverables, strategies, timelines, and status are being considered.
- Maintain a log tracking IPO/IV&V issues that delineates any challenges, barriers, risks, issues, defects, milestones changed or missed, and observations warranting discussion and monitoring; monitor the resolution of such issues; document the resolution and closure of each matter.
- Conduct bi-weekly briefings with the RAD and designated Project Manager(s) discussing all previous work and any updates or new developments.
- Compile the results of the IPO/IV&V monitoring efforts in writing. In addition to compliance issues, the report will also contain any other significant findings, conclusions, and recommendations including the identification of risks, lessons learned, best practices, or performance exceeding minimum requirements as well as comment on severity or criticality and impact or consequence of items discussed.
- Ascertain and report on follow-up efforts taken on corrective actions needed and implementation of oversight recommendations.
- Provide reports to the RAD and designated Project Manager(s) on a monthly basis, or more frequent if necessary, based on project stage criticality.

Appendix F: SEC Activities - Performed & Planned

During March, SEC performed the following activities:

- Monitored QA Metrics;
- Monitored Re-Planning Efforts;
- Monitored Testing Efforts;
- Attended weekly and monthly Project Management Meetings as well as participated in CCMS-V4 IPO/IVV Project Meetings;
- Performed analysis of areas in the Project Oversight Review Checklist Appendix C;
- Identified and tracked potential risks, observations, and issues as well as discussed and prepared monthly IPO/IV&V written status reports.

Planned SEC Activities for April 2010

SEC plans to conduct the following activities over the next month:

- Attend, observe, and participate in a variety of CCMS-V4 meetings including weekly Project Management Meetings, monthly Project Management Meeting, monthly RPO Management Meeting, monthly ISD Meeting, bi-weekly Steering Committee Meetings, weekly Technical Architecture Meetings, CIO Meetings, and monthly IPO/IVV Project Meeting;
- Review technical documents prepared and discussed at weekly meetings as well as other documents distributed as part of weekly and monthly meetings;
- Continue review and comment on the Testing Documentation in terms of sufficiency of detail including implementation of integration test plan and PAT plan;
- Continue review and comment of the Re-Plan effort in terms of executability of the plan;
- Continue review and comment of the cost management practices in place;
- Monitor results of product testing in terms of progress in script executions, frequency and severity of defects identified, and resolution of defects.
- Prepare monthly IPO/IV&V status report that identifies and tracks new risks or issues as well as accomplishments and review prior issue resolution.

**The Judicial Council of California,
Administrative Office of the Courts**

Independent Project Oversight (IPO) and
Independent Verification and Validation (IV&V)
For the CCMS-V4 Development Project

Status Report as of April 30, 2010

SJOBERG & EVASHENK
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Executive Summary

Realizing the importance of independent oversight for high criticality technology projects, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) services for the California Case Management System (CCMS)-V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the CCMS Executive Sponsor in the Regional Program Office (RPO), our objectives are to monitor the activities, deliverables, milestones, deadlines, and design of the CCMS-V4 project and communicate status, progress, issues, and challenges to the success of the project as designed. Our monthly IPO/IV&V reports are intended to capture and assess current project activities to determine whether process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards, as well as that potential risk/issues are known by decision makers at a specific point in time; thus, the monthly items reported are in-flux, continually evolving, and will change over the course of the project.

Period Highlights:

During April, most of the CCMS-V4 project efforts have been focused on the functional assessment to address the test incidents/defect issues noted during Integration Testing. Preliminary timeline estimates, per the CCMS-V4 Weekly Status Report, show Integration Testing scheduled for completion in December 2010 and Product Acceptance Testing scheduled for completion in April 2011—though details are still in the planning phase.

Upon completion of this re-planning effort, the IPO/IV&V Team will review the re-plan and assess the executability of the plan. Although, as of April 30, 2010, the replan document which consists of a revised schedule, according to the RPO, is not yet available to the IPO/IV&V Team; thus, we cannot comment on its reasonableness or appropriateness. Further, after Deloitte completes its planned efforts to validate the code back to the requirements and makes any needed corrections, the application, according to the RPO, will be placed back into System Testing and then into Integration Testing.

During April, the IPO/IV&V Team reviewed the CCMS-V4 Project budget processes and found a time tracking mechanism that would track both planned and actual staff hours and costs at the work breakdown structure level in order to assess cost variances to still be missing from the processes. However, after discussions with the RPO, they stated their process was never intended to track staff hours against the Work Breakdown Structure.

Moreover, the IPO/IV&V Team continues to have concerns about Deloitte's QA Reports that have not addressed our previous concerns such as the resolution of previous QA Report findings and a more explanation of the significance and/or meaning of metrics presented in the reports. It is the IPO/IV&V Team's recommendation that future QA Reports provide an interpretation of what various metrics are indicating in the QA reports. Further, the IPO/IV&V Team suggests that report findings (concerns, issues, and opportunities) that have been acted upon and closed should be reported in the next monthly QA Report and then dropped from the report the next reporting period.

Detailed Observations, Impact, and Recommendations

The Southern California Regional Program Office (RPO) staff, AOC staff, individual court staff, and Deloitte Consulting continue to practice project management and systems-engineering practices in accordance with industry standards related to the identification and resolution of issues, risks, items for management attention, and modification and change requests. Additionally, the continued diligence employed by the RPO staff, AOC staff, Court staff, and Deloitte Consulting in addressing issues and following established project management processes has been consistent. As part of our continued IPO/IV&V efforts, we offer the following observations and areas of concern in various project management and technical areas.

Project Oversight Focus Areas

Communication Management:

There do not appear to be any current communication concerns noted by the CCMS-V4 Project Team or the IPO/IV&V Team.

Schedule Management:

Once the re-planning effort has been completed, the IPO/IV&V Team will review the re-plan and assess the executability of the plan/schedule.

Scope Management:

Scope management items raised by the CCMS-V4 Project Team are being actively managed through eRoom.

Risk Management:

During the month of April, six (6) new risks were identified by the CCMS-V4 Project Team. As of April 30, 2010, the risks identified below by the CCMS-V4 Project Team remain active. There are numerous clarifications that are needed in eRoom with respect to risks. The IPO/IV&V Team has contacted Deloitte Consulting to remedy this.

Risk Number	Risk Title	Activity Performed	Target Resolution Date
37	Justice Partner Readiness	Reference Implementation constraint schemas have been published. This is an accepted risk and will continue to be monitored on a weekly basis. At this time, no mitigation actions are required.	03-29-10 This date should be updated.

Risk Number	Risk Title	Activity Performed	Target Resolution Date
42	FFDV Mitigation Activities	The FFDV Pods will be tracked daily against the plan and work with teams responsible for identifying challenges and developing action plans to mitigate the challenges. Outliers will be raised to the PM Group to work through together in developing additional mitigation activities, as needed.	No Target Resolution Date is listed
43	Integration Testing Readiness	Cycles will be developed within Integration Testing to prioritize the needs for Integration Testing. Cycle 0 will contain functionality needed to support future testing cycles. Cycle Core will address the core functionality within the application. Cycle Other will address areas that will complete FFDV later (i.e., MOCS, OAH, DWRD). Mitigation plans will be developed for areas that will not meet the target entry dates for Integration Testing.	No Target Resolution Date is listed
44	Integration Testing Script Execution	Integration Test tracking will include a daily snapshot of the number of test scripts executed as well as activities needed to remediate code, as needed. Outliers will be tracked, managed, and mitigated as they are identified.	No Target Resolution Date is listed
45	AOC Testing Resources	PAT resource needs will be communicated to the AOC and the Courts and the availability and on-boarding of staff resources for PAT will be tracked.	No Target Resolution Date is listed
46	Justice Partner Readiness	No mitigation has been established as of April 30, 2010.	No Target Resolution Date is listed
47	Integration Testing Readiness	The approach to the first four (4) weeks of Foundation Functional Design has been adjusted to eliminate the larger JAD scheduled for Week 4 and instead have two "mini-cycles" during Weeks 3 and 4 with the larger-than-expected FreSME group.	No Target Resolution Date is listed

The following risks were closed during the month of April.

Risk Number	Risk Title	Resolution
27	SME Testing Staffing Plan	This risk was closed since it was included in Risk 45.
35	CCMS-V3 Resources	This risk was closed but there was no documented resolution in eRoom.

Risk Number	Risk Title	Resolution
38	System Response Time Matrix	This risk was closed and the documented resolution was that both parties had reached a resolution. However, it is not clear where the resolution was documented.
39	Large Number of Integration Testing Defects	This risk was closed since an FFD validation effort was implemented to address this risk.

Issue Management:

As of April 30, 2010, there were no open issues tracked by the CCMS-V4 Project Team.

Resource Management:

All parties continue to be concerned that the CCMS-V4 Project requires more resources to complete the product Development and Testing phases. The AOC and the courts have accepted this risk and are monitoring it on a weekly basis.

Cost Management:

In April, the IPO/IV&V Team reviewed the Budget Process documents supplied by Keri Collins, CCMS Project Manager, to identify any new or modified procedures being employed. The RPO Management Team clarified that the procedures the IPO/IV&V Team reviewed have been in place since the beginning of the project. According to the documents supplied, ISD has an internal budgeting process which supports the CCMS RPO budget where an annual 5-year zero-based budget is developed for CCMS. The Finance Division reviews and the Project Review Board (PRB) approve this budget.

According to the documentation received, the following processes are in place to track progress against budget:

- **Contracts Tracking** – Each development contract or statement of work is monitored from the budget projection stage through full execution of the contract and encumbrance of funds.
- **Consultants Tracking** – Consultant's hours and travel expenses are tracked monthly for compliance with contract.
- **Invoice Tracking** – Each invoice is processed, approved, and entered into the RPO tracking system. Reports can be run for each Statement of Work to show invoices paid, in process, and not yet submitted. Every invoice for a deliverable on the development project must be submitted with a Deliverable Acceptance Form signed by the AOC Project Manager.
- **Unit Manager Change Updates** – Reports are reviewed and updated regularly with Finance budget analysts for staff salaries, benefits, and operating expenses. These reports show progress against the current year budget and projected current year expenditures.

The documents supplied also stated that the following reports contain financial data:

- **Executive Status Report** – *Monthly, ISD/RPO combined, reviewed by Finance*
This report contains accomplishments, planned activities, project dates, project issues and budget for the CCMS program and major phases of the program. The report addresses action items assigned by the Project Review Board in its previous meetings, but does not display the CCMS development project as a discreet component of the report. However, the Project Review Board has directed that the CCMS project budget be reported in accordance with the new reporting model showing discreet budgets for project, operational and maintenance expenditures, and interim case management system costs in future reports.
- **Special Funds Report**– *Annual, ISD/RPO combined, reviewed by Finance*
The Executive & Planning Advisory Committee receives a report at the beginning of the fiscal year for approval which indicates the project, the amount of funds that will be allocated, and how the funds will be used. A report is also provided at the end of the year indicating the actual amounts encumbered and the major activities that were funded.
- **Report to Legislature** – *Annual, ISD and RPO combined, reviewed by Finance*
This report contains a program summary, accomplishments to date, and program revenue and expenses to date. In the past, CCMS has included projections for the next fiscal year and reported the entire program budget. The current report illustrates the new reporting model that displays costs for maintenance, support, and interim case management systems separate from the project cost.
- **V4 Development Budget Report** – *Quarterly and on-demand, ISD/RPO only*
This report shows the amount budgeted, the amount encumbered/expended, and projections for each line item.
- **V4 Development Amendment Status Report** – *On-demand*
This report shows the payment status of each deliverable on the development contract and the retention amount, if any.

Further, Keri Collins stated that ISD and RPO are working with Finance to develop reports in the AOC's Oracle financial system so that the CCMS Project can easily report financial data that can meet the needs of multiple recipients.

Yet, from a review of these reports, what appears to be missing is a time tracking mechanism that would capture both planned and actual staff hours and costs at the work breakdown structure level in order to assess cost variances. However, the CCMS Project Team has stated that it does not have a tool to perform this activity and has not intended to have a tool to perform this activity.

As opposed to time tracking, the RPO has created an Access database to track project budget, monies encumbered, and monies expended to date. They will continue to follow these processes. In addition, the SRO has continued its process of having its Product Managers review Statements of Work (SOWs) submitted by various vendors to assess whether the “level of effort” estimates are consistent with previous estimates.

Technical Focus Areas

Quality Management:

The CCMS-V4 Quality Assurance (QA) Report #8, version 1, was delivered to the AOC on February 26, 2010 for review and was rejected by the AOC. QA Report # 8 was then resubmitted and approved by the AOC on April 1, 2010. In reviewing version 3, it does not appear that the IPO/IV&V Team’s concerns raised were addressed.

Specifically, the IPO/IV&V Team’s issues with QA Report #8 that were identified to the AOC on March 9, 2010 were as follows:

“QA Report #7 item Q101, Other Quality Improvement Opportunity section stated:

- Deliverable reviews do not currently require the amount of effort that would be expected to thoroughly review deliverables of the size and scope produced by the project.

However, QA Report #8 identifies Q101, the same identifier, as:

- A large number of defects are being found during the Release 1.0 cycle Integration Testing cycles.

QA Report # 7 also identified a Q102, but QA Report # 8 does not have such a finding.

This reuse of an identifying number is a significant problem in that it does not provide traceability back to the original finding, the original document, or the resolution. Of major concern to the IPO/IV&V Team, as reported in this report and the March 2010 IPO/IV&V Status Report, is that the Q101 and Q102 from QA Report #7 were closed without any explanation of what was done to justify closing the identified QA finding. Now, the reuse in numbering compounds and confuses the situation. It is not clear, when discussing Q101, which QA Report is being referred to in a discussion.

Secondly, while providing metrics in the report is good, a Deloitte explanation of the metric and what it means to Deloitte QA would be extremely beneficial. While the AOC can make its own interpretation, reading the Deloitte QA’s interpretation would be very valuable to assess how well aligned the AOC is with the Deloitte QA staff. In short, the graphs should not stand alone without a Deloitte QA interpretation.”

While QA Report #8 has addressed the reuse of numbering issues, the resolution of previous QA Report finding, or opportunities in this case, is not addressed. It is the IPO/IV&V recommendation that future QA Report findings (concerns, issues, and opportunities) that have been acted upon and closed should be reported in the next monthly QA Report and then dropped from the report after the next reporting period. It is the IPO/IV&V understanding that the QA Reports are management-level reports; thus, showing management that action was taken and describing the specific actions employed to address QA findings would be appropriate for such a report. At this point, it is still unclear how QI01 and QI02 from QA Report #7 were closed.

The other issue the IPO/IV&V Team identified with initial submittal of QA Report #8 was the use of metrics without an interpretation of what the metric is indicating. While the AOC accepted version does contain some limited text, the IPO/IV&V Team keep focusing on the management audience of the report. Typically, senior management does not have the knowledge or experience to identify if the reported information in the metric is “good” or “bad”. Because QA Report #8 still does not have that type of information, it is likely senior management will not fully understand what the metric is indicating, such as positive or negative trends, overall completeness, or invalid information due to mid-stream changes.

Quality Architecture:

There are no open issues with System Architecture for the month of April and the System Architecture Team with Deloitte, AOC, ISD, and other Court members continues to do a good job of identifying and defining the system architecture as well as architectural tradeoffs, raising issues for resolution, and generally creating a solid CCMS-V4 system architecture.

Configuration Management:

There are no open issues with Configuration Management. Configuration Management for documentation is being well controlled through eRoom and JCC Web Sites that have built-in controls for Configuration Management.

System Engineering Standards and Practices:

Since Deloitte Consulting appears to be following currently accepted systems engineering standards and practices, even as defined in IEEE Standard 1220, there are no system engineering standards and practices concerns at this point in time.

Requirements Identification and Traceability:

There are no new issues with Requirements Identification and Traceability that have not already been discussed in previous reports.

Detailed Design Review:

There are no open issues with the Detailed Design Review that have not already been discussed in previous reports.

System Development Quality and Progress:

The completeness of the Architecture Team decisions cannot be verified by the IPO/IV&V Team due to the absence of an Architectural Decision Tradeoff Matrix which would document the options, tradeoffs, decisions, and underlying rationale for the approach taken.

Testing Practices and Progress:

At this point in time, the IPO/IV&V Team has not seen a revised test plan or schedule; however, the release of the Integration Test Plan is tentatively planned for 6-18-10 and the release of the PAT Plan is tentatively planned for 8-20-10. Thus, the IPO/IV&V Team cannot obtain information on exactly what testing will be re-accomplished and how the re-accomplished testing will be performed—namely, the level of detail that will be documented and tested—until the revised test plans are provided to us.

However, the IPO/IV&V Team has been reviewing the list of lower-level testing documentation placed on the Deloitte eRoom Web site. While we do not have access to the specific documentation on eRoom or the JCC Web site, the level of classification of the testing documents, by title, indicates a significantly more detailed focus on individual tests. During the AOC-Deloitte re-planning and re-execution effort, it appears that improvements have been made—but, without access to the revised testing plan and/or schedule, the IPO/IV&V Team is unclear on the details of what is being done and cannot comment on the reasonableness or appropriateness. These testing practices will be further explored by the IPO/IV&V Team during the month of May as well as once the revised plans are received.

Appendix A: Matrix of Areas of Concern (Open)

The matrix below provides a current listing of all open areas of concern, our recommendations, and the action taken by the CCMS-V4 Project Team. As items are resolved, they will be moved to Appendix B. Key statistics are summarized below:

- **There was one area of concern identified this month in addition to items covered in the Project Issues and Risks.**
- **Further, the IPO/IV&V Team strongly believes that this project will continue to be a high risk project due to the constraints imposed by the budget, schedule, and resources.**

Item Number	Area of Concern	Recommendation	Action Taken
Apr10.1	QA Report Metrics	Continue the use of metrics in the QA Reports, but include a definition or interpretation of all metrics shown in the reports.	4-2010 – New this month.

Appendix B: Matrix of Areas of Concern (Closed)

The matrix below provides a listing of all closed areas of concern, our recommendations, and the action taken to resolve the issues by the CCMS-V4 Project Team. Key statistics are summarized below:

- **No areas of concern were closed this month.**

Item Number	Area of Concern	Recommendation	Action Taken
Jul07.1	Aggressive schedule	The schedule should be reviewed to ensure that ample time has been allocated to each phase of the project.	<p>09-2007 - No action taken that SEC is aware of.</p> <p>10-2007 – At this point in the project it is difficult to determine if there is ample time allocated to each phase of the project. This item will remain in a watch status (e.g., once Test Planning activities have begun, it will be easier to determine if enough time is allocated to testing activities).</p> <p>11-2007 to 04-2008 – Although 12 weeks were added to the schedule, there is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>05-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>06-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>07-2008 – There is concern that there is not enough time to complete the review of the FFD. In addition, there is concern that there is insufficient time allocated to testing and that test planning has not been fully engaged. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>08-2008 – 27 additional days were added to the schedule for review of the FFD. It is unknown at this point whether the additional days are sufficient to allow a thorough review and better ensure the highest quality product possible. Moreover, because test planning is slow to start, SEC still has concerns about the time allocated to the testing phase. This item will remain in watch status.</p> <p>09-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>10-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>11-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>12-2008 – It is unclear how the extended review timeframe will impact the overall schedule. This item will remain in watch status.</p> <p>1-2009 – The Core application, Portals, and Statewide Data Warehouse portions of the FFD will be completed by March 30, 2009. The Data Exchanges portion is expected to be completed by April 15, 2009. This item will remain in watch status.</p> <p>2-2009 – All portions of the FFD are on track for completion by March 30, 2009 and April 15, 2009, respectively. This item will remain in watch status.</p> <p>3-2009 – The Portals and Statewide Data Warehouse will be accepted by March 31, 2009. The Core application will be completed by March 31, 2009. Data Exchanges will not be completed until the end of April. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>4-2009 – The FFD was signed off May 1, 2009. The Data Exchanges are expected to be completed by May 22, 2009.</p> <p>5-2009 – The Data Exchanges are expected to be completed by June 5, 2009.</p> <p>6-2009 – While the IPO/IV&V Team believes the schedule is aggressive and will remain aggressive for the duration of the project adding to project risk, the RPO and AOC have extended the schedule through contract amendments. At this point, the RPO and AOC have accepted the project risk as neither the schedule nor the budget can be changed.</p>
Aug07.1	JAD Schedule	<p>There does not appear to be a comprehensive schedule of JADs so that participants can plan time accordingly. Thus, Deloitte Consulting should prepare a detailed schedule that sets realistic timeframes needed to JAD each functional area and ensure the schedule is agreed to by all relevant parties.</p>	<p>09-2007 – The schedule should be completed in October 2007.</p> <p>10-2007 – A revised schedule was completed in October 2007. While the schedule provides more details than previous versions, it still does not address the detailed planning that must be conducted to ensure coverage of all functional areas and the workflows associated with each.</p> <p>11-2007 to 04-2008 – JAD scheduling has improved to the point that this is no longer an area of concern. Consequently, this item has been closed. Over the past few months, Deloitte Consulting has been diligent in setting and adhering to its JAD schedule. As the project enter the final design stage, participants appear able to plan time accordingly to ensure they are available to participate in tracks as needed and share their subject matter expertise. Meetings were also held to hear concerns that more time was needed to review developing requirements—resulting in more time added to the overall project development schedule.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Sep07.1	Requirements Gathering	Ensure that a detailed JAD schedule includes a plan for how the workflow interrelationships will be addressed.	<p>10-2007 – While the workflows and interrelationships have not yet been addressed, the AOC has instituted cross-track meetings as part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements are being gathered.</p> <p>11-2007 to 04-2008– The cross-track meetings have proven to be an essential, needed part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements were being gathered. However, to SEC's knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>05-2008– To SEC's knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas. This step should help address some of our concerns. However, since the final design is nearing completion, there is little value in fully mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.1	Project Oversight Activities	Assign person in role of day to day project management responsible for ensuring that issues are resolved timely, do not impact downstream work efforts, and are not in conflict with other project activities, legal provisions, or branch policy.	<p>11-2007 to 04-2008– It was explained that Bob Steiner, the AOC Project Manager, performs these activities and that a Project Management Consultant familiar with V2 and V3, Sean Yingling, will be assigned to assist the Development Project Manager (Bob). This item will remain in watch status over the next month to ensure the activities are being performed.</p> <p>05-2008– SEC will continue to monitor this item until a Responsibility Matrix indicating the project management component responsibilities that are designated to Sean and Bob is developed. The matrix will ensure that no workload gaps exist.</p> <p>06-2008– To date, a Responsibility Matrix has not been provided to SEC for review.</p> <p>07-2008– SEC will work with Bob Steiner and Sean Yingling to better understand the project management responsibilities.</p> <p>08-2008– Bob and Sean have established a seamless working relationship. Bob has ultimate responsibility for all project management activities. Sean’s focus rests with coordinating the FFD review, reporting to the Steering Committee, and following up on issues with the V4 Court Project Managers.</p>
Oct07.2	JAD Session Documentation	Utilize new template or other mechanism to document detailed JAD Session minutes including areas of discussion, results or actions taken, agreements reached, and issues raised as well as distribute timely for approval.	<p>11-2007 to 04-2008 – Starting in mid-April, the JAD tracks created a new template to ensure consistency across JADs for documenting decisions reached and meeting outcomes. However, since it appears that the new template is only used in isolated instances, this item will remain in watch status over the next month.</p> <p>05-2008 – It is not clear whether an AOC CCMS member will be appointed to monitor and summarize decisions made in the JAD sessions and elevate those of potential interest to the Steering Committee, especially those that may require higher level buy-in.</p> <p>06-2008 – Since the final design is nearing completion, there is little value in mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.3	Governance Structure and Escalation Process	Clarify and establish the complete governance structure to eliminate confusion related to issue escalation process and decision-making.	<p>11-2007 to 04-2008 – The CCMS Governance Model was distributed to committee members. This item will remain in watch status over the next month to ensure its use.</p> <p>05-2008 – The CCMS Governance Model appears to be in use and effective in allowing participation in project decisions regarding project scope, cost, and schedule.</p>
Apr08.1	Unclear Requirements	<p>Review the requirements to determine the types of clarifications needed for understanding in order to avoid confusion during downstream activities such as coding and preparing for testing.</p> <p>As of our 09-2008 review of the FFD, we have suggested the following additional recommendations:</p> <ol style="list-style-type: none"> 1. Identify and evaluate subjective text in FFD (such as may or could) and clarify within the context of use; 2. Perform a traceability exercise to link use cases to business rules—again to reduce need for individual interpretation; 3. Review business rule part of each section to ensure complete and clear rules have been incorporated into the use case. 4. Evaluate pre and post-conditions to ensure they are correct and complete. 	<p>04-2008 – New this month.</p> <p>05-2008 – It is not clear whether action has been taken on this issue.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas). This item will remain in watch status over the next month to review this process.</p> <p>07-2008 – This item remain in watch status until a better understanding can be achieved and SEC evaluates the review process.</p> <p>08-2008 – SEC will assess this item during their review of the FFD deliverable.</p> <p>09-2008 – SEC has begun to assess this item and will continue to evaluate progress during the AOC/Court review of the FFD deliverable.</p> <p>10-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>11-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>12-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>1-2009 – The RPO Management Team is currently developing plans to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>2-2009 – The RPO Management Team continues to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>3-2009 – The RPO Management Team continues to discuss the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>4-2009 – An updated resource schedule is being developed that will forecast resource needs between now and the beginning integration testing. This item will remain in watch status.</p> <p>5-2009 – An estimate of the number of Court SMEs needed for testing has been provided. However, more SMEs with Family and Juvenile expertise will be needed. This item will remain in watch status.</p> <p>6-2009 – The IPO/IV&V Team has continued to express their concern that the ambiguity surrounding the interpretation of final requirements presents a risk to the construction and testing phases of the project. Data is being captured by the AOC Software Quality Assurance Team during early testing that should assist in defining the extent of the problem and any future concerns will be raised as part of the testing assessment.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Dec08.1	Standardization and Configuration	It is not clear what impact the Standardization and Configuration requirements will have on the FFD and on long-term maintenance of the application. Once all Standardization and Configuration requirements have been defined, the requirements should be traced back into the FFD and reviewed again.	<p>12-2008 – New this month.</p> <p>1-2009 – In the month of January, a Court Executive Management work group was established to address the concerns surrounding the standardization and configuration requirements.</p> <p>2-2009 – The RPO Management Team reported that the Standards and Configuration Management Group will determine whether configurable items are statewide standards or local configurations and that these decisions will not impact the FFD.</p>
Dec08.2	Single Point of Contact for ISD	A single point of contact should be established for AOC that can track and manage daily progress on ISD-related activities	<p>12-2008 – New this month.</p> <p>1-2009 – It is not clear where the roles and responsibilities are documented and whether David Corral, selected as the single point of contact, has the authority to make decisions on behalf of ISD. Virginia Sanders-Hinds will work with IPO/IV&V to better understand the ISD roles and responsibilities within the project.</p> <p>2-2009 – It was clarified that Virginia Sanders-Hinds is the single point of contact with the authority to make decisions on behalf of ISD.</p>
Mar09.1	Justice Partners (Interfaces) Plan	Determine the state and progress of the common “State” interfaces which are currently being reviewed by the Justice Partners and assess the progress for project schedule impact.	<p>4-2009 – The “State” interfaces are being addressed with the Justice Partners. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p> <p>5-2009 – The “State” interfaces are being addressed with the Justice Partners at both the State and local levels. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off (now anticipated for 6-5-09) and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>6-2009 – The “Statewide” interfaces are being addressed with the Justice Partners. – A plan has been defined for day-one critical exchanges and each Justice Partner will be given a Microsoft Project Plan to follow. The AOC will continue to work closely with each Justice Partner to anticipate any potential challenges. However, it is not clear if and when the Justice Partners will participate in PAT. This item will remain in watch status.</p> <p>7-2009 - The CCMS-V4 Project Team has clarified that the Statewide Justice Partners will participate in PAT. This item will be closed out.</p>
Mar09.2	Document Management Plan	Determine the state and progress of the agnostic “generic” interface to support any existing document management solution and assess the progress for project schedule impact.	<p>4-2009 – The “generic” interface is currently under development. This item will remain in watch status. The RPO Management Team has stated that the requirements for document management were gathered during design and have been signed off. The AOC is in the process of standardizing the document management interface for all courts but is unsure whether this effort will be complete prior to Go Live for CCMS-V4. This item will remain in watch status.</p> <p>5-2009 – The “generic” interface is currently under development. This item will remain in watch status.</p> <p>6-2009 – The “generic” interface is currently under development and will have a solution that supports the courts at Go Live. Currently, the early adopter court uses FileNet and is scheduled to test this interface during PAT. For each of the remaining Courts, the agnostic “generic” document management interface will be finalized, if needed, during the deployment effort. This item will remain in watch status.</p> <p>7-2009 – The CCMS-V4 Project Team has clarified that the Lead Courts which use FileNet are scheduled to test this interface during PAT. This item will be closed out.</p>

Appendix C: Project Oversight Review Checklist

To assist us in determining whether the CCMS-V4 project is on track to be completed within the estimated schedule and cost, the Project Oversight Review Checklist is used to identify and quantify any issues and risks affecting these project components.

The checklist format provides a quick reference for the assessment of the project management practices and processes in place over the CCMS-V4 project and will assess the adequacy or deficiency of the area. Further, the checklist may provide comments on the specific items reviewed, interviews conducted, and general practices observed for requirements presented under the five categories identified below. These requirements are consistent with industry standards and accepted best practices such as the Project Management Institute (PMI)'s Project Management Body of Knowledge (PMBOK) and the Institute of Electrical and Electronic Engineers (IEEE) standards. Use of these checklists will assist us in commenting on the effectiveness of the project activities.

- Planning and Tracking
- Procurement
- Risk Management
- Communication
- System Engineering

No updates were made to the Project Oversight Review Checklist this month.

Project Oversight Review Checklist

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		The business case has been finalized. The project goals, objectives, and expected outcomes are documented in the Deloitte Consulting Statement of Work. The key stakeholders and sponsors are identified and documented in the Project Management Plan for CCMS-V4.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project plan that has been approved is loaded into Microsoft Project. Deloitte Consulting will update the schedule with construction and testing details after the requirements are complete.
Is completion of planned tasks recorded within the PM software?	X		Completion of milestones are tracked within Microsoft Project.
Are actual hours expended by task recorded at least monthly within PM software?		X	Actual hours for Deloitte Consulting staff are tracked weekly within Playbook Navigator, but are not shared with the AOC as this is a fixed price development contract. The AOC has historically not tracked this information.
Are estimated hours to complete by task recorded at least monthly within PM software?		X	Estimated hours to complete for Deloitte Consulting staff are tracked weekly but are not shared with the AOC as this is a fixed-price development contract. Any deviations occurring to planned dates are discussed at an internal weekly meeting between AOC and Deloitte Consulting.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans?	X		There is a formal staffing plan for Deloitte Leads that is shared with the AOC. Deloitte Consulting tracks internal project staffing with respect to acquisition, schedule for arrival and departure of specific staff, and staff training plans. The AOC does not currently have a CCMS-V4 Staffing Plan; staff are allocated at the CCMS level and not at the specific project level.
Have project cost estimates, with supporting data for each cost category, been maintained?	X		While development costs are tracked internally by Deloitte Consulting, they are not shared with the AOC since this is a fixed-price development contract. The AOC tracks the project budget, monies encumbered, and monies expended to date in an Access database.
Are software size estimates developed and tracked?	X		Deloitte Consulting has included estimates for Final Design, Final Construction, Testing, and Conversion.
Are two or more estimation approaches used to refine estimates?	X		A Bottom Up estimate is performed by the Deloitte Consulting Project Manager and a Top Down estimate is performed by the Lead.
Are independent reviews of estimates conducted?	X		There are multiple internal reviewers consisting of Deloitte Consulting, AOC, and Court staff.
Are actual costs recorded and regularly compared to budgeted costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Currently, AOC costs are tracked at the overall CCMS level. At this point, a daily (or on-demand) Access database report can be printed showing project budget, monies encumbered, monies expended to date, and monies forecasted to be spent.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Planning and Tracking			
Is supporting data maintained for actual costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Yet, the RPO has invoice level data to support its actual cost data tracked in its Access database.
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	X		This information is reported weekly, monthly, and quarterly.
Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration mgmt plan?	X		The CCMS-V4 Configuration Management Plan outlines the process and procedures followed for Configuration Management.
Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?	X		This information is tracked in eRoom and in the weekly, monthly, and quarterly status reports.
Is user satisfaction assessed at key project milestones?		X	Deloitte Consulting has stated that user satisfaction is assessed at key project milestones in the form of deliverable review. All deliverable comments are logged, reviewed, and categorized to indicate if a response is needed. According to Deloitte Consulting, all defects or other comments that require a response are addressed and tracked through closure. Other validation processes include proof of concepts, UI prototypes, design sessions, design council sessions, and cross track meetings. As such, Deloitte Consulting believes that acceptance of the deliverable is evidence of user satisfaction. While there are no satisfaction surveys used or assessments performed at key project milestones, the AOC agrees that there are several opportunities to talk through and resolve deliverable disagreements on a case by case basis.
Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?	X		Planning is in compliance with a formal system development life-cycle (SDLC) methodology.
Is there a formal enterprise architecture in place?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point in time, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project. SEC will be investigating the AOC enterprise architecture further as the project progresses.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	X		Project Closeout activities are planned to occur and we will evaluate and comment whether the planned activities occurred at the project closeout. In the interim, Lessons Learned sessions are being conducted at various project phases to identify possible process improvements.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, "alternative procurement") and their required processes followed?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Is a detailed written scope of work for all services included in solicitation documents?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Are detailed requirement specifications included in solicitation documents?	X		Detailed requirements were included in Exhibit B of the Statement of Work. These will be expanded upon during Detailed Design. Thus, we will review or evaluate those requirements when developed.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. For ongoing SOWs, independent third-party vendors are used to review and recommend procurement planning and execution practices.
For large-scale outsourcing, is qualified legal counsel obtained?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. The AOC utilized outside council for the V4 Development Contract.
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X		The Risk Management Plan contains the process and procedures for risk. Risks are tracked within eRoom and are discussed during the weekly and monthly status meetings. In addition, the Deloitte Consulting Project Manager meets with the CCMS Product Director weekly to discuss risks.
Does the management team review risks and mitigation progress at least monthly?	X		The management team reviews risks at weekly and monthly status meetings.
Are externally developed risk identification aids used, such as the SEI "Taxonomy Based Questionnaire?"		X	Additional risk identification aids are internal to Deloitte Consulting and are not shared with the AOC. The AOC is not using any other risk identification aids.
Communication			
Is there a written project communications plan?	X		This information is contained in the CCMS-V4 Communication Management Plan.
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		Written weekly, monthly, and quarterly status reports are prepared and discussed with the project management team as well as the Steering Committee/Oversight Committee. In addition, there are executive meetings held to brief the Lead Court CIOs.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Communication			
Are there written escalation policies for issues and risks?	X		This CCMS-V4 Project Management documentation contains this information.
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		The Product Management Group has primary responsibility for working through the issues and risks. Additionally, issues and status are shared with lead court information officers, court executive officers at bi-weekly steering committee meetings as well as with selected presiding judges at the quarterly oversight committee meetings. The RPO is also working diligently to seek input and have stakeholders assume an active ownership role in the development process.
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		AOC and Court staff are planned to be involved from requirements gathering through testing and into implementation.
Do users formally approve/sign-off on written specifications?	X		The requirements will be approved by the AOC and Court staff.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		The RPO Management Team has reported that Deloitte Consulting is using Clear Quest and Clear Case to manage defects and Rational Requisite Pro to track requirements.
Do software engineering standards exist and are they followed?	X		This CCMS-V4 development standards documentation has been reviewed by SEC and found to be adequate.
Is a formal system development life-cycle (SDLC) methodology followed?		X	Deloitte is using an overlapped waterfall SDLC as evidenced by the structure of their project plan and the manner in which activities are performed. CMMI Level 3 requirements require that a defined, standard, consistent process and process measurement be followed. This would require that: <ul style="list-style-type: none"> • Technical processes are defined in writing; • Project roles are clearly defined; • Staff are trained in standard methods and process activities before they are assigned to roles; and • Technical management activities are guided by defined processes. It is not clear where the processes and roles are documented and whether the CCMS-V4 Project is CMMI Level 3 compliant.
Does product defect tracking begin no later than requirements specifications?	X		Product defect tracking occurs during deliverable review. Users submit defects by entering comments in the deliverable. Each defect is tracked to closure within the deliverable. Any corresponding response is attached to the original defect in the body of the deliverable. Before approval of the deliverable, the AOC confirms that all defects have been appropriately addressed.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
System Engineering			
Are formal code reviews conducted?		X	Two levels of code reviews are conducted. Automated reviews of code are conducted using the JCART tool which checks for and highlights unacceptable coding practices. Any issues identified through the JCART execution have to be resolved before the code can be included in the build. Additionally, manual code reviews are conducted by the Architecture Leads (Technical Analysts, Development Leads and the Framework Team). Code review checklists are created and stored in ClearCase. Deloitte should implement a process for ensuring that the coding standards are adhered to as opposed to the AOC assessing the compliance after completion.
Are formal quality assurance procedures followed consistently?	X		The quality assurance documentation was updated to include CCMS-V4. As more QA related data is collected and reported by Deloitte Consulting, the IPO/IV&V Team will be reviewing these reports to assess how data is represented in the reports—such as through metrics—and identify issues with processes if the metrics indicate negative trends.
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	AOC and the Court staff will sign-off on acceptance test results. Acceptance criteria have been established as 0 Severity-1 incidents, 0 Severity-2 incidents, and not more than 50 Severity-3 incidents.
Is the enterprise architecture plan adhered to?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project.
Are formal deliverable inspections performed, beginning with requirements specifications?	X		All deliverables are approved by the AOC and Court staff.
Are IV&V services obtained and used?	X		SEC has been hired to perform IV&V.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Appendix D: IPO/IV&V Project Scorecard

For April 1, 2010 – April 30, 2010 Time Period

Process Area	NOV 2009	DEC 2009	JAN 2010	FEB 2010	MAR 2010	APR 2010	REMARKS
Communication Management							Day-to-day communication continues to be strong.
Schedule Management							The schedule remains aggressive and a replanning effort is under review.
Scope Management							Project scope is managed and controlled through a variety of avenues.
Risk Management							Risks are reported, discussed, and managed on a weekly basis.
Issue Management							Issues are discussed/reported weekly at various project management and Executive Committee meetings.
Resource Management							AOC and Deloitte project resources appear to be insufficient during testing.
Cost Management							ISD costs and RPO costs are maintained in separate databases and there is no effort to combine these in the near future.
Quality Management (Client Functionality)							We are unable to conclude on the quality of the client functionality due to the absence System test defect data related to Deloitte's execution of the System Test scripts.
Quality Architecture							Quality Architecture is currently adequately defined from an industry-sound SEI approach.
Configuration Management							CM, for documentation, is being well controlled through the eRoom and JCC web sites that have built-in controls for CM.
System Engineering Standards and Practices							Deloitte Consulting appears to be following currently accepted systems engineering standards and practices.
Requirements Identification and Traceability							The IPO/IV&V Team has concerns with the lack of traceability between use cases and business rules.
Detailed Design Review							The Technical Design documentation was delivered to the RPO but is an artifact and not a deliverable and therefore, the Detailed Design cannot be assessed.
System Development Quality and Progress							The technical architecture and design is proceeding on the defined schedule with only minor changes.
Testing Practices and Progress							Testing continues to be a concern.

	Green – On Track
	Yellow – Warning
	Red – Significant Problems
↑ ↓	

Appendix E: IPO/IV&V Background, Scope, and Methodology

The California Case Management System (CCMS) is a statewide initiative to bring the courts together to use one application for all case types. CCMS is managed by the Administrative Office of the Courts (AOC) Southern Regional Office (SRO) in Burbank with the participation of the AOC Information Services Division and superior courts in the planning, design, and development sessions. Over the next 2 years, the AOC plans to expand the functionality of the current interim CCMS applications and develop the next phase—CCMS-V4—that will include family law, juvenile dependency, and juvenile delinquency case types as well as incorporate the V2 and V3 products and update the system’s technical architecture and environments. Toward this end, the AOC has executed a contract with Deloitte Consulting to design and develop the V4 component—yet, the success of the V4 Project relies on every party working in harmony toward common goals.

Background:

For all high criticality technology projects such as CCMS-V4, industry best practices strongly encourage independent oversight. Ideally, the independent project oversight process begins during the feasibility study and continues through project closeout. Deficiencies, issues, findings, and recommendations identified by the oversight process should be incorporated into the appropriate project management processes. As the project progresses, the independent review and assessment approach should track the disposition of findings and recommendations in terms of corrective action and implementation of oversight recommendations.

An Independent Project Oversight (IPO) effort is intended to audit system development, acquisition, and maintenance controls to assure a structured project management methodology is adhered to and managed through activities such as project scheduling, risk management, and change management. A primary goal is to provide impartial oversight of the responsibilities and activities of the project office. Similarly, the Independent Verification and Validation (IV&V) provides unbiased oversight of the technical deliverables such as program code, test scripts and results, and network configurations and processes used to create the product. It is intended to evaluate products against system requirements and whether processes used follow the intended life cycle methodology.

However, these efforts are not designed to guarantee success of the CCMS-V4 application nor will the IPO/IV&V efforts ensure the completeness of business requirements designed by the CCMS-V4 team or the ability of the end system functionality of the application built to meet court needs statewide.

Appendix E: Continued

Scope and Methodology

In July 2007, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) Services over the California Case Management System (CCMS) V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the Regional Administrative Director and CCMS Product Director at the Southern Regional Office (SRO), our objectives are to monitor the services, deliverables, milestones, deadlines, and functionality of the CCMS-V4 project and communicate status, progress, issues, and potential challenges to the success of the project as designed. The IPO/IV&V efforts are designed to give assurance, from an independent and unbiased perspective, that the process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards as well as that potential risks and issues are known by project decision makers. The IPO/IV&V effort cannot require change, but any identified and reported findings and results should be considered by the project sponsors.

To provide appropriate and independent review, analysis, and oversight on the CCMS-V4 project, SEC will generally provide monitoring efforts from July 2007 through June 30, 2010 relative to the following areas:

- Project management and System Development Life Cycle (SDLC) processes, procedures, and communication
- Adherence to schedule
- Techniques and processes employed for risk management, issue management, and communication strategies
- Requirements gathering as part of JAD Sessions
- Completeness of Functional Design and Technical Design
- Traceability of requirements from one SDLC phase to the next
- Testing techniques and processes employed
- Compliance with project management and technical contract requirements

However, the IPO/IV&V efforts will not review or address the completeness of the business requirements being developed cooperatively by Deloitte Consulting, SRO staff, and court Subject Matter Experts (SMEs) as part of functional design joint application development (JAD) sessions. While business requirements will be reviewed from a technical perspective to assess whether they contain sufficient levels of specificity to ensure proper coding and end-user functionality as planned, SEC cannot ensure that all critical business processes and steps are appropriately captured in the business requirements to meet court needs.

Appendix E: Continued

Additionally, our efforts do not address the management surrounding the application developer's budget. Because the AOC awarded Deloitte Consulting a fixed-price contract, a time and material type review and analysis is not warranted in this situation.

Moreover, to provide appropriate and independent review, analysis, and oversight over the CCMS-V4 project, the following parameters need to be met in allowing SEC to perform activities unimpeded:

- Understanding/agreement by all project participants on our independent role and importance of timely information sharing and meeting scheduling;
- Inclusion as a seamless member of the project team;
- Timely knowledge of and inclusion in all project meetings;
- Commitment from all project participants to attend meetings scheduled with the IPOC/IV&V;
- Unfiltered access to all documents, data, deliverables, and personnel deemed relevant by the IPOC/IV&V Team; and
- Full disclosure of project knowledge including items such as project issues, risks, change requests.

If there are challenges in adhering to those parameters, we will escalate our issues and/or concerns to the Internal Audit Services Manager, CCMS Product Director, RAD, CCMS Steering Committee, and CCMS Oversight Committee as necessary or appropriate. Working in conjunction and coordination with the AOC's Internal Audit Services to complete this Statement of Work, we will perform the following tasks:

IPO Specific Tasks

- Conduct meetings, as needed, with key project staff to obtain first-hand information as to the objectives of the project, identify the key players and their roles, and the interrelationship and communication structure between all parties as well as review documents such as organization charts and governance structure.
- Attend meetings, as needed, key court/AOC and vendor personnel to obtain information on their responsibilities, objectives, communications, and schedules.
- Conduct observations, on-going interviews, and document examinations to monitor meeting timelines, deliverables, and milestones as described in the schedule.
- Review project planning/management deliverables and documentation to comment on compliance with industry best practices and adherence to documented project processes
- Perform initial assessment of Project Management processes and documents (project management plan, communication plan, change management plan, implementation plan, etc).

Appendix E: Continued

- Participate in certain critical requirements gathering and physical design sessions (JAD sessions) as deemed necessary or at the direction of the Internal Audit Services Manager to provide expertise courtroom operations (family law, criminal, and traffic), finance, distributions, and audit as well as on the V2 and V3 retrofit and validate processes are being followed.
- Provide an Implementation Strategy Review. This review would consist of an analysis of the implementation approach and the action plan for accomplishing implementation.

IV&V Specific Tasks

- Review Requirement Traceability and Contract at end of Functional Design, Technical Design, and Test Preparation.
- Provide a Functional Design and Requirements Traceability Review. The Functional Design review would consist of an analysis of the Functional Design Specification to assess the readability, consistency, and testability of the design. The Functional Design review will identify issues such as non- testable requirements, vague requirements, requirements that are in conflict or not consistent with each other, etc. The Requirements Traceability review will ensure that all of the contractual requirements have been addressed and are accounted for.
- Provide a Technical (software) Design and Requirements Traceability Review. The Technical Design review would consist of an analysis of the Technical Design Specification to assess the readability, consistency, and testability of the technical design as well as identification of any potential weaknesses in the design. The Technical Design review will identify where the Technical Design may be in conflict with the Functional Design. The Requirements Traceability review will ensure that the design has addressed all of the functional requirements.
- Provide a Test Methodology and Requirements Traceability Review. The Test Methodology review would consist of an analysis of the Test Methodology and a sampling of test scripts which will be traced to the requirements and to the design specification as well as reviewing the data elements necessary for the scripts. The Requirements Traceability Review will ensure that all of the test cases/scripts have been developed to test the design and the functional requirements.
- Review a statistically valid sample of source code (coded based on requirements documented in JAD sessions). Approximately 40 modules will be reviewed which would provide early feedback on compliance to coding standards and comparisons to the design requirements.

Appendix E: Continued

- Review a statistically valid sample of test scripts (unit, integration, system, user acceptance, product acceptance) for compliance with requirements from both a technical perspective and from a court operations perspective (testing enough scenarios/scripts covering critical and most frequent business cases both on a positive/ideal flow and on an exception basis).

IPO/IV&V Combined Tasks

- Assess Systems Development Life Cycle (SDLC) practices to comment on compliance with industry best practices and adherence to documented project processes.
- Review agreed-upon vendor deliverables including, but not limited to Functional Design, Technical Design, Test Methodology, Implementation Strategy, V2 Requirements and V3 Requirements, to comment on compliance with Deliverable Expectations Document (DED).
- Identify and assess any new or ongoing challenges, barriers, risks, or issues.
- Attend meetings, as needed, where deliverables, strategies, timelines, and status are being considered.
- Maintain a log tracking IPO/IV&V issues that delineates any challenges, barriers, risks, issues, defects, milestones changed or missed, and observations warranting discussion and monitoring; monitor the resolution of such issues; document the resolution and closure of each matter.
- Conduct bi-weekly briefings with the RAD and designated Project Manager(s) discussing all previous work and any updates or new developments.
- Compile the results of the IPO/IV&V monitoring efforts in writing. In addition to compliance issues, the report will also contain any other significant findings, conclusions, and recommendations including the identification of risks, lessons learned, best practices, or performance exceeding minimum requirements as well as comment on severity or criticality and impact or consequence of items discussed.
- Ascertain and report on follow-up efforts taken on corrective actions needed and implementation of oversight recommendations.
- Provide reports to the RAD and designated Project Manager(s) on a monthly basis, or more frequent if necessary, based on project stage criticality.

Appendix F: SEC Activities - Performed & Planned

During April, SEC performed the following activities:

- Monitored QA Metrics;
- Monitored Re-Planning Efforts;
- Monitored Testing Efforts;
- Reviewed Budget/Cost Management process;
- Responded to Inquiries from the California Office of the Chief Information Officer;
- Attended weekly and monthly Project Management Meetings, weekly Technical Architecture Meetings, and monthly Steering Committee Meetings, as well as participated in CCMS-V4 IPO/IVV Project Meetings;
- Performed analysis of areas in the Project Oversight Review Checklist Appendix C;
- Identified and tracked potential risks, observations, and issues as well as discussed and prepared monthly IPO/IV&V written status reports.

Planned SEC Activities for May 2010

SEC plans to conduct the following activities over the next month:

- Attend, observe, and participate in a variety of CCMS-V4 meetings including weekly Project Management Meetings, monthly Project Management Meeting, monthly RPO Management Meeting, monthly ISD Meeting, monthly Steering Committee Meetings, weekly Technical Architecture Meetings, CIO Meetings, and monthly IPO/IVV Project Meeting;
- Review technical documents prepared and discussed at weekly meetings as well as other documents distributed as part of weekly and monthly meetings;
- Continue review and comment on the Testing Documentation in terms of sufficiency of detail including implementation of integration test plan and PAT plan;
- Continue review and comment on the Re-Plan effort in terms of executability of the plan;
- Continue review and comment on the cost management practices in place;
- Monitor results of product testing in terms of progress in script executions, frequency and severity of defects identified, and resolution of defects.
- Prepare monthly IPO/IV&V status report that identifies and tracks new risks or issues as well as accomplishments and review prior issue resolution.

The Judicial Council of California, Administrative Office of the Courts

Independent Project Oversight (IPO) and
Independent Verification and Validation (IV&V)
For the CCMS-V4 Development Project

Status Report as of May 31, 2010

SJOBERG & EVASHENK
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Executive Summary

Realizing the importance of independent oversight for high criticality technology projects, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) services for the California Case Management System (CCMS)-V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the CCMS Executive Sponsor in the Regional Program Office (RPO), our objectives are to monitor the activities, deliverables, milestones, deadlines, and design of the CCMS-V4 project and communicate status, progress, issues, and challenges to the success of the project as designed. Our monthly IPO/IV&V reports are intended to capture and assess current project activities to determine whether process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards, as well as that potential risk/issues are known by decision makers at a specific point in time; thus, the monthly items reported are in-flux, continually evolving, and will change over the course of the project.

Period Highlights:

During May, the IPO/IV&V Team monitored the Find and Fix processes. Preliminary timeline estimates, per the CCMS-V4 Weekly Status Report, show Final Functional Design (FFD) Validation anticipated for completion on July 15, 2010 and the corresponding OAH/Juvenile find/fixes completed on August 16, 2010. The Integration Test Planning is scheduled for completion June 18, 2010 with the delivery of the Integration Test Plan and Integration Test Preparation is scheduled for completion on August 16, 2010—at which point, Integration Test Execution will begin and continue through February 2011.

Upon completion of this re-planning effort, the IPO/IV&V Team will review the re-plan and assess the executability of the plan. Although, as of May 31, 2010, the replan document which consists of a revised schedule according to the RPO, is not yet available to the IPO/IV&V Team; thus, we cannot comment on its reasonableness or appropriateness.

The IPO/IV&V Team continues to have concerns about Deloitte's QA Reports that have not addressed our previous concerns such as the resolution of previous QA Report findings and more explanation of the significance and/or meaning of metrics presented in the reports. It is the IPO/IV&V Team's recommendation that future QA Reports provide an interpretation of what various metrics are indicating in the QA reports. Further, the IPO/IV&V Team suggests that report findings (concerns, issues, and opportunities) that have been acted upon and closed should be reported in the next monthly QA Report and then dropped from the report the next reporting period.

Detailed Observations, Impact, and Recommendations

The Southern California Regional Program Office (RPO) staff, AOC staff, individual court staff, and Deloitte Consulting continue to practice project management and systems-engineering practices in accordance with industry standards related to the identification and resolution of issues, risks, items for management attention, and modification and change requests. Additionally, the continued diligence employed by the RPO staff, AOC staff, Court staff, and Deloitte Consulting in addressing issues and following established project management processes has been consistent. As part of our continued IPO/IV&V efforts, we offer the following observations and areas of concern in various project management and technical areas.

Project Oversight Focus Areas

Communication Management:

There do not appear to be any current communication concerns noted by the CCMS-V4 Project Team or the IPO/IV&V Team.

Schedule Management:

Once the re-planning effort has been completed, the IPO/IV&V Team will review the re-plan and assess the executability of the plan/schedule.

Scope Management:

Scope management items raised by the CCMS-V4 Project Team are being actively managed through eRoom.

Risk Management:

As of May 31, 2010, the risks identified below by the CCMS-V4 Project Team remain active.

Risk Number	Risk Title	Activity Performed	Target Resolution Date
37	Justice Partner Readiness	Reference Implementation constraint schemas have been published. This is an accepted risk and will continue to be monitored on a weekly basis. At this time, no mitigation actions are required.	12-31-10
42	FFDV Mitigation Activities	The FFDV Pods will be tracked daily against the plan and work with teams responsible for identifying challenges and developing action plans to mitigate the challenges. Outliers will be raised to the PM Group to work through together in developing additional mitigation activities, as needed.	08-15-10

Risk Number	Risk Title	Activity Performed	Target Resolution Date
43	Integration Testing Readiness	Cycles will be developed within Integration Testing to prioritize the needs for Integration Testing. Cycle 0 will contain functionality needed to support future testing cycles. Cycle Core will address the core functionality within the application. Cycle Other will address areas that will complete FFDV later (i.e., MOCS, OAH, DWRD). Mitigation plans will be developed for areas that will not meet the target entry dates for Integration Testing.	08-15-10
44	Integration Testing Script Execution	Integration Test tracking will include a daily snapshot of the number of test scripts executed as well as activities needed to remediate code, as needed. Outliers will be tracked, managed, and mitigated as they are identified.	12-31-10
45	AOC Testing Resources	PAT resource needs will be communicated to the AOC and the Courts and the availability and on-boarding of staff resources for PAT will be tracked.	12-3-10
47	Integration Testing Readiness	Not having a go forward data strategy, in the Integration and PAT test plans that includes the source configuration and transactional data, is a risk to the AOC as converted configuration and transactional data is not integrated and carried forward by the testing process. Due to this, data migration and conversion integration problems will surface during deployment rather than at Integration and PAT testing. This has the potential of introducing CCMS product quality issues during deployment and could impact the early adopter schedule.	8-15-10

The following risk was closed during the month of May.

Risk Number	Risk Title	Resolution
46	Justice Partner Readiness	This risk was closed and included in Risk 37.

Issue Management:

As of May 31, 2010, there were no open issues tracked by the CCMS-V4 Project Team.

Resource Management:

All parties continue to be concerned that the CCMS-V4 Project requires more resources to complete the product Development and Testing phases. The AOC and the courts have accepted this risk and are monitoring it on a weekly basis.

Cost Management:

There are no new issues with respect to Cost Management.

Technical Focus Areas

Quality Management:

In addition to the IPO/IV&V Team recommendations made in the April 2010 IPO/IV&V report, which are still valid and should be acted upon, the IPO/IV&V Team has some additional going-forward recommendations.

Since the QA Report documentation and findings during the previous CCMS-V4 testing efforts was limited, it is the IPO/IV&V Team's recommendation that the QA Reports be expanded to provide more detailed metrics and Quality Indicators consistent with traditional Software Quality Reports, with specific emphasis on Test reporting. While this was discussed previously, the lack of insight and reporting of the software quality during the previous testing efforts prompts the IPO/IV&V Team to make this recommendation again. And, as recommended in the April 2010 IPO/IV&V Report, the metrics and Quality Indicators should include a through interpretation of what the metrics and Quality Indicators mean to the Deloitte QA Team.

In addition, it is recommended that the QA Report should continue through acceptance of the core CCMS -V4 software and that they should continue, though be modified, through the implementation and customization efforts for all of the individual courts. While the IPO/IV&V Team recognizes that implementation and customization is out of scope of the IPO/IV&V effort, it is still a recommendation we are making in the best interest of our client.

Quality Architecture:

There are no open issues with System Architecture and the System Architecture Team with Deloitte, AOC, ISD, and other Court members continues to do a good job of identifying and defining the system architecture as well as architectural tradeoffs, raising issues for resolution, and generally creating a solid CCMS-V4 system architecture.

Configuration Management:

There are no open issues with Configuration Management. Configuration Management for documentation is being well controlled through eRoom and JCC Web Sites that have built-in controls for Configuration Management.

System Engineering Standards and Practices:

Since Deloitte Consulting appears to be following currently accepted systems engineering standards and practices, even as defined in IEEE Standard 1220, there are no system engineering standards and practices concerns at this point in time.

Requirements Identification and Traceability:

There are no new issues with Requirements Identification and Traceability that have not already been discussed in previous reports.

Detailed Design Review:

There are no open issues with the Detailed Design Review that have not already been discussed in previous reports.

System Development Quality and Progress:

The completeness of the Architecture Team decisions cannot be verified by the IPO/IV&V Team due to the absence of an Architectural Decision Tradeoff Matrix which would document the options, tradeoffs, decisions, and underlying rationale for the approach taken.

Testing Practices and Progress:

At this point in time, the IPO/IV&V Team has not seen a revised test plan or schedule; however, the release of the Integration Test Plan is tentatively planned for June 18, 2010 and the release of the PAT Plan is tentatively planned for August 20, 2010. Thus, the IPO/IV&V Team cannot obtain information on exactly what testing will be re-accomplished and how the re-accomplished testing is anticipated to be performed—namely, the level of detail that will be documented and tested—until the revised test plans are provided to us.

However, the IPO/IV&V Team has been reviewing the list of lower-level testing documentation placed on the Deloitte eRoom Web site. While we do not have access to the specific documentation on eRoom or the JCC Web site, the level of classification of the testing documents, by title, indicates a significantly more detailed focus on individual tests. During the AOC-Deloitte re-planning and re-execution effort, it appears that improvements have been made—but, without access to the revised testing plan and/or schedule, the IPO/IV&V Team is unclear on the details of what is being done and cannot comment on the reasonableness or appropriateness. These testing practices will be further explored by the IPO/IV&V Team once the revised plans are received.

Appendix A: Matrix of Areas of Concern (Open)

The matrix below provides a current listing of all open areas of concern, our recommendations, and the action taken by the CCMS-V4 Project Team. As items are resolved, they will be moved to Appendix B. Key statistics are summarized below:

- **There were no new areas of concern identified this month.**
- **The IPO/IV&V Team strongly believes that this project will continue to be a high risk project due to the constraints imposed by the budget, schedule, and resources.**

Item Number	Area of Concern	Recommendation	Action Taken
Apr10.1	QA Report Metrics	Continue the use of metrics in the QA Reports, but include a definition or interpretation of all metrics shown in the reports.	4-2010 – New this month. 5-2010 – There is no change in this action item.

Appendix B: Matrix of Areas of Concern (Closed)

The matrix below provides a listing of all closed areas of concern, our recommendations, and the action taken to resolve the issues by the CCMS-V4 Project Team. Key statistics are summarized below:

- No areas of concern were closed this month.

Item Number	Area of Concern	Recommendation	Action Taken
Jul07.1	Aggressive schedule	The schedule should be reviewed to ensure that ample time has been allocated to each phase of the project.	<p>09-2007 - No action taken that SEC is aware of.</p> <p>10-2007 – At this point in the project it is difficult to determine if there is ample time allocated to each phase of the project. This item will remain in a watch status (e.g., once Test Planning activities have begun, it will be easier to determine if enough time is allocated to testing activities).</p> <p>11-2007 to 04-2008 – Although 12 weeks were added to the schedule, there is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>05-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>06-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>07-2008 – There is concern that there is not enough time to complete the review of the FFD. In addition, there is concern that there is insufficient time allocated to testing and that test planning has not been fully engaged. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>08-2008 – 27 additional days were added to the schedule for review of the FFD. It is unknown at this point whether the additional days are sufficient to allow a thorough review and better ensure the highest quality product possible. Moreover, because test planning is slow to start, SEC still has concerns about the time allocated to the testing phase. This item will remain in watch status.</p> <p>09-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>10-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>11-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>12-2008 – It is unclear how the extended review timeframe will impact the overall schedule. This item will remain in watch status.</p> <p>1-2009 – The Core application, Portals, and Statewide Data Warehouse portions of the FFD will be completed by March 30, 2009. The Data Exchanges portion is expected to be completed by April 15, 2009. This item will remain in watch status.</p> <p>2-2009 – All portions of the FFD are on track for completion by March 30, 2009 and April 15, 2009, respectively. This item will remain in watch status.</p> <p>3-2009 – The Portals and Statewide Data Warehouse will be accepted by March 31, 2009. The Core application will be completed by March 31, 2009. Data Exchanges will not be completed until the end of April. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>4-2009 – The FFD was signed off May 1, 2009. The Data Exchanges are expected to be completed by May 22, 2009.</p> <p>5-2009 – The Data Exchanges are expected to be completed by June 5, 2009.</p> <p>6-2009 – While the IPO/IV&V Team believes the schedule is aggressive and will remain aggressive for the duration of the project adding to project risk, the RPO and AOC have extended the schedule through contract amendments. At this point, the RPO and AOC have accepted the project risk as neither the schedule nor the budget can be changed.</p>
Aug07.1	JAD Schedule	<p>There does not appear to be a comprehensive schedule of JADs so that participants can plan time accordingly. Thus, Deloitte Consulting should prepare a detailed schedule that sets realistic timeframes needed to JAD each functional area and ensure the schedule is agreed to by all relevant parties.</p>	<p>09-2007 – The schedule should be completed in October 2007.</p> <p>10-2007 – A revised schedule was completed in October 2007. While the schedule provides more details than previous versions, it still does not address the detailed planning that must be conducted to ensure coverage of all functional areas and the workflows associated with each.</p> <p>11-2007 to 04-2008 – JAD scheduling has improved to the point that this is no longer an area of concern. Consequently, this item has been closed. Over the past few months, Deloitte Consulting has been diligent in setting and adhering to its JAD schedule. As the project enter the final design stage, participants appear able to plan time accordingly to ensure they are available to participate in tracks as needed and share their subject matter expertise. Meetings were also held to hear concerns that more time was needed to review developing requirements—resulting in more time added to the overall project development schedule.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Sep07.1	Requirements Gathering	Ensure that a detailed JAD schedule includes a plan for how the workflow interrelationships will be addressed.	<p>10-2007 – While the workflows and interrelationships have not yet been addressed, the AOC has instituted cross-track meetings as part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements are being gathered.</p> <p>11-2007 to 04-2008– The cross-track meetings have proven to be an essential, needed part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements were being gathered. However, to SEC's knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>05-2008– To SEC's knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas. This step should help address some of our concerns. However, since the final design is nearing completion, there is little value in fully mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.1	Project Oversight Activities	Assign person in role of day to day project management responsible for ensuring that issues are resolved timely, do not impact downstream work efforts, and are not in conflict with other project activities, legal provisions, or branch policy.	<p>11-2007 to 04-2008– It was explained that Bob Steiner, the AOC Project Manager, performs these activities and that a Project Management Consultant familiar with V2 and V3, Sean Yingling, will be assigned to assist the Development Project Manager (Bob). This item will remain in watch status over the next month to ensure the activities are being performed.</p> <p>05-2008– SEC will continue to monitor this item until a Responsibility Matrix indicating the project management component responsibilities that are designated to Sean and Bob is developed. The matrix will ensure that no workload gaps exist.</p> <p>06-2008– To date, a Responsibility Matrix has not been provided to SEC for review.</p> <p>07-2008– SEC will work with Bob Steiner and Sean Yingling to better understand the project management responsibilities.</p> <p>08-2008– Bob and Sean have established a seamless working relationship. Bob has ultimate responsibility for all project management activities. Sean’s focus rests with coordinating the FFD review, reporting to the Steering Committee, and following up on issues with the V4 Court Project Managers.</p>
Oct07.2	JAD Session Documentation	Utilize new template or other mechanism to document detailed JAD Session minutes including areas of discussion, results or actions taken, agreements reached, and issues raised as well as distribute timely for approval.	<p>11-2007 to 04-2008 – Starting in mid-April, the JAD tracks created a new template to ensure consistency across JADs for documenting decisions reached and meeting outcomes. However, since it appears that the new template is only used in isolated instances, this item will remain in watch status over the next month.</p> <p>05-2008 – It is not clear whether an AOC CCMS member will be appointed to monitor and summarize decisions made in the JAD sessions, and subsequently elevate those of potential interest to the Steering Committee, especially those that may require higher level buy-in.</p> <p>06-2008 – Since the final design is nearing completion, there is little value in mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.3	Governance Structure and Escalation Process	Clarify and establish the complete governance structure to eliminate confusion related to issue escalation process and decision-making.	<p>11-2007 to 04-2008 – The CCMS Governance Model was distributed to committee members. This item will remain in watch status over the next month to ensure its use.</p> <p>05-2008 – The CCMS Governance Model appears to be in use and effective in allowing participation in project decisions regarding project scope, cost, and schedule.</p>
Apr08.1	Unclear Requirements	<p>Review the requirements to determine the types of clarifications needed for understanding in order to avoid confusion during downstream activities such as coding and preparing for testing.</p> <p>As of our 09-2008 review of the FFD, we have suggested the following additional recommendations:</p> <ol style="list-style-type: none"> 1. Identify and evaluate subjective text in FFD (such as may or could) and clarify within the context of use; 2. Perform a traceability exercise to link use cases to business rules—again to reduce need for individual interpretation; 3. Review business rule part of each section to ensure complete and clear rules have been incorporated into the use case. 4. Evaluate pre and post-conditions to ensure they are correct and complete. 	<p>04-2008 – New this month.</p> <p>05-2008 – It is not clear whether action has been taken on this issue.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas). This item will remain in watch status over the next month to review this process.</p> <p>07-2008 – This item remain in watch status until a better understanding can be achieved and SEC evaluates the review process.</p> <p>08-2008 – SEC will assess this item during their review of the FFD deliverable.</p> <p>09-2008 – SEC has begun to assess this item and will continue to evaluate progress during the AOC/Court review of the FFD deliverable.</p> <p>10-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>11-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>12-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>1-2009 – The RPO Management Team is currently developing plans to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>2-2009 – The RPO Management Team continues to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>3-2009 – The RPO Management Team continues to discuss the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>4-2009 – An updated resource schedule is being developed that will forecast resource needs between now and the beginning integration testing. This item will remain in watch status.</p> <p>5-2009 – An estimate of the number of Court SMEs needed for testing has been provided. However, more SMEs with Family and Juvenile expertise will be needed. This item will remain in watch status.</p> <p>6-2009 – The IPO/IV&V Team has continued to express their concern that the ambiguity surrounding the interpretation of final requirements presents a risk to the construction and testing phases of the project. Data is being captured by the AOC Software Quality Assurance Team during early testing that should assist in defining the extent of the problem and any future concerns will be raised as part of the testing assessment.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Dec08.1	Standardization and Configuration	It is not clear what impact the Standardization and Configuration requirements will have on the FFD and on long-term maintenance of the application. Once all Standardization and Configuration requirements have been defined, the requirements should be traced back into the FFD and reviewed again.	<p>12-2008 – New this month.</p> <p>1-2009 – In the month of January, a Court Executive Management work group was established to address the concerns surrounding the standardization and configuration requirements.</p> <p>2-2009 – The RPO Management Team reported that the Standards and Configuration Management Group will determine whether configurable items are statewide standards or local configurations and that these decisions will not impact the FFD.</p>
Dec08.2	Single Point of Contact for ISD	A single point of contact should be established for AOC that can track and manage daily progress on ISD-related activities	<p>12-2008 – New this month.</p> <p>1-2009 – It is not clear where the roles and responsibilities are documented and whether David Corral, selected as the single point of contact, has the authority to make decisions on behalf of ISD. Virginia Sanders-Hinds will work with IPO/IV&V to better understand the ISD roles and responsibilities within the project.</p> <p>2-2009 – It was clarified that Virginia Sanders-Hinds is the single point of contact with the authority to make decisions on behalf of ISD.</p>
Mar09.1	Justice Partners (Interfaces) Plan	Determine the state and progress of the common “State” interfaces which are currently being reviewed by the Justice Partners and assess the progress for project schedule impact.	<p>4-2009 – The “State” interfaces are being addressed with the Justice Partners. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p> <p>5-2009 – The “State” interfaces are being addressed with the Justice Partners at both the State and local levels. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off (now anticipated for 6-5-09) and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>6-2009 – The “Statewide” interfaces are being addressed with the Justice Partners. – A plan has been defined for day-one critical exchanges and each Justice Partner will be given a Microsoft Project Plan to follow. The AOC will continue to work closely with each Justice Partner to anticipate any potential challenges. However, it is not clear if and when the Justice Partners will participate in PAT. This item will remain in watch status.</p> <p>7-2009 - The CCMS-V4 Project Team has clarified that the Statewide Justice Partners will participate in PAT. This item will be closed out.</p>
Mar09.2	Document Management Plan	Determine the state and progress of the agnostic “generic” interface to support any existing document management solution and assess the progress for project schedule impact.	<p>4-2009 – The “generic” interface is currently under development. This item will remain in watch status. The RPO Management Team has stated that the requirements for document management were gathered during design and have been signed off. The AOC is in the process of standardizing the document management interface for all courts but is unsure whether this effort will be complete prior to Go Live for CCMS-V4. This item will remain in watch status.</p> <p>5-2009 – The “generic” interface is currently under development. This item will remain in watch status.</p> <p>6-2009 – The “generic” interface is currently under development and will have a solution that supports the courts at Go Live. Currently, the early adopter court uses FileNet and is scheduled to test this interface during PAT. For each of the remaining Courts, the agnostic “generic” document management interface will be finalized, if needed, during the deployment effort. This item will remain in watch status.</p> <p>7-2009 – The CCMS-V4 Project Team has clarified that the Lead Courts which use FileNet are scheduled to test this interface during PAT. This item will be closed out.</p>

Appendix C: Project Oversight Review Checklist

To assist us in determining whether the CCMS-V4 project is on track to be completed within the estimated schedule and cost, the Project Oversight Review Checklist is used to identify and quantify any issues and risks affecting these project components.

The checklist format provides a quick reference for the assessment of the project management practices and processes in place over the CCMS-V4 project and will assess the adequacy or deficiency of the area. Further, the checklist may provide comments on the specific items reviewed, interviews conducted, and general practices observed for requirements presented under the five categories identified below. These requirements are consistent with industry standards and accepted best practices such as the Project Management Institute (PMI)'s Project Management Body of Knowledge (PMBOK) and the Institute of Electrical and Electronic Engineers (IEEE) standards. Use of these checklists will assist us in commenting on the effectiveness of the project activities.

- Planning and Tracking
 - Procurement
 - Risk Management
 - Communication
 - System Engineering

No updates were made to the Project Oversight Review Checklist this month.

Project Oversight Review Checklist

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		The business case has been finalized. The project goals, objectives, and expected outcomes are documented in the Deloitte Consulting Statement of Work. The key stakeholders and sponsors are identified and documented in the Project Management Plan for CCMS-V4.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project plan that has been approved is loaded into Microsoft Project. Deloitte Consulting will update the schedule with construction and testing details after the requirements are complete.
Is completion of planned tasks recorded within the PM software?	X		Completion of milestones are tracked within Microsoft Project.
Are actual hours expended by task recorded at least monthly within PM software?		X	Actual hours for Deloitte Consulting staff are tracked weekly within Playbook Navigator, but are not shared with the AOC as this is a fixed price development contract. The AOC has historically not tracked this information.
Are estimated hours to complete by task recorded at least monthly within PM software?		X	Estimated hours to complete for Deloitte Consulting staff are tracked weekly but are not shared with the AOC as this is a fixed-price development contract. Any deviations occurring to planned dates are discussed at an internal weekly meeting between AOC and Deloitte Consulting.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans?	X		There is a formal staffing plan for Deloitte Leads that is shared with the AOC. Deloitte Consulting tracks internal project staffing with respect to acquisition, schedule for arrival and departure of specific staff, and staff training plans. The AOC does not currently have a CCMS-V4 Staffing Plan; staff are allocated at the CCMS level and not at the specific project level.
Have project cost estimates, with supporting data for each cost category, been maintained?	X		While development costs are tracked internally by Deloitte Consulting, they are not shared with the AOC since this is a fixed-price development contract. The AOC tracks the project budget, monies encumbered, and monies expended to date in an Access database.
Are software size estimates developed and tracked?	X		Deloitte Consulting has included estimates for Final Design, Final Construction, Testing, and Conversion.
Are two or more estimation approaches used to refine estimates?	X		A Bottom Up estimate is performed by the Deloitte Consulting Project Manager and a Top Down estimate is performed by the Lead.
Are independent reviews of estimates conducted?	X		There are multiple internal reviewers consisting of Deloitte Consulting, AOC, and Court staff.
Are actual costs recorded and regularly compared to budgeted costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Currently, AOC costs are tracked at the overall CCMS level. At this point, a daily (or on-demand) Access database report can be printed showing project budget, monies encumbered, monies expended to date, and monies forecasted to be spent.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Planning and Tracking			
Is supporting data maintained for actual costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Yet, the RPO has invoice level data to support its actual cost data tracked in its Access database.
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	X		This information is reported weekly, monthly, and quarterly.
Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration mgmt plan?	X		The CCMS-V4 Configuration Management Plan outlines the process and procedures followed for Configuration Management.
Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?	X		This information is tracked in eRoom and in the weekly, monthly, and quarterly status reports.
Is user satisfaction assessed at key project milestones?		X	Deloitte Consulting has stated that user satisfaction is assessed at key project milestones in the form of deliverable review. All deliverable comments are logged, reviewed, and categorized to indicate if a response is needed. According to Deloitte Consulting, all defects or other comments that require a response are addressed and tracked through closure. Other validation processes include proof of concepts, UI prototypes, design sessions, design council sessions, and cross track meetings. As such, Deloitte Consulting believes that acceptance of the deliverable is evidence of user satisfaction. While there are no satisfaction surveys used or assessments performed at key project milestones, the AOC agrees that there are several opportunities to talk through and resolve deliverable disagreements on a case by case basis.
Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?	X		Planning is in compliance with a formal system development life-cycle (SDLC) methodology.
Is there a formal enterprise architecture in place?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point in time, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project. SEC will be investigating the AOC enterprise architecture further as the project progresses.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	X		Project Closeout activities are planned to occur and we will evaluate and comment whether the planned activities occurred at the project closeout. In the interim, Lessons Learned sessions are being conducted at various project phases to identify possible process improvements.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, "alternative procurement") and their required processes followed?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Is a detailed written scope of work for all services included in solicitation documents?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Are detailed requirement specifications included in solicitation documents?	X		Detailed requirements were included in Exhibit B of the Statement of Work. These will be expanded upon during Detailed Design. Thus, we will review or evaluate those requirements when developed.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. For ongoing SOWs, independent third-party vendors are used to review and recommend procurement planning and execution practices.
For large-scale outsourcing, is qualified legal counsel obtained?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. The AOC utilized outside counsel for the V4 Development Contract.
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X		The Risk Management Plan contains the process and procedures for risk. Risks are tracked within eRoom and are discussed during the weekly and monthly status meetings. In addition, the Deloitte Consulting Project Manager meets with the CCMS Product Director weekly to discuss risks.
Does the management team review risks and mitigation progress at least monthly?	X		The management team reviews risks at weekly and monthly status meetings.
Are externally developed risk identification aids used, such as the SEI "Taxonomy Based Questionnaire?"		X	Additional risk identification aids are internal to Deloitte Consulting and are not shared with the AOC. The AOC is not using any other risk identification aids.
Communication			
Is there a written project communications plan?	X		This information is contained in the CCMS-V4 Communication Management Plan.
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		Written weekly, monthly, and quarterly status reports are prepared and discussed with the project management team as well as the Steering Committee/Oversight Committee. In addition, there are executive meetings held to brief the Lead Court CIOs.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Communication			
Are there written escalation policies for issues and risks?	X		This CCMS-V4 Project Management documentation contains this information.
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		The Product Management Group has primary responsibility for working through the issues and risks. Additionally, issues and status are shared with lead court information officers, court executive officers at bi-weekly steering committee meetings as well as with selected presiding judges at the quarterly oversight committee meetings. The RPO is also working diligently to seek input and have stakeholders assume an active ownership role in the development process.
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		AOC and Court staff are planned to be involved from requirements gathering through testing and into implementation.
Do users formally approve/sign-off on written specifications?	X		The requirements will be approved by the AOC and Court staff.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		The RPO Management Team has reported that Deloitte Consulting is using Clear Quest and Clear Case to manage defects and Rational Requisite Pro to track requirements.
Do software engineering standards exist and are they followed?	X		This CCMS-V4 development standards documentation has been reviewed by SEC and found to be adequate.
Is a formal system development life-cycle (SDLC) methodology followed?		X	Deloitte is using an overlapped waterfall SDLC as evidenced by the structure of their project plan and the manner in which activities are performed. CMMI Level 3 requirements require that a defined, standard, consistent process and process measurement be followed. This would require that: <ul style="list-style-type: none"> • Technical processes are defined in writing; • Project roles are clearly defined; • Staff are trained in standard methods and process activities before they are assigned to roles; and • Technical management activities are guided by defined processes. It is not clear where the processes and roles are documented and whether the CCMS-V4 Project is CMMI Level 3 compliant.
Does product defect tracking begin no later than requirements specifications?	X		Product defect tracking occurs during deliverable review. Users submit defects by entering comments in the deliverable. Each defect is tracked to closure within the deliverable. Any corresponding response is attached to the original defect in the body of the deliverable. Before approval of the deliverable, the AOC confirms that all defects have been appropriately addressed.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
System Engineering			
Are formal code reviews conducted?		X	Two levels of code reviews are conducted. Automated reviews of code are conducted using the JCART tool which checks for and highlights unacceptable coding practices. Any issues identified through the JCART execution have to be resolved before the code can be included in the build. Additionally, manual code reviews are conducted by the Architecture Leads (Technical Analysts, Development Leads and the Framework Team). Code review checklists are created and stored in ClearCase. Deloitte should implement a process for ensuring that the coding standards are adhered to as opposed to the AOC assessing the compliance after completion.
Are formal quality assurance procedures followed consistently?	X		The quality assurance documentation was updated to include CCMS-V4. As more QA related data is collected and reported by Deloitte Consulting, the IPO/IV&V Team will be reviewing these reports to assess how data is represented in the reports—such as through metrics—and identify issues with processes if the metrics indicate negative trends.
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	AOC and the Court staff will sign-off on acceptance test results. Acceptance criteria have been established as 0 Severity-1 incidents, 0 Severity-2 incidents, and not more than 50 Severity-3 incidents.
Is the enterprise architecture plan adhered to?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project.
Are formal deliverable inspections performed, beginning with requirements specifications?	X		All deliverables are approved by the AOC and Court staff.
Are IV&V services obtained and used?	X		SEC has been hired to perform IV&V.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Appendix D: IPO/IV&V Project Scorecard

For May 1, 2010 – May 31, 2010 Time Period

Process Area	DEC 2009	JAN 2010	FEB 2010	MAR 2010	APR 2010	MAY 2010	REMARKS
Communication Management							Day-to-day communication continues to be strong.
Schedule Management							The schedule remains aggressive and a replanning effort is under review.
Scope Management							Project scope is managed and controlled through a variety of avenues.
Risk Management							Risks are reported, discussed, and managed on a weekly basis.
Issue Management							Issues are discussed/reported weekly at various project management and Executive Committee meetings.
Resource Management							AOC and Deloitte project resources appear to be insufficient during testing.
Cost Management							ISD costs and RPO costs are maintained in separate databases and there is no effort to combine these in the near future.
Quality Management (Client Functionality)							We are unable to conclude on the quality of the client functionality due to the absence System test defect data related to Deloitte's execution of the System Test scripts.
Quality Architecture							Quality Architecture is currently adequately defined from an industry-sound SEI approach.
Configuration Management							CM, for documentation, is being well controlled through the eRoom and JCC web sites that have built-in controls for CM.
System Engineering Standards and Practices							Deloitte Consulting appears to be following currently accepted systems engineering standards and practices.
Requirements Identification and Traceability							The IPO/IV&V Team has concerns with the lack of traceability between use cases and business rules.
Detailed Design Review							The Technical Design documentation was delivered to the RPO but is an artifact and not a deliverable and therefore, the Detailed Design cannot be assessed.
System Development Quality and Progress							The technical architecture and design is proceeding on the defined schedule with only minor changes.
Testing Practices and Progress							Testing continues to be a concern.



Green – On Track
 Yellow – Warning
 Red – Significant Problems

Appendix E: IPO/IV&V Background, Scope, and Methodology

The California Case Management System (CCMS) is a statewide initiative to bring the courts together to use one application for all case types. CCMS is managed by the Administrative Office of the Courts (AOC) Southern Regional Office (SRO) in Burbank with the participation of the AOC Information Services Division and superior courts in the planning, design, and development sessions. Over the next 2 years, the AOC plans to expand the functionality of the current interim CCMS applications and develop the next phase—CCMS-V4—that will include family law, juvenile dependency, and juvenile delinquency case types as well as incorporate the V2 and V3 products and update the system’s technical architecture and environments. Toward this end, the AOC has executed a contract with Deloitte Consulting to design and develop the V4 component—yet, the success of the V4 Project relies on every party working in harmony toward common goals.

Background:

For all high criticality technology projects such as CCMS-V4, industry best practices strongly encourage independent oversight. Ideally, the independent project oversight process begins during the feasibility study and continues through project closeout. Deficiencies, issues, findings, and recommendations identified by the oversight process should be incorporated into the appropriate project management processes. As the project progresses, the independent review and assessment approach should track the disposition of findings and recommendations in terms of corrective action and implementation of oversight recommendations.

An Independent Project Oversight (IPO) effort is intended to audit system development, acquisition, and maintenance controls to assure a structured project management methodology is adhered to and managed through activities such as project scheduling, risk management, and change management. A primary goal is to provide impartial oversight of the responsibilities and activities of the project office. Similarly, the Independent Verification and Validation (IV&V) provides unbiased oversight of the technical deliverables such as program code, test scripts and results, and network configurations and processes used to create the product. It is intended to evaluate products against system requirements and whether processes used follow the intended life cycle methodology.

However, these efforts are not designed to guarantee success of the CCMS-V4 application nor will the IPO/IV&V efforts ensure the completeness of business requirements designed by the CCMS-V4 team or the ability of the end system functionality of the application built to meet court needs statewide.

Appendix E: Continued

Scope and Methodology

In July 2007, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) Services over the California Case Management System (CCMS) V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the Regional Administrative Director and CCMS Product Director at the Southern Regional Office (SRO), our objectives are to monitor the services, deliverables, milestones, deadlines, and functionality of the CCMS-V4 project and communicate status, progress, issues, and potential challenges to the success of the project as designed. The IPO/IV&V efforts are designed to give assurance, from an independent and unbiased perspective, that the process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards as well as that potential risks and issues are known by project decision makers. The IPO/IV&V effort cannot require change, but any identified and reported findings and results should be considered by the project sponsors.

To provide appropriate and independent review, analysis, and oversight on the CCMS-V4 project, SEC will generally provide monitoring efforts from July 2007 through April 30, 2011 relative to the following areas:

- Project management and System Development Life Cycle (SDLC) processes, procedures, and communication
- Adherence to schedule
- Techniques and processes employed for risk management, issue management, and communication strategies
- Requirements gathering as part of JAD Sessions
- Completeness of Functional Design and Technical Design
- Traceability of requirements from one SDLC phase to the next
- Testing techniques and processes employed
- Compliance with project management and technical contract requirements

However, the IPO/IV&V efforts will not review or address the completeness of the business requirements being developed cooperatively by Deloitte Consulting, SRO staff, and court Subject Matter Experts (SMEs) as part of functional design joint application development (JAD) sessions. While business requirements will be reviewed from a technical perspective to assess whether they contain sufficient levels of specificity to ensure proper coding and end-user functionality as planned, SEC cannot ensure that all critical business processes and steps are appropriately captured in the business requirements to meet court needs.

Appendix E: Continued

Additionally, our efforts do not address the management surrounding the application developer's budget. Because the AOC awarded Deloitte Consulting a fixed-price contract, a time and material type review and analysis is not warranted in this situation.

Moreover, to provide appropriate and independent review, analysis, and oversight over the CCMS-V4 project, the following parameters need to be met in allowing SEC to perform activities unimpeded:

- Understanding/agreement by all project participants on our independent role and importance of timely information sharing and meeting scheduling;
- Inclusion as a seamless member of the project team;
- Timely knowledge of and inclusion in all project meetings;
- Commitment from all project participants to attend meetings scheduled with the IPOC/IV&V;
- Unfiltered access to all documents, data, deliverables, and personnel deemed relevant by the IPOC/IV&V Team; and
- Full disclosure of project knowledge including items such as project issues, risks, change requests.

If there are challenges in adhering to those parameters, we will escalate our issues and/or concerns to the Internal Audit Services Manager, CCMS Product Director, RAD, CCMS Steering Committee, and CCMS Oversight Committee as necessary or appropriate. Working in conjunction and coordination with the AOC's Internal Audit Services to complete this Statement of Work, we will perform the following tasks:

IPO Specific Tasks

- Conduct meetings, as needed, with key project staff to obtain first-hand information as to the objectives of the project, identify the key players and their roles, and the interrelationship and communication structure between all parties as well as review documents such as organization charts and governance structure.
- Attend meetings, as needed, key court/AOC and vendor personnel to obtain information on their responsibilities, objectives, communications, and schedules.
- Conduct observations, on-going interviews, and document examinations to monitor meeting timelines, deliverables, and milestones as described in the schedule.
- Review project planning/management deliverables and documentation to comment on compliance with industry best practices and adherence to documented project processes
- Perform initial assessment of Project Management processes and documents (project management plan, communication plan, change management plan, implementation plan, etc).

Appendix E: Continued

- Participate in certain critical requirements gathering and physical design sessions (JAD sessions) as deemed necessary or at the direction of the Internal Audit Services Manager to provide expertise courtroom operations (family law, criminal, and traffic), finance, distributions, and audit as well as on the V2 and V3 retrofit and validate processes are being followed.
- Provide an Implementation Strategy Review. This review would consist of an analysis of the implementation approach and the action plan for accomplishing implementation.

IV&V Specific Tasks

- Review Requirement Traceability and Contract at end of Functional Design, Technical Design, and Test Preparation.
- Provide a Functional Design and Requirements Traceability Review. The Functional Design review would consist of an analysis of the Functional Design Specification to assess the readability, consistency, and testability of the design. The Functional Design review will identify issues such as non- testable requirements, vague requirements, requirements that are in conflict or not consistent with each other, etc. The Requirements Traceability review will ensure that all of the contractual requirements have been addressed and are accounted for.
- Provide a Technical (software) Design and Requirements Traceability Review. The Technical Design review would consist of an analysis of the Technical Design Specification to assess the readability, consistency, and testability of the technical design as well as identification of any potential weaknesses in the design. The Technical Design review will identify where the Technical Design may be in conflict with the Functional Design. The Requirements Traceability review will ensure that the design has addressed all of the functional requirements.
- Provide a Test Methodology and Requirements Traceability Review. The Test Methodology review would consist of an analysis of the Test Methodology and a sampling of test scripts which will be traced to the requirements and to the design specification as well as reviewing the data elements necessary for the scripts. The Requirements Traceability Review will ensure that all of the test cases/scripts have been developed to test the design and the functional requirements.
- Review a statistically valid sample of source code (coded based on requirements documented in JAD sessions). Approximately 40 modules will be reviewed which would provide early feedback on compliance to coding standards and comparisons to the design requirements.

Appendix E: Continued

- Review a statistically valid sample of test scripts (unit, integration, system, user acceptance, product acceptance) for compliance with requirements from both a technical perspective and from a court operations perspective (testing enough scenarios/scripts covering critical and most frequent business cases both on a positive/ideal flow and on an exception basis).

IPO/IV&V Combined Tasks

- Assess Systems Development Life Cycle (SDLC) practices to comment on compliance with industry best practices and adherence to documented project processes.
- Review agreed-upon vendor deliverables including, but not limited to Functional Design, Technical Design, Test Methodology, Implementation Strategy, V2 Requirements and V3 Requirements, to comment on compliance with Deliverable Expectations Document (DED).
- Identify and assess any new or ongoing challenges, barriers, risks, or issues.
- Attend meetings, as needed, where deliverables, strategies, timelines, and status are being considered.
- Maintain a log tracking IPO/IV&V issues that delineates any challenges, barriers, risks, issues, defects, milestones changed or missed, and observations warranting discussion and monitoring; monitor the resolution of such issues; document the resolution and closure of each matter.
- Conduct bi-weekly briefings with the RAD and designated Project Manager(s) discussing all previous work and any updates or new developments.
- Compile the results of the IPO/IV&V monitoring efforts in writing. In addition to compliance issues, the report will also contain any other significant findings, conclusions, and recommendations including the identification of risks, lessons learned, best practices, or performance exceeding minimum requirements as well as comment on severity or criticality and impact or consequence of items discussed.
- Ascertain and report on follow-up efforts taken on corrective actions needed and implementation of oversight recommendations.
- Provide reports to the RAD and designated Project Manager(s) on a monthly basis, or more frequent if necessary, based on project stage criticality.

Appendix F: SEC Activities - Performed & Planned

During May, SEC performed the following activities:

- Monitored QA Metrics;
- Monitored Re-Planning Efforts;
- Monitored Testing Efforts;
- Attended weekly and monthly Project Management Meetings, weekly Technical Architecture Meetings, and monthly Steering Committee Meetings, as well as participated in CCMS-V4 IPO/IVV Project Meetings;
- Performed analysis of areas in the Project Oversight Review Checklist Appendix C;
- Identified and tracked potential risks, observations, and issues as well as discussed and prepared monthly IPO/IV&V written status reports.

Planned SEC Activities for June 2010

SEC plans to conduct the following activities over the next month:

- Attend, observe, and participate in a variety of CCMS-V4 meetings including weekly Project Management Meetings, monthly Project Management Meeting, monthly RPO Management Meeting, monthly ISD Meeting, monthly Steering Committee Meetings, weekly Technical Architecture Meetings, CIO Meetings, and monthly IPO/IVV Project Meeting;
- Review technical documents prepared and discussed at weekly meetings as well as other documents distributed as part of weekly and monthly meetings;
- Continue review and comment on the Testing Documentation in terms of sufficiency of detail including implementation of integration test plan and PAT plan;
- Continue review and comment on the Re-Plan effort in terms of executability of the plan;
- Monitor results of product testing in terms of progress in script executions, frequency and severity of defects identified, and resolution of defects.
- Prepare monthly IPO/IV&V status report that identifies and tracks new risks or issues as well as accomplishments and review prior issue resolution.

The Judicial Council of California, Administrative Office of the Courts

Independent Project Oversight (IPO) and
Independent Verification and Validation (IV&V)
For the CCMS-V4 Development Project

Status Report as of June 30, 2010

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Executive Summary

Realizing the importance of independent oversight for high criticality technology projects, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) services for the California Case Management System (CCMS)-V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the CCMS Executive Sponsor in the Regional Program Office (RPO), our objectives are to monitor the activities, deliverables, milestones, deadlines, and design of the CCMS-V4 project and communicate status, progress, issues, and challenges to the success of the project as designed. Our monthly IPO/IV&V reports are intended to capture and assess current project activities to determine whether process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards, as well as that potential risk/issues are known by decision makers at a specific point in time; thus, the monthly items reported are in-flux, continually evolving, and will change over the course of the project.

Period Highlights:

During June, the IPO/IV&V Team monitored the Find and Fix processes. Preliminary timeline estimates, per the CCMS-V4 Weekly Status Report, show Final Functional Design (FFD) Validation and Fix (Core) anticipated for completion on July 16, 2010 and the corresponding OAH Find/Fix anticipated for completion on August 16, 2010. The Integration Test Preparation is scheduled for completion August 16, 2010—at which point, Integration Test Execution will begin and continue through February 11, 2011. The Integration Test Plan was expected to be completed by June 18, 2010 but is not available on the AOC's JCC Site or in Deloitte's eRoom. Once it becomes available, the IPO/IV&V Team will review the plan for adherence with industry practices as well as to gain insight into how test scripts are being organized and tester training is being established.

Upon completion of this re-planning effort, the IPO/IV&V Team will review the re-plan and assess the executability of the plan. Although, as of June 30, 2010, the re-plan document which consists of a revised schedule according to the RPO, is still not yet available to the IPO/IV&V Team; thus, we cannot comment on its reasonableness or appropriateness.

The IPO/IV&V Team continues to have concerns about Deloitte's QA Reports that have not addressed our previous concerns such as the resolution of previous QA Report findings and more explanation of the significance and/or meaning of metrics presented in the reports. It is the IPO/IV&V Team's recommendation that future QA Reports provide expanded metrics to give more insight into a broader range of testing activities and that these metrics include an interpretation of what various metrics are indicating in the QA reports. Further, the IPO/IV&V Team suggests that report findings (concerns, issues, and opportunities) that have been acted upon and closed should be reported in the next monthly QA Report and then dropped from the report the next reporting period.

Detailed Observations, Impact, and Recommendations

The Southern California Regional Program Office (RPO) staff, AOC staff, individual court staff, and Deloitte Consulting continue to practice project management and systems-engineering practices in accordance with industry standards related to the identification and resolution of issues, risks, items for management attention, and modification and change requests. Additionally, the continued diligence employed by the RPO staff, AOC staff, Court staff, and Deloitte Consulting in addressing issues and following established project management processes has been consistent. As part of our continued IPO/IV&V efforts, we offer the following observations and areas of concern in various project management and technical areas.

Project Oversight Focus Areas

Communication Management:

There do not appear to be any current communication concerns noted by the CCMS-V4 Project Team or the IPO/IV&V Team.

Schedule Management:

Once the re-planning effort has been completed, the IPO/IV&V Team will review the re-plan and assess the executability of the plan/schedule.

Scope Management:

Scope management items raised by the CCMS-V4 Project Team are being actively managed through eRoom.

Risk Management:

One new risk (Risk 48) was opened during the month of June and, as of June 30, 2010, the risks identified below by the CCMS-V4 Project Team remain active.

Risk Number	Risk Title	Activity Performed	Target Resolution Date
42	FFDV Mitigation Activities	Weekly information about FFDV status, metrics numbers, status report text and details are provided during the Project Management Meeting.	08-15-10

Risk Number	Risk Title	Activity Performed	Target Resolution Date
43	Integration Testing Readiness	The Integration Test Plan, submitted on 6/18/10, provides details about the cycles for integration testing which include 3 cycles from August 2010 through February 2011. Cycle 0 is included within System Validation activities. Currently, all Pods are scheduled to meet the established Find, Fix and Certify dates. Additionally, multiple quality metrics (e.g., 3rd party validation, SUC validation) indicate quality levels above 90% on tested areas to date.	08-15-10
44	Integration Testing Script Execution	Tracking activities for Integration Testing are currently in progress and will be available as part of Cycle 0 activities which are scheduled to start on 7/15/10. Based on the testing results, areas of concern will be raised to the Project Management Team along with recommended mitigation strategies.	12-3-10
45	AOC Testing Resources	AOC staffing estimates will be provided during the week of June 28, 2010.	12-3-10
48	Lack of Court subject matter expertise involved in the remaining E-Filing and Testing efforts	Mitigation activities have not yet been developed.	TBD

The following risks were closed during the month of June.

Risk Number	Risk Title	Resolution
37	Justice Partner Readiness	This risk was closed per the AOC Project Manager. The timing of Early Adopter and Justice Partner testing will be documented within the CCMS-V4 Development Project Plan.
47	Integration Testing Readiness	This risk was closed per the direction of the AOC/Deloitte Project Management meeting. The data approach to support integration and PAT is currently defined in the testing deliverables.

Issue Management:

Three new issues were opened during the month of June and, as of June 30, 2010, the issues identified below by the CCMS-V4 Project Team remain active.

Issue Number	Issue Title	Activity Performed	Target Resolution Date
28	Current OWSM product/architecture does not support UNT Token or SAML for outbound Justice Partner connectivity.	The Patch Set 2 did not fix this issue and Oracle has designed a new patch which is expected to be demonstrated on 5/28/10. Progress will continue to be monitored. However, if the patch is not received and implemented by the start of Core Integration Test, then a decision that Integration/PAT will be conducted with the only working solution (non-unique username/password token) must be discussed.	05-22-10 <i>Date should be updated</i>
29	Current allocation of resources (4 cores across 4 servers) for Adobe LiveCycle is unable to support the average or peak hour volumes.	Original estimates assumed the product would use all 16 cores on the servers to which the product was running. However, to achieve this level of utilization separate LC processes need to run for each core. Currently, the Stress Test environment is being retrofitted to test this configuration. Subsequent testing will be done to provide benchmarks for this platform. The final configuration recommendation would likely impact software licenses and possibly hardware costs. Tests are being executed with multi-instance configurations and the results will be known by 6-25-10.	07-15-10
30	Stress Test environment is observing latency in communication between Oracle RAC DB nodes.	This issue has been through subsequent testing and it was determined to likely be within the server/OS/RAC. Other factors being considered are hardware switch configuration, virtualization, and platform (T5240) related. The current plan is for Deloitte to work with Oracle, SAIC, and the AOC to conduct further analysis to identify and resolve the issue.	07-15-10

Resource Management:

All parties continue to be concerned that the CCMS-V4 Project requires more resources to complete the product Development and Testing phases. The AOC and the courts have accepted this risk and are monitoring it on a weekly basis.

Cost Management:

There are no new issues with respect to Cost Management.

Technical Focus Areas

Quality Management:

In addition to the IPO/IV&V Team recommendations made in the April 2010 IPO/IV&V report, which are still valid and should be acted upon, the IPO/IV&V Team has some additional going-forward recommendations.

Since the QA Report documentation and findings during the previous CCMS-V4 testing efforts was limited, it is the IPO/IV&V Team's recommendation that the QA Reports be expanded to provide more detailed metrics and Quality Indicators consistent with traditional Software Quality Reports, with specific emphasis on Test reporting. While this was discussed previously, the lack of insight and reporting of the software quality during the previous testing efforts prompts the IPO/IV&V Team to make this recommendation again, and we believe this is desired and supported by the RPO Team. And, as recommended in the April 2010 IPO/IV&V Report, the metrics and Quality Indicators should include a through interpretation of what the metrics and Quality Indicators mean to the Deloitte QA Team.

In addition, it is recommended that the QA Report should continue through acceptance of the core CCMS -V4 software and that they should continue, though be modified, through the implementation and customization efforts for all of the individual courts. While the IPO/IV&V Team recognizes that implementation and customization is out of scope of the IPO/IV&V effort, it is still a recommendation we are making in the best interest of our client.

Quality Architecture:

There are no open issues with System Architecture and the System Architecture Team with Deloitte, AOC, ISD, and other Court members continues to do a good job of identifying and defining the system architecture as well as architectural tradeoffs, raising issues for resolution, and generally creating a solid CCMS-V4 system architecture.

Configuration Management:

There are no open issues with Configuration Management. Configuration Management for documentation is being well controlled through eRoom and JCC Web Sites that have built-in controls for Configuration Management.

System Engineering Standards and Practices:

Since Deloitte Consulting appears to be following currently accepted systems engineering standards and practices, even as defined in IEEE Standard 1220, there are no system engineering standards and practices concerns at this point in time.

Requirements Identification and Traceability:

There are no new issues with Requirements Identification and Traceability that have not already been discussed in previous reports.

Detailed Design Review:

There are no open issues with the Detailed Design Review that have not already been discussed in previous reports.

System Development Quality and Progress:

The completeness of the Architecture Team decisions cannot be verified by the IPO/IV&V Team due to the absence of an Architectural Decision Tradeoff Matrix which would document the options, tradeoffs, decisions, and underlying rationale for the approach taken.

Testing Practices and Progress:

The Integration Test Plan was expected to be completed by June 18, 2010, but is not available on the AOC's JCC Site or in Deloitte's eRoom. Once it becomes available, the IPO/IV&V Team will review the plan for adherence with industry practices as well as to gain insight into how test scripts are being organized and tester training is being established. The release of the PAT Plan is tentatively planned for August 20, 2010. Thus, the IPO/IV&V Team cannot obtain information on exactly what testing will be re-accomplished and how the re-accomplished testing is anticipated to be performed—namely, the level of detail that will be documented and tested—until the revised test plans are available. However, the IPO/IV&V Team has been reviewing the list of lower-level testing documentation placed on the Deloitte eRoom Web site. While we do not have access to the specific documentation on eRoom or the JCC Web site, the level of classification of the testing documents, by title, indicates a significantly more detailed focus on individual tests. During the AOC-Deloitte re-planning and re-execution effort, it appears that improvements have been made—but, without access to the revised testing plan and/or schedule, the IPO/IV&V Team is unclear on the details of what is being done and cannot comment on the reasonableness or appropriateness. These testing practices will be further explored by the IPO/IV&V Team once the revised plans are received.

Appendix A: Matrix of Areas of Concern (Open)

The matrix below provides a current listing of all open areas of concern, our recommendations, and the action taken by the CCMS-V4 Project Team. As items are resolved, they will be moved to Appendix B. Key statistics are summarized below:

- **There were no new areas of concern identified this month.**
- **The IPO/IV&V Team strongly believes that this project will continue to be a high risk project due to the constraints imposed by the budget, schedule, and resources.**

Item Number	Area of Concern	Recommendation	Action Taken
Apr10.1	QA Report Metrics	Continue the use of metrics in the QA Reports, but include a definition or interpretation of all metrics shown in the reports.	4-2010 – New this month. 5-2010 – There is no change in this action item. 6-2010 – There is no change in this action item.

Appendix B: Matrix of Areas of Concern (Closed)

The matrix below provides a listing of all closed areas of concern, our recommendations, and the action taken to resolve the issues by the CCMS-V4 Project Team. Key statistics are summarized below:

- No areas of concern were closed this month.

Item Number	Area of Concern	Recommendation	Action Taken
Jul07.1	Aggressive schedule	The schedule should be reviewed to ensure that ample time has been allocated to each phase of the project.	<p>09-2007 - No action taken that SEC is aware of.</p> <p>10-2007 – At this point in the project it is difficult to determine if there is ample time allocated to each phase of the project. This item will remain in a watch status (e.g., once Test Planning activities have begun, it will be easier to determine if enough time is allocated to testing activities).</p> <p>11-2007 to 04-2008 – Although 12 weeks were added to the schedule, there is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>05-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>06-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>07-2008 – There is concern that there is not enough time to complete the review of the FFD. In addition, there is concern that there is insufficient time allocated to testing and that test planning has not been fully engaged. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>08-2008 – 27 additional days were added to the schedule for review of the FFD. It is unknown at this point whether the additional days are sufficient to allow a thorough review and better ensure the highest quality product possible. Moreover, because test planning is slow to start, SEC still has concerns about the time allocated to the testing phase. This item will remain in watch status.</p> <p>09-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>10-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>11-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>12-2008 – It is unclear how the extended review timeframe will impact the overall schedule. This item will remain in watch status.</p> <p>1-2009 – The Core application, Portals, and Statewide Data Warehouse portions of the FFD will be completed by March 30, 2009. The Data Exchanges portion is expected to be completed by April 15, 2009. This item will remain in watch status.</p> <p>2-2009 – All portions of the FFD are on track for completion by March 30, 2009 and April 15, 2009, respectively. This item will remain in watch status.</p> <p>3-2009 – The Portals and Statewide Data Warehouse will be accepted by March 31, 2009. The Core application will be completed by March 31, 2009. Data Exchanges will not be completed until the end of April. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>4-2009 – The FFD was signed off May 1, 2009. The Data Exchanges are expected to be completed by May 22, 2009.</p> <p>5-2009 – The Data Exchanges are expected to be completed by June 5, 2009.</p> <p>6-2009 – While the IPO/IV&V Team believes the schedule is aggressive and will remain aggressive for the duration of the project adding to project risk, the RPO and AOC have extended the schedule through contract amendments. At this point, the RPO and AOC have accepted the project risk as neither the schedule nor the budget can be changed.</p>
Aug07.1	JAD Schedule	<p>There does not appear to be a comprehensive schedule of JADs so that participants can plan time accordingly. Thus, Deloitte Consulting should prepare a detailed schedule that sets realistic timeframes needed to JAD each functional area and ensure the schedule is agreed to by all relevant parties.</p>	<p>09-2007 – The schedule should be completed in October 2007.</p> <p>10-2007 – A revised schedule was completed in October 2007. While the schedule provides more details than previous versions, it still does not address the detailed planning that must be conducted to ensure coverage of all functional areas and the workflows associated with each.</p> <p>11-2007 to 04-2008 – JAD scheduling has improved to the point that this is no longer an area of concern. Consequently, this item has been closed. Over the past few months, Deloitte Consulting has been diligent in setting and adhering to its JAD schedule. As the project enter the final design stage, participants appear able to plan time accordingly to ensure they are available to participate in tracks as needed and share their subject matter expertise. Meetings were also held to hear concerns that more time was needed to review developing requirements—resulting in more time added to the overall project development schedule.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Sep07.1	Requirements Gathering	Ensure that a detailed JAD schedule includes a plan for how the workflow inter-relationships will be addressed.	<p>10-2007 – While the workflows and interrelationships have not yet been addressed, the AOC has instituted cross-track meetings as part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements are being gathered.</p> <p>11-2007 to 04-2008– The cross-track meetings have proven to be an essential, needed part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements were being gathered. However, to SEC’s knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>05-2008– To SEC’s knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas. This step should help address some of our concerns. However, since the final design is nearing completion, there is little value in fully mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.1	Project Oversight Activities	Assign person in role of day to day project management responsible for ensuring that issues are resolved timely, do not impact downstream work efforts, and are not in conflict with other project activities, legal provisions, or branch policy.	<p>11-2007 to 04-2008– It was explained that Bob Steiner, the AOC Project Manager, performs these activities and that a Project Management Consultant familiar with V2 and V3, Sean Yingling, will be assigned to assist the Development Project Manager (Bob). This item will remain in watch status over the next month to ensure the activities are being performed.</p> <p>05-2008– SEC will continue to monitor this item until a Responsibility Matrix indicating the project management component responsibilities that are designated to Sean and Bob is developed. The matrix will ensure that no workload gaps exist.</p> <p>06-2008– To date, a Responsibility Matrix has not been provided to SEC for review.</p> <p>07-2008– SEC will work with Bob Steiner and Sean Yingling to better understand the project management responsibilities.</p> <p>08-2008– Bob and Sean have established a seamless working relationship. Bob has ultimate responsibility for all project management activities. Sean's focus rests with coordinating the FFD review, reporting to the Steering Committee, and following up on issues with the V4 Court Project Managers.</p>
Oct07.2	JAD Session Documentation	Utilize new template or other mechanism to document detailed JAD Session minutes including areas of discussion, results or actions taken, agreements reached, and issues raised as well as distribute timely for approval.	<p>11-2007 to 04-2008 – Starting in mid-April, the JAD tracks created a new template to ensure consistency across JADs for documenting decisions reached and meeting outcomes. However, since it appears that the new template is only used in isolated instances, this item will remain in watch status over the next month.</p> <p>05-2008 – It is not clear whether an AOC CCMS member will be appointed to monitor and summarize decisions made in the JAD sessions, and subsequently elevate those of potential interest to the Steering Committee, especially those that may require higher level buy-in.</p> <p>06-2008 – Since the final design is nearing completion, there is little value in mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.3	Governance Structure and Escalation Process	Clarify and establish the complete governance structure to eliminate confusion related to issue escalation process and decision-making.	<p>11-2007 to 04-2008 – The CCMS Governance Model was distributed to committee members. This item will remain in watch status over the next month to ensure its use.</p> <p>05-2008 – The CCMS Governance Model appears to be in use and effective in allowing participation in project decisions regarding project scope, cost, and schedule.</p>
Apr08.1	Unclear Requirements	<p>Review the requirements to determine the types of clarifications needed for understanding in order to avoid confusion during downstream activities such as coding and preparing for testing.</p> <p>As of our 09-2008 review of the FFD, we have suggested the following additional recommendations:</p> <ol style="list-style-type: none"> 1. Identify and evaluate subjective text in FFD (such as may or could) and clarify within the context of use; 2. Perform a traceability exercise to link use cases to business rules—again to reduce need for individual interpretation; 3. Review business rule part of each section to ensure complete and clear rules have been incorporated into the use case. 4. Evaluate pre and post-conditions to ensure they are correct and complete. 	<p>04-2008 – New this month.</p> <p>05-2008 – It is not clear whether action has been taken on this issue.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas). This item will remain in watch status over the next month to review this process.</p> <p>07-2008 – This item remain in watch status until a better understanding can be achieved and SEC evaluates the review process.</p> <p>08-2008 – SEC will assess this item during their review of the FFD deliverable.</p> <p>09-2008 – SEC has begun to assess this item and will continue to evaluate progress during the AOC/Court review of the FFD deliverable.</p> <p>10-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>11-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>12-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>1-2009 – The RPO Management Team is currently developing plans to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>2-2009 – The RPO Management Team continues to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>3-2009 – The RPO Management Team continues to discuss the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>4-2009 – An updated resource schedule is being developed that will forecast resource needs between now and the beginning integration testing. This item will remain in watch status.</p> <p>5-2009 – An estimate of the number of Court SMEs needed for testing has been provided. However, more SMEs with Family and Juvenile expertise will be needed. This item will remain in watch status.</p> <p>6-2009 – The IPO/IV&V Team has continued to express their concern that the ambiguity surrounding the interpretation of final requirements presents a risk to the construction and testing phases of the project. Data is being captured by the AOC Software Quality Assurance Team during early testing that should assist in defining the extent of the problem and any future concerns will be raised as part of the testing assessment.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Dec08.1	Standardization and Configuration	It is not clear what impact the Standardization and Configuration requirements will have on the FFD and on long-term maintenance of the application. Once all Standardization and Configuration requirements have been defined, the requirements should be traced back into the FFD and reviewed again.	<p>12-2008 – New this month.</p> <p>1-2009 – In the month of January, a Court Executive Management work group was established to address the concerns surrounding the standardization and configuration requirements.</p> <p>2-2009 – The RPO Management Team reported that the Standards and Configuration Management Group will determine whether configurable items are statewide standards or local configurations and that these decisions will not impact the FFD.</p>
Dec08.2	Single Point of Contact for ISD	A single point of contact should be established for AOC that can track and manage daily progress on ISD-related activities	<p>12-2008 – New this month.</p> <p>1-2009 – It is not clear where the roles and responsibilities are documented and whether David Corral, selected as the single point of contact, has the authority to make decisions on behalf of ISD. Virginia Sanders-Hinds will work with IPO/IV&V to better understand the ISD roles and responsibilities within the project.</p> <p>2-2009 – It was clarified that Virginia Sanders-Hinds is the single point of contact with the authority to make decisions on behalf of ISD.</p>
Mar09.1	Justice Partners (Interfaces) Plan	Determine the state and progress of the common “State” interfaces which are currently being reviewed by the Justice Partners and assess the progress for project schedule impact.	<p>4-2009 – The “State” interfaces are being addressed with the Justice Partners. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p> <p>5-2009 – The “State” interfaces are being addressed with the Justice Partners at both the State and local levels. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off (now anticipated for 6-5-09) and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>6-2009 – The “Statewide” interfaces are being addressed with the Justice Partners. – A plan has been defined for day-one critical exchanges and each Justice Partner will be given a Microsoft Project Plan to follow. The AOC will continue to work closely with each Justice Partner to anticipate any potential challenges. However, it is not clear if and when the Justice Partners will participate in PAT. This item will remain in watch status.</p> <p>7-2009 - The CCMS-V4 Project Team has clarified that the Statewide Justice Partners will participate in PAT. This item will be closed out.</p>
Mar09.2	Document Management Plan	Determine the state and progress of the agnostic “generic” interface to support any existing document management solution and assess the progress for project schedule impact.	<p>4-2009 – The “generic” interface is currently under development. This item will remain in watch status. The RPO Management Team has stated that the requirements for document management were gathered during design and have been signed off. The AOC is in the process of standardizing the document management interface for all courts but is unsure whether this effort will be complete prior to Go Live for CCMS-V4. This item will remain in watch status.</p> <p>5-2009 – The “generic” interface is currently under development. This item will remain in watch status.</p> <p>6-2009 – The “generic” interface is currently under development and will have a solution that supports the courts at Go Live. Currently, the early adopter court uses FileNet and is scheduled to test this interface during PAT. For each of the remaining Courts, the agnostic “generic” document management interface will be finalized, if needed, during the deployment effort. This item will remain in watch status.</p> <p>7-2009 – The CCMS-V4 Project Team has clarified that the Lead Courts which use FileNet are scheduled to test this interface during PAT. This item will be closed out.</p>

Appendix C: Project Oversight Review Checklist

To assist us in determining whether the CCMS-V4 project is on track to be completed within the estimated schedule and cost, the Project Oversight Review Checklist is used to identify and quantify any issues and risks affecting these project components.

The checklist format provides a quick reference for the assessment of the project management practices and processes in place over the CCMS-V4 project and will assess the adequacy or deficiency of the area. Further, the checklist may provide comments on the specific items reviewed, interviews conducted, and general practices observed for requirements presented under the five categories identified below. These requirements are consistent with industry standards and accepted best practices such as the Project Management Institute (PMI)'s Project Management Body of Knowledge (PMBOK) and the Institute of Electrical and Electronic Engineers (IEEE) standards. Use of these checklists will assist us in commenting on the effectiveness of the project activities.

- Planning and Tracking
 - Procurement
 - Risk Management
 - Communication
 - System Engineering

No updates were made to the Project Oversight Review Checklist this month.

Project Oversight Review Checklist

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		The business case has been finalized. The project goals, objectives, and expected outcomes are documented in the Deloitte Consulting Statement of Work. The key stakeholders and sponsors are identified and documented in the Project Management Plan for CCMS-V4.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project plan that has been approved is loaded into Microsoft Project. Deloitte Consulting will update the schedule with construction and testing details after the requirements are complete.
Is completion of planned tasks recorded within the PM software?	X		Completion of milestones are tracked within Microsoft Project.
Are actual hours expended by task recorded at least monthly within PM software?		X	Actual hours for Deloitte Consulting staff are tracked weekly within Playbook Navigator, but are not shared with the AOC as this is a fixed price development contract. The AOC has historically not tracked this information.
Are estimated hours to complete by task recorded at least monthly within PM software?		X	Estimated hours to complete for Deloitte Consulting staff are tracked weekly but are not shared with the AOC as this is a fixed-price development contract. Any deviations occurring to planned dates are discussed at an internal weekly meeting between AOC and Deloitte Consulting.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans?	X		There is a formal staffing plan for Deloitte Leads that is shared with the AOC. Deloitte Consulting tracks internal project staffing with respect to acquisition, schedule for arrival and departure of specific staff, and staff training plans. The AOC does not currently have a CCMS-V4 Staffing Plan; staff are allocated at the CCMS level and not at the specific project level.
Have project cost estimates, with supporting data for each cost category, been maintained?	X		While development costs are tracked internally by Deloitte Consulting, they are not shared with the AOC since this is a fixed-price development contract. The AOC tracks the project budget, monies encumbered, and monies expended to date in an Access database.
Are software size estimates developed and tracked?	X		Deloitte Consulting has included estimates for Final Design, Final Construction, Testing, and Conversion.
Are two or more estimation approaches used to refine estimates?	X		A Bottom Up estimate is performed by the Deloitte Consulting Project Manager and a Top Down estimate is performed by the Lead.
Are independent reviews of estimates conducted?	X		There are multiple internal reviewers consisting of Deloitte Consulting, AOC, and Court staff.
Are actual costs recorded and regularly compared to budgeted costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Currently, AOC costs are tracked at the overall CCMS level. At this point, a daily (or on-demand) Access database report can be printed showing project budget, monies encumbered, monies expended to date, and monies forecasted to be spent.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Planning and Tracking			
Is supporting data maintained for actual costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Yet, the RPO has invoice level data to support its actual cost data tracked in its Access database.
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	X		This information is reported weekly, monthly, and quarterly.
Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration mgmt plan?	X		The CCMS-V4 Configuration Management Plan outlines the process and procedures followed for Configuration Management.
Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?	X		This information is tracked in eRoom and in the weekly, monthly, and quarterly status reports.
Is user satisfaction assessed at key project milestones?		X	Deloitte Consulting has stated that user satisfaction is assessed at key project milestones in the form of deliverable review. All deliverable comments are logged, reviewed, and categorized to indicate if a response is needed. According to Deloitte Consulting, all defects or other comments that require a response are addressed and tracked through closure. Other validation processes include proof of concepts, UI prototypes, design sessions, design council sessions, and cross track meetings. As such, Deloitte Consulting believes that acceptance of the deliverable is evidence of user satisfaction. While there are no satisfaction surveys used or assessments performed at key project milestones, the AOC agrees that there are several opportunities to talk through and resolve deliverable disagreements on a case by case basis.
Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?	X		Planning is in compliance with a formal system development life-cycle (SDLC) methodology.
Is there a formal enterprise architecture in place?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point in time, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project. SEC will be investigating the AOC enterprise architecture further as the project progresses.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	X		Project Closeout activities are planned to occur and we will evaluate and comment whether the planned activities occurred at the project closeout. In the interim, Lessons Learned sessions are being conducted at various project phases to identify possible process improvements.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, "alternative procurement") and their required processes followed?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Is a detailed written scope of work for all services included in solicitation documents?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Are detailed requirement specifications included in solicitation documents?	X		Detailed requirements were included in Exhibit B of the Statement of Work. These will be expanded upon during Detailed Design. Thus, we will review or evaluate those requirements when developed.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. For ongoing SOWs, independent third-party vendors are used to review and recommend procurement planning and execution practices.
For large-scale outsourcing, is qualified legal counsel obtained?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. The AOC utilized outside counsel for the V4 Development Contract.
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X		The Risk Management Plan contains the process and procedures for risk. Risks are tracked within eRoom and are discussed during the weekly and monthly status meetings. In addition, the Deloitte Consulting Project Manager meets with the CCMS Product Director weekly to discuss risks.
Does the management team review risks and mitigation progress at least monthly?	X		The management team reviews risks at weekly and monthly status meetings.
Are externally developed risk identification aids used, such as the SEI "Taxonomy Based Questionnaire"?		X	Additional risk identification aids are internal to Deloitte Consulting and are not shared with the AOC. The AOC is not using any other risk identification aids.
Communication			
Is there a written project communications plan?	X		This information is contained in the CCMS-V4 Communication Management Plan.
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		Written weekly, monthly, and quarterly status reports are prepared and discussed with the project management team as well as the Steering Committee/Oversight Committee. In addition, there are executive meetings held to brief the Lead Court CIOs.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Communication			
Are there written escalation policies for issues and risks?	X		This CCMS-V4 Project Management documentation contains this information.
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		The Product Management Group has primary responsibility for working through the issues and risks. Additionally, issues and status are shared with lead court information officers, court executive officers at bi-weekly steering committee meetings as well as with selected presiding judges at the quarterly oversight committee meetings. The RPO is also working diligently to seek input and have stakeholders assume an active ownership role in the development process.
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		AOC and Court staff are planned to be involved from requirements gathering through testing and into implementation.
Do users formally approve/sign-off on written specifications?	X		The requirements will be approved by the AOC and Court staff.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		The RPO Management Team has reported that Deloitte Consulting is using Clear Quest and Clear Case to manage defects and Rational Requisite Pro to track requirements.
Do software engineering standards exist and are they followed?	X		This CCMS-V4 development standards documentation has been reviewed by SEC and found to be adequate.
Is a formal system development life-cycle (SDLC) methodology followed?		X	<p>Deloitte is using an overlapped waterfall SDLC as evidenced by the structure of their project plan and the manner in which activities are performed.</p> <p>CMMI Level 3 requirements require that a defined, standard, consistent process and process measurement be followed. This would require that:</p> <ul style="list-style-type: none"> • Technical processes are defined in writing; • Project roles are clearly defined; • Staff are trained in standard methods and process activities before they are assigned to roles; and • Technical management activities are guided by defined processes. <p>It is not clear where the processes and roles are documented and whether the CCMS-V4 Project is CMMI Level 3 compliant.</p>
Does product defect tracking begin no later than requirements specifications?	X		Product defect tracking occurs during deliverable review. Users submit defects by entering comments in the deliverable. Each defect is tracked to closure within the deliverable. Any corresponding response is attached to the original defect in the body of the deliverable. Before approval of the deliverable, the AOC confirms that all defects have been appropriately addressed.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
System Engineering			
Are formal code reviews conducted?		X	Two levels of code reviews are conducted. Automated reviews of code are conducted using the JCART tool which checks for and highlights unacceptable coding practices. Any issues identified through the JCART execution have to be resolved before the code can be included in the build. Additionally, manual code reviews are conducted by the Architecture Leads (Technical Analysts, Development Leads and the Framework Team). Code review checklists are created and stored in ClearCase. Deloitte should implement a process for ensuring that the coding standards are adhered to as opposed to the AOC assessing the compliance after completion.
Are formal quality assurance procedures followed consistently?	X		The quality assurance documentation was updated to include CCMS-V4. As more QA related data is collected and reported by Deloitte Consulting, the IPO/IV&V Team will be reviewing these reports to assess how data is represented in the reports—such as through metrics—and identify issues with processes if the metrics indicate negative trends.
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	AOC and the Court staff will sign-off on acceptance test results. Acceptance criteria have been established as 0 Severity-1 incidents, 0 Severity-2 incidents, and not more than 50 Severity-3 incidents.
Is the enterprise architecture plan adhered to?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project.
Are formal deliverable inspections performed, beginning with requirements specifications?	X		All deliverables are approved by the AOC and Court staff.
Are IV&V services obtained and used?	X		SEC has been hired to perform IV&V.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Appendix D: IPO/IV&V Project Scorecard

For June 1, 2010 – June 30, 2010 Time Period

Process Area	JAN 2010	FEB 2010	MAR 2010	APR 2010	MAY 2010	JUN 2010	REMARKS
Communication Management							Day-to-day communication continues to be strong.
Schedule Management							The schedule remains aggressive and a re-planning effort is under review.
Scope Management							Project scope is managed and controlled through a variety of avenues.
Risk Management							Risks are reported, discussed, and managed on a weekly basis.
Issue Management							Issues are discussed/reported weekly at various project management and Executive Committee meetings.
Resource Management							AOC and Deloitte project resources appear to be insufficient during testing.
Cost Management							ISD costs and RPO costs are maintained in separate databases and there is no effort to combine these in the near future.
Quality Management (Client Functionality)							We are unable to conclude on the quality of the client functionality due to the absence System test defect data related to Deloitte's execution of the System Test scripts.
Quality Architecture							Quality Architecture is currently adequately defined from an industry-sound SEI approach.
Configuration Management							CM, for documentation, is being well controlled through the eRoom and JCC web sites that have built-in controls for CM.
System Engineering Standards and Practices							Deloitte Consulting appears to be following currently accepted systems engineering standards and practices.
Requirements Identification and Traceability							The IPO/IV&V Team has concerns with the lack of traceability between use cases and business rules.
Detailed Design Review							The Technical Design documentation was delivered to the RPO but is an artifact and not a deliverable and therefore, the Detailed Design cannot be assessed.
System Development Quality and Progress							The technical architecture and design is proceeding on the defined schedule with only minor changes.
Testing Practices and Progress							Testing continues to be a concern.



Green – On Track
 Yellow – Warning
 Red – Significant Problems

Appendix E: IPO/IV&V Background, Scope, and Methodology

The California Case Management System (CCMS) is a statewide initiative to bring the courts together to use one application for all case types. CCMS is managed by the Administrative Office of the Courts (AOC) Southern Regional Office (SRO) in Burbank with the participation of the AOC Information Services Division and superior courts in the planning, design, and development sessions. Over the next 2 years, the AOC plans to expand the functionality of the current interim CCMS applications and develop the next phase—CCMS-V4—that will include family law, juvenile dependency, and juvenile delinquency case types as well as incorporate the V2 and V3 products and update the system’s technical architecture and environments. Toward this end, the AOC has executed a contract with Deloitte Consulting to design and develop the V4 component—yet, the success of the V4 Project relies on every party working in harmony toward common goals.

Background:

For all high criticality technology projects such as CCMS-V4, industry best practices strongly encourage independent oversight. Ideally, the independent project oversight process begins during the feasibility study and continues through project closeout. Deficiencies, issues, findings, and recommendations identified by the oversight process should be incorporated into the appropriate project management processes. As the project progresses, the independent review and assessment approach should track the disposition of findings and recommendations in terms of corrective action and implementation of oversight recommendations.

An Independent Project Oversight (IPO) effort is intended to audit system development, acquisition, and maintenance controls to assure a structured project management methodology is adhered to and managed through activities such as project scheduling, risk management, and change management. A primary goal is to provide impartial oversight of the responsibilities and activities of the project office. Similarly, the Independent Verification and Validation (IV&V) provides unbiased oversight of the technical deliverables such as program code, test scripts and results, and network configurations and processes used to create the product. It is intended to evaluate products against system requirements and whether processes used follow the intended life cycle methodology.

However, these efforts are not designed to guarantee success of the CCMS-V4 application nor will the IPO/IV&V efforts ensure the completeness of business requirements designed by the CCMS-V4 team or the ability of the end system functionality of the application built to meet court needs statewide.

Appendix E: Continued

Scope and Methodology

In July 2007, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) Services over the California Case Management System (CCMS) V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the Regional Administrative Director and CCMS Product Director at the Southern Regional Office (SRO), our objectives are to monitor the services, deliverables, milestones, deadlines, and functionality of the CCMS-V4 project and communicate status, progress, issues, and potential challenges to the success of the project as designed. The IPO/IV&V efforts are designed to give assurance, from an independent and unbiased perspective, that the process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards as well as that potential risks and issues are known by project decision makers. The IPO/IV&V effort cannot require change, but any identified and reported findings and results should be considered by the project sponsors.

To provide appropriate and independent review, analysis, and oversight on the CCMS-V4 project, SEC will generally provide monitoring efforts from July 2007 through April 30, 2011 relative to the following areas:

- Project management and System Development Life Cycle (SDLC) processes, procedures, and communication
- Adherence to schedule
- Techniques and processes employed for risk management, issue management, and communication strategies
- Requirements gathering as part of JAD Sessions
- Completeness of Functional Design and Technical Design
- Traceability of requirements from one SDLC phase to the next
- Testing techniques and processes employed
- Compliance with project management and technical contract requirements

However, the IPO/IV&V efforts will not review or address the completeness of the business requirements being developed cooperatively by Deloitte Consulting, SRO staff, and court Subject Matter Experts (SMEs) as part of functional design joint application development (JAD) sessions. While business requirements will be reviewed from a technical perspective to assess whether they contain sufficient levels of specificity to ensure proper coding and end-user functionality as planned, SEC cannot ensure that all critical business processes and steps are appropriately captured in the business requirements to meet court needs.

Appendix E: Continued

Additionally, our efforts do not address the management surrounding the application developer's budget. Because the AOC awarded Deloitte Consulting a fixed-price contract, a time and material type review and analysis is not warranted in this situation.

Moreover, to provide appropriate and independent review, analysis, and oversight over the CCMS-V4 project, the following parameters need to be met in allowing SEC to perform activities unimpeded:

- Understanding/agreement by all project participants on our independent role and importance of timely information sharing and meeting scheduling;
- Inclusion as a seamless member of the project team;
- Timely knowledge of and inclusion in all project meetings;
- Commitment from all project participants to attend meetings scheduled with the IPOC/IV&V;
- Unfiltered access to all documents, data, deliverables, and personnel deemed relevant by the IPOC/IV&V Team; and
- Full disclosure of project knowledge including items such as project issues, risks, change requests.

If there are challenges in adhering to those parameters, we will escalate our issues and/or concerns to the Internal Audit Services Manager, CCMS Product Director, RAD, CCMS Steering Committee, and CCMS Oversight Committee as necessary or appropriate. Working in conjunction and coordination with the AOC's Internal Audit Services to complete this Statement of Work, we will perform the following tasks:

IPO Specific Tasks

- Conduct meetings, as needed, with key project staff to obtain first-hand information as to the objectives of the project, identify the key players and their roles, and the interrelationship and communication structure between all parties as well as review documents such as organization charts and governance structure.
- Attend meetings, as needed, key court/AOC and vendor personnel to obtain information on their responsibilities, objectives, communications, and schedules.
- Conduct observations, on-going interviews, and document examinations to monitor meeting timelines, deliverables, and milestones as described in the schedule.
- Review project planning/management deliverables and documentation to comment on compliance with industry best practices and adherence to documented project processes
- Perform initial assessment of Project Management processes and documents (project management plan, communication plan, change management plan, implementation plan, etc).

Appendix E: Continued

- Participate in certain critical requirements gathering and physical design sessions (JAD sessions) as deemed necessary or at the direction of the Internal Audit Services Manager to provide expertise courtroom operations (family law, criminal, and traffic), finance, distributions, and audit as well as on the V2 and V3 retrofit and validate processes are being followed.
- Provide an Implementation Strategy Review. This review would consist of an analysis of the implementation approach and the action plan for accomplishing implementation.

IV&V Specific Tasks

- Review Requirement Traceability and Contract at end of Functional Design, Technical Design, and Test Preparation.
- Provide a Functional Design and Requirements Traceability Review. The Functional Design review would consist of an analysis of the Functional Design Specification to assess the readability, consistency, and testability of the design. The Functional Design review will identify issues such as non- testable requirements, vague requirements, requirements that are in conflict or not consistent with each other, etc. The Requirements Traceability review will ensure that all of the contractual requirements have been addressed and are accounted for.
- Provide a Technical (software) Design and Requirements Traceability Review. The Technical Design review would consist of an analysis of the Technical Design Specification to assess the readability, consistency, and testability of the technical design as well as identification of any potential weaknesses in the design. The Technical Design review will identify where the Technical Design may be in conflict with the Functional Design. The Requirements Traceability review will ensure that the design has addressed all of the functional requirements.
- Provide a Test Methodology and Requirements Traceability Review. The Test Methodology review would consist of an analysis of the Test Methodology and a sampling of test scripts which will be traced to the requirements and to the design specification as well as reviewing the data elements necessary for the scripts. The Requirements Traceability Review will ensure that all of the test cases/scripts have been developed to test the design and the functional requirements.
- Review a statistically valid sample of source code (coded based on requirements documented in JAD sessions). Approximately 40 modules will be reviewed which would provide early feedback on compliance to coding standards and comparisons to the design requirements.

Appendix E: Continued

- Review a statistically valid sample of test scripts (unit, integration, system, user acceptance, product acceptance) for compliance with requirements from both a technical perspective and from a court operations perspective (testing enough scenarios/scripts covering critical and most frequent business cases both on a positive/ideal flow and on an exception basis).

IPO/IV&V Combined Tasks

- Assess Systems Development Life Cycle (SDLC) practices to comment on compliance with industry best practices and adherence to documented project processes.
- Review agreed-upon vendor deliverables including, but not limited to Functional Design, Technical Design, Test Methodology, Implementation Strategy, V2 Requirements and V3 Requirements, to comment on compliance with Deliverable Expectations Document (DED).
- Identify and assess any new or ongoing challenges, barriers, risks, or issues.
- Attend meetings, as needed, where deliverables, strategies, timelines, and status are being considered.
- Maintain a log tracking IPO/IV&V issues that delineates any challenges, barriers, risks, issues, defects, milestones changed or missed, and observations warranting discussion and monitoring; monitor the resolution of such issues; document the resolution and closure of each matter.
- Conduct bi-weekly briefings with the RAD and designated Project Manager(s) discussing all previous work and any updates or new developments.
- Compile the results of the IPO/IV&V monitoring efforts in writing. In addition to compliance issues, the report will also contain any other significant findings, conclusions, and recommendations including the identification of risks, lessons learned, best practices, or performance exceeding minimum requirements as well as comment on severity or criticality and impact or consequence of items discussed.
- Ascertain and report on follow-up efforts taken on corrective actions needed and implementation of oversight recommendations.
- Provide reports to the RAD and designated Project Manager(s) on a monthly basis, or more frequent if necessary, based on project stage criticality.

Appendix F: SEC Activities - Performed & Planned

During June, SEC performed the following activities:

- Monitored QA Metrics;
- Monitored Re-Planning Efforts;
- Monitored Testing Efforts;
- Attended weekly and monthly Project Management Meetings, weekly Technical Architecture Meetings, and monthly Steering Committee Meetings, as well as participated in CCMS-V4 IPO/IVV Project Meetings;
- Performed analysis of areas in the Project Oversight Review Checklist Appendix C;
- Identified and tracked potential risks, observations, and issues as well as discussed and prepared monthly IPO/IV&V written status reports.

Planned SEC Activities for July 2010

SEC plans to conduct the following activities over the next month:

- Attend, observe, and participate in a variety of CCMS-V4 meetings including weekly Project Management Meetings, monthly Project Management Meeting, monthly RPO Management Meeting, monthly ISD Meeting, monthly Steering Committee Meetings, weekly Technical Architecture Meetings, CIO Meetings, and monthly IPO/IVV Project Meeting;
- Review technical documents prepared and discussed at weekly meetings as well as other documents distributed as part of weekly and monthly meetings;
- Request a copy of the Integration Test Plan and review, if available;
- Continue review and comment on the Testing Documentation in terms of sufficiency of detail including implementation of integration test plan and PAT plan;
- Continue review and comment on the Re-Plan effort in terms of executability of the plan;
- Monitor results of product testing in terms of progress in script executions, frequency and severity of defects identified, and resolution of defects.
- Prepare monthly IPO/IV&V status report that identifies and tracks new risks or issues as well as accomplishments and review prior issue resolution.

The Judicial Council of California, Administrative Office of the Courts

Independent Project Oversight (IPO) and
Independent Verification and Validation (IV&V)
For the CCMS-V4 Development Project

Status Report as of July 31, 2010

SJOBERG EVASHENK
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Executive Summary

Realizing the importance of independent oversight for high criticality technology projects, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) services for the California Case Management System (CCMS)-V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the CCMS Executive Sponsor in the Regional Program Office (RPO), our objectives are to monitor the activities, deliverables, milestones, deadlines, and design of the CCMS-V4 project and communicate status, progress, issues, and challenges to the success of the project as designed. Our monthly IPO/IV&V reports are intended to capture and assess current project activities to determine whether process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards, as well as that potential risk/issues are known by decision makers at a specific point in time; thus, the monthly items reported are in-flux, continually evolving, and will change over the course of the project.

Period Highlights:

The Governance Model for CCMS is being revised to include a wider audience and participation. The existing CCMS Oversight Committee will be replaced with the CCMS Executive Committee which will include judges and court executives. The CCMS Steering Committee will also be changed to include court representatives. As of July 31, 2010, the Governance Model was still in internal review and will be distributed to the IPO/IV&V Team when finalized.

On a positive note and as a way of incentivizing the Courts to participate in the project, the AOC has arranged to pay Court Testers and Project Managers in an effort to gain more participation from the Courts. Project Managers would be paid \$25,000 per quarter plus travel expenses, would be based in Santa Ana, and participate, on behalf of their court, in all Project Manager-related activities. Court Testers would be paid between \$20,000 and \$55,000 depending on the project phase and length of participation, with the expectation of committing to a testing phase.

The IPO/IV&V Team reviewed the CCMS-V4 Core Product Integration Test Plan, Amendment #1, dated 18 June 2010 and has recommendations including clarity needed where System Validation Testing is performed, the necessity for a full regression test, and automation of the test scripts. Some of the more significant changes from an IPO/IV&V perspective are:

- The duration of Integration Testing was expanded from 16-weeks to 26-weeks;
- Defined management objectives for each cycle include Key Performance Indicators (KPIs). However, since the initial KPI structure was to be defined in Attachment A, which was not located with the plan, the IPO/IV&V Team does not know what the initial KPI structure is in order to determine the depth and breadth of the KPIs;

- There is a clear commitment of AOC/Court Subject Matter Experts (SMEs) to support the testing efforts. There are twenty-three (23) SMEs supporting the testing effort daily through test validation to provide business subject matter expertise and clarify business issues;
- Cycle 2 appears to be a cycle where a stable system is achieved after Cycle 1 testing- in order to better perform Cycle 3 after the Cycle 1 defects are corrected; and
- A new process is defined for the Defect Lifecycle which is quantifiably less complex and more streamlined.

Detailed Observations, Impact, and Recommendations

The Southern California Regional Program Office (RPO) staff, AOC staff, individual court staff, and Deloitte Consulting continue to practice project management and systems-engineering practices in accordance with industry standards related to the identification and resolution of issues, risks, items for management attention, and modification and change requests. Additionally, the continued diligence employed by the RPO staff, AOC staff, Court staff, and Deloitte Consulting in addressing issues and following established project management processes has been consistent. As part of our continued IPO/IV&V efforts, we offer the following observations and areas of concern in various project management and technical areas.

Project Oversight Focus Areas

Communication Management:

There do not appear to be any current communication concerns noted by the CCMS-V4 Project Team or the IPO/IV&V Team.

Schedule Management:

Once the re-planning effort has been completed, the IPO/IV&V Team will review the re-plan and assess the executability of the plan/schedule.

Scope Management:

Scope management items raised by the CCMS-V4 Project Team are being actively managed through eRoom.

Risk Management:

No new risks were opened and no risks were closed during the month of July. As of July 31, 2010, the risks identified below by the CCMS-V4 Project Team remain active.

Risk Number	Risk Title	Activity Performed	Target Resolution Date
42	FFDV Mitigation Activities	Weekly information about FFDV status, metrics numbers, status report text and details are provided during the Project Management Meeting. This will continue to be a challenge until the start of Core Integration testing as well as throughout non-core activities, the team has proposed closing this risk, accepting it and monitoring the activity.	08-15-10

Risk Number	Risk Title	Activity Performed	Target Resolution Date
43	Integration Testing Readiness	There is close coordination between the FFDV Development Team, System Validation Team, and the Testing Team. Based on current results from Cycle 0 activities, the execution rates are within the estimates used for planning purposes. Based on this, the team has proposed closing this risk, accepting it and monitoring the activity.	08-15-10
44	Integration Testing Script Execution	Based on Cycle 0 testing activities, execution rates are within the planning estimates. This risk will continue to be monitored throughout the remainder of Cycle 0 and Cycle 1 of integration testing.	12-3-10
45	AOC Testing Resources	AOC staffing estimates and timelines have been provided.	12-3-10
48	Lack of Court subject matter expertise involved in the remaining E-Filing and Testing efforts	Mitigation activities have not yet been developed.	TBD

Issue Management:

No new issues were opened and no issues were closed during the month of July. As of July 31, 2010, the issues identified below by the CCMS-V4 Project Team remain active.

Issue Number	Issue Title	Activity Performed	Target Resolution Date
28	Current OWSM product/architecture does not support UNT Token or SAML for outbound Justice Partner connectivity.	The Patch Set 2 did not fix this issue and Oracle has designed a new patch which is expected to be demonstrated on 5/28/10. Progress will continue to be monitored. However, if the patch is not received and implemented by the start of Core Integration Test, then a decision that Integration/PAT will be conducted with the only working solution (non-unique username/password token) must be discussed.	05-22-10 <i>Date should be updated</i>
29	Current allocation of resources (4 cores across 4 servers) for Adobe LiveCycle is unable to support the average or peak hour volumes.	Original estimates assumed the product would use all 16 cores on the servers to which the product was running. However, to achieve this level of utilization separate LC processes need to run for each core. Currently, the Stress Test environment is being retrofitted to test this configuration. Subsequent testing will be done to provide benchmarks for this platform. The final configuration recommendation would likely impact software licenses and possibly hardware costs. Tests are being executed with multi-instancce configurations and the results will be known by 6-25-10.	07-15-10 <i>Date should be updated</i>

Issue Number	Issue Title	Activity Performed	Target Resolution Date
30	Stress Test environment is observing latency in communication between Oracle RAC DB nodes.	This issue has been through subsequent testing and it was determined to likely be within the server/OS/RAC. Other factors being considered are hardware switch configuration, virtualization, and platform (T5240) related. The current plan is for Deloitte to work with Oracle, SAIC, and the AOC to conduct further analysis to identify and resolve the issue.	07-15-10 <i>Date should be updated</i>

Resource Management:

On a positive note and as a way of incentivizing the Courts to participate in the project, the AOC has arranged to pay Court Testers and Project Managers in an effort to gain more participation from the Courts. Project Managers would be paid \$25,000 per quarter plus travel expenses, would be based in Santa Ana, and participate, on behalf of their court, in all Project Manager-related activities. Court Testers would be paid between \$20,000 and \$55,000 depending on the project phase and length of participation, with the expectation of committing to a testing phase.

Cost Management:

There are no new issues with respect to Cost Management.

Technical Focus Areas

Quality Management:

The RPO Management Team is currently working with Deloitte management to revise the QA Reports for the project.

Quality Architecture:

There are no open issues with System Architecture and the System Architecture Team with Deloitte, AOC, ISD, and other Court members continues to do a good job of identifying and defining the system architecture as well as architectural tradeoffs, raising issues for resolution, and generally creating a solid CCMS-V4 system architecture.

Configuration Management:

There are no open issues with Configuration Management. Configuration Management for documentation is being well controlled through eRoom and JCC Web Sites that have built-in controls for Configuration Management.

System Engineering Standards and Practices:

Since Deloitte Consulting appears to be following currently accepted systems engineering standards and practices, even as defined in IEEE Standard 1220, there are no system engineering standards and practices concerns at this point in time.

Requirements Identification and Traceability:

There are no new issues with Requirements Identification and Traceability that have not already been discussed in previous reports.

Detailed Design Review:

There are no open issues with the Detailed Design Review that have not already been discussed in previous reports.

System Development Quality and Progress:

The completeness of the Architecture Team decisions cannot be verified by the IPO/IV&V Team due to the absence of an Architectural Decision Tradeoff Matrix which would document the options, tradeoffs, decisions, and underlying rationale for the approach taken.

Testing Practices and Progress:

The IPO/IV&V Team reviewed the CCMS-V4 Core Product Integration Test Plan, Amendment #1, dated 18 June 2010. This amendment identifies the changes made to the approved CCMS-V4 Core Product Integration Test Plan by identifying deleted text, new text, and modified/corrected text from the approved Plan. While there are numerous changes to the approved Plan, the following identifies some of the more significant changes from an IPO/IV&V perspective.

- The duration of Integration Testing was expanded from 16-weeks to 26-weeks;
- Defined management objectives for each cycle include Key Performance Indicators (KPIs). The initial KPI structure was to be defined in Attachment A, but there was no Attachment A with the reviewed document or in the JCC folder. Consequently, we do not know what the initial KPI structure is in order to determine the depth and breadth of the KPIs;
- There is a clear commitment of AOC/Court Subject Matter Experts (SMEs) to support the testing efforts. There are twenty-three (23) SMEs supporting the testing effort daily through test validation to provide business subject matter expertise and clarify business issues;
- Cycle 2 appears to be a cycle where a stable system is achieved after Cycle 1 testing in order to better perform Cycle 3 after the Cycle 1 defects are corrected; and

- A new process is defined for the Defect Lifecycle which is quantifiably less complex and more streamlined.

However, the IPO/IV&V Team also has the following comments and recommendations:

- It is not clear where System Validation Testing, an 8-week effort, is on the schedule. Section 1.4 identifies this testing as part of the “Integration and PAT testing” which goes from August 16, 2010 through April 30, 2011; however, it is not shown on the timeline presented in the same Section. The RPO Management Team has clarified that System Validation Testing occurs before Integration Testing begins on August 16, 2010.
- In Section 3.1, it is not clear if a full regression test of the scripts executed in Cycle 1 is re-executed in Cycle 2. While the table in Section 3.1 states “Execute regression test scripts” the definition of regression test in Section 3.3 deleted the paragraph that states “Each cycle of integration testing will retest all of the test scripts executed in the prior cycle, which will confirm the current stability of that functionality.” Regression testing is limited to a set of core tests scripts to “smoke test” a build. The RPO Management Team has clarified that Cycle 2 is not a re-execution of all scripts but only those that failed in Cycle 1 and that there would be specific regression test scripts executed as well. The IPO/IV&V Team recommends the re-execution of all previous cycle test scripts in order to perform a full regression test.
- The IPO/IV&V Team recommends automating the test scripts as early as possible. The first manual execution of the test scripts should identify any errors in the scripts and these errors should be corrected. The next run of the scripts should be captured by an automation tool and from that point on, the automated scripts should be run whenever a new major build is released. Automated the test scripts would ensure that a consistent test is performed each and every time a new major build is released. The RPO Management Team clarified that the timeline for automating the test scripts is running behind and consequently all of the test scripts will not be automated during Cycle 3. However, all scripts will be run manually, despite the fact scripts are being automated since the scripts may not be automated in time for execution.

There are no changes identified for the test cases or scripts in the Addendum, even though there appears to be a large number of test cases and scripts being loaded into eRoom. However, since the IPO/IV&V Team does not have access to the test cases/scripts, we are unsure as to their purpose or role in testing. It could be that the test cases and scripts were corrected to reflect the code developed, but the IPO/IV&V Team cannot make an assessment without reviewing the actual test cases/scripts.

Appendix A: Matrix of Areas of Concern (Open)

The matrix below provides a current listing of all open areas of concern, our recommendations, and the action taken by the CCMS-V4 Project Team. As items are resolved, they will be moved to Appendix B. Key statistics are summarized below:

- **There were no new areas of concern identified this month.**
- **The IPO/IV&V Team strongly believes that this project will continue to be a high risk project due to the constraints imposed by the budget, schedule, and resources.**

Item Number	Area of Concern	Recommendation	Action Taken
Apr10.1	QA Report Metrics	Continue the use of metrics in the QA Reports, but include a definition or interpretation of all metrics shown in the reports.	4-2010 – New this month. 5-2010 – There is no change in this action item. 6-2010 – There is no change in this action item. 7-2010 – There is no change in this action item.

Appendix B: Matrix of Areas of Concern (Closed)

The matrix below provides a listing of all closed areas of concern, our recommendations, and the action taken to resolve the issues by the CCMS-V4 Project Team. Key statistics are summarized below:

- No areas of concern were closed this month.

Item Number	Area of Concern	Recommendation	Action Taken
Jul07.1	Aggressive schedule	The schedule should be reviewed to ensure that ample time has been allocated to each phase of the project.	<p>09-2007 - No action taken that SEC is aware of.</p> <p>10-2007 – At this point in the project it is difficult to determine if there is ample time allocated to each phase of the project. This item will remain in a watch status (e.g., once Test Planning activities have begun, it will be easier to determine if enough time is allocated to testing activities).</p> <p>11-2007 to 04-2008 – Although 12 weeks were added to the schedule, there is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>05-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>06-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>07-2008 – There is concern that there is not enough time to complete the review of the FFD. In addition, there is concern that there is insufficient time allocated to testing and that test planning has not been fully engaged. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>08-2008 – 27 additional days were added to the schedule for review of the FFD. It is unknown at this point whether the additional days are sufficient to allow a thorough review and better ensure the highest quality product possible. Moreover, because test planning is slow to start, SEC still has concerns about the time allocated to the testing phase. This item will remain in watch status.</p> <p>09-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>10-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>11-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>12-2008 – It is unclear how the extended review timeframe will impact the overall schedule. This item will remain in watch status.</p> <p>1-2009 – The Core application, Portals, and Statewide Data Warehouse portions of the FFD will be completed by March 30, 2009. The Data Exchanges portion is expected to be completed by April 15, 2009. This item will remain in watch status.</p> <p>2-2009 – All portions of the FFD are on track for completion by March 30, 2009 and April 15, 2009, respectively. This item will remain in watch status.</p> <p>3-2009 – The Portals and Statewide Data Warehouse will be accepted by March 31, 2009. The Core application will be completed by March 31, 2009. Data Exchanges will not be completed until the end of April. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>4-2009 – The FFD was signed off May 1, 2009. The Data Exchanges are expected to be completed by May 22, 2009.</p> <p>5-2009 – The Data Exchanges are expected to be completed by June 5, 2009.</p> <p>6-2009 – While the IPO/IV&V Team believes the schedule is aggressive and will remain aggressive for the duration of the project adding to project risk, the RPO and AOC have extended the schedule through contract amendments. At this point, the RPO and AOC have accepted the project risk as neither the schedule nor the budget can be changed.</p>
Aug07.1	JAD Schedule	<p>There does not appear to be a comprehensive schedule of JADs so that participants can plan time accordingly. Thus, Deloitte Consulting should prepare a detailed schedule that sets realistic timeframes needed to JAD each functional area and ensure the schedule is agreed to by all relevant parties.</p>	<p>09-2007 – The schedule should be completed in October 2007.</p> <p>10-2007 – A revised schedule was completed in October 2007. While the schedule provides more details than previous versions, it still does not address the detailed planning that must be conducted to ensure coverage of all functional areas and the workflows associated with each.</p> <p>11-2007 to 04-2008 – JAD scheduling has improved to the point that this is no longer an area of concern. Consequently, this item has been closed. Over the past few months, Deloitte Consulting has been diligent in setting and adhering to its JAD schedule. As the project enter the final design stage, participants appear able to plan time accordingly to ensure they are available to participate in tracks as needed and share their subject matter expertise. Meetings were also held to hear concerns that more time was needed to review developing requirements—resulting in more time added to the overall project development schedule.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Sep07.1	Requirements Gathering	Ensure that a detailed JAD schedule includes a plan for how the workflow inter-relationships will be addressed.	<p>10-2007 – While the workflows and interrelationships have not yet been addressed, the AOC has instituted cross-track meetings as part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements are being gathered.</p> <p>11-2007 to 04-2008– The cross-track meetings have proven to be an essential, needed part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements were being gathered. However, to SEC’s knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>05-2008– To SEC’s knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas. This step should help address some of our concerns. However, since the final design is nearing completion, there is little value in fully mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.1	Project Oversight Activities	Assign person in role of day to day project management responsible for ensuring that issues are resolved timely, do not impact downstream work efforts, and are not in conflict with other project activities, legal provisions, or branch policy.	<p>11-2007 to 04-2008– It was explained that Bob Steiner, the AOC Project Manager, performs these activities and that a Project Management Consultant familiar with V2 and V3, Sean Yingling, will be assigned to assist the Development Project Manager (Bob). This item will remain in watch status over the next month to ensure the activities are being performed.</p> <p>05-2008– SEC will continue to monitor this item until a Responsibility Matrix indicating the project management component responsibilities that are designated to Sean and Bob is developed. The matrix will ensure that no workload gaps exist.</p> <p>06-2008– To date, a Responsibility Matrix has not been provided to SEC for review.</p> <p>07-2008– SEC will work with Bob Steiner and Sean Yingling to better understand the project management responsibilities.</p> <p>08-2008– Bob and Sean have established a seamless working relationship. Bob has ultimate responsibility for all project management activities. Sean’s focus rests with coordinating the FFD review, reporting to the Steering Committee, and following up on issues with the V4 Court Project Managers.</p>
Oct07.2	JAD Session Documentation	Utilize new template or other mechanism to document detailed JAD Session minutes including areas of discussion, results or actions taken, agreements reached, and issues raised as well as distribute timely for approval.	<p>11-2007 to 04-2008 – Starting in mid-April, the JAD tracks created a new template to ensure consistency across JADs for documenting decisions reached and meeting outcomes. However, since it appears that the new template is only used in isolated instances, this item will remain in watch status over the next month.</p> <p>05-2008 – It is not clear whether an AOC CCMS member will be appointed to monitor and summarize decisions made in the JAD sessions, and subsequently elevate those of potential interest to the Steering Committee, especially those that may require higher level buy-in.</p> <p>06-2008 – Since the final design is nearing completion, there is little value in mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.3	Governance Structure and Escalation Process	Clarify and establish the complete governance structure to eliminate confusion related to issue escalation process and decision-making.	<p>11-2007 to 04-2008 – The CCMS Governance Model was distributed to committee members. This item will remain in watch status over the next month to ensure its use.</p> <p>05-2008 – The CCMS Governance Model appears to be in use and effective in allowing participation in project decisions regarding project scope, cost, and schedule.</p>
Apr08.1	Unclear Requirements	<p>Review the requirements to determine the types of clarifications needed for understanding in order to avoid confusion during downstream activities such as coding and preparing for testing.</p> <p>As of our 09-2008 review of the FFD, we have suggested the following additional recommendations:</p> <ol style="list-style-type: none"> 1. Identify and evaluate subjective text in FFD (such as may or could) and clarify within the context of use; 2. Perform a traceability exercise to link use cases to business rules—again to reduce need for individual interpretation; 3. Review business rule part of each section to ensure complete and clear rules have been incorporated into the use case. 4. Evaluate pre and post-conditions to ensure they are correct and complete. 	<p>04-2008 – New this month.</p> <p>05-2008 – It is not clear whether action has been taken on this issue.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas). This item will remain in watch status over the next month to review this process.</p> <p>07-2008 – This item remain in watch status until a better understanding can be achieved and SEC evaluates the review process.</p> <p>08-2008 – SEC will assess this item during their review of the FFD deliverable.</p> <p>09-2008 – SEC has begun to assess this item and will continue to evaluate progress during the AOC/Court review of the FFD deliverable.</p> <p>10-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>11-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>12-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>1-2009 – The RPO Management Team is currently developing plans to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>2-2009 – The RPO Management Team continues to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>3-2009 – The RPO Management Team continues to discuss the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>4-2009 – An updated resource schedule is being developed that will forecast resource needs between now and the beginning integration testing. This item will remain in watch status.</p> <p>5-2009 – An estimate of the number of Court SMEs needed for testing has been provided. However, more SMEs with Family and Juvenile expertise will be needed. This item will remain in watch status.</p> <p>6-2009 – The IPO/IV&V Team has continued to express their concern that the ambiguity surrounding the interpretation of final requirements presents a risk to the construction and testing phases of the project. Data is being captured by the AOC Software Quality Assurance Team during early testing that should assist in defining the extent of the problem and any future concerns will be raised as part of the testing assessment.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Dec08.1	Standardization and Configuration	It is not clear what impact the Standardization and Configuration requirements will have on the FFD and on long-term maintenance of the application. Once all Standardization and Configuration requirements have been defined, the requirements should be traced back into the FFD and reviewed again.	<p>12-2008 – New this month.</p> <p>1-2009 – In the month of January, a Court Executive Management work group was established to address the concerns surrounding the standardization and configuration requirements.</p> <p>2-2009 – The RPO Management Team reported that the Standards and Configuration Management Group will determine whether configurable items are statewide standards or local configurations and that these decisions will not impact the FFD.</p>
Dec08.2	Single Point of Contact for ISD	A single point of contact should be established for AOC that can track and manage daily progress on ISD-related activities	<p>12-2008 – New this month.</p> <p>1-2009 – It is not clear where the roles and responsibilities are documented and whether David Corral, selected as the single point of contact, has the authority to make decisions on behalf of ISD. Virginia Sanders-Hinds will work with IPO/IV&V to better understand the ISD roles and responsibilities within the project.</p> <p>2-2009 – It was clarified that Virginia Sanders-Hinds is the single point of contact with the authority to make decisions on behalf of ISD.</p>
Mar09.1	Justice Partners (Interfaces) Plan	Determine the state and progress of the common “State” interfaces which are currently being reviewed by the Justice Partners and assess the progress for project schedule impact.	<p>4-2009 – The “State” interfaces are being addressed with the Justice Partners. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p> <p>5-2009 – The “State” interfaces are being addressed with the Justice Partners at both the State and local levels. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off (now anticipated for 6-5-09) and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>6-2009 – The “Statewide” interfaces are being addressed with the Justice Partners. – A plan has been defined for day-one critical exchanges and each Justice Partner will be given a Microsoft Project Plan to follow. The AOC will continue to work closely with each Justice Partner to anticipate any potential challenges. However, it is not clear if and when the Justice Partners will participate in PAT. This item will remain in watch status.</p> <p>7-2009 - The CCMS-V4 Project Team has clarified that the Statewide Justice Partners will participate in PAT. This item will be closed out.</p>
Mar09.2	Document Management Plan	Determine the state and progress of the agnostic “generic” interface to support any existing document management solution and assess the progress for project schedule impact.	<p>4-2009 – The “generic” interface is currently under development. This item will remain in watch status. The RPO Management Team has stated that the requirements for document management were gathered during design and have been signed off. The AOC is in the process of standardizing the document management interface for all courts but is unsure whether this effort will be complete prior to Go Live for CCMS-V4. This item will remain in watch status.</p> <p>5-2009 – The “generic” interface is currently under development. This item will remain in watch status.</p> <p>6-2009 – The “generic” interface is currently under development and will have a solution that supports the courts at Go Live. Currently, the early adopter court uses FileNet and is scheduled to test this interface during PAT. For each of the remaining Courts, the agnostic “generic” document management interface will be finalized, if needed, during the deployment effort. This item will remain in watch status.</p> <p>7-2009 – The CCMS-V4 Project Team has clarified that the Lead Courts which use FileNet are scheduled to test this interface during PAT. This item will be closed out.</p>

Appendix C: Project Oversight Review Checklist

To assist us in determining whether the CCMS-V4 project is on track to be completed within the estimated schedule and cost, the Project Oversight Review Checklist is used to identify and quantify any issues and risks affecting these project components.

The checklist format provides a quick reference for the assessment of the project management practices and processes in place over the CCMS-V4 project and will assess the adequacy or deficiency of the area. Further, the checklist may provide comments on the specific items reviewed, interviews conducted, and general practices observed for requirements presented under the five categories identified below. These requirements are consistent with industry standards and accepted best practices such as the Project Management Institute (PMI)'s Project Management Body of Knowledge (PMBOK) and the Institute of Electrical and Electronic Engineers (IEEE) standards. Use of these checklists will assist us in commenting on the effectiveness of the project activities.

- Planning and Tracking
 - Procurement
 - Risk Management
 - Communication
 - System Engineering

No updates were made to the Project Oversight Review Checklist this month.

Project Oversight Review Checklist

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		The business case has been finalized. The project goals, objectives, and expected outcomes are documented in the Deloitte Consulting Statement of Work. The key stakeholders and sponsors are identified and documented in the Project Management Plan for CCMS-V4.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project plan that has been approved is loaded into Microsoft Project. Deloitte Consulting will update the schedule with construction and testing details after the requirements are complete.
Is completion of planned tasks recorded within the PM software?	X		Completion of milestones are tracked within Microsoft Project.
Are actual hours expended by task recorded at least monthly within PM software?		X	Actual hours for Deloitte Consulting staff are tracked weekly within Playbook Navigator, but are not shared with the AOC as this is a fixed price development contract. The AOC has historically not tracked this information.
Are estimated hours to complete by task recorded at least monthly within PM software?		X	Estimated hours to complete for Deloitte Consulting staff are tracked weekly but are not shared with the AOC as this is a fixed-price development contract. Any deviations occurring to planned dates are discussed at an internal weekly meeting between AOC and Deloitte Consulting.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans?	X		There is a formal staffing plan for Deloitte Leads that is shared with the AOC. Deloitte Consulting tracks internal project staffing with respect to acquisition, schedule for arrival and departure of specific staff, and staff training plans. The AOC does not currently have a CCMS-V4 Staffing Plan; staff are allocated at the CCMS level and not at the specific project level.
Have project cost estimates, with supporting data for each cost category, been maintained?	X		While development costs are tracked internally by Deloitte Consulting, they are not shared with the AOC since this is a fixed-price development contract. The AOC tracks the project budget, monies encumbered, and monies expended to date in an Access database.
Are software size estimates developed and tracked?	X		Deloitte Consulting has included estimates for Final Design, Final Construction, Testing, and Conversion.
Are two or more estimation approaches used to refine estimates?	X		A Bottom Up estimate is performed by the Deloitte Consulting Project Manager and a Top Down estimate is performed by the Lead.
Are independent reviews of estimates conducted?	X		There are multiple internal reviewers consisting of Deloitte Consulting, AOC, and Court staff.
Are actual costs recorded and regularly compared to budgeted costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Currently, AOC costs are tracked at the overall CCMS level. At this point, a daily (or on-demand) Access database report can be printed showing project budget, monies encumbered, monies expended to date, and monies forecasted to be spent.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Planning and Tracking			
Is supporting data maintained for actual costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Yet, the RPO has invoice level data to support its actual cost data tracked in its Access database.
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	X		This information is reported weekly, monthly, and quarterly.
Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration mgmt plan?	X		The CCMS-V4 Configuration Management Plan outlines the process and procedures followed for Configuration Management.
Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?	X		This information is tracked in eRoom and in the weekly, monthly, and quarterly status reports.
Is user satisfaction assessed at key project milestones?		X	Deloitte Consulting has stated that user satisfaction is assessed at key project milestones in the form of deliverable review. All deliverable comments are logged, reviewed, and categorized to indicate if a response is needed. According to Deloitte Consulting, all defects or other comments that require a response are addressed and tracked through closure. Other validation processes include proof of concepts, UI prototypes, design sessions, design council sessions, and cross track meetings. As such, Deloitte Consulting believes that acceptance of the deliverable is evidence of user satisfaction. While there are no satisfaction surveys used or assessments performed at key project milestones, the AOC agrees that there are several opportunities to talk through and resolve deliverable disagreements on a case by case basis.
Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?	X		Planning is in compliance with a formal system development life-cycle (SDLC) methodology.
Is there a formal enterprise architecture in place?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point in time, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project. SEC will be investigating the AOC enterprise architecture further as the project progresses.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	X		Project Closeout activities are planned to occur and we will evaluate and comment whether the planned activities occurred at the project closeout. In the interim, Lessons Learned sessions are being conducted at various project phases to identify possible process improvements.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, "alternative procurement") and their required processes followed?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Is a detailed written scope of work for all services included in solicitation documents?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Are detailed requirement specifications included in solicitation documents?	X		Detailed requirements were included in Exhibit B of the Statement of Work. These will be expanded upon during Detailed Design. Thus, we will review or evaluate those requirements when developed.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. For ongoing SOWs, independent third-party vendors are used to review and recommend procurement planning and execution practices.
For large-scale outsourcing, is qualified legal counsel obtained?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. The AOC utilized outside counsel for the V4 Development Contract.
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X		The Risk Management Plan contains the process and procedures for risk. Risks are tracked within eRoom and are discussed during the weekly and monthly status meetings. In addition, the Deloitte Consulting Project Manager meets with the CCMS Product Director weekly to discuss risks.
Does the management team review risks and mitigation progress at least monthly?	X		The management team reviews risks at weekly and monthly status meetings.
Are externally developed risk identification aids used, such as the SEI "Taxonomy Based Questionnaire?"		X	Additional risk identification aids are internal to Deloitte Consulting and are not shared with the AOC. The AOC is not using any other risk identification aids.
Communication			
Is there a written project communications plan?	X		This information is contained in the CCMS-V4 Communication Management Plan.
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		Written weekly, monthly, and quarterly status reports are prepared and discussed with the project management team as well as the Steering Committee/Oversight Committee. In addition, there are executive meetings held to brief the Lead Court CIOs.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Communication			
Are there written escalation policies for issues and risks?	X		This CCMS-V4 Project Management documentation contains this information.
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		The Product Management Group has primary responsibility for working through the issues and risks. Additionally, issues and status are shared with lead court information officers, court executive officers at bi-weekly steering committee meetings as well as with selected presiding judges at the quarterly oversight committee meetings. The RPO is also working diligently to seek input and have stakeholders assume an active ownership role in the development process.
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		AOC and Court staff are planned to be involved from requirements gathering through testing and into implementation.
Do users formally approve/sign-off on written specifications?	X		The requirements will be approved by the AOC and Court staff.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		The RPO Management Team has reported that Deloitte Consulting is using Clear Quest and Clear Case to manage defects and Rational Requisite Pro to track requirements.
Do software engineering standards exist and are they followed?	X		This CCMS-V4 development standards documentation has been reviewed by SEC and found to be adequate.
Is a formal system development life-cycle (SDLC) methodology followed?		X	Deloitte is using an overlapped waterfall SDLC as evidenced by the structure of their project plan and the manner in which activities are performed. CMMI Level 3 requirements require that a defined, standard, consistent process and process measurement be followed. This would require that: <ul style="list-style-type: none"> • Technical processes are defined in writing; • Project roles are clearly defined; • Staff are trained in standard methods and process activities before they are assigned to roles; and • Technical management activities are guided by defined processes. It is not clear where the processes and roles are documented and whether the CCMS-V4 Project is CMMI Level 3 compliant.
Does product defect tracking begin no later than requirements specifications?	X		Product defect tracking occurs during deliverable review. Users submit defects by entering comments in the deliverable. Each defect is tracked to closure within the deliverable. Any corresponding response is attached to the original defect in the body of the deliverable. Before approval of the deliverable, the AOC confirms that all defects have been appropriately addressed.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
System Engineering			
Are formal code reviews conducted?		X	Two levels of code reviews are conducted. Automated reviews of code are conducted using the JCART tool which checks for and highlights unacceptable coding practices. Any issues identified through the JCART execution have to be resolved before the code can be included in the build. Additionally, manual code reviews are conducted by the Architecture Leads (Technical Analysts, Development Leads and the Framework Team). Code review checklists are created and stored in ClearCase. Deloitte should implement a process for ensuring that the coding standards are adhered to as opposed to the AOC assessing the compliance after completion.
Are formal quality assurance procedures followed consistently?	X		The quality assurance documentation was updated to include CCMS-V4. As more QA related data is collected and reported by Deloitte Consulting, the IPO/IV&V Team will be reviewing these reports to assess how data is represented in the reports—such as through metrics—and identify issues with processes if the metrics indicate negative trends.
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	AOC and the Court staff will sign-off on acceptance test results. Acceptance criteria have been established as 0 Severity-1 incidents, 0 Severity-2 incidents, and not more than 50 Severity-3 incidents.
Is the enterprise architecture plan adhered to?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project.
Are formal deliverable inspections performed, beginning with requirements specifications?	X		All deliverables are approved by the AOC and Court staff.
Are IV&V services obtained and used?	X		SEC has been hired to perform IV&V.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Appendix D: IPO/IV&V Project Scorecard

For July 1, 2010 – July 31, 2010 Time Period

Process Area	FEB 2010	MAR 2010	APR 2010	MAY 2010	JUN 2010	JUL 2010	REMARKS
Communication Management							Day-to-day communication continues to be strong.
Schedule Management							The schedule remains aggressive and a re-planning effort is under review.
Scope Management							Project scope is managed and controlled through a variety of avenues.
Risk Management							Risks are reported, discussed, and managed on a weekly basis.
Issue Management							Issues are discussed/reported weekly at various project management and Executive Committee meetings.
Resource Management							AOC and Deloitte project resources appear to be insufficient during testing.
Cost Management							ISD costs and RPO costs are maintained in separate databases and there is no effort to combine these in the near future.
Quality Management (Client Functionality)							We are unable to conclude on the quality of the client functionality due to the absence System test defect data related to Deloitte's execution of the System Test scripts.
Quality Architecture							Quality Architecture is currently adequately defined from an industry-sound SEI approach.
Configuration Management							CM, for documentation, is being well controlled through the eRoom and JCC web sites that have built-in controls for CM.
System Engineering Standards and Practices							Deloitte Consulting appears to be following currently accepted systems engineering standards and practices.
Requirements Identification and Traceability							The IPO/IV&V Team has concerns with the lack of traceability between use cases and business rules.
Detailed Design Review							The Technical Design documentation was delivered to the RPO but is an artifact and not a deliverable and therefore, the Detailed Design cannot be assessed.
System Development Quality and Progress							The technical architecture and design is proceeding on the defined schedule with only minor changes.
Testing Practices and Progress							Testing continues to be a concern.

	Green – On Track
	Yellow – Warning
	Red – Significant Problems
↑ ↓	

Appendix E: IPO/IV&V Background, Scope, and Methodology

The California Case Management System (CCMS) is a statewide initiative to bring the courts together to use one application for all case types. CCMS is managed by the Administrative Office of the Courts (AOC) Southern Regional Office (SRO) in Burbank with the participation of the AOC Information Services Division and superior courts in the planning, design, and development sessions. Over the next 2 years, the AOC plans to expand the functionality of the current interim CCMS applications and develop the next phase—CCMS-V4—that will include family law, juvenile dependency, and juvenile delinquency case types as well as incorporate the V2 and V3 products and update the system’s technical architecture and environments. Toward this end, the AOC has executed a contract with Deloitte Consulting to design and develop the V4 component—yet, the success of the V4 Project relies on every party working in harmony toward common goals.

Background:

For all high criticality technology projects such as CCMS-V4, industry best practices strongly encourage independent oversight. Ideally, the independent project oversight process begins during the feasibility study and continues through project closeout. Deficiencies, issues, findings, and recommendations identified by the oversight process should be incorporated into the appropriate project management processes. As the project progresses, the independent review and assessment approach should track the disposition of findings and recommendations in terms of corrective action and implementation of oversight recommendations.

An Independent Project Oversight (IPO) effort is intended to audit system development, acquisition, and maintenance controls to assure a structured project management methodology is adhered to and managed through activities such as project scheduling, risk management, and change management. A primary goal is to provide impartial oversight of the responsibilities and activities of the project office. Similarly, the Independent Verification and Validation (IV&V) provides unbiased oversight of the technical deliverables such as program code, test scripts and results, and network configurations and processes used to create the product. It is intended to evaluate products against system requirements and whether processes used follow the intended life cycle methodology.

However, these efforts are not designed to guarantee success of the CCMS-V4 application nor will the IPO/IV&V efforts ensure the completeness of business requirements designed by the CCMS-V4 team or the ability of the end system functionality of the application built to meet court needs statewide.

Appendix E: Continued

Scope and Methodology

In July 2007, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) Services over the California Case Management System (CCMS) V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the Regional Administrative Director and CCMS Product Director at the Southern Regional Office (SRO), our objectives are to monitor the services, deliverables, milestones, deadlines, and functionality of the CCMS-V4 project and communicate status, progress, issues, and potential challenges to the success of the project as designed. The IPO/IV&V efforts are designed to give assurance, from an independent and unbiased perspective, that the process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards as well as that potential risks and issues are known by project decision makers. The IPO/IV&V effort cannot require change, but any identified and reported findings and results should be considered by the project sponsors.

To provide appropriate and independent review, analysis, and oversight on the CCMS-V4 project, SEC will generally provide monitoring efforts from July 2007 through April 30, 2011 relative to the following areas:

- Project management and System Development Life Cycle (SDLC) processes, procedures, and communication
- Adherence to schedule
- Techniques and processes employed for risk management, issue management, and communication strategies
- Requirements gathering as part of JAD Sessions
- Completeness of Functional Design and Technical Design
- Traceability of requirements from one SDLC phase to the next
- Testing techniques and processes employed
- Compliance with project management and technical contract requirements

However, the IPO/IV&V efforts will not review or address the completeness of the business requirements being developed cooperatively by Deloitte Consulting, SRO staff, and court Subject Matter Experts (SMEs) as part of functional design joint application development (JAD) sessions. While business requirements will be reviewed from a technical perspective to assess whether they contain sufficient levels of specificity to ensure proper coding and end-user functionality as planned, SEC cannot ensure that all critical business processes and steps are appropriately captured in the business requirements to meet court needs.

Appendix E: Continued

Additionally, our efforts do not address the management surrounding the application developer's budget. Because the AOC awarded Deloitte Consulting a fixed-price contract, a time and material type review and analysis is not warranted in this situation.

Moreover, to provide appropriate and independent review, analysis, and oversight over the CCMS-V4 project, the following parameters need to be met in allowing SEC to perform activities unimpeded:

- Understanding/agreement by all project participants on our independent role and importance of timely information sharing and meeting scheduling;
- Inclusion as a seamless member of the project team;
- Timely knowledge of and inclusion in all project meetings;
- Commitment from all project participants to attend meetings scheduled with the IPOC/IV&V;
- Unfiltered access to all documents, data, deliverables, and personnel deemed relevant by the IPOC/IV&V Team; and
- Full disclosure of project knowledge including items such as project issues, risks, change requests.

If there are challenges in adhering to those parameters, we will escalate our issues and/or concerns to the Internal Audit Services Manager, CCMS Product Director, RAD, CCMS Steering Committee, and CCMS Oversight Committee as necessary or appropriate. Working in conjunction and coordination with the AOC's Internal Audit Services to complete this Statement of Work, we will perform the following tasks:

IPO Specific Tasks

- Conduct meetings, as needed, with key project staff to obtain first-hand information as to the objectives of the project, identify the key players and their roles, and the interrelationship and communication structure between all parties as well as review documents such as organization charts and governance structure.
- Attend meetings, as needed, key court/AOC and vendor personnel to obtain information on their responsibilities, objectives, communications, and schedules.
- Conduct observations, on-going interviews, and document examinations to monitor meeting timelines, deliverables, and milestones as described in the schedule.
- Review project planning/management deliverables and documentation to comment on compliance with industry best practices and adherence to documented project processes
- Perform initial assessment of Project Management processes and documents (project management plan, communication plan, change management plan, implementation plan, etc).

Appendix E: Continued

- Participate in certain critical requirements gathering and physical design sessions (JAD sessions) as deemed necessary or at the direction of the Internal Audit Services Manager to provide expertise courtroom operations (family law, criminal, and traffic), finance, distributions, and audit as well as on the V2 and V3 retrofit and validate processes are being followed.
- Provide an Implementation Strategy Review. This review would consist of an analysis of the implementation approach and the action plan for accomplishing implementation.

IV&V Specific Tasks

- Review Requirement Traceability and Contract at end of Functional Design, Technical Design, and Test Preparation.
- Provide a Functional Design and Requirements Traceability Review. The Functional Design review would consist of an analysis of the Functional Design Specification to assess the readability, consistency, and testability of the design. The Functional Design review will identify issues such as non- testable requirements, vague requirements, requirements that are in conflict or not consistent with each other, etc. The Requirements Traceability review will ensure that all of the contractual requirements have been addressed and are accounted for.
- Provide a Technical (software) Design and Requirements Traceability Review. The Technical Design review would consist of an analysis of the Technical Design Specification to assess the readability, consistency, and testability of the technical design as well as identification of any potential weaknesses in the design. The Technical Design review will identify where the Technical Design may be in conflict with the Functional Design. The Requirements Traceability review will ensure that the design has addressed all of the functional requirements.
- Provide a Test Methodology and Requirements Traceability Review. The Test Methodology review would consist of an analysis of the Test Methodology and a sampling of test scripts which will be traced to the requirements and to the design specification as well as reviewing the data elements necessary for the scripts. The Requirements Traceability Review will ensure that all of the test cases/scripts have been developed to test the design and the functional requirements.
- Review a statistically valid sample of source code (coded based on requirements documented in JAD sessions). Approximately 40 modules will be reviewed which would provide early feedback on compliance to coding standards and comparisons to the design requirements.

Appendix E: Continued

- Review a statistically valid sample of test scripts (unit, integration, system, user acceptance, product acceptance) for compliance with requirements from both a technical perspective and from a court operations perspective (testing enough scenarios/scripts covering critical and most frequent business cases both on a positive/ideal flow and on an exception basis).

IPO/IV&V Combined Tasks

- Assess Systems Development Life Cycle (SDLC) practices to comment on compliance with industry best practices and adherence to documented project processes.
- Review agreed-upon vendor deliverables including, but not limited to Functional Design, Technical Design, Test Methodology, Implementation Strategy, V2 Requirements and V3 Requirements, to comment on compliance with Deliverable Expectations Document (DED).
- Identify and assess any new or ongoing challenges, barriers, risks, or issues.
- Attend meetings, as needed, where deliverables, strategies, timelines, and status are being considered.
- Maintain a log tracking IPO/IV&V issues that delineates any challenges, barriers, risks, issues, defects, milestones changed or missed, and observations warranting discussion and monitoring; monitor the resolution of such issues; document the resolution and closure of each matter.
- Conduct bi-weekly briefings with the RAD and designated Project Manager(s) discussing all previous work and any updates or new developments.
- Compile the results of the IPO/IV&V monitoring efforts in writing. In addition to compliance issues, the report will also contain any other significant findings, conclusions, and recommendations including the identification of risks, lessons learned, best practices, or performance exceeding minimum requirements as well as comment on severity or criticality and impact or consequence of items discussed.
- Ascertain and report on follow-up efforts taken on corrective actions needed and implementation of oversight recommendations.
- Provide reports to the RAD and designated Project Manager(s) on a monthly basis, or more frequent if necessary, based on project stage criticality.

Appendix F: SEC Activities - Performed & Planned

During July, SEC performed the following activities:

- Monitored QA Metrics;
- Monitored Re-Planning Efforts;
- Monitored Testing Efforts;
- Attended weekly and monthly Project Management Meetings, weekly Technical Architecture Meetings, and monthly Steering Committee Meetings, as well as participated in CCMS-V4 IPO/IVV Project Meetings;
- Performed analysis of areas in the Project Oversight Review Checklist Appendix C;
- Identified and tracked potential risks, observations, and issues as well as discussed and prepared monthly IPO/IV&V written status reports.

Planned SEC Activities for August 2010

SEC plans to conduct the following activities over the next month:

- Attend, observe, and participate in a variety of CCMS-V4 meetings including weekly Project Management Meetings, monthly Project Management Meeting, monthly RPO Management Meeting, monthly ISD Meeting, weekly Technical Architecture Meetings, CIO Meetings, and monthly IPO/IVV Project Meeting;
- Identify schedule for and attend new CCMS Management Committee meetings as well as new CCMS Executive Committee meetings
- Review technical documents prepared and discussed at weekly meetings as well as other documents distributed as part of weekly and monthly meetings;
- Request a copy of the Integration Test Plan and review, if available;
- Continue review and comment on the Testing Documentation in terms of sufficiency of detail including implementation of integration test plan and PAT plan;
- Continue review and comment on the Re-Plan effort in terms of executability of the plan;
- Monitor results of product testing in terms of progress in script executions, frequency and severity of defects identified, and resolution of defects.
- Prepare monthly IPO/IV&V status report that identifies and tracks new risks or issues as well as accomplishments and review prior issue resolution.

The Judicial Council of California, Administrative Office of the Courts

Independent Project Oversight (IPO) and
Independent Verification and Validation (IV&V)
For the CCMS-V4 Development Project

Status Report as of August 31, 2010

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Executive Summary

Realizing the importance of independent oversight for high criticality technology projects, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) services for the California Case Management System (CCMS)-V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the CCMS Executive Sponsor in the Regional Program Office (RPO), our objectives are to monitor the activities, deliverables, milestones, deadlines, and design of the CCMS-V4 project and communicate status, progress, issues, and challenges to the success of the project as designed. Our monthly IPO/IV&V reports are intended to capture and assess current project activities to determine whether process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards, as well as that potential risk/issues are known by decision makers at a specific point in time; thus, the monthly items reported are in-flux, continually evolving, and will change over the course of the project.

Period Highlights:

The “re-plan”, or resetting of the project objectives, agreements, and schedules, is contained in various artifacts that had not been provided to the IPO/IV&V Team for review as of August 31, 2010 so that we could assess the executability of the plan and schedule. The RPO Management Team has agreed to forward these documents to the IPO/IV&V Team during the month of September for review.

Project activities were focused on revising the Governance Model for CCMS to include a wider audience and participation. According to the Executive Sponsor, the existing CCMS Oversight Committee will be replaced with the CCMS Executive Committee which will include judges and court executives, and the CCMS Steering Committee will also be replaced by the CCMS Management Committee that is expected to include court representatives and other external stakeholders. As of August 31, 2010, the Governance Model had not been finalized and, thus, not distributed to the IPO/IV&V Team for review and comment.

Also this month, the IPO/IV&V Team reviewed the CCMS-V4 Development Core Product Acceptance Test (PAT) Plan, Version 3.0, dated August 15, 2010 and the CCMS-V4 Moving Forward Discussion – Overall Core Release Testing Strategy and Approach (more commonly referred to as Attachment A). While an updated version of the PAT Plan, Version 1.1, dated September 9, 2010 was provided to the IPO/IV&V Team on September 15, 2010, the IPO/IV&V Team reviewed the initial PAT Plan (Version 3.0) during the August period covered by this monthly IPO/IV&V report. Thus, our IPO/IV&V observations as presented below may have been addressed in the most recent PAT Plan Version 1.1. That version will be reviewed and discussed in the September 2010 IPO/IV&V Report due next month.

- Although the PAT effort does not include a full regression test, the focused nine weeks of execution are assumed by the AOC to be executed against a stable, production-ready code base. For the PAT effort, the AOC and the Courts hand-

selected approximately 2,300 scripts to be automated based on their criticality and breadth of function. The plan states that “The final two (2) weeks are dedicated to defect-specific remediation and closeout”. This is specifically designed to address the repair and retest of the code and will include some regression testing, as well. However, without a full regression test, the likelihood of side-effects being introduced due to defect fixes to the code and then side-effects appearing in production is significantly greater. The assumption of the stable, production-ready code base minimizes this effect and the project team has assumed this risk in only performing one execution cycle.

- Section 5.0 identifies that the 0-0-50 exit criteria is only accumulated during the 9-week execution cycle. This implies that Severity 1 or 2 defects identified in the final 2-week cycle, perhaps due to side-effects, are not counted as part of the exit criteria, which is a risk for the AOC. The AOC has stated that this statement does not imply that Severity 1 or 2 defects would not be counted as part of exit criteria and that additional builds may be requested by the AOC. The IPO/IV&V Team will verify this statement in an updated version of the PAT Plan in the September report.

As such, the IPO/IV&V Team recommends the following:

- The AOC should be involved in defining the regression test cases that should be accomplished by Deloitte when a defect fix is regression tested. The selection of regression test cases should be based on “white box” knowledge of the fix implemented and the potential side-effects that may occur, which the AOC may not have sufficient knowledge or insight. Therefore, the AOC must clearly understand the fix and question Deloitte as to the scope of the regression testing being performed. Broader regression testing will then minimize the potential of side-effect getting into production. The AOC has stated that the AOC and the Courts defined the regression test cases and that it was the AOC’s responsibility for the amount of regression tests performed.
- The AOC should define criteria for when an additional build would be required. Currently, within the PAT Plan, there are no criteria defined for when an additional build would be required. It simply states that additional builds may be requested. In addition to a build, the criteria should be expanded to address data refreshes. The AOC has stated that the AOC and the Courts defined the regression test cases and that it was the AOC’s responsibility. The IPO/IV&V Team will verify this statement in an updated version of the PAT Plan in the September report.
- The PAT Plan should clearly identify where the 0-0-50 criteria applies (e.g. only during the nine week execution or also during the two week re-execution of fixes?) One way to correct this is to establish an understanding with Deloitte, preferably in writing, that side-effects related to a defect fix will be associated to the original defect and that the original defect will not be closed until all side-effects associated with correcting the defect are resolved. The AOC has stated that this has been clarified in a subsequent version of the PAT Plan. The IPO/IV&V Team will verify this statement in an updated version of the PAT Plan in the September report.

Detailed Observations, Impact, and Recommendations

The Southern California Regional Program Office (RPO) staff, AOC staff, individual court staff, and Deloitte Consulting continue to practice project management and systems-engineering practices in accordance with industry standards related to the identification and resolution of issues, risks, items for management attention, and modification and change requests. Additionally, the continued diligence employed by the RPO staff, AOC staff, Court staff, and Deloitte Consulting in addressing issues and following established project management processes has been consistent. As part of our continued IPO/IV&V efforts, we offer the following observations and areas of concern in various project management and technical areas.

Project Oversight Focus Areas

Communication Management:

There do not appear to be any current communication concerns noted by the CCMS-V4 Project Team or the IPO/IV&V Team.

Schedule Management:

The “re-plan”, or resetting of the project objectives, agreements, and schedules is contained in various artifacts that had not been provided to the IPO/IV&V Team for review as of August 31, 2010 so that we could assess the executability of the plan and schedule. The RPO Management Team has agreed to forward these documents to the IPO/IV&V Team during the month of September for review.

Scope Management:

Scope management items raised by the CCMS-V4 Project Team are being actively managed through eRoom.

Risk Management:

One new risk (Risk 49) was opened during the month of July. The Project Management Team appears to be adequately tracking the risks and as of August 31, 2010, the risks identified below by the CCMS-V4 Project Team remain active.

Risk Number	Risk Title	Activity Performed	Target Resolution Date
44	Integration Testing Script Execution	Based on Cycle 0 testing activities, the execution rates are within the planning estimates and the team is continuing to track the execution rate per tester through Cycle 1. This risk will continue to be monitored throughout the remainder of Cycle 0 and Cycle 1 of integration testing.	12-3-10

Risk Number	Risk Title	Activity Performed	Target Resolution Date
49	Automation Resources	The Automation Team is having difficulty identifying appropriately skilled automation resources and is widening the automation search criteria and expanding the list of vendors.-	08-28-10 <i>This date should be updated.</i>

The following risks were closed during the month of August.

Risk Number	Risk Title	Activity Performed
42	FFDV Mitigation Activities	This risk was closed since the FFD Phase is now complete.
43	Integration Testing Readiness	This risk is closed since Integration Testing has started on schedule and the risk of script execution effort is considered closed.
45	AOC Testing Resources	Adequate staffing has been identified and the team agreed to close this item.
48	Lack of Court subject matter expertise involved in the remaining E-Filing and Testing efforts	Adequate replacements for the lost Subject Matter Experts have been identified, so the Project Management team agreed to close this risk.

Issue Management:

No new issues were opened during the month of August. The Project Management Team appears to be adequately tracking the issues and as of August 31, 2010, there were no open issues identified by the CCMS-V4 Project Team.

The following issues were closed during the month of August.

Issue Number	Issue Title	Activity Performed
28	Current OWSM product/architecture does not support UNT Token or SAML for outbound Justice Partner connectivity.	The approach for Integration/PAT testing has been approved, so the Project Management team agreed to close this issue.
29	Current allocation of resources (4 cores across 4 servers) for Adobe LiveCycle is unable to support the average or peak hour volumes.	This issue appears to have been closed without a resolution.
30	Stress Test environment is observing latency in communication between Oracle RAC DB nodes.	The latency issue has been resolved through collaboration between Oracle, Deloitte, SAIC, and the AOC, so the Project Management team agreed to close this issue.

Resource Management:

The resources necessary for testing are being identified and there are no new open items with respect to Resource Management. The IPO/IV&V Team will review the more detailed resource planning during the month of September.

Cost Management:

There are no new issues with respect to Cost Management that have not already been discussed in previous IPO/IV&V reports.

Technical Focus Areas

Quality Management:

The RPO Management Team is currently working with Deloitte management to revise the QA Reports for the project.

Quality Architecture:

There are no open issues with System Architecture and the System Architecture Team with Deloitte, AOC, ISD, and other Court members continues to do a good job of identifying and defining the system architecture as well as architectural tradeoffs, raising issues for resolution, and generally creating a solid CCMS-V4 system architecture.

Configuration Management:

There are no open issues with Configuration Management. Configuration Management for documentation is being well controlled through eRoom and JCC Web Sites that have built-in controls for Configuration Management.

System Engineering Standards and Practices:

Since Deloitte Consulting appears to be following currently accepted systems engineering standards and practices, even as defined in IEEE Standard 1220, there are no system engineering standards and practices concerns at this point in time.

Requirements Identification and Traceability:

There are no new issues with Requirements Identification and Traceability that have not already been discussed in IPO/IV&V previous reports.

Detailed Design Review:

There are no open issues with the Detailed Design Review that have not already been discussed in previous IPO/IV&V reports.

System Development Quality and Progress:

There are no open issues with the Detailed Design Review that have not already been discussed in previous IPO/IV&V reports.

Testing Practices and Progress:

The IPO/IV&V Team reviewed the CCMS-V4 Development Core Product Acceptance Test Plan, Version 3.0, August 15, 2010 and the CCMS-V4 Moving Forward Discussion – Overall Core Release Testing Strategy and Approach (more commonly referred to as Attachment A). While an updated version of the PAT Plan, Version 1.1, dated September 9, 2010 was provided to the IPO/IV&V Team on September 15, 2010, the IPO/IV&V Team reviewed the initial PAT Plan (Version 3.0) during the August period covered by this monthly IPO/IV&V report. Thus, our IPO/IV&V observations as presented below may have been addressed in the most recent PAT Plan Version 1.1. That version will be reviewed and discussed in the September 2010 IPO/IV&V Report due next month. Some of the more significant observations from an IPO/IV&V perspective are:

- Although the PAT effort does not include a full regression test, the focused nine weeks of execution are assumed by the AOC to be executed against a stable, production-ready code base. For the PAT effort, the AOC and the Courts hand-selected approximately 2,300 scripts to be automated based on their criticality and breadth of function. The plan states that “The final two (2) weeks are dedicated to defect-specific remediation and closeout” and relies on “Good Builds” that are “sufficiently smoke tested and regression tested” by Deloitte.
 - The lack of a full regression test is a risk because it does not provide a process to verify that no side-effects have been introduced when a defect is fixed. However, the assumption of the stable, production-ready code base minimizes this effect and the CCMS-V4 Project Team has assumed this risk in only performing one execution cycle. The Deloitte regression testing of defects should be “white box” based and be broad; not limited to the minimum steps as identified below. The AOC has stated that the AOC and the Courts defined the regression test cases and that it was the AOC’s responsibility for the amount of regression tests performed.
- For the AOC, “Defect retest involves executing the minimum number of steps required to test the defect successfully - this does not include re-execution of the entire scenario(s) related to a given defect.”
 - The AOC should ensure that Deloitte is performing broad regression testing based on knowledge of the defect fix to ensure there are no side-effects created by the fix since there is no process to identify that this occurs. The AOC has stated that the AOC and the Courts defined the regression test cases and that the AOC was performing the regression testing. The IPO/IV&V Team will verify this statement in an updated version of the PAT Plan in the September report.

- Section 5.0 identifies that the 0-0-50 exit criteria is only accumulated during the 9-week execution cycle.
 - The PAT Plan should clearly identify where the 0-0-50 criteria applies (e.g. only during the nine week execution or also during the two week re-execution of fixes?) One way to correct this is to establish an understanding with Deloitte, preferably in writing, that side-effects related to a defect fix will be associated to the original defect and that the original defect will not be closed until all side-effects associated with correcting the defect are resolved. The AOC has stated that this has been clarified in a subsequent version of the PAT Plan. The IPO/IV&V Team will verify this statement.
- Testing coverage parallels the requirements documents which will ensure better traceability from the approved Final Functional Design documents to the test cases; the traceability matrix is a deliverable as part of the Test Scripts Deliverable.
 - This will result in improved traceability, which will make it easier for the AOC to verify that all the requirements have an associated test case.
- Staffing levels appear appropriate based on the number of test, number of resources, time to execute a test, and an acceptable productivity rate for the testers.
 - Resource productivity rate is comparable to Industry averages and not overly aggressive.
- Data loading for transactional data refers to “the start of the first cycle”, which according to Table 3.2.1 is at the beginning of the first 9-week test period; there is no identified refresh point.
 - Data refresh should be considered whenever a new build is placed into PAT and criteria should be defined as to when a data refresh would be required. Currently, in the PAT Plan, the data refresh point is undefined.
- Test metric data should include a discussion from the Deloitte QA Manager to explain what the metric is indicating to Deloitte, instead of just raw numbers.
 - Metric data should never stand alone and should always have an interpretation by Deloitte’s QA Manager.

As such, the IPO/IV&V Team recommends the following:

- The AOC should be involved defining the regression test cases that should be accomplished by Deloitte when a defect fix is regression tested. The selection of regression test cases should be based on “white box” knowledge of the fix implemented and the potential side-effects that may occur, which the AOC may not have sufficient knowledge or insight. Therefore, the AOC must clearly understand the fix and question Deloitte as to the scope of the regression testing being performed. Broader regression testing will then minimize the potential of

side-effect getting into production. The AOC has stated that the AOC and the Courts defined the regression test cases and that the AOC was performing the regression testing. The IPO/IV&V Team will verify this statement in an updated version of the PAT Plan in the September report.

- The AOC should define criteria for when an additional build would be required. Currently, within the PAT Plan, there are no criteria defined for when an additional build would be required. It simply states that additional builds may be requested. In addition to a build, the criteria should be expanded to address data refreshes. The AOC has stated that this has been clarified in a subsequent version of the PAT Plan. The IPO/IV&V Team will verify this statement in an updated version of the PAT Plan in the September report.
- The PAT Plan should clearly identify where the 0-0-50 criteria applies (only during the nine week execution or also during the two week re-execution of fixes?) One way to correct this is to establish an understanding with Deloitte, preferably in writing, that side-effects related to a defect fix will be associated to the original defect and that the original defect will not be closed until all side-effects associated with correcting the defect are resolved. The AOC has stated that this has been clarified in a subsequent version of the PAT Plan. The IPO/IV&V Team will verify this statement.

The IPO/IV&V Team will add this concern as “*Aug10.1 PAT Plan*” to the matrix of concerns in Appendix A, and track actions taken to address our recommendation to either modify the PAT Plan or establish risks for each of the points identified above and implement appropriate corrective actions to mitigate the risk.

Appendix A: Matrix of Areas of Concern (Open)

The matrix below provides a current listing of all open areas of concern, our recommendations, and the action taken by the CCMS-V4 Project Team. As items are resolved, they will be moved to Appendix B. Key statistics are summarized below:

- There was one new area of concern identified this month.
- The IPO/IV&V Team strongly believes that this project will continue to be a high risk project due to the constraints imposed by the budget, schedule, and resources.

Item Number	Area of Concern	Recommendation	Action Taken
Aug10.1	PAT Plan	Either modify the PAT Plan or establish risks for each of the points identified by IPO/IV&V in this report and implement appropriate corrective actions to mitigate the risks.	9-2010 – New this month. On September 15, 2010, the IPO/IV&V Team received a revised PAT Plan, Version 1.1, dated September 9, 2010 for review that may address some of the IPO/IV&V areas of concern.
Apr10.1	QA Report Metrics	Continue the use of metrics in the QA Reports, but include a definition or interpretation of all metrics shown in the reports.	4-2010 – New this month. 5-2010 – There is no change in this action item. 6-2010 – There is no change in this action item. 7-2010 – There is no change in this action item. 8-2010 – There is no change in this action item, although the CCMS-V4 Project Team reported working with Deloitte to change the QA report content.

Appendix B: Matrix of Areas of Concern (Closed)

The matrix below provides a listing of all closed areas of concern, our recommendations, and the action taken to resolve the issues by the CCMS-V4 Project Team. Key statistics are summarized below:

- No areas of concern were closed this month.

Item Number	Area of Concern	Recommendation	Action Taken
Jul07.1	Aggressive schedule	The schedule should be reviewed to ensure that ample time has been allocated to each phase of the project.	<p>09-2007 - No action taken that SEC is aware of.</p> <p>10-2007 – At this point in the project it is difficult to determine if there is ample time allocated to each phase of the project. This item will remain in a watch status (e.g., once Test Planning activities have begun, it will be easier to determine if enough time is allocated to testing activities).</p> <p>11-2007 to 04-2008 – Although 12 weeks were added to the schedule, there is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>05-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>06-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>07-2008 – There is concern that there is not enough time to complete the review of the FFD. In addition, there is concern that there is insufficient time allocated to testing and that test planning has not been fully engaged. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>08-2008 – 27 additional days were added to the schedule for review of the FFD. It is unknown at this point whether the additional days are sufficient to allow a thorough review and better ensure the highest quality product possible. Moreover, because test planning is slow to start, SEC still has concerns about the time allocated to the testing phase. This item will remain in watch status.</p> <p>09-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>10-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>11-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>12-2008 – It is unclear how the extended review timeframe will impact the overall schedule. This item will remain in watch status.</p> <p>1-2009 – The Core application, Portals, and Statewide Data Warehouse portions of the FFD will be completed by March 30, 2009. The Data Exchanges portion is expected to be completed by April 15, 2009. This item will remain in watch status.</p> <p>2-2009 – All portions of the FFD are on track for completion by March 30, 2009 and April 15, 2009, respectively. This item will remain in watch status.</p> <p>3-2009 – The Portals and Statewide Data Warehouse will be accepted by March 31, 2009. The Core application will be completed by March 31, 2009. Data Exchanges will not be completed until the end of April. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>4-2009 – The FFD was signed off May 1, 2009. The Data Exchanges are expected to be completed by May 22, 2009.</p> <p>5-2009 – The Data Exchanges are expected to be completed by June 5, 2009.</p> <p>6-2009 – While the IPO/IV&V Team believes the schedule is aggressive and will remain aggressive for the duration of the project adding to project risk, the RPO and AOC have extended the schedule through contract amendments. At this point, the RPO and AOC have accepted the project risk as neither the schedule nor the budget can be changed.</p>
Aug07.1	JAD Schedule	<p>There does not appear to be a comprehensive schedule of JADs so that participants can plan time accordingly. Thus, Deloitte Consulting should prepare a detailed schedule that sets realistic timeframes needed to JAD each functional area and ensure the schedule is agreed to by all relevant parties.</p>	<p>09-2007 – The schedule should be completed in October 2007.</p> <p>10-2007 – A revised schedule was completed in October 2007. While the schedule provides more details than previous versions, it still does not address the detailed planning that must be conducted to ensure coverage of all functional areas and the workflows associated with each.</p> <p>11-2007 to 04-2008 – JAD scheduling has improved to the point that this is no longer an area of concern. Consequently, this item has been closed. Over the past few months, Deloitte Consulting has been diligent in setting and adhering to its JAD schedule. As the project enter the final design stage, participants appear able to plan time accordingly to ensure they are available to participate in tracks as needed and share their subject matter expertise. Meetings were also held to hear concerns that more time was needed to review developing requirements—resulting in more time added to the overall project development schedule.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Sep07.1	Requirements Gathering	Ensure that a detailed JAD schedule includes a plan for how the workflow interrelationships will be addressed.	<p>10-2007 – While the workflows and interrelationships have not yet been addressed, the AOC has instituted cross-track meetings as part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements are being gathered.</p> <p>11-2007 to 04-2008– The cross-track meetings have proven to be an essential, needed part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements were being gathered. However, to SEC's knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>05-2008– To SEC's knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas. This step should help address some of our concerns. However, since the final design is nearing completion, there is little value in fully mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.1	Project Oversight Activities	Assign person in role of day to day project management responsible for ensuring that issues are resolved timely, do not impact downstream work efforts, and are not in conflict with other project activities, legal provisions, or branch policy.	<p>11-2007 to 04-2008– It was explained that Bob Steiner, the AOC Project Manager, performs these activities and that a Project Management Consultant familiar with V2 and V3, Sean Yingling, will be assigned to assist the Development Project Manager (Bob). This item will remain in watch status over the next month to ensure the activities are being performed.</p> <p>05-2008– SEC will continue to monitor this item until a Responsibility Matrix indicating the project management component responsibilities that are designated to Sean and Bob is developed. The matrix will ensure that no workload gaps exist.</p> <p>06-2008– To date, a Responsibility Matrix has not been provided to SEC for review.</p> <p>07-2008– SEC will work with Bob Steiner and Sean Yingling to better understand the project management responsibilities.</p> <p>08-2008– Bob and Sean have established a seamless working relationship. Bob has ultimate responsibility for all project management activities. Sean’s focus rests with coordinating the FFD review, reporting to the Steering Committee, and following up on issues with the V4 Court Project Managers.</p>
Oct07.2	JAD Session Documentation	Utilize new template or other mechanism to document detailed JAD Session minutes including areas of discussion, results or actions taken, agreements reached, and issues raised as well as distribute timely for approval.	<p>11-2007 to 04-2008 – Starting in mid-April, the JAD tracks created a new template to ensure consistency across JADs for documenting decisions reached and meeting outcomes. However, since it appears that the new template is only used in isolated instances, this item will remain in watch status over the next month.</p> <p>05-2008 – It is not clear whether an AOC CCMS member will be appointed to monitor and summarize decisions made in the JAD sessions, and subsequently elevate those of potential interest to the Steering Committee, especially those that may require higher level buy-in.</p> <p>06-2008 – Since the final design is nearing completion, there is little value in mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.3	Governance Structure and Escalation Process	Clarify and establish the complete governance structure to eliminate confusion related to issue escalation process and decision-making.	<p>11-2007 to 04-2008 – The CCMS Governance Model was distributed to committee members. This item will remain in watch status over the next month to ensure its use.</p> <p>05-2008 – The CCMS Governance Model appears to be in use and effective in allowing participation in project decisions regarding project scope, cost, and schedule.</p>
Apr08.1	Unclear Requirements	<p>Review the requirements to determine the types of clarifications needed for understanding in order to avoid confusion during downstream activities such as coding and preparing for testing.</p> <p>As of our 09-2008 review of the FFD, we have suggested the following additional recommendations:</p> <ol style="list-style-type: none"> 1. Identify and evaluate subjective text in FFD (such as may or could) and clarify within the context of use; 2. Perform a traceability exercise to link use cases to business rules—again to reduce need for individual interpretation; 3. Review business rule part of each section to ensure complete and clear rules have been incorporated into the use case. 4. Evaluate pre and post-conditions to ensure they are correct and complete. 	<p>04-2008 – New this month.</p> <p>05-2008 – It is not clear whether action has been taken on this issue.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas). This item will remain in watch status over the next month to review this process.</p> <p>07-2008 – This item remain in watch status until a better understanding can be achieved and SEC evaluates the review process.</p> <p>08-2008 – SEC will assess this item during their review of the FFD deliverable.</p> <p>09-2008 – SEC has begun to assess this item and will continue to evaluate progress during the AOC/Court review of the FFD deliverable.</p> <p>10-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>11-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>12-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>1-2009 – The RPO Management Team is currently developing plans to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>2-2009 – The RPO Management Team continues to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>3-2009 – The RPO Management Team continues to discuss the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>4-2009 – An updated resource schedule is being developed that will forecast resource needs between now and the beginning integration testing. This item will remain in watch status.</p> <p>5-2009 – An estimate of the number of Court SMEs needed for testing has been provided. However, more SMEs with Family and Juvenile expertise will be needed. This item will remain in watch status.</p> <p>6-2009 – The IPO/IV&V Team has continued to express their concern that the ambiguity surrounding the interpretation of final requirements presents a risk to the construction and testing phases of the project. Data is being captured by the AOC Software Quality Assurance Team during early testing that should assist in defining the extent of the problem and any future concerns will be raised as part of the testing assessment.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Dec08.1	Standardization and Configuration	It is not clear what impact the Standardization and Configuration requirements will have on the FFD and on long-term maintenance of the application. Once all Standardization and Configuration requirements have been defined, the requirements should be traced back into the FFD and reviewed again.	<p>12-2008 – New this month.</p> <p>1-2009 – In the month of January, a Court Executive Management work group was established to address the concerns surrounding the standardization and configuration requirements.</p> <p>2-2009 – The RPO Management Team reported that the Standards and Configuration Management Group will determine whether configurable items are statewide standards or local configurations and that these decisions will not impact the FFD.</p>
Dec08.2	Single Point of Contact for ISD	A single point of contact should be established for AOC that can track and manage daily progress on ISD-related activities	<p>12-2008 – New this month.</p> <p>1-2009 – It is not clear where the roles and responsibilities are documented and whether David Corral, selected as the single point of contact, has the authority to make decisions on behalf of ISD. Virginia Sanders-Hinds will work with IPO/IV&V to better understand the ISD roles and responsibilities within the project.</p> <p>2-2009 – It was clarified that Virginia Sanders-Hinds is the single point of contact with the authority to make decisions on behalf of ISD.</p>
Mar09.1	Justice Partners (Interfaces) Plan	Determine the state and progress of the common “State” interfaces which are currently being reviewed by the Justice Partners and assess the progress for project schedule impact.	<p>4-2009 – The “State” interfaces are being addressed with the Justice Partners. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p> <p>5-2009 – The “State” interfaces are being addressed with the Justice Partners at both the State and local levels. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off (now anticipated for 6-5-09) and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>6-2009 – The “Statewide” interfaces are being addressed with the Justice Partners. – A plan has been defined for day-one critical exchanges and each Justice Partner will be given a Microsoft Project Plan to follow. The AOC will continue to work closely with each Justice Partner to anticipate any potential challenges. However, it is not clear if and when the Justice Partners will participate in PAT. This item will remain in watch status.</p> <p>7-2009 - The CCMS-V4 Project Team has clarified that the Statewide Justice Partners will participate in PAT. This item will be closed out.</p>
Mar09.2	Document Management Plan	Determine the state and progress of the agnostic “generic” interface to support any existing document management solution and assess the progress for project schedule impact.	<p>4-2009 – The “generic” interface is currently under development. This item will remain in watch status. The RPO Management Team has stated that the requirements for document management were gathered during design and have been signed off. The AOC is in the process of standardizing the document management interface for all courts but is unsure whether this effort will be complete prior to Go Live for CCMS-V4. This item will remain in watch status.</p> <p>5-2009 – The “generic” interface is currently under development. This item will remain in watch status.</p> <p>6-2009 – The “generic” interface is currently under development and will have a solution that supports the courts at Go Live. Currently, the early adopter court uses FileNet and is scheduled to test this interface during PAT. For each of the remaining Courts, the agnostic “generic” document management interface will be finalized, if needed, during the deployment effort. This item will remain in watch status.</p> <p>7-2009 – The CCMS-V4 Project Team has clarified that the Lead Courts which use FileNet are scheduled to test this interface during PAT. This item will be closed out.</p>

Appendix C: Project Oversight Review Checklist

To assist us in determining whether the CCMS-V4 project is on track to be completed within the estimated schedule and cost, the Project Oversight Review Checklist is used to identify and quantify any issues and risks affecting these project components.

The checklist format provides a quick reference for the assessment of the project management practices and processes in place over the CCMS-V4 project and will assess the adequacy or deficiency of the area. Further, the checklist may provide comments on the specific items reviewed, interviews conducted, and general practices observed for requirements presented under the five categories identified below. These requirements are consistent with industry standards and accepted best practices such as the Project Management Institute (PMI)'s Project Management Body of Knowledge (PMBOK) and the Institute of Electrical and Electronic Engineers (IEEE) standards. Use of these checklists will assist us in commenting on the effectiveness of the project activities.

- Planning and Tracking
 - Procurement
 - Risk Management
 - Communication
 - System Engineering

No updates were made to the Project Oversight Review Checklist this month.

Project Oversight Review Checklist

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		The business case has been finalized. The project goals, objectives, and expected outcomes are documented in the Deloitte Consulting Statement of Work. The key stakeholders and sponsors are identified and documented in the Project Management Plan for CCMS-V4.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project plan that has been approved is loaded into Microsoft Project. Deloitte Consulting will update the schedule with construction and testing details after the requirements are complete.
Is completion of planned tasks recorded within the PM software?	X		Completion of milestones is tracked within Microsoft Project.
Are actual hours expended by task recorded at least monthly within PM software?		X	Actual hours for Deloitte Consulting staff are tracked weekly within Playbook Navigator, but are not shared with the AOC as this is a fixed price development contract. The AOC has historically not tracked this information.
Are estimated hours to complete by task recorded at least monthly within PM software?		X	Estimated hours to complete for Deloitte Consulting staff are tracked weekly but are not shared with the AOC as this is a fixed-price development contract. Any deviations occurring to planned dates are discussed at an internal weekly meeting between AOC and Deloitte Consulting.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans?	X		There is a formal staffing plan for Deloitte Leads that is shared with the AOC. Deloitte Consulting tracks internal project staffing with respect to acquisition, schedule for arrival and departure of specific staff, and staff training plans. The AOC does not currently have a CCMS-V4 Staffing Plan; staff are allocated at the CCMS level and not at the specific project level.
Have project cost estimates, with supporting data for each cost category, been maintained?	X		While development costs are tracked internally by Deloitte Consulting, they are not shared with the AOC since this is a fixed-price development contract. The AOC tracks the project budget, monies encumbered, and monies expended to date in an Access database.
Are software size estimates developed and tracked?	X		Deloitte Consulting has included estimates for Final Design, Final Construction, Testing, and Conversion.
Are two or more estimation approaches used to refine estimates?	X		A Bottom Up estimate is performed by the Deloitte Consulting Project Manager and a Top Down estimate is performed by the Lead.
Are independent reviews of estimates conducted?	X		There are multiple internal reviewers consisting of Deloitte Consulting, AOC, and Court staff.
Are actual costs recorded and regularly compared to budgeted costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Currently, AOC costs are tracked at the overall CCMS level. At this point, a daily (or on-demand) Access database report can be printed showing project budget, monies encumbered, monies expended to date, and monies forecasted to be spent.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Planning and Tracking			
Is supporting data maintained for actual costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Yet, the RPO has invoice level data to support its actual cost data tracked in its Access database.
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	X		This information is reported weekly, monthly, and quarterly.
Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration mgmt plan?	X		The CCMS-V4 Configuration Management Plan outlines the process and procedures followed for Configuration Management.
Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?	X		This information is tracked in eRoom and in the weekly, monthly, and quarterly status reports.
Is user satisfaction assessed at key project milestones?		X	Deloitte Consulting has stated that user satisfaction is assessed at key project milestones in the form of deliverable review. All deliverable comments are logged, reviewed, and categorized to indicate if a response is needed. According to Deloitte Consulting, all defects or other comments that require a response are addressed and tracked through closure. Other validation processes include proof of concepts, UI prototypes, design sessions, design council sessions, and cross track meetings. As such, Deloitte Consulting believes that acceptance of the deliverable is evidence of user satisfaction. While there are no satisfaction surveys used or assessments performed at key project milestones, the AOC agrees that there are several opportunities to talk through and resolve deliverable disagreements on a case by case basis.
Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?	X		Planning is in compliance with a formal system development life-cycle (SDLC) methodology.
Is there a formal enterprise architecture in place?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point in time, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project. SEC will be investigating the AOC enterprise architecture further as the project progresses.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	X		Project Closeout activities are planned to occur and we will evaluate and comment whether the planned activities occurred at the project closeout. In the interim, Lessons Learned sessions are being conducted at various project phases to identify possible process improvements.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, "alternative procurement") and their required processes followed?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Is a detailed written scope of work for all services included in solicitation documents?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Are detailed requirement specifications included in solicitation documents?	X		Detailed requirements were included in Exhibit B of the Statement of Work. These will be expanded upon during Detailed Design. Thus, we will review or evaluate those requirements when developed.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. For ongoing SOWs, independent third-party vendors are used to review and recommend procurement planning and execution practices.
For large-scale outsourcing, is qualified legal counsel obtained?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. The AOC utilized outside counsel for the V4 Development Contract.
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X		The Risk Management Plan contains the process and procedures for risk. Risks are tracked within eRoom and are discussed during the weekly and monthly status meetings. In addition, the Deloitte Consulting Project Manager meets with the CCMS Product Director weekly to discuss risks.
Does the management team review risks and mitigation progress at least monthly?	X		The management team reviews risks at weekly and monthly status meetings.
Are externally developed risk identification aids used, such as the SEI "Taxonomy Based Questionnaire"?		X	Additional risk identification aids are internal to Deloitte Consulting and are not shared with the AOC. The AOC is not using any other risk identification aids.
Communication			
Is there a written project communications plan?	X		This information is contained in the CCMS-V4 Communication Management Plan.
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		Written weekly, monthly, and quarterly status reports are prepared and discussed with the project management team as well as the Steering Committee/Oversight Committee. In addition, there are executive meetings held to brief the Lead Court CIOs.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Communication			
Are there written escalation policies for issues and risks?	X		This CCMS-V4 Project Management documentation contains this information.
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		The Product Management Group has primary responsibility for working through the issues and risks. Additionally, issues and status are shared with lead court information officers, court executive officers at bi-weekly steering committee meetings as well as with selected presiding judges at the quarterly oversight committee meetings. The RPO is also working diligently to seek input and have stakeholders assume an active ownership role in the development process.
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		AOC and Court staff are planned to be involved from requirements gathering through testing and into implementation.
Do users formally approve/sign-off on written specifications?	X		The requirements will be approved by the AOC and Court staff.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		The RPO Management Team has reported that Deloitte Consulting is using Clear Quest and Clear Case to manage defects and Rational Requisite Pro to track requirements.
Do software engineering standards exist and are they followed?	X		This CCMS-V4 development standards documentation has been reviewed by SEC and found to be adequate.
Is a formal system development life-cycle (SDLC) methodology followed?		X	<p>Deloitte is using an overlapped waterfall SDLC as evidenced by the structure of their project plan and the manner in which activities are performed.</p> <p>CMMI Level 3 requirements require that a defined, standard, consistent process and process measurement be followed. This would require that:</p> <ul style="list-style-type: none"> • Technical processes are defined in writing; • Project roles are clearly defined; • Staff are trained in standard methods and process activities before they are assigned to roles; and • Technical management activities are guided by defined processes. <p>It is not clear where the processes and roles are documented and whether the CCMS-V4 Project is CMMI Level 3 compliant.</p>
Does product defect tracking begin no later than requirements specifications?	X		Product defect tracking occurs during deliverable review. Users submit defects by entering comments in the deliverable. Each defect is tracked to closure within the deliverable. Any corresponding response is attached to the original defect in the body of the deliverable. Before approval of the deliverable, the AOC confirms that all defects have been appropriately addressed.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

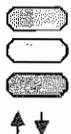
Practices and Products	Practice in Use	Practice Not in Use *	Notes:
System Engineering			
Are formal code reviews conducted?		X	Two levels of code reviews are conducted. Automated reviews of code are conducted using the JCART tool which checks for and highlights unacceptable coding practices. Any issues identified through the JCART execution have to be resolved before the code can be included in the build. Additionally, manual code reviews are conducted by the Architecture Leads (Technical Analysts, Development Leads and the Framework Team). Code review checklists are created and stored in ClearCase. Deloitte should implement a process for ensuring that the coding standards are adhered to as opposed to the AOC assessing the compliance after completion.
Are formal quality assurance procedures followed consistently?	X		The quality assurance documentation was updated to include CCMS-V4. As more QA related data is collected and reported by Deloitte Consulting, the IPO/IV&V Team will be reviewing these reports to assess how data is represented in the reports—such as through metrics—and identify issues with processes if the metrics indicate negative trends.
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	AOC and the Court staff will sign-off on acceptance test results. Acceptance criteria have been established as 0 Severity-1 incidents, 0 Severity-2 incidents, and not more than 50 Severity-3 incidents.
Is the enterprise architecture plan adhered to?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project.
Are formal deliverable inspections performed, beginning with requirements specifications?	X		All deliverables are approved by the AOC and Court staff.
Are IV&V services obtained and used?	X		SEC has been hired to perform IV&V.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Appendix D: IPO/IV&V Project Scorecard

For August 1, 2010 – August 31, 2010 Time Period

Process Area	MAR 2010	APR 2010	MAY 2010	JUN 2010	JUL 2010	AUG 2010	REMARKS
Communication Management							Day-to-day communication continues to be strong.
Schedule Management							The schedule remains aggressive and a re-planning effort is under review.
Scope Management							Project scope is managed and controlled through a variety of avenues.
Risk Management							Risks are reported, discussed, and managed on a weekly basis.
Issue Management							Issues are discussed/reported weekly at various project management and Executive Committee meetings.
Resource Management							AOC and Deloitte's level of project resources are being defined.
Cost Management							ISD costs and RPO costs are maintained in separate databases and there is no effort to combine these in the near future.
Quality Management (Client Functionality)							We are unable to conclude on the quality of the client functionality due to the absence System test defect data related to Deloitte's execution of the System Test scripts.
Quality Architecture							Quality Architecture is currently adequately defined from an industry-sound SEI approach.
Configuration Management							CM, for documentation, is being well controlled through the eRoom and JCC web sites that have built-in controls for CM.
System Engineering Standards and Practices							Deloitte Consulting appears to be following currently accepted systems engineering standards and practices.
Requirements Identification and Traceability							The IPO/IV&V Team has concerns with the lack of traceability between use cases and business rules.
Detailed Design Review							The Technical Design documentation was delivered to the RPO, but is an artifact and not a deliverable. Therefore, the Detailed Design cannot be assessed.
System Development Quality and Progress							The technical architecture and design is proceeding on the defined schedule with only minor changes.
Testing Practices and Progress							Testing continues to be a concern.



Green – On Track
 Yellow – Warning
 Red – Significant Problems

Appendix E: IPO/IV&V Background, Scope, and Methodology

The California Case Management System (CCMS) is a statewide initiative to bring the courts together to use one application for all case types. CCMS is managed by the Administrative Office of the Courts (AOC) Southern Regional Office (SRO) in Burbank with the participation of the AOC Information Services Division and superior courts in the planning, design, and development sessions. Over the next 2 years, the AOC plans to expand the functionality of the current interim CCMS applications and develop the next phase—CCMS-V4—that will include family law, juvenile dependency, and juvenile delinquency case types as well as incorporate the V2 and V3 products and update the system’s technical architecture and environments. Toward this end, the AOC has executed a contract with Deloitte Consulting to design and develop the V4 component—yet, the success of the V4 Project relies on every party working in harmony toward common goals.

Background:

For all high criticality technology projects such as CCMS-V4, industry best practices strongly encourage independent oversight. Ideally, the independent project oversight process begins during the feasibility study and continues through project closeout. Deficiencies, issues, findings, and recommendations identified by the oversight process should be incorporated into the appropriate project management processes. As the project progresses, the independent review and assessment approach should track the disposition of findings and recommendations in terms of corrective action and implementation of oversight recommendations.

An Independent Project Oversight (IPO) effort is intended to audit system development, acquisition, and maintenance controls to assure a structured project management methodology is adhered to and managed through activities such as project scheduling, risk management, and change management. A primary goal is to provide impartial oversight of the responsibilities and activities of the project office. Similarly, the Independent Verification and Validation (IV&V) provides unbiased oversight of the technical deliverables such as program code, test scripts and results, and network configurations and processes used to create the product. It is intended to evaluate products against system requirements and whether processes used follow the intended life cycle methodology.

However, these efforts are not designed to guarantee success of the CCMS-V4 application nor will the IPO/IV&V efforts ensure the completeness of business requirements designed by the CCMS-V4 team or the ability of the end system functionality of the application built to meet court needs statewide.

Appendix E: Continued

Scope and Methodology

In July 2007, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) Services over the California Case Management System (CCMS) V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the Regional Administrative Director and CCMS Product Director at the Southern Regional Office (SRO), our objectives are to monitor the services, deliverables, milestones, deadlines, and functionality of the CCMS-V4 project and communicate status, progress, issues, and potential challenges to the success of the project as designed. The IPO/IV&V efforts are designed to give assurance, from an independent and unbiased perspective, that the process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards as well as that potential risks and issues are known by project decision makers. The IPO/IV&V effort cannot require change, but any identified and reported findings and results should be considered by the project sponsors.

To provide appropriate and independent review, analysis, and oversight on the CCMS-V4 project, SEC will generally provide monitoring efforts from July 2007 through April 30, 2011 relative to the following areas:

- Project management and System Development Life Cycle (SDLC) processes, procedures, and communication
- Adherence to schedule
- Techniques and processes employed for risk management, issue management, and communication strategies
- Requirements gathering as part of JAD Sessions
- Completeness of Functional Design and Technical Design
- Traceability of requirements from one SDLC phase to the next
- Testing techniques and processes employed
- Compliance with project management and technical contract requirements

However, the IPO/IV&V efforts will not review or address the completeness of the business requirements being developed cooperatively by Deloitte Consulting, SRO staff, and court Subject Matter Experts (SMEs) as part of functional design joint application development (JAD) sessions. While business requirements will be reviewed from a technical perspective to assess whether they contain sufficient levels of specificity to ensure proper coding and end-user functionality as planned, SEC cannot ensure that all critical business processes and steps are appropriately captured in the business requirements to meet court needs.

Appendix E: Continued

Additionally, our efforts do not address the management surrounding the application developer's budget. Because the AOC awarded Deloitte Consulting a fixed-price contract, a time and material type review and analysis is not warranted in this situation.

Moreover, to provide appropriate and independent review, analysis, and oversight over the CCMS-V4 project, the following parameters need to be met in allowing SEC to perform activities unimpeded:

- Understanding/agreement by all project participants on our independent role and importance of timely information sharing and meeting scheduling;
- Inclusion as a seamless member of the project team;
- Timely knowledge of and inclusion in all project meetings;
- Commitment from all project participants to attend meetings scheduled with the IPOC/IV&V;
- Unfiltered access to all documents, data, deliverables, and personnel deemed relevant by the IPOC/IV&V Team; and
- Full disclosure of project knowledge including items such as project issues, risks, change requests.

If there are challenges in adhering to those parameters, we will escalate our issues and/or concerns to the Internal Audit Services Manager, CCMS Product Director, RAD, CCMS Steering Committee, and CCMS Oversight Committee as necessary or appropriate. Working in conjunction and coordination with the AOC's Internal Audit Services to complete this Statement of Work, we will perform the following tasks:

IPO Specific Tasks

- Conduct meetings, as needed, with key project staff to obtain first-hand information as to the objectives of the project, identify the key players and their roles, and the interrelationship and communication structure between all parties as well as review documents such as organization charts and governance structure.
- Attend meetings, as needed, key court/AOC and vendor personnel to obtain information on their responsibilities, objectives, communications, and schedules.
- Conduct observations, on-going interviews, and document examinations to monitor meeting timelines, deliverables, and milestones as described in the schedule.
- Review project planning/management deliverables and documentation to comment on compliance with industry best practices and adherence to documented project processes
- Perform initial assessment of Project Management processes and documents (project management plan, communication plan, change management plan, implementation plan, etc).

Appendix E: Continued

- Participate in certain critical requirements gathering and physical design sessions (JAD sessions) as deemed necessary or at the direction of the Internal Audit Services Manager to provide expertise courtroom operations (family law, criminal, and traffic), finance, distributions, and audit as well as on the V2 and V3 retrofit and validate processes are being followed.
- Provide an Implementation Strategy Review. This review would consist of an analysis of the implementation approach and the action plan for accomplishing implementation.

IV&V Specific Tasks

- Review Requirement Traceability and Contract at end of Functional Design, Technical Design, and Test Preparation.
- Provide a Functional Design and Requirements Traceability Review. The Functional Design review would consist of an analysis of the Functional Design Specification to assess the readability, consistency, and testability of the design. The Functional Design review will identify issues such as non- testable requirements, vague requirements, requirements that are in conflict or not consistent with each other, etc. The Requirements Traceability review will ensure that all of the contractual requirements have been addressed and are accounted for.
- Provide a Technical (software) Design and Requirements Traceability Review. The Technical Design review would consist of an analysis of the Technical Design Specification to assess the readability, consistency, and testability of the technical design as well as identification of any potential weaknesses in the design. The Technical Design review will identify where the Technical Design may be in conflict with the Functional Design. The Requirements Traceability review will ensure that the design has addressed all of the functional requirements.
- Provide a Test Methodology and Requirements Traceability Review. The Test Methodology review would consist of an analysis of the Test Methodology and a sampling of test scripts which will be traced to the requirements and to the design specification as well as reviewing the data elements necessary for the scripts. The Requirements Traceability Review will ensure that all of the test cases/scripts have been developed to test the design and the functional requirements.
- Review a statistically valid sample of source code (coded based on requirements documented in JAD sessions). Approximately 40 modules will be reviewed which would provide early feedback on compliance to coding standards and comparisons to the design requirements.

Appendix E: Continued

- Review a statistically valid sample of test scripts (unit, integration, system, user acceptance, product acceptance) for compliance with requirements from both a technical perspective and from a court operations perspective (testing enough scenarios/scripts covering critical and most frequent business cases both on a positive/ideal flow and on an exception basis).

IPO/IV&V Combined Tasks

- Assess Systems Development Life Cycle (SDLC) practices to comment on compliance with industry best practices and adherence to documented project processes.
- Review agreed-upon vendor deliverables including, but not limited to Functional Design, Technical Design, Test Methodology, Implementation Strategy, V2 Requirements and V3 Requirements, to comment on compliance with Deliverable Expectations Document (DED).
- Identify and assess any new or ongoing challenges, barriers, risks, or issues.
- Attend meetings, as needed, where deliverables, strategies, timelines, and status are being considered.
- Maintain a log tracking IPO/IV&V issues that delineates any challenges, barriers, risks, issues, defects, milestones changed or missed, and observations warranting discussion and monitoring; monitor the resolution of such issues; document the resolution and closure of each matter.
- Conduct bi-weekly briefings with the RAD and designated Project Manager(s) discussing all previous work and any updates or new developments.
- Compile the results of the IPO/IV&V monitoring efforts in writing. In addition to compliance issues, the report will also contain any other significant findings, conclusions, and recommendations including the identification of risks, lessons learned, best practices, or performance exceeding minimum requirements as well as comment on severity or criticality and impact or consequence of items discussed.
- Ascertain and report on follow-up efforts taken on corrective actions needed and implementation of oversight recommendations.
- Provide reports to the RAD and designated Project Manager(s) on a monthly basis, or more frequent if necessary, based on project stage criticality.

Appendix F: SEC Activities - Performed & Planned

Completed SEC Activities for August 2010

During August, SEC performed the following activities:

- Monitored QA Metrics;
- Monitored Re-Planning Efforts;
- Monitored Testing Efforts;
- Follow-up on Integration Test Plan recommendations made by the IPO/IV&V Team;
- Obtained and reviewed the Core Product Acceptance Test Plan, Version 3.0, dated August 15, 2010 as well as incorporated comments into this monthly report;
- Attended weekly and monthly Project Management Meetings, weekly Technical Architecture Meetings, and monthly Steering Committee Meetings, as well as participated in CCMS-V4 IPO/IV&V Project Meetings;
- Performed analysis of areas in the Project Oversight Review Checklist Appendix C;
- Identified and tracked potential risks, observations, and issues as well as discussed and prepared monthly IPO/IV&V written status reports.

Planned SEC Activities for September 2010

SEC plans to conduct the following activities over the next month:

- Attend, observe, and participate in a variety of CCMS-V4 meetings including weekly Project Management Meetings, monthly Project Management Meeting, monthly RPO Management Meeting, monthly ISD Meeting, weekly Technical Architecture Meetings, CIO Meetings, and monthly IPO/IV&V Project Meeting;
- Attempt to identify schedule for and attend new CCMS Management Committee meetings new CCMS Executive Committee meetings, as well as identify the composition of the committee members.
- Review technical documents prepared and discussed at weekly meetings as well as other documents distributed as part of weekly and monthly meetings;
- Review revised Core PAT Plan, Version 1.1, dated September 9, 2010;
- Continue review and comment on the Testing Documentation in terms of sufficiency of detail including implementation of integration test plan and PAT plan;
- Obtain “re-plan”, or resetting of the project objectives, agreements, and schedules, as contained in various artifacts from the RPO Management Team. Once received, assess the plan in terms of executability of the plan given the project schedule and activities;
- Monitor results of product testing, when started, in terms of progress in script executions, frequency and severity of defects identified, and resolution of defects.
- Prepare monthly IPO/IV&V status report that identifies and tracks new risks or issues as well as accomplishments and review prior issue resolution.

The Judicial Council of California, Administrative Office of the Courts

Independent Project Oversight (IPO) and
Independent Verification and Validation (IV&V)
For the CCMS-V4 Development Project

Status Report as of September 30, 2010

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Executive Summary

Realizing the importance of independent oversight for high criticality technology projects, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) services for the California Case Management System (CCMS)-V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the CCMS Executive Sponsor in the Regional Program Office (RPO), our objectives are to monitor the activities, deliverables, milestones, deadlines, and design of the CCMS-V4 project and communicate status, progress, issues, and challenges to the success of the project as designed. Our monthly IPO/IV&V reports are intended to capture and assess current project activities to determine whether process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards, as well as that potential risk/issues are known by decision makers at a specific point in time; thus, the monthly items reported are in-flux, continually evolving, and will change over the course of the project.

Period Highlights:

The “re-plan”, or resetting of the project objectives, agreements, and schedules, is contained in various artifacts and deliverables. The project objectives and agreements are being detailed in a Statement of Work which has not yet been finalized and thus, cannot be distributed to the IPO/IV&V Team. The schedule is published weekly in the CCMS-V4 Development Services Status Report and the project team appears to be tracking according to the schedule.

As of September 30, 2010, the Governance Model had not been finalized and, thus, not distributed to the IPO/IV&V Team for review and comment.

During the month of September, the IPO/IV&V Team reviewed the revised CCMS-V4 Development Core Product Acceptance Test Plan, Version 1.1, dated September 9, 2010.

- For the PAT effort, the AOC and the Courts hand-selected approximately 2,300 scripts to be automated based on their criticality and breadth of function. The IPO/IV&V Team is currently reviewing a sampling of these scripts from both a business and technical perspective. The plan states that PAT is executed over an eleven week period and that the first nine weeks consists of one complete execution with the final two weeks dedicated to defect-specific remediation and closeout and that this time would also be used to execute the regression test suite. This clarification alleviates any previous concern the IPO/IV&V Team had with the activities occurring within the final two weeks of PAT.
- Section 3.2 of the plan states that the AOC PAT Manager may request additional builds. This clarification alleviates any previous concern the IPO/IV&V Team had with the need for additional builds.

Detailed Observations, Impact, and Recommendations

The Southern California Regional Program Office (RPO) staff, AOC staff, individual court staff, and Deloitte Consulting continue to practice project management and systems-engineering practices in accordance with industry standards related to the identification and resolution of issues, risks, items for management attention, and modification and change requests. Additionally, the continued diligence employed by the RPO staff, AOC staff, Court staff, and Deloitte Consulting in addressing issues and following established project management processes has been consistent. As part of our continued IPO/IV&V efforts, we offer the following observations and areas of concern in various project management and technical areas.

Project Oversight Focus Areas

Communication Management:

There do not appear to be any current communication concerns noted by the CCMS-V4 Project Team or the IPO/IV&V Team.

Schedule Management:

The schedule is published weekly in the CCMS-V4 Development Services Status Report and the project team appears to be tracking according to the schedule.

Scope Management:

Scope management items raised by the CCMS-V4 Project Team are being actively managed through eRoom.

Risk Management:

No new risks were opened during the month of September. The Project Management Team appears to be adequately tracking the risks and as of September 30, 2010, the risks identified below by the CCMS-V4 Project Team remain active.

Risk Number	Risk Title	Activity Performed	Target Resolution Date
45	AOC Testing Resources	This risk has been reopened.	12-3-10

The following risks were closed during the month of September.

Risk Number	Risk Title	Activity Performed
44	Integration Testing Script Execution	Since the Integration Testing Team has maintained appropriate execution rates in Cycle 1 and Cycle 2, this risk has been closed.

Risk Number	Risk Title	Activity Performed
49	Automation Resources	The automation team is now fully staffed; resources with appropriate automation skills have been procured and on boarded.

Issue Management:

No new issues were opened or closed during the month of September. The Project Management Team appears to be adequately tracking the issues and as of September 30, 2010, there were no open issues identified by the CCMS-V4 Project Team.

Resource Management:

The resources necessary for testing are still being identified and consequently Risk 45 (AOC Testing Resources) has been reopened. The Project Team is continuing to interview and hire court referrals and QA analysts.

Cost Management:

There are no new issues with respect to Cost Management that have not already been discussed in previous IPO/IV&V reports.

Technical Focus Areas

Quality Management:

The RPO Management Team is currently working with Deloitte management to revise the QA Reports for the project.

Quality Architecture:

There are no open issues with System Architecture and the System Architecture Team with Deloitte, AOC, ISD, and other Court members have done a good job of identifying and defining the system architecture as well as architectural tradeoffs, raising issues for resolution, and generally creating a solid CCMS-V4 system architecture.

Configuration Management:

There are no open issues with Configuration Management. Configuration Management for documentation is being well controlled through eRoom and JCC Web Sites that have built-in controls for Configuration Management.

System Engineering Standards and Practices:

Since Deloitte Consulting appears to be following currently accepted systems engineering standards and practices, even as defined in IEEE Standard 1220, there are no system engineering standards and practices concerns at this point in time.

Requirements Identification and Traceability:

There are no new issues with Requirements Identification and Traceability that have not already been discussed in IPO/IV&V previous reports.

Detailed Design Review:

There are no open issues with the Detailed Design Review that have not already been discussed in previous IPO/IV&V reports.

System Development Quality and Progress:

There are no open issues with the Detailed Design Review that have not already been discussed in previous IPO/IV&V reports.

Testing Practices and Progress:

The IPO/IV&V Team reviewed the revised CCMS-V4 Development Core Product Acceptance Test Plan, Version 1.1, dated September 9, 2010. Some of the more significant observations from an IPO/IV&V perspective are:

- For the PAT effort, the AOC and the Courts hand-selected approximately 2,300 scripts to be automated based on their criticality and breadth of function. The IPO/IV&V Team is currently reviewing a sampling of these scripts from both a business and technical perspective. The plan states that PAT is executed over an eleven week period and that the first nine weeks consists of one complete execution with the final two weeks dedicated to defect-specific remediation and closeout and that this time would also be used to execute the regression test suite. This clarification alleviates any previous concern the IPO/IV&V Team had with the activities occurring within the final two weeks of PAT.
- Section 3.2 of the plan states that the AOC PAT Manager may request additional builds. This clarification alleviates any previous concern the IPO/IV&V Team had with the need for additional builds.

Appendix A: Matrix of Areas of Concern (Open)

The matrix below provides a current listing of all open areas of concern, our recommendations, and the action taken by the CCMS-V4 Project Team. As items are resolved, they will be moved to Appendix B. Key statistics are summarized below:

- **There were no new areas of concern identified this month.**
- **The IPO/IV&V Team strongly believes that this project will continue to be a high risk project due to the constraints imposed by the budget, schedule, and resources.**

Item Number	Area of Concern	Recommendation	Action Taken
Aug10.1	PAT Plan	Either modify the PAT Plan or establish risks for each of the points identified by IPO/IV&V in this report and implement appropriate corrective actions to mitigate the risks.	<p>9-2010 – New this month. On September 15, 2010, the IPO/IV&V Team received a revised PAT Plan, Version 1.1, dated September 9, 2010 for review that may address some of the IPO/IV&V areas of concern.</p> <p>10-2010 – .The IPO/IV&V Team is reviewing the current version, 1.3, of the PAT Plan , which we know from our preliminary assessment address some of the areas of concern. Until we complete our review, the Item will remain open.</p>
Apr10.1	QA Report Metrics	Continue the use of metrics in the QA Reports, but include a definition or interpretation of all metrics shown in the reports.	<p>4-2010 – New this month.</p> <p>5-2010 – There is no change in this action item.</p> <p>6-2010 – There is no change in this action item.</p> <p>7-2010 – There is no change in this action item.</p> <p>8-2010 – There is no change in this action item, although the CCMS-V4 Project Team reported working with Deloitte to change the QA report content.</p> <p>9-2010 – There is no change in this action item.</p> <p>10-2010 – There is no change in this action item since no new QA Report has been published.</p>

Appendix B: Matrix of Areas of Concern (Closed)

The matrix below provides a listing of all closed areas of concern, our recommendations, and the action taken to resolve the issues by the CCMS-V4 Project Team. Key statistics are summarized below:

- No areas of concern were closed this month.

Item Number	Area of Concern	Recommendation	Action Taken
Jul07.1	Aggressive schedule	The schedule should be reviewed to ensure that ample time has been allocated to each phase of the project.	<p>09-2007 - No action taken that SEC is aware of.</p> <p>10-2007 – At this point in the project it is difficult to determine if there is ample time allocated to each phase of the project. This item will remain in a watch status (e.g., once Test Planning activities have begun, it will be easier to determine if enough time is allocated to testing activities).</p> <p>11-2007 to 04-2008 – Although 12 weeks were added to the schedule, there is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>05-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>06-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>07-2008 – There is concern that there is not enough time to complete the review of the FFD. In addition, there is concern that there is insufficient time allocated to testing and that test planning has not been fully engaged. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>08-2008 – 27 additional days were added to the schedule for review of the FFD. It is unknown at this point whether the additional days are sufficient to allow a thorough review and better ensure the highest quality product possible. Moreover, because test planning is slow to start, SEC still has concerns about the time allocated to the testing phase. This item will remain in watch status.</p> <p>09-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>10-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>11-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>12-2008 – It is unclear how the extended review timeframe will impact the overall schedule. This item will remain in watch status.</p> <p>1-2009 – The Core application, Portals, and Statewide Data Warehouse portions of the FFD will be completed by March 30, 2009. The Data Exchanges portion is expected to be completed by April 15, 2009. This item will remain in watch status.</p> <p>2-2009 – All portions of the FFD are on track for completion by March 30, 2009 and April 15, 2009, respectively. This item will remain in watch status.</p> <p>3-2009 – The Portals and Statewide Data Warehouse will be accepted by March 31, 2009. The Core application will be completed by March 31, 2009. Data Exchanges will not be completed until the end of April. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>4-2009 – The FFD was signed off May 1, 2009. The Data Exchanges are expected to be completed by May 22, 2009.</p> <p>5-2009 – The Data Exchanges are expected to be completed by June 5, 2009.</p> <p>6-2009 – While the IPO/IV&V Team believes the schedule is aggressive and will remain aggressive for the duration of the project adding to project risk, the RPO and AOC have extended the schedule through contract amendments. At this point, the RPO and AOC have accepted the project risk as neither the schedule nor the budget can be changed.</p>
Aug07.1	JAD Schedule	<p>There does not appear to be a comprehensive schedule of JADs so that participants can plan time accordingly. Thus, Deloitte Consulting should prepare a detailed schedule that sets realistic timeframes needed to JAD each functional area and ensure the schedule is agreed to by all relevant parties.</p>	<p>09-2007 – The schedule should be completed in October 2007.</p> <p>10-2007 – A revised schedule was completed in October 2007. While the schedule provides more details than previous versions, it still does not address the detailed planning that must be conducted to ensure coverage of all functional areas and the workflows associated with each.</p> <p>11-2007 to 04-2008 – JAD scheduling has improved to the point that this is no longer an area of concern. Consequently, this item has been closed. Over the past few months, Deloitte Consulting has been diligent in setting and adhering to its JAD schedule. As the project enter the final design stage, participants appear able to plan time accordingly to ensure they are available to participate in tracks as needed and share their subject matter expertise. Meetings were also held to hear concerns that more time was needed to review developing requirements—resulting in more time added to the overall project development schedule.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Sep07.1	Requirements Gathering	Ensure that a detailed JAD schedule includes a plan for how the workflow inter-relationships will be addressed.	<p>10-2007 – While the workflows and interrelationships have not yet been addressed, the AOC has instituted cross-track meetings as part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements are being gathered.</p> <p>11-2007 to 04-2008– The cross-track meetings have proven to be an essential, needed part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements were being gathered. However, to SEC’s knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>05-2008– To SEC’s knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas. This step should help address some of our concerns. However, since the final design is nearing completion, there is little value in fully mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.1	Project Oversight Activities	Assign person in role of day to day project management responsible for ensuring that issues are resolved timely, do not impact downstream work efforts, and are not in conflict with other project activities, legal provisions, or branch policy.	<p>11-2007 to 04-2008– It was explained that Bob Steiner, the AOC Project Manager, performs these activities and that a Project Management Consultant familiar with V2 and V3, Sean Yingling, will be assigned to assist the Development Project Manager (Bob). This item will remain in watch status over the next month to ensure the activities are being performed.</p> <p>05-2008– SEC will continue to monitor this item until a Responsibility Matrix indicating the project management component responsibilities that are designated to Sean and Bob is developed. The matrix will ensure that no workload gaps exist.</p> <p>06-2008– To date, a Responsibility Matrix has not been provided to SEC for review.</p> <p>07-2008– SEC will work with Bob Steiner and Sean Yingling to better understand the project management responsibilities.</p> <p>08-2008– Bob and Sean have established a seamless working relationship. Bob has ultimate responsibility for all project management activities. Sean’s focus rests with coordinating the FFD review, reporting to the Steering Committee, and following up on issues with the V4 Court Project Managers.</p>
Oct07.2	JAD Session Documentation	Utilize new template or other mechanism to document detailed JAD Session minutes including areas of discussion, results or actions taken, agreements reached, and issues raised as well as distribute timely for approval.	<p>11-2007 to 04-2008 – Starting in mid-April, the JAD tracks created a new template to ensure consistency across JADs for documenting decisions reached and meeting outcomes. However, since it appears that the new template is only used in isolated instances, this item will remain in watch status over the next month.</p> <p>05-2008 – It is not clear whether an AOC CCMS member will be appointed to monitor and summarize decisions made in the JAD sessions, and subsequently elevate those of potential interest to the Steering Committee, especially those that may require higher level buy-in.</p> <p>06-2008 – Since the final design is nearing completion, there is little value in mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.3	Governance Structure and Escalation Process	Clarify and establish the complete governance structure to eliminate confusion related to issue escalation process and decision-making.	<p>11-2007 to 04-2008 – The CCMS Governance Model was distributed to committee members. This item will remain in watch status over the next month to ensure its use.</p> <p>05-2008 – The CCMS Governance Model appears to be in use and effective in allowing participation in project decisions regarding project scope, cost, and schedule.</p>
Apr08.1	Unclear Requirements	<p>Review the requirements to determine the types of clarifications needed for understanding in order to avoid confusion during downstream activities such as coding and preparing for testing.</p> <p>As of our 09-2008 review of the FFD, we have suggested the following additional recommendations:</p> <ol style="list-style-type: none"> 1. Identify and evaluate subjective text in FFD (such as may or could) and clarify within the context of use; 2. Perform a traceability exercise to link use cases to business rules—again to reduce need for individual interpretation; 3. Review business rule part of each section to ensure complete and clear rules have been incorporated into the use case. 4. Evaluate pre and post-conditions to ensure they are correct and complete. 	<p>04-2008 – New this month.</p> <p>05-2008 – It is not clear whether action has been taken on this issue.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas). This item will remain in watch status over the next month to review this process.</p> <p>07-2008 – This item remain in watch status until a better understanding can be achieved and SEC evaluates the review process.</p> <p>08-2008 – SEC will assess this item during their review of the FFD deliverable.</p> <p>09-2008 – SEC has begun to assess this item and will continue to evaluate progress during the AOC/Court review of the FFD deliverable.</p> <p>10-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>11-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>12-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>1-2009 – The RPO Management Team is currently developing plans to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>2-2009 – The RPO Management Team continues to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>3-2009 – The RPO Management Team continues to discuss the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>4-2009 – An updated resource schedule is being developed that will forecast resource needs between now and the beginning integration testing. This item will remain in watch status.</p> <p>5-2009 – An estimate of the number of Court SMEs needed for testing has been provided. However, more SMEs with Family and Juvenile expertise will be needed. This item will remain in watch status.</p> <p>6-2009 – The IPO/IV&V Team has continued to express their concern that the ambiguity surrounding the interpretation of final requirements presents a risk to the construction and testing phases of the project. Data is being captured by the AOC Software Quality Assurance Team during early testing that should assist in defining the extent of the problem and any future concerns will be raised as part of the testing assessment.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Dec08.1	Standardization and Configuration	It is not clear what impact the Standardization and Configuration requirements will have on the FFD and on long-term maintenance of the application. Once all Standardization and Configuration requirements have been defined, the requirements should be traced back into the FFD and reviewed again.	<p>12-2008 – New this month.</p> <p>1-2009 – In the month of January, a Court Executive Management work group was established to address the concerns surrounding the standardization and configuration requirements.</p> <p>2-2009 – The RPO Management Team reported that the Standards and Configuration Management Group will determine whether configurable items are statewide standards or local configurations and that these decisions will not impact the FFD.</p>
Dec08.2	Single Point of Contact for ISD	A single point of contact should be established for AOC that can track and manage daily progress on ISD-related activities	<p>12-2008 – New this month.</p> <p>1-2009 – It is not clear where the roles and responsibilities are documented and whether David Corral, selected as the single point of contact, has the authority to make decisions on behalf of ISD. Virginia Sanders-Hinds will work with IPO/IV&V to better understand the ISD roles and responsibilities within the project.</p> <p>2-2009 – It was clarified that Virginia Sanders-Hinds is the single point of contact with the authority to make decisions on behalf of ISD.</p>
Mar09.1	Justice Partners (Interfaces) Plan	Determine the state and progress of the common “State” interfaces which are currently being reviewed by the Justice Partners and assess the progress for project schedule impact.	<p>4-2009 – The “State” interfaces are being addressed with the Justice Partners. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p> <p>5-2009 – The “State” interfaces are being addressed with the Justice Partners at both the State and local levels. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off (now anticipated for 6-5-09) and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>6-2009 – The “Statewide” interfaces are being addressed with the Justice Partners. – A plan has been defined for day-one critical exchanges and each Justice Partner will be given a Microsoft Project Plan to follow. The AOC will continue to work closely with each Justice Partner to anticipate any potential challenges. However, it is not clear if and when the Justice Partners will participate in PAT. This item will remain in watch status.</p> <p>7-2009 - The CCMS-V4 Project Team has clarified that the Statewide Justice Partners will participate in PAT. This item will be closed out.</p>
Mar09.2	Document Management Plan	Determine the state and progress of the agnostic “generic” interface to support any existing document management solution and assess the progress for project schedule impact.	<p>4-2009 – The “generic” interface is currently under development. This item will remain in watch status. The RPO Management Team has stated that the requirements for document management were gathered during design and have been signed off. The AOC is in the process of standardizing the document management interface for all courts but is unsure whether this effort will be complete prior to Go Live for CCMS-V4. This item will remain in watch status.</p> <p>5-2009 – The “generic” interface is currently under development. This item will remain in watch status.</p> <p>6-2009 – The “generic” interface is currently under development and will have a solution that supports the courts at Go Live. Currently, the early adopter court uses FileNet and is scheduled to test this interface during PAT. For each of the remaining Courts, the agnostic “generic” document management interface will be finalized, if needed, during the deployment effort. This item will remain in watch status.</p> <p>7-2009 – The CCMS-V4 Project Team has clarified that the Lead Courts which use FileNet are scheduled to test this interface during PAT. This item will be closed out.</p>

Appendix C: Project Oversight Review Checklist

To assist us in determining whether the CCMS-V4 project is on track to be completed within the estimated schedule and cost, the Project Oversight Review Checklist is used to identify and quantify any issues and risks affecting these project components.

The checklist format provides a quick reference for the assessment of the project management practices and processes in place over the CCMS-V4 project and will assess the adequacy or deficiency of the area. Further, the checklist may provide comments on the specific items reviewed, interviews conducted, and general practices observed for requirements presented under the five categories identified below. These requirements are consistent with industry standards and accepted best practices such as the Project Management Institute (PMI)'s Project Management Body of Knowledge (PMBOK) and the Institute of Electrical and Electronic Engineers (IEEE) standards. Use of these checklists will assist us in commenting on the effectiveness of the project activities.

- Planning and Tracking
 - Procurement
 - Risk Management
 - Communication
 - System Engineering

No updates were made to the Project Oversight Review Checklist this month.

Project Oversight Review Checklist

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		The business case has been finalized. The project goals, objectives, and expected outcomes are documented in the Deloitte Consulting Statement of Work. The key stakeholders and sponsors are identified and documented in the Project Management Plan for CCMS-V4.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project plan that has been approved is loaded into Microsoft Project. Deloitte Consulting will update the schedule with construction and testing details after the requirements are complete.
Is completion of planned tasks recorded within the PM software?	X		Completion of milestones is tracked within Microsoft Project.
Are actual hours expended by task recorded at least monthly within PM software?		X	Actual hours for Deloitte Consulting staff are tracked weekly within Playbook Navigator, but are not shared with the AOC as this is a fixed price development contract. The AOC has historically not tracked this information.
Are estimated hours to complete by task recorded at least monthly within PM software?		X	Estimated hours to complete for Deloitte Consulting staff are tracked weekly but are not shared with the AOC as this is a fixed-price development contract. Any deviations occurring to planned dates are discussed at an internal weekly meeting between AOC and Deloitte Consulting.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans?	X		There is a formal staffing plan for Deloitte Leads that is shared with the AOC. Deloitte Consulting tracks internal project staffing with respect to acquisition, schedule for arrival and departure of specific staff, and staff training plans. The AOC does not currently have a CCMS-V4 Staffing Plan; staff are allocated at the CCMS level and not at the specific project level.
Have project cost estimates, with supporting data for each cost category, been maintained?	X		While development costs are tracked internally by Deloitte Consulting, they are not shared with the AOC since this is a fixed-price development contract. The AOC tracks the project budget, monies encumbered, and monies expended to date in an Access database.
Are software size estimates developed and tracked?	X		Deloitte Consulting has included estimates for Final Design, Final Construction, Testing, and Conversion.
Are two or more estimation approaches used to refine estimates?	X		A Bottom Up estimate is performed by the Deloitte Consulting Project Manager and a Top Down estimate is performed by the Lead.
Are independent reviews of estimates conducted?	X		There are multiple internal reviewers consisting of Deloitte Consulting, AOC, and Court staff.
Are actual costs recorded and regularly compared to budgeted costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Currently, AOC costs are tracked at the overall CCMS level. At this point, a daily (or on-demand) Access database report can be printed showing project budget, monies encumbered, monies expended to date, and monies forecasted to be spent.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes
Planning and Tracking			
Is supporting data maintained for actual costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Yet, the RPO has invoice level data to support its actual cost data tracked in its Access database.
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	X		This information is reported weekly, monthly, and quarterly.
Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration mgmt plan?	X		The CCMS-V4 Configuration Management Plan outlines the process and procedures followed for Configuration Management.
Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?	X		This information is tracked in eRoom and in the weekly, monthly, and quarterly status reports.
Is user satisfaction assessed at key project milestones?		X	Deloitte Consulting has stated that user satisfaction is assessed at key project milestones in the form of deliverable review. All deliverable comments are logged, reviewed, and categorized to indicate if a response is needed. According to Deloitte Consulting, all defects or other comments that require a response are addressed and tracked through closure. Other validation processes include proof of concepts, UI prototypes, design sessions, design council sessions, and cross track meetings. As such, Deloitte Consulting believes that acceptance of the deliverable is evidence of user satisfaction. While there are no satisfaction surveys used or assessments performed at key project milestones, the AOC agrees that there are several opportunities to talk through and resolve deliverable disagreements on a case by case basis.
Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?	X		Planning is in compliance with a formal system development life-cycle (SDLC) methodology.
Is there a formal enterprise architecture in place?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point in time, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project. SEC will be investigating the AOC enterprise architecture further as the project progresses.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	X		Project Closeout activities are planned to occur and we will evaluate and comment whether the planned activities occurred at the project closeout. In the interim, Lessons Learned sessions are being conducted at various project phases to identify possible process improvements.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, "alternative procurement") and their required processes followed?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Is a detailed written scope of work for all services included in solicitation documents?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Are detailed requirement specifications included in solicitation documents?	X		Detailed requirements were included in Exhibit B of the Statement of Work. These will be expanded upon during Detailed Design. Thus, we will review or evaluate those requirements when developed.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. For ongoing SOWs, independent third-party vendors are used to review and recommend procurement planning and execution practices.
For large-scale outsourcing, is qualified legal counsel obtained?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. The AOC utilized outside counsel for the V4 Development Contract.
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X		The Risk Management Plan contains the process and procedures for risk. Risks are tracked within eRoom and are discussed during the weekly and monthly status meetings. In addition, the Deloitte Consulting Project Manager meets with the CCMS Product Director weekly to discuss risks.
Does the management team review risks and mitigation progress at least monthly?	X		The management team reviews risks at weekly and monthly status meetings.
Are externally developed risk identification aids used, such as the SEI "Taxonomy Based Questionnaire?"		X	Additional risk identification aids are internal to Deloitte Consulting and are not shared with the AOC. The AOC is not using any other risk identification aids.
Communication			
Is there a written project communications plan?	X		This information is contained in the CCMS-V4 Communication Management Plan.
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		Written weekly, monthly, and quarterly status reports are prepared and discussed with the project management team as well as the Steering Committee/Oversight Committee. In addition, there are executive meetings held to brief the Lead Court CIOs.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Communication			
Are there written escalation policies for issues and risks?	X		This CCMS-V4 Project Management documentation contains this information.
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		The Product Management Group has primary responsibility for working through the issues and risks. Additionally, issues and status are shared with lead court information officers, court executive officers at bi-weekly steering committee meetings as well as with selected presiding judges at the quarterly oversight committee meetings. The RPO is also working diligently to seek input and have stakeholders assume an active ownership role in the development process.
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		AOC and Court staff are planned to be involved from requirements gathering through testing and into implementation.
Do users formally approve/sign-off on written specifications?	X		The requirements will be approved by the AOC and Court staff.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		The RPO Management Team has reported that Deloitte Consulting is using Clear Quest and Clear Case to manage defects and Rational Requisite Pro to track requirements.
Do software engineering standards exist and are they followed?	X		This CCMS-V4 development standards documentation has been reviewed by SEC and found to be adequate.
Is a formal system development life-cycle (SDLC) methodology followed?		X	Deloitte is using an overlapped waterfall SDLC as evidenced by the structure of their project plan and the manner in which activities are performed. CMMI Level 3 requirements require that a defined, standard, consistent process and process measurement be followed. This would require that: <ul style="list-style-type: none"> • Technical processes are defined in writing; • Project roles are clearly defined; • Staff are trained in standard methods and process activities before they are assigned to roles; and • Technical management activities are guided by defined processes. It is not clear where the processes and roles are documented and whether the CCMS-V4 Project is CMMI Level 3 compliant.
Does product defect tracking begin no later than requirements specifications?	X		Product defect tracking occurs during deliverable review. Users submit defects by entering comments in the deliverable. Each defect is tracked to closure within the deliverable. Any corresponding response is attached to the original defect in the body of the deliverable. Before approval of the deliverable, the AOC confirms that all defects have been appropriately addressed.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
System Engineering			
Are formal code reviews conducted?		X	Two levels of code reviews are conducted. Automated reviews of code are conducted using the JCART tool which checks for and highlights unacceptable coding practices. Any issues identified through the JCART execution have to be resolved before the code can be included in the build. Additionally, manual code reviews are conducted by the Architecture Leads (Technical Analysts, Development Leads and the Framework Team). Code review checklists are created and stored in ClearCase. Deloitte should implement a process for ensuring that the coding standards are adhered to as opposed to the AOC assessing the compliance after completion.
Are formal quality assurance procedures followed consistently?	X		The quality assurance documentation was updated to include CCMS-V4. As more QA related data is collected and reported by Deloitte Consulting, the IPO/IV&V Team will be reviewing these reports to assess how data is represented in the reports—such as through metrics—and identify issues with processes if the metrics indicate negative trends.
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	AOC and the Court staff will sign-off on acceptance test results. Acceptance criteria have been established as 0 Severity-1 incidents, 0 Severity-2 incidents, and not more than 50 Severity-3 incidents.
Is the enterprise architecture plan adhered to?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project.
Are formal deliverable inspections performed, beginning with requirements specifications?	X		All deliverables are approved by the AOC and Court staff.
Are IV&V services obtained and used?	X		SEC has been hired to perform IV&V.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Appendix D: IPO/IV&V Project Scorecard

For September 1, 2010 – September 30, 2010 Time Period

Process Area	APR 2010	MAY 2010	JUN 2010	JUL 2010	AUG 2010	SEP 2010	REMARKS
Communication Management							Day-to-day communication continues to be strong.
Schedule Management							The schedule remains aggressive and a re-planning effort is under review.
Scope Management							Project scope is managed and controlled through a variety of avenues.
Risk Management							Risks are reported, discussed, and managed on a weekly basis.
Issue Management							Issues are discussed/reported weekly at various project management and Executive Committee meetings.
Resource Management							AOC and Deloitte's level of project resources are being defined.
Cost Management							ISD costs and RPO costs are maintained in separate databases and there is no effort to combine these in the near future.
Quality Management (Client Functionality)							We are unable to conclude on the quality of the client functionality due to the absence System test defect data related to Deloitte's execution of the System Test scripts.
Quality Architecture							Quality Architecture is currently adequately defined from an industry-sound SEI approach.
Configuration Management							CM, for documentation, is being well controlled through the eRoom and JCC web sites that have built-in controls for CM.
System Engineering Standards and Practices							Deloitte Consulting appears to be following currently accepted systems engineering standards and practices.
Requirements Identification and Traceability							The IPO/IV&V Team has concerns with the lack of traceability between use cases and business rules.
Detailed Design Review							The Technical Design documentation was delivered to the RPO, but is an artifact and not a deliverable. Therefore, the Detailed Design cannot be assessed.
System Development Quality and Progress							The technical architecture and design is proceeding on the defined schedule with only minor changes.
Testing Practices and Progress							Testing continues to be a concern.



Green – On Track
 Yellow – Warning
 Red – Significant Problems

Appendix E: IPO/IV&V Background, Scope, and Methodology

The California Case Management System (CCMS) is a statewide initiative to bring the courts together to use one application for all case types. CCMS is managed by the Administrative Office of the Courts (AOC) Southern Regional Office (SRO) in Burbank with the participation of the AOC Information Services Division and superior courts in the planning, design, and development sessions. Over the next 2 years, the AOC plans to expand the functionality of the current interim CCMS applications and develop the next phase—CCMS-V4—that will include family law, juvenile dependency, and juvenile delinquency case types as well as incorporate the V2 and V3 products and update the system’s technical architecture and environments. Toward this end, the AOC has executed a contract with Deloitte Consulting to design and develop the V4 component—yet, the success of the V4 Project relies on every party working in harmony toward common goals.

Background:

For all high criticality technology projects such as CCMS-V4, industry best practices strongly encourage independent oversight. Ideally, the independent project oversight process begins during the feasibility study and continues through project closeout. Deficiencies, issues, findings, and recommendations identified by the oversight process should be incorporated into the appropriate project management processes. As the project progresses, the independent review and assessment approach should track the disposition of findings and recommendations in terms of corrective action and implementation of oversight recommendations.

An Independent Project Oversight (IPO) effort is intended to audit system development, acquisition, and maintenance controls to assure a structured project management methodology is adhered to and managed through activities such as project scheduling, risk management, and change management. A primary goal is to provide impartial oversight of the responsibilities and activities of the project office. Similarly, the Independent Verification and Validation (IV&V) provides unbiased oversight of the technical deliverables such as program code, test scripts and results, and network configurations and processes used to create the product. It is intended to evaluate products against system requirements and whether processes used follow the intended life cycle methodology.

However, these efforts are not designed to guarantee success of the CCMS-V4 application nor will the IPO/IV&V efforts ensure the completeness of business requirements designed by the CCMS-V4 team or the ability of the end system functionality of the application built to meet court needs statewide.

Appendix E: Continued

Scope and Methodology

In July 2007, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) Services over the California Case Management System (CCMS) V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the Regional Administrative Director and CCMS Product Director at the Southern Regional Office (SRO), our objectives are to monitor the services, deliverables, milestones, deadlines, and functionality of the CCMS-V4 project and communicate status, progress, issues, and potential challenges to the success of the project as designed. The IPO/IV&V efforts are designed to give assurance, from an independent and unbiased perspective, that the process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards as well as that potential risks and issues are known by project decision makers. The IPO/IV&V effort cannot require change, but any identified and reported findings and results should be considered by the project sponsors.

To provide appropriate and independent review, analysis, and oversight on the CCMS-V4 project, SEC will generally provide monitoring efforts from July 2007 through April 30, 2011 relative to the following areas:

- Project management and System Development Life Cycle (SDLC) processes, procedures, and communication
- Adherence to schedule
- Techniques and processes employed for risk management, issue management, and communication strategies
- Requirements gathering as part of JAD Sessions
- Completeness of Functional Design and Technical Design
- Traceability of requirements from one SDLC phase to the next
- Testing techniques and processes employed
- Compliance with project management and technical contract requirements

However, the IPO/IV&V efforts will not review or address the completeness of the business requirements being developed cooperatively by Deloitte Consulting, SRO staff, and court Subject Matter Experts (SMEs) as part of functional design joint application development (JAD) sessions. While business requirements will be reviewed from a technical perspective to assess whether they contain sufficient levels of specificity to ensure proper coding and end-user functionality as planned, SEC cannot ensure that all critical business processes and steps are appropriately captured in the business requirements to meet court needs.

Appendix E: Continued

Additionally, our efforts do not address the management surrounding the application developer's budget. Because the AOC awarded Deloitte Consulting a fixed-price contract, a time and material type review and analysis is not warranted in this situation.

Moreover, to provide appropriate and independent review, analysis, and oversight over the CCMS-V4 project, the following parameters need to be met in allowing SEC to perform activities unimpeded:

- Understanding/agreement by all project participants on our independent role and importance of timely information sharing and meeting scheduling;
- Inclusion as a seamless member of the project team;
- Timely knowledge of and inclusion in all project meetings;
- Commitment from all project participants to attend meetings scheduled with the IPOC/IV&V;
- Unfiltered access to all documents, data, deliverables, and personnel deemed relevant by the IPOC/IV&V Team; and
- Full disclosure of project knowledge including items such as project issues, risks, change requests.

If there are challenges in adhering to those parameters, we will escalate our issues and/or concerns to the Internal Audit Services Manager, CCMS Product Director, RAD, CCMS Steering Committee, and CCMS Oversight Committee as necessary or appropriate. Working in conjunction and coordination with the AOC's Internal Audit Services to complete this Statement of Work, we will perform the following tasks:

IPO Specific Tasks

- Conduct meetings, as needed, with key project staff to obtain first-hand information as to the objectives of the project, identify the key players and their roles, and the interrelationship and communication structure between all parties as well as review documents such as organization charts and governance structure.
- Attend meetings, as needed, key court/AOC and vendor personnel to obtain information on their responsibilities, objectives, communications, and schedules.
- Conduct observations, on-going interviews, and document examinations to monitor meeting timelines, deliverables, and milestones as described in the schedule.
- Review project planning/management deliverables and documentation to comment on compliance with industry best practices and adherence to documented project processes
- Perform initial assessment of Project Management processes and documents (project management plan, communication plan, change management plan, implementation plan, etc).

Appendix E: Continued

- Participate in certain critical requirements gathering and physical design sessions (JAD sessions) as deemed necessary or at the direction of the Internal Audit Services Manager to provide expertise courtroom operations (family law, criminal, and traffic), finance, distributions, and audit as well as on the V2 and V3 retrofit and validate processes are being followed.
- Provide an Implementation Strategy Review. This review would consist of an analysis of the implementation approach and the action plan for accomplishing implementation.

IV&V Specific Tasks

- Review Requirement Traceability and Contract at end of Functional Design, Technical Design, and Test Preparation.
- Provide a Functional Design and Requirements Traceability Review. The Functional Design review would consist of an analysis of the Functional Design Specification to assess the readability, consistency, and testability of the design. The Functional Design review will identify issues such as non- testable requirements, vague requirements, requirements that are in conflict or not consistent with each other, etc. The Requirements Traceability review will ensure that all of the contractual requirements have been addressed and are accounted for.
- Provide a Technical (software) Design and Requirements Traceability Review. The Technical Design review would consist of an analysis of the Technical Design Specification to assess the readability, consistency, and testability of the technical design as well as identification of any potential weaknesses in the design. The Technical Design review will identify where the Technical Design may be in conflict with the Functional Design. The Requirements Traceability review will ensure that the design has addressed all of the functional requirements.
- Provide a Test Methodology and Requirements Traceability Review. The Test Methodology review would consist of an analysis of the Test Methodology and a sampling of test scripts which will be traced to the requirements and to the design specification as well as reviewing the data elements necessary for the scripts. The Requirements Traceability Review will ensure that all of the test cases/scripts have been developed to test the design and the functional requirements.
- Review a statistically valid sample of source code (coded based on requirements documented in JAD sessions). Approximately 40 modules will be reviewed which would provide early feedback on compliance to coding standards and comparisons to the design requirements.

Appendix E: Continued

- Review a statistically valid sample of test scripts (unit, integration, system, user acceptance, product acceptance) for compliance with requirements from both a technical perspective and from a court operations perspective (testing enough scenarios/scripts covering critical and most frequent business cases both on a positive/ideal flow and on an exception basis).

IPO/IV&V Combined Tasks

- Assess Systems Development Life Cycle (SDLC) practices to comment on compliance with industry best practices and adherence to documented project processes.
- Review agreed-upon vendor deliverables including, but not limited to Functional Design, Technical Design, Test Methodology, Implementation Strategy, V2 Requirements and V3 Requirements, to comment on compliance with Deliverable Expectations Document (DED).
- Identify and assess any new or ongoing challenges, barriers, risks, or issues.
- Attend meetings, as needed, where deliverables, strategies, timelines, and status are being considered.
- Maintain a log tracking IPO/IV&V issues that delineates any challenges, barriers, risks, issues, defects, milestones changed or missed, and observations warranting discussion and monitoring; monitor the resolution of such issues; document the resolution and closure of each matter.
- Conduct bi-weekly briefings with the RAD and designated Project Manager(s) discussing all previous work and any updates or new developments.
- Compile the results of the IPO/IV&V monitoring efforts in writing. In addition to compliance issues, the report will also contain any other significant findings, conclusions, and recommendations including the identification of risks, lessons learned, best practices, or performance exceeding minimum requirements as well as comment on severity or criticality and impact or consequence of items discussed.
- Ascertain and report on follow-up efforts taken on corrective actions needed and implementation of oversight recommendations.
- Provide reports to the RAD and designated Project Manager(s) on a monthly basis, or more frequent if necessary, based on project stage criticality.

Appendix F: SEC Activities - Performed & Planned

Completed SEC Activities for September 2010

During September, SEC performed the following activities:

- Monitored QA Metrics;
- Monitored Re-Planning Efforts;
- Monitored Testing Efforts;
- Follow-up on PAT Test Plan recommendations made by the IPO/IV&V Team;
- Obtained and reviewed the Core Product Acceptance Test Plan, Version 1.1, dated September 9, 2010 as well as incorporated comments into this monthly report;
- Reviewed “re-plan” documentations;
- Attended weekly and monthly Project Management Meetings, weekly Technical Architecture Meetings, and monthly Steering Committee Meetings, as well as participated in CCMS-V4 IPO/IVV Project Meetings;
- Performed analysis of areas in the Project Oversight Review Checklist Appendix C;
- Identified and tracked potential risks, observations, and issues as well as discussed and prepared monthly IPO/IV&V written status reports.

Planned SEC Activities for October 2010

SEC plans to conduct the following activities over the next month:

- Attend, observe, and participate in a variety of CCMS-V4 meetings including weekly Project Management Meetings, monthly Project Management Meeting, monthly RPO Management Meeting, monthly ISD Meeting, weekly Technical Architecture Meetings, CIO Meetings, and monthly IPO/IVV Project Meeting;
- Attempt to identify schedule for and attend new CCMS Management Committee meetings new CCMS Executive Committee meetings, as well as identify the composition of the committee members.
- Review technical documents prepared and discussed at weekly meetings as well as other documents distributed as part of weekly and monthly meetings;
- Continue review and comment on the Testing Documentation in terms of sufficiency of detail including implementation of integration test plan and PAT plan;
- Monitor results of product testing, when started, in terms of progress in script executions, frequency and severity of defects identified, and resolution of defects.
- Prepare monthly IPO/IV&V status report that identifies and tracks new risks or issues as well as accomplishments and review prior issue resolution.

The Judicial Council of California, Administrative Office of the Courts

Independent Project Oversight (IPO) and
Independent Verification and Validation (IV&V)
For the CCMS-V4 Development Project

Status Report as of October 31, 2010

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Executive Summary

Realizing the importance of independent oversight for high criticality technology projects, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) services for the California Case Management System (CCMS)-V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the CCMS Executive Sponsor in the Regional Program Office (RPO), our objectives are to monitor the activities, deliverables, milestones, deadlines, and design of the CCMS-V4 project and communicate status, progress, issues, and challenges to the success of the project as designed. Our monthly IPO/IV&V reports are intended to capture and assess current project activities to determine whether process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards, as well as that potential risk/issues are known by decision makers at a specific point in time; thus, the monthly items reported are in-flux, continually evolving, and will change over the course of the project.

Period Highlights:

In an effort to assist the IPO/IV&V Team in assessing the testing effort, the RPO Management Team allowed the IPO/IV&V Team to be granted access to the HP Quality Center product. This access will allow the IPO/IV&V Team visibility into the requirements and test scripts, and will allow the IPO/IV&V Team to create custom queries and metric reports, including requirements that do not currently have test cases associated with them, test scripts executed, defects, severity, and aging. For the November report, the IPO/IV&V Team will be able to provide the analysis of their review.

A Statement of Work, which identifies the revised project objectives and agreements, has not yet been finalized and thus, cannot be distributed to the IPO/IV&V Team. Once received, the IPO/IV&V Team will be able to review this document.

As of October 31, 2010, the Governance Model had not been finalized and, thus, not distributed to the IPO/IV&V Team for review and comment.

During the month of October, the IPO/IV&V Team reviewed the revised CCMS-V4 Development Core Product Acceptance Test Plan, Version 1.4, dated October 19, 2010. All previous concerns with this plan have been remedied.

Detailed Observations, Impact, and Recommendations

The Southern California Regional Program Office (RPO) staff, AOC staff, individual court staff, and Deloitte Consulting continue to practice project management and systems-engineering practices in accordance with industry standards related to the identification and resolution of issues, risks, items for management attention, and modification and change requests. Additionally, the continued diligence employed by the RPO staff, AOC staff, Court staff, and Deloitte Consulting in addressing issues and following established project management processes has been consistent. As part of our continued IPO/IV&V efforts, we offer the following observations and areas of concern in various project management and technical areas.

Project Oversight Focus Areas

Communication Management:

There do not appear to be any current communication concerns noted by the CCMS-V4 Project Team or the IPO/IV&V Team.

Schedule Management:

The schedule is published weekly in the CCMS-V4 Development Services Status Report and the project team appears to be tracking according to the schedule.

Scope Management:

Scope management items raised by the CCMS-V4 Project Team are being actively managed through eRoom.

Risk Management:

No new risks were opened during the month of October and no new risks were closed. The Project Management Team appears to be adequately tracking the risks and as of October 31, 2010, the risks identified below by the CCMS-V4 Project Team remain active.

Risk Number	Risk Title	Activity Performed	Target Resolution Date
45	AOC Testing Resources	This risk was reopened and although this does not seem to be an issue at this time, this risk will remain open and be reviewed each week.	12-3-10

Issue Management:

No new issues were opened or closed during the month of October. The Project Management Team appears to be adequately tracking the issues and as of October 31, 2010, there were no open issues identified by the CCMS-V4 Project Team.

Resource Management:

The resources necessary for testing are still being identified and consequently Risk 45 (AOC Testing Resources) was reopened and is being actively worked.

Cost Management:

There are no new issues with respect to Cost Management that have not already been discussed in previous IPO/IV&V reports.

Technical Focus Areas

Quality Management:

The RPO Management Team is currently working with Deloitte management to revise the QA Reports for the project and a new QA Report is expected to be delivered in December. The IPO/IV&V Team anticipates reviewing the new QA Report during the month of December.

Quality Architecture:

There are no open issues with System Architecture and the System Architecture Team with Deloitte, AOC, ISD, and other Court members have done a good job of identifying and defining the system architecture as well as architectural tradeoffs, raising issues for resolution, and generally creating a solid CCMS-V4 system architecture.

Configuration Management:

There are no open issues with Configuration Management. Configuration Management for documentation is being well controlled through eRoom and JCC Web Sites that have built-in controls for Configuration Management.

System Engineering Standards and Practices:

Since Deloitte Consulting appears to be following currently accepted systems engineering standards and practices, even as defined in IEEE Standard 1220, there are no system engineering standards and practices concerns at this point in time.

Requirements Identification and Traceability:

There are no new issues with Requirements Identification and Traceability that have not already been discussed in IPO/IV&V previous reports.

Detailed Design Review:

There are no open issues with the Detailed Design Review that have not already been discussed in previous IPO/IV&V reports.

System Development Quality and Progress:

There are no open issues with the Detailed Design Review that have not already been discussed in previous IPO/IV&V reports.

Testing Practices and Progress:

In an effort to assist the IPO/IV&V Team in assessing the testing effort, the RPO Management Team allowed the IPO/IV&V Team to be granted access to the HP Quality Center product. This access will allow the IPO/IV&V Team visibility into the requirements and test scripts, and will allow the IPO/IV&V Team to create custom queries and metric reports, including requirements that do not currently have test cases associated with them, test scripts executed, defects, severity, and aging. For the November report, the IPO/IV&V Team will be able to provide the analysis of their review.

The IPO/IV&V Team reviewed the revised CCMS-V4 Development Core Product Acceptance Test Plan, Version 1.4, dated October 19, 2010. All previous concerns with this plan have been remedied.

Appendix A: Matrix of Areas of Concern (Open)

The matrix below provides a current listing of all open areas of concern, our recommendations, and the action taken by the CCMS-V4 Project Team. As items are resolved, they will be moved to Appendix B. Key statistics are summarized below:

- **There were no new areas of concern identified this month.**
- **The IPO/IV&V Team strongly believes that this project will continue to be a high risk project due to the constraints imposed by the budget, schedule, and resources.**

Item Number	Area of Concern	Recommendation	Action Taken
Apr10.1	QA Report Metrics	Continue the use of metrics in the QA Reports, but include a definition or interpretation of all metrics shown in the reports.	4-2010 – New this month. 5-2010 – There is no change in this action item. 6-2010 – There is no change in this action item. 7-2010 – There is no change in this action item. 8-2010 – There is no change in this action item, although the CCMS-V4 Project Team reported working with Deloitte to change the QA report content. 9-2010 – There is no change in this action item. 10-2010 – There is no change in this action item since no new QA Report has been published.

Appendix B: Matrix of Areas of Concern (Closed)

The matrix below provides a listing of all closed areas of concern, our recommendations, and the action taken to resolve the issues by the CCMS-V4 Project Team. Key statistics are summarized below:

- **One area of concern was closed this month.**

Item Number	Area of Concern	Recommendation	Action Taken
Jul07.1	Aggressive schedule	The schedule should be reviewed to ensure that ample time has been allocated to each phase of the project.	<p>09-2007 - No action taken that SEC is aware of.</p> <p>10-2007 – At this point in the project it is difficult to determine if there is ample time allocated to each phase of the project. This item will remain in a watch status (e.g., once Test Planning activities have begun, it will be easier to determine if enough time is allocated to testing activities).</p> <p>11-2007 to 04-2008 – Although 12 weeks were added to the schedule, there is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>05-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>06-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>07-2008 – There is concern that there is not enough time to complete the review of the FFD. In addition, there is concern that there is insufficient time allocated to testing and that test planning has not been fully engaged. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>08-2008 – 27 additional days were added to the schedule for review of the FFD. It is unknown at this point whether the additional days are sufficient to allow a thorough review and better ensure the highest quality product possible. Moreover, because test planning is slow to start, SEC still has concerns about the time allocated to the testing phase. This item will remain in watch status.</p> <p>09-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>10-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>11-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>12-2008 – It is unclear how the extended review timeframe will impact the overall schedule. This item will remain in watch status.</p> <p>1-2009 – The Core application, Portals, and Statewide Data Warehouse portions of the FFD will be completed by March 30, 2009. The Data Exchanges portion is expected to be completed by April 15, 2009. This item will remain in watch status.</p> <p>2-2009 – All portions of the FFD are on track for completion by March 30, 2009 and April 15, 2009, respectively. This item will remain in watch status.</p> <p>3-2009 – The Portals and Statewide Data Warehouse will be accepted by March 31, 2009. The Core application will be completed by March 31, 2009. Data Exchanges will not be completed until the end of April. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>4-2009 – The FFD was signed off May 1, 2009. The Data Exchanges are expected to be completed by May 22, 2009.</p> <p>5-2009 – The Data Exchanges are expected to be completed by June 5, 2009.</p> <p>6-2009 – While the IPO/IV&V Team believes the schedule is aggressive and will remain aggressive for the duration of the project adding to project risk, the RPO and AOC have extended the schedule through contract amendments. At this point, the RPO and AOC have accepted the project risk as neither the schedule nor the budget can be changed.</p>
Aug07.1	JAD Schedule	<p>There does not appear to be a comprehensive schedule of JADs so that participants can plan time accordingly. Thus, Deloitte Consulting should prepare a detailed schedule that sets realistic timeframes needed to JAD each functional area and ensure the schedule is agreed to by all relevant parties.</p>	<p>09-2007 – The schedule should be completed in October 2007.</p> <p>10-2007 – A revised schedule was completed in October 2007. While the schedule provides more details than previous versions, it still does not address the detailed planning that must be conducted to ensure coverage of all functional areas and the workflows associated with each.</p> <p>11-2007 to 04-2008 – JAD scheduling has improved to the point that this is no longer an area of concern. Consequently, this item has been closed. Over the past few months, Deloitte Consulting has been diligent in setting and adhering to its JAD schedule. As the project enter the final design stage, participants appear able to plan time accordingly to ensure they are available to participate in tracks as needed and share their subject matter expertise. Meetings were also held to hear concerns that more time was needed to review developing requirements—resulting in more time added to the overall project development schedule.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Sep07.1	Requirements Gathering	Ensure that a detailed JAD schedule includes a plan for how the workflow interrelationships will be addressed.	<p>10-2007 – While the workflows and interrelationships have not yet been addressed, the AOC has instituted cross-track meetings as part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements are being gathered.</p> <p>11-2007 to 04-2008– The cross-track meetings have proven to be an essential, needed part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements were being gathered. However, to SEC's knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>05-2008– To SEC's knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas. This step should help address some of our concerns. However, since the final design is nearing completion, there is little value in fully mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.1	Project Oversight Activities	Assign person in role of day to day project management responsible for ensuring that issues are resolved timely, do not impact downstream work efforts, and are not in conflict with other project activities, legal provisions, or branch policy.	<p>11-2007 to 04-2008– It was explained that Bob Steiner, the AOC Project Manager, performs these activities and that a Project Management Consultant familiar with V2 and V3, Sean Yingling, will be assigned to assist the Development Project Manager (Bob). This item will remain in watch status over the next month to ensure the activities are being performed.</p> <p>05-2008– SEC will continue to monitor this item until a Responsibility Matrix indicating the project management component responsibilities that are designated to Sean and Bob is developed. The matrix will ensure that no workload gaps exist.</p> <p>06-2008– To date, a Responsibility Matrix has not been provided to SEC for review.</p> <p>07-2008– SEC will work with Bob Steiner and Sean Yingling to better understand the project management responsibilities.</p> <p>08-2008– Bob and Sean have established a seamless working relationship. Bob has ultimate responsibility for all project management activities. Sean’s focus rests with coordinating the FFD review, reporting to the Steering Committee, and following up on issues with the V4 Court Project Managers.</p>
Oct07.2	JAD Session Documentation	Utilize new template or other mechanism to document detailed JAD Session minutes including areas of discussion, results or actions taken, agreements reached, and issues raised as well as distribute timely for approval.	<p>11-2007 to 04-2008 – Starting in mid-April, the JAD tracks created a new template to ensure consistency across JADs for documenting decisions reached and meeting outcomes. However, since it appears that the new template is only used in isolated instances, this item will remain in watch status over the next month.</p> <p>05-2008 – It is not clear whether an AOC CCMS member will be appointed to monitor and summarize decisions made in the JAD sessions, and subsequently elevate those of potential interest to the Steering Committee, especially those that may require higher level buy-in.</p> <p>06-2008 – Since the final design is nearing completion, there is little value in mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.3	Governance Structure and Escalation Process	Clarify and establish the complete governance structure to eliminate confusion related to issue escalation process and decision-making.	<p>11-2007 to 04-2008 – The CCMS Governance Model was distributed to committee members. This item will remain in watch status over the next month to ensure its use.</p> <p>05-2008 – The CCMS Governance Model appears to be in use and effective in allowing participation in project decisions regarding project scope, cost, and schedule.</p>
Apr08.1	Unclear Requirements	<p>Review the requirements to determine the types of clarifications needed for understanding in order to avoid confusion during downstream activities such as coding and preparing for testing.</p> <p>As of our 09-2008 review of the FFD, we have suggested the following additional recommendations:</p> <ol style="list-style-type: none"> 1. Identify and evaluate subjective text in FFD (such as may or could) and clarify within the context of use; 2. Perform a traceability exercise to link use cases to business rules—again to reduce need for individual interpretation; 3. Review business rule part of each section to ensure complete and clear rules have been incorporated into the use ease. 4. Evaluate pre and post-conditions to ensure they are correct and complete. 	<p>04-2008 – New this month.</p> <p>05-2008 – It is not clear whether action has been taken on this issue.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas). This item will remain in watch status over the next month to review this process.</p> <p>07-2008 – This item remain in watch status until a better understanding can be achieved and SEC evaluates the review process.</p> <p>08-2008 – SEC will assess this item during their review of the FFD deliverable.</p> <p>09-2008 – SEC has begun to assess this item and will continue to evaluate progress during the AOC/Court review of the FFD deliverable.</p> <p>10-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>11-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>12-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>1-2009 – The RPO Management Team is currently developiug plans to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>2-2009 – The RPO Management Team continues to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>3-2009 – The RPO Management Team continues to discuss the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>4-2009 – An updated resource schedule is being developed that will forecast resource needs between now and the beginning integration testing. This item will remain in watch status.</p> <p>5-2009 – An estimate of the number of Court SMEs needed for testing has been provided. However, more SMEs with Family and Juvenile expertise will be needed. This item will remain in watch status.</p> <p>6-2009 – The IPO/IV&V Team has continued to express their concern that the ambiguity surrounding the interpretation of final requirements presents a risk to the construction and testing phases of the project. Data is being captured by the AOC Software Quality Assurance Team during early testing that should assist in defining the extent of the problem and any future concerns will be raised as part of the testing assessment.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Dec08.1	Standardization and Configuration	It is not clear what impact the Standardization and Configuration requirements will have on the FFD and on long-term maintenance of the application. Once all Standardization and Configuration requirements have been defined, the requirements should be traced back into the FFD and reviewed again.	<p>12-2008 – New this month.</p> <p>1-2009 – In the month of January, a Court Executive Management work group was established to address the concerns surrounding the standardization and configuration requirements.</p> <p>2-2009 – The RPO Management Team reported that the Standards and Configuration Management Group will determine whether configurable items are statewide standards or local configurations and that these decisions will not impact the FFD.</p>
Dec08.2	Single Point of Contact for ISD	A single point of contact should be established for AOC that can track and manage daily progress on ISD-related activities	<p>12-2008 – New this month.</p> <p>1-2009 – It is not clear where the roles and responsibilities are documented and whether David Corral, selected as the single point of contact, has the authority to make decisions on behalf of ISD. Virginia Sanders-Hinds will work with IPO/IV&V to better understand the ISD roles and responsibilities within the project.</p> <p>2-2009 – It was clarified that Virginia Sanders-Hinds is the single point of contact with the authority to make decisions on behalf of ISD.</p>
Mar09.1	Justice Partners (Interfaces) Plan	Determine the state and progress of the common “State” interfaces which are currently being reviewed by the Justice Partners and assess the progress for project schedule impact.	<p>4-2009 – The “State” interfaces are being addressed with the Justice Partners. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p> <p>5-2009 – The “State” interfaces are being addressed with the Justice Partners at both the State and local levels. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off (now anticipated for 6-5-09) and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>6-2009 – The “Statewide” interfaces are being addressed with the Justice Partners. – A plan has been defined for day-one critical exchanges and each Justice Partner will be given a Microsoft Project Plan to follow. The AOC will continue to work closely with each Justice Partner to anticipate any potential challenges. However, it is not clear if and when the Justice Partners will participate in PAT. This item will remain in watch status.</p> <p>7-2009 - The CCMS-V4 Project Team has clarified that the Statewide Justice Partners will participate in PAT. This item will be closed out.</p>
Mar09.2	Document Management Plan	Determine the state and progress of the agnostic “generic” interface to support any existing document management solution and assess the progress for project schedule impact.	<p>4-2009 – The “generic” interface is currently under development. This item will remain in watch status. The RPO Management Team has stated that the requirements for document management were gathered during design and have been signed off. The AOC is in the process of standardizing the document management interface for all courts but is unsure whether this effort will be complete prior to Go Live for CCMS-V4. This item will remain in watch status.</p> <p>5-2009 – The “generic” interface is currently under development. This item will remain in watch status.</p> <p>6-2009 – The “generic” interface is currently under development and will have a solution that supports the courts at Go Live. Currently, the early adopter court uses FileNet and is scheduled to test this interface during PAT. For each of the remaining Courts, the agnostic “generic” document management interface will be finalized, if needed, during the deployment effort. This item will remain in watch status.</p> <p>7-2009 – The CCMS-V4 Project Team has clarified that the Lead Courts which use FileNet are scheduled to test this interface during PAT. This item will be closed out.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Aug10.1	PAT Plan	Either modify the PAT Plan or establish risks for each of the points identified by IPO/IV&V in this report and implement appropriate corrective actions to mitigate the risks.	<p>8-2010 – New this month. On September 15, 2010, the IPO/IV&V Team received a revised PAT Plan, Version 1.1, dated September 9, 2010 for review that may address some of the IPO/IV&V areas of concern.</p> <p>9-2010 – The IPO/IV&V Team is reviewing the current version, 1.3, of the PAT Plan, which we know from our preliminary assessment address some of the areas of concern. Until we complete our review, the Item will remain open.</p> <p>10-2010 – The IPO/IV&V Team reviewed version 1.4 of the PAT Plan and found that all previous concerns have been remedied. This item will be closed.</p>

Appendix C: Project Oversight Review Checklist

To assist us in determining whether the CCMS-V4 project is on track to be completed within the estimated schedule and cost, the Project Oversight Review Checklist is used to identify and quantify any issues and risks affecting these project components.

The checklist format provides a quick reference for the assessment of the project management practices and processes in place over the CCMS-V4 project and will assess the adequacy or deficiency of the area. Further, the checklist may provide comments on the specific items reviewed, interviews conducted, and general practices observed for requirements presented under the five categories identified below. These requirements are consistent with industry standards and accepted best practices such as the Project Management Institute (PMI)'s Project Management Body of Knowledge (PMBOK) and the Institute of Electrical and Electronic Engineers (IEEE) standards. Use of these checklists will assist us in commenting on the effectiveness of the project activities.

- Planning and Tracking
 - Procurement
 - Risk Management
 - Communication
 - System Engineering

No updates were made to the Project Oversight Review Checklist this month.

Project Oversight Review Checklist

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		The business case has been finalized. The project goals, objectives, and expected outcomes are documented in the Deloitte Consulting Statement of Work. The key stakeholders and sponsors are identified and documented in the Project Management Plan for CCMS-V4.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project plan that has been approved is loaded into Microsoft Project. Deloitte Consulting will update the schedule with construction and testing details after the requirements are complete.
Is completion of planned tasks recorded within the PM software?	X		Completion of milestones is tracked within Microsoft Project.
Are actual hours expended by task recorded at least monthly within PM software?		X	Actual hours for Deloitte Consulting staff are tracked weekly within Playbook Navigator, but are not shared with the AOC as this is a fixed price development contract. The AOC has historically not tracked this information.
Are estimated hours to complete by task recorded at least monthly within PM software?		X	Estimated hours to complete for Deloitte Consulting staff are tracked weekly but are not shared with the AOC as this is a fixed-price development contract. Any deviations occurring to planned dates are discussed at an internal weekly meeting between AOC and Deloitte Consulting.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans?	X		There is a formal staffing plan for Deloitte Leads that is shared with the AOC. Deloitte Consulting tracks internal project staffing with respect to acquisition, schedule for arrival and departure of specific staff, and staff training plans. The AOC does not currently have a CCMS-V4 Staffing Plan; staff are allocated at the CCMS level and not at the specific project level.
Have project cost estimates, with supporting data for each cost category, been maintained?	X		While development costs are tracked internally by Deloitte Consulting, they are not shared with the AOC since this is a fixed-price development contract. The AOC tracks the project budget, monies encumbered, and monies expended to date in an Access database.
Are software size estimates developed and tracked?	X		Deloitte Consulting has included estimates for Final Design, Final Construction, Testing, and Conversion.
Are two or more estimation approaches used to refine estimates?	X		A Bottom Up estimate is performed by the Deloitte Consulting Project Manager and a Top Down estimate is performed by the Lead.
Are independent reviews of estimates conducted?	X		There are multiple internal reviewers consisting of Deloitte Consulting, AOC, and Court staff.
Are actual costs recorded and regularly compared to budgeted costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Currently, AOC costs are tracked at the overall CCMS level. At this point, a daily (or on-demand) Access database report can be printed showing project budget, monies encumbered, monies expended to date, and monies forecasted to be spent.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Planning and Tracking			
Is supporting data maintained for actual costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Yet, the RPO has invoice level data to support its actual cost data tracked in its Access database.
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	X		This information is reported weekly, monthly, and quarterly.
Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration mgmt plan?	X		The CCMS-V4 Configuration Management Plan outlines the process and procedures followed for Configuration Management.
Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?	X		This information is tracked in eRoom and in the weekly, monthly, and quarterly status reports.
Is user satisfaction assessed at key project milestones?		X	Deloitte Consulting has stated that user satisfaction is assessed at key project milestones in the form of deliverable review. All deliverable comments are logged, reviewed, and categorized to indicate if a response is needed. According to Deloitte Consulting, all defects or other comments that require a response are addressed and tracked through closure. Other validation processes include proof of concepts, UI prototypes, design sessions, design council sessions, and cross track meetings. As such, Deloitte Consulting believes that acceptance of the deliverable is evidence of user satisfaction. While there are no satisfaction surveys used or assessments performed at key project milestones, the AOC agrees that there are several opportunities to talk through and resolve deliverable disagreements on a case by case basis.
Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?	X		Planning is in compliance with a formal system development life-cycle (SDLC) methodology.
Is there a formal enterprise architecture in place?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point in time, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project. SEC will be investigating the AOC enterprise architecture further as the project progresses.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	X		Project Closeout activities are planned to occur and we will evaluate and comment whether the planned activities occurred at the project closeout. In the interim, Lessons Learned sessions are being conducted at various project phases to identify possible process improvements.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, "alternative procurement") and their required processes followed?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Is a detailed written scope of work for all services included in solicitation documents?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Are detailed requirement specifications included in solicitation documents?	X		Detailed requirements were included in Exhibit B of the Statement of Work. These will be expanded upon during Detailed Design. Thus, we will review or evaluate those requirements when developed.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. For ongoing SOWs, independent third-party vendors are used to review and recommend procurement planning and execution practices.
For large-scale outsourcing, is qualified legal counsel obtained?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. The AOC utilized outside counsel for the V4 Development Contract.
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X		The Risk Management Plan contains the process and procedures for risk. Risks are tracked within eRoom and are discussed during the weekly and monthly status meetings. In addition, the Deloitte Consulting Project Manager meets with the CCMS Product Director weekly to discuss risks.
Does the management team review risks and mitigation progress at least monthly?	X		The management team reviews risks at weekly and monthly status meetings.
Are externally developed risk identification aids used, such as the SEI "Taxonomy Based Questionnaire?"		X	Additional risk identification aids are internal to Deloitte Consulting and are not shared with the AOC. The AOC is not using any other risk identification aids.
Communication			
Is there a written project communications plan?	X		This information is contained in the CCMS-V4 Communication Management Plan.
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		Written weekly, monthly, and quarterly status reports are prepared and discussed with the project management team as well as the Steering Committee/Oversight Committee. In addition, there are executive meetings held to brief the Lead Court CIOs.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use*	Notes:
Communication			
Are there written escalation policies for issues and risks?	X		This CCMS-V4 Project Management documentation contains this information.
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		The Product Management Group has primary responsibility for working through the issues and risks. Additionally, issues and status are shared with lead court information officers, court executive officers at bi-weekly steering committee meetings as well as with selected presiding judges at the quarterly oversight committee meetings. The RPO is also working diligently to seek input and have stakeholders assume an active ownership role in the development process.
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		AOC and Court staff are planned to be involved from requirements gathering through testing and into implementation.
Do users formally approve/sign-off on written specifications?	X		The requirements will be approved by the AOC and Court staff.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		The RPO Management Team has reported that Deloitte Consulting is using Clear Quest and Clear Case to manage defects and Rational Requisite Pro to track requirements.
Do software engineering standards exist and are they followed?	X		This CCMS-V4 development standards documentation has been reviewed by SEC and found to be adequate.
Is a formal system development life-cycle (SDLC) methodology followed?		X	Deloitte is using an overlapped waterfall SDLC as evidenced by the structure of their project plan and the manner in which activities are performed. CMMI Level 3 requirements require that a defined, standard, consistent process and process measurement be followed. This would require that: <ul style="list-style-type: none"> • Technical processes are defined in writing; • Project roles are clearly defined; • Staff are trained in standard methods and process activities before they are assigned to roles; and • Technical management activities are guided by defined processes. It is not clear where the processes and roles are documented and whether the CCMS-V4 Project is CMMI Level 3 compliant.
Does product defect tracking begin no later than requirements specifications?	X		Product defect tracking occurs during deliverable review. Users submit defects by entering comments in the deliverable. Each defect is tracked to closure within the deliverable. Any corresponding response is attached to the original defect in the body of the deliverable. Before approval of the deliverable, the AOC confirms that all defects have been appropriately addressed.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
System Engineering			
Are formal code reviews conducted?		X	Two levels of code reviews are conducted. Automated reviews of code are conducted using the JCART tool which checks for and highlights unacceptable coding practices. Any issues identified through the JCART execution have to be resolved before the code can be included in the build. Additionally, manual code reviews are conducted by the Architecture Leads (Technical Analysts, Development Leads and the Framework Team). Code review checklists are created and stored in ClearCase. Deloitte should implement a process for ensuring that the coding standards are adhered to as opposed to the AOC assessing the compliance after completion.
Are formal quality assurance procedures followed consistently?	X		The quality assurance documentation was updated to include CCMS-V4. As more QA related data is collected and reported by Deloitte Consulting, the IPO/IV&V Team will be reviewing these reports to assess how data is represented in the reports—such as through metrics—and identify issues with processes if the metrics indicate negative trends.
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	AOC and the Court staff will sign-off on acceptance test results. Acceptance criteria have been established as 0 Severity-1 incidents, 0 Severity-2 incidents, and not more than 50 Severity-3 incidents.
Is the enterprise architecture plan adhered to?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project.
Are formal deliverable inspections performed, beginning with requirements specifications?	X		All deliverables are approved by the AOC and Court staff.
Are IV&V services obtained and used?	X		SEC has been hired to perform IV&V.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Appendix D: IPO/IV&V Project Scorecard

For October 1, 2010 – October 31, 2010 Time Period

Process Area	MAY 2010	JUN 2010	JUL 2010	AUG 2010	SEP 2010	OCT 2010	REMARKS
Communication Management							Day-to-day communication continues to be strong.
Schedule Management							The schedule remains aggressive and a re-planning effort is under review.
Scope Management							Project scope is managed and controlled through a variety of avenues.
Risk Management							Risks are reported, discussed, and managed on a weekly basis.
Issue Management							Issues are discussed/reported weekly at various project management and Executive Committee meetings.
Resource Management							AOC and Deloitte's level of project resources are being defined.
Cost Management							ISD costs and RPO costs are maintained in separate databases and there is no effort to combine these in the near future.
Quality Management (Client Functionality)							We are unable to conclude on the quality of the client functionality due to the absence System test defect data related to Deloitte's execution of the System Test scripts.
Quality Architecture							Quality Architecture is currently adequately defined from an industry-sound SEI approach.
Configuration Management							CM, for documentation, is being well controlled through the eRoom and JCC web sites that have built-in controls for CM.
System Engineering Standards and Practices							Deloitte Consulting appears to be following currently accepted systems engineering standards and practices.
Requirements Identification and Traceability							The IPO/IV&V Team has concerns with the lack of traceability between use cases and business rules.
Detailed Design Review							The Technical Design documentation was delivered to the RPO, but is an artifact and not a deliverable. Therefore, the Detailed Design cannot be assessed.
System Development Quality and Progress							The technical architecture and design is proceeding on the defined schedule with only minor changes.
Testing Practices and Progress							Testing continues to be a concern.

	Green – On Track
	Yellow – Warning
	Red – Significant Problems
↑ ↓	

Appendix E: IPO/IV&V Background, Scope, and Methodology

The California Case Management System (CCMS) is a statewide initiative to bring the courts together to use one application for all case types. CCMS is managed by the Administrative Office of the Courts (AOC) Southern Regional Office (SRO) in Burbank with the participation of the AOC Information Services Division and superior courts in the planning, design, and development sessions. Over the next 2 years, the AOC plans to expand the functionality of the current interim CCMS applications and develop the next phase—CCMS-V4—that will include family law, juvenile dependency, and juvenile delinquency case types as well as incorporate the V2 and V3 products and update the system’s technical architecture and environments. Toward this end, the AOC has executed a contract with Deloitte Consulting to design and develop the V4 component—yet, the success of the V4 Project relies on every party working in harmony toward common goals.

Background:

For all high criticality technology projects such as CCMS-V4, industry best practices strongly encourage independent oversight. Ideally, the independent project oversight process begins during the feasibility study and continues through project closeout. Deficiencies, issues, findings, and recommendations identified by the oversight process should be incorporated into the appropriate project management processes. As the project progresses, the independent review and assessment approach should track the disposition of findings and recommendations in terms of corrective action and implementation of oversight recommendations.

An Independent Project Oversight (IPO) effort is intended to audit system development, acquisition, and maintenance controls to assure a structured project management methodology is adhered to and managed through activities such as project scheduling, risk management, and change management. A primary goal is to provide impartial oversight of the responsibilities and activities of the project office. Similarly, the Independent Verification and Validation (IV&V) provides unbiased oversight of the technical deliverables such as program code, test scripts and results, and network configurations and processes used to create the product. It is intended to evaluate products against system requirements and whether processes used follow the intended life cycle methodology.

However, these efforts are not designed to guarantee success of the CCMS-V4 application nor will the IPO/IV&V efforts ensure the completeness of business requirements designed by the CCMS-V4 team or the ability of the end system functionality of the application built to meet court needs statewide.

Appendix E: Continued

Scope and Methodology

In July 2007, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Šjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) Services over the California Case Management System (CCMS) V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the Regional Administrative Director and CCMS Product Director at the Southern Regional Office (SRO), our objectives are to monitor the services, deliverables, milestones, deadlines, and functionality of the CCMS-V4 project and communicate status, progress, issues, and potential challenges to the success of the project as designed. The IPO/IV&V efforts are designed to give assurance, from an independent and unbiased perspective, that the process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards as well as that potential risks and issues are known by project decision makers. The IPO/IV&V effort cannot require change, but any identified and reported findings and results should be considered by the project sponsors.

To provide appropriate and independent review, analysis, and oversight on the CCMS-V4 project, SEC will generally provide monitoring efforts from July 2007 through April 30, 2011 relative to the following areas:

- Project management and System Development Life Cycle (SDLC) processes, procedures, and communication
- Adherence to schedule
- Techniques and processes employed for risk management, issue management, and communication strategies
- Requirements gathering as part of JAD Sessions
- Completeness of Functional Design and Technical Design
- Traceability of requirements from one SDLC phase to the next
- Testing techniques and processes employed
- Compliance with project management and technical contract requirements

However, the IPO/IV&V efforts will not review or address the completeness of the business requirements being developed cooperatively by Deloitte Consulting, SRO staff, and court Subject Matter Experts (SMEs) as part of functional design joint application development (JAD) sessions. While business requirements will be reviewed from a technical perspective to assess whether they contain sufficient levels of specificity to ensure proper coding and end-user functionality as planned, SEC cannot ensure that all critical business processes and steps are appropriately captured in the business requirements to meet court needs.

Appendix E: Continued

Additionally, our efforts do not address the management surrounding the application developer's budget. Because the AOC awarded Deloitte Consulting a fixed-price contract, a time and material type review and analysis is not warranted in this situation.

Moreover, to provide appropriate and independent review, analysis, and oversight over the CCMS-V4 project, the following parameters need to be met in allowing SEC to perform activities unimpeded:

- Understanding/agreement by all project participants on our independent role and importance of timely information sharing and meeting scheduling;
- Inclusion as a seamless member of the project team;
- Timely knowledge of and inclusion in all project meetings;
- Commitment from all project participants to attend meetings scheduled with the IPOC/IV&V;
- Unfiltered access to all documents, data, deliverables, and personnel deemed relevant by the IPOC/IV&V Team; and
- Full disclosure of project knowledge including items such as project issues, risks, change requests.

If there are challenges in adhering to those parameters, we will escalate our issues and/or concerns to the Internal Audit Services Manager, CCMS Product Director, RAD, CCMS Steering Committee, and CCMS Oversight Committee as necessary or appropriate. Working in conjunction and coordination with the AOC's Internal Audit Services to complete this Statement of Work, we will perform the following tasks:

IPO Specific Tasks

- Conduct meetings, as needed, with key project staff to obtain first-hand information as to the objectives of the project, identify the key players and their roles, and the interrelationship and communication structure between all parties as well as review documents such as organization charts and governance structure.
- Attend meetings, as needed, key court/AOC and vendor personnel to obtain information on their responsibilities, objectives, communications, and schedules.
- Conduct observations, on-going interviews, and document examinations to monitor meeting timelines, deliverables, and milestones as described in the schedule.
- Review project planning/management deliverables and documentation to comment on compliance with industry best practices and adherence to documented project processes
- Perform initial assessment of Project Management processes and documents (project management plan, communication plan, change management plan, implementation plan, etc).

Appendix E: Continued

- Participate in certain critical requirements gathering and physical design sessions (JAD sessions) as deemed necessary or at the direction of the Internal Audit Services Manager to provide expertise courtroom operations (family law, criminal, and traffic), finance, distributions, and audit as well as on the V2 and V3 retrofit and validate processes are being followed.
- Provide an Implementation Strategy Review. This review would consist of an analysis of the implementation approach and the action plan for accomplishing implementation.

IV&V Specific Tasks

- Review Requirement Traceability and Contract at end of Functional Design, Technical Design, and Test Preparation.
- Provide a Functional Design and Requirements Traceability Review. The Functional Design review would consist of an analysis of the Functional Design Specification to assess the readability, consistency, and testability of the design. The Functional Design review will identify issues such as non- testable requirements, vague requirements, requirements that are in conflict or not consistent with each other, etc. The Requirements Traceability review will ensure that all of the contractual requirements have been addressed and are accounted for.
- Provide a Technical (software) Design and Requirements Traceability Review. The Technical Design review would consist of an analysis of the Technical Design Specification to assess the readability, consistency, and testability of the technical design as well as identification of any potential weaknesses in the design. The Technical Design review will identify where the Technical Design may be in conflict with the Functional Design. The Requirements Traceability review will ensure that the design has addressed all of the functional requirements.
- Provide a Test Methodology and Requirements Traceability Review. The Test Methodology review would consist of an analysis of the Test Methodology and a sampling of test scripts which will be traced to the requirements and to the design specification as well as reviewing the data elements necessary for the scripts. The Requirements Traceability Review will ensure that all of the test cases/scripts have been developed to test the design and the functional requirements.
- Review a statistically valid sample of source code (coded based on requirements documented in JAD sessions). Approximately 40 modules will be reviewed which would provide early feedback on compliance to coding standards and comparisons to the design requirements.

Appendix E: Continued

- Review a statistically valid sample of test scripts (unit, integration, system, user acceptance, product acceptance) for compliance with requirements from both a technical perspective and from a court operations perspective (testing enough scenarios/scripts covering critical and most frequent business cases both on a positive/ideal flow and on an exception basis).

IPO/IV&V Combined Tasks

- Assess Systems Development Life Cycle (SDLC) practices to comment on compliance with industry best practices and adherence to documented project processes.
- Review agreed-upon vendor deliverables including, but not limited to Functional Design, Technical Design, Test Methodology, Implementation Strategy, V2 Requirements and V3 Requirements, to comment on compliance with Deliverable Expectations Document (DED).
- Identify and assess any new or ongoing challenges, barriers, risks, or issues.
- Attend meetings, as needed, where deliverables, strategies, timelines, and status are being considered.
- Maintain a log tracking IPO/IV&V issues that delineates any challenges, barriers, risks, issues, defects, milestones changed or missed, and observations warranting discussion and monitoring; monitor the resolution of such issues; document the resolution and closure of each matter.
- Conduct bi-weekly briefings with the RAD and designated Project Manager(s) discussing all previous work and any updates or new developments.
- Compile the results of the IPO/IV&V monitoring efforts in writing. In addition to compliance issues, the report will also contain any other significant findings, conclusions, and recommendations including the identification of risks, lessons learned, best practices, or performance exceeding minimum requirements as well as comment on severity or criticality and impact or consequence of items discussed.
- Ascertain and report on follow-up efforts taken on corrective actions needed and implementation of oversight recommendations.
- Provide reports to the RAD and designated Project Manager(s) on a monthly basis, or more frequent if necessary, based on project stage criticality.

Appendix F: SEC Activities - Performed & Planned

Completed SEC Activities for October 2010

During September, SEC performed the following activities:

- Monitored QA Metrics;
- Monitored Re-Planning Efforts;
- Monitored Testing Efforts;
- Obtained and reviewed the Core Product Acceptance Test Plan, Version 1.4, dated October 19, 2010 and incorporated comments into this monthly report;
- Attended weekly and monthly Project Management Meetings, weekly Technical Architecture Meetings, and monthly Steering Committee Meetings, as well as participated in CCMS-V4 IPO/IVV Project Meetings;
- Performed analysis of areas in the Project Oversight Review Checklist Appendix C;
- Identified and tracked potential risks, observations, and issues as well as discussed and prepared monthly IPO/IV&V written status reports.

Planned SEC Activities for November 2010

SEC plans to conduct the following activities over the next month:

- Attend, observe, and participate in a variety of CCMS-V4 meetings including weekly Project Management Meetings, monthly Project Management Meeting, monthly RPO Management Meeting, monthly ISD Meeting, weekly Technical Architecture Meetings, CIO Meetings, and monthly IPO/IVV Project Meeting;
- Attempt to identify schedule for and attend new CCMS Management Committee meetings new CCMS Executive Committee meetings, as well as identify the composition of the committee members.
- Review technical documents prepared and discussed at weekly meetings as well as other documents distributed as part of weekly and monthly meetings;
- Continue review and comment on the Testing Documentation in terms of sufficiency of detail including implementation of integration test plan and PAT plan;
- Monitor results of product testing, when started, in terms of progress in script executions, frequency and severity of defects identified, and resolution of defects.
- Prepare monthly IPO/IV&V status report that identifies and tracks new risks or issues as well as accomplishments and review prior issue resolution.

The Judicial Council of California, Administrative Office of the Courts

Independent Project Oversight (IPO) and
Independent Verification and Validation (IV&V)
For the CCMS-V4 Development Project

Status Report as of November 30, 2010

SJOBERG & EVASHENK
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Executive Summary

Realizing the importance of independent oversight for high criticality technology projects, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) services for the California Case Management System (CCMS)-V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the CCMS Executive Sponsor in the Regional Program Office (RPO), our objectives are to monitor the activities, deliverables, milestones, deadlines, and design of the CCMS-V4 project and communicate status, progress, issues, and challenges to the success of the project as designed. Our monthly IPO/IV&V reports are intended to capture and assess current project activities to determine whether process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards, as well as that potential risk/issues are known by decision makers at a specific point in time; thus, the monthly items reported are in-flux, continually evolving, and will change over the course of the project.

Period Highlights:

During the month of November, the IPO/IV&V Team assessed the testing effort starting with the traceability (coverage) of requirements to test cases. The IPO/IV&V Team's investigation revealed that approximately 8,000 requirements documented in HP Quality Center did not have an associated test case (i.e., a test case to verify that the requirement was provided in the software). While this may or may not prove to be an issue, the IPO/IV&V Team has not yet reviewed all of the requirements and currently does not have access to Requisite Pro, the requirements management tool, to complete that review. Without more evaluation and a comparison to the Requisite Pro database, it is not possible for the IPO/IV&V Team to state whether or not a problem exists. Within the Requisite Pro database, there are typically requirements that are not true requirements, such as a heading tagged as a requirement, which is commonly associated with a document-based requirements tracking tool. A review of the Requisite Pro database may alleviate this concern. The primary focus of our investigation is to ensure that all of the requirements are tested and that there are test cases associated with each requirement, typically more than one. Currently, the IPO/IV&V Team is unable to verify that all of the requirements are in HP Quality Center; we can only see 11,245 requirements in HP Quality Center and are not sure/confident this number captures all of the requirements. The AOC Testing staff has identified a different method of tracing requirements that the IPO/IV&V Team will investigate further during the month of December.

As of November 30, 2010, the Statement of Work, which reflects the results of the replanning effort, and identifies the revised project objectives and agreements, has not yet been finalized and thus, cannot be distributed to the IPO/IV&V Team. Once received, the IPO/IV&V Team will be able to review this document.

As of November 30, 2010, the Governance Model had not been finalized and, thus, not distributed to the IPO/IV&V Team for review and comment.

Detailed Observations, Impact, and Recommendations

The Southern California Regional Program Office (RPO) staff, AOC staff, individual court staff, and Deloitte Consulting continue to practice project management and systems-engineering practices in accordance with industry standards related to the identification and resolution of issues, risks, items for management attention, and modification and change requests. Additionally, the continued diligence employed by the RPO staff, AOC staff, Court staff, and Deloitte Consulting in addressing issues and following established project management processes has been consistent. As part of our continued IPO/IV&V efforts, we offer the following observations and areas of concern in various project management and technical areas.

Project Oversight Focus Areas

Communication Management:

There do not appear to be any current communication concerns noted by the CCMS-V4 Project Team or the IPO/IV&V Team.

Schedule Management:

The schedule is published weekly in the CCMS-V4 Development Services Status Report and the project team appears to be tracking according to the schedule.

Scope Management:

Scope management items raised by the CCMS-V4 Project Team are being actively managed through eRoom.

Risk Management:

One new risk (Risk #51) was opened and no risks were closed during the month of November. The Project Management Team appears to be adequately tracking the risks and as of November 30, 2010, the risks identified below by the CCMS-V4 Project Team remain active.

Risk Number	Risk Title	Activity Performed	Target Resolution Date
45	AOC Testing Resources	Although this does not seem to be an issue at this time, this risk will remain open and be reviewed each week.	12-3-10

Risk Number	Risk Title	Activity Performed	Target Resolution Date
51	Stack Upgrade Impact on PAT	<p>The instability of the infrastructure may impact the script execution during PAT, which may reduce their confidence in the application. If the issues are not resolved soon, SAIC may not be able to complete the stack upgrade in the PAT and Stress Test environments which will impact the Stress Test team's ability to complete stress/performance testing before the start of External Components PAT on 5/16/11.</p> <p>In an effort to mitigate this risk, the following actions are being taken:</p> <ol style="list-style-type: none"> 1. Deloitte has acquired an Oracle support contract to obtain higher levels of support required to address outstanding Oracle-related stack issues. 2. Continue to engage Adobe to support resolution of LiveCycle issues. 3. Acquire additional infrastructure team resources to support resolution of stack upgrade issues. 	<p><i>No target resolution date is entered in eRoom.</i></p>

Issue Management:

No new issues were opened or closed during the month of November. The Project Management Team appears to be adequately tracking the issues and as of November 30, 2010, there were no open issues identified by the CCMS-V4 Project Team.

Resource Management:

The resources necessary for testing are still being identified and consequently Risk 45 (AOC Testing Resources) is being actively worked.

Cost Management:

There are no new issues with respect to Cost Management that have not already been discussed in previous IPO/IV&V reports.

Technical Focus Areas

Quality Management:

The RPO Management Team is currently working with Deloitte management to revise the QA Reports for the project and a new QA Report is expected to be delivered in December. The IPO/IV&V Team anticipates reviewing the new QA Report during the month of December.

Quality Architecture:

There are no open issues with System Architecture and the System Architecture Team with Deloitte, AOC, ISD, and other Court members have done a good job of identifying and defining the system architecture as well as architectural tradeoffs, raising issues for resolution, and generally creating a solid CCMS-V4 system architecture.

Configuration Management:

There are no open issues with Configuration Management. Configuration Management for documentation is being well controlled through eRoom and JCC Web Sites that have built-in controls for Configuration Management.

System Engineering Standards and Practices:

Since Deloitte Consulting appears to be following currently accepted systems engineering standards and practices, even as defined in IEEE Standard 1220, there are no system engineering standards and practices concerns at this point in time.

Requirements Identification and Traceability:

There are no new issues with Requirements Identification and Traceability that have not already been discussed in IPO/IV&V previous reports.

Detailed Design Review:

There are no open issues with the Detailed Design Review that have not already been discussed in previous IPO/IV&V reports.

System Development Quality and Progress:

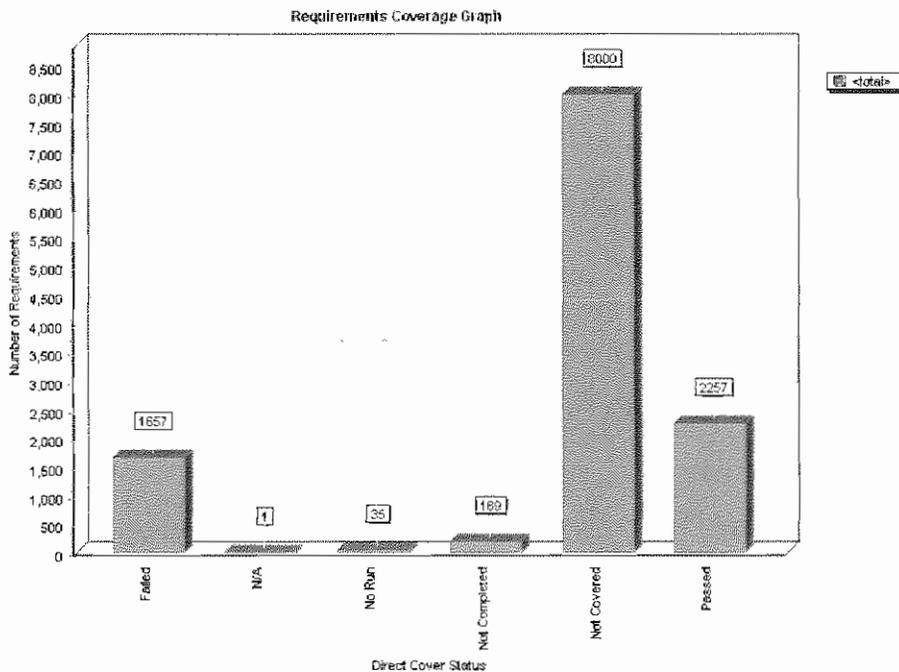
There are no open issues with the System Development Quality and Progress that have not already been discussed in previous IPO/IV&V reports.

Testing Practices and Progress:

The primary focus of our review of the project's testing practices is to ensure that all of the requirements are tested and that there are test cases associated with each requirement, typically more than one. Currently, the IPO/IV&V Team is unable to verify that all of

the requirements are in HP Quality Center; rather, we can only see 11,245 requirements in HP Quality Center and are not sure/confident this number captures all of the requirements.

The IPO/IV&V Team began assessing the testing effort starting with the traceability (coverage) of requirements to test cases. In reviewing HP Quality Center data for the Core application, the data reflected in the following Requirements Coverage Graph was discovered. Of major importance is that this data shows 8,000 requirements within HP Quality Center that do not have an associated test case to cover the requirements that were imported into HP Quality Center. While this may or may not prove to be an issue, the IPO/IV&V Team has not yet reviewed all of the requirements and currently does not have access to Requisite Pro, the requirements management tool, to complete that review. Without more evaluation and a comparison to the Requisite Pro database, it is not possible for the IPO/IV&V Team to confirm whether or not a problem exists. Within the Requisite Pro database, there are typically “non-Requirements” (e.g., labels or headings that are associated with the use of Requisite Pro) depending on the filter used to transfer the requirements from Requisite Pro to HP Quality Center. Since a one-on-one verification is not realistic, the IPO/IV&V Team suggests that the AOC review the Test Case generation process to ensure that the test cases are properly tagged to the associated requirements. The Requirements Coverage Analysis, used properly, can ensure that all of the approved requirements have been tested. Thus, the IPO/IV&V Team strongly urges the AOC be provided this information weekly from Deloitte during the testing phase.



Further, the AOC Testing staff has identified a different method of tracing requirements that the IPO/IV&V Team will investigate further during the month of December.

Appendix A: Matrix of Areas of Concern (Open)

The matrix below provides a current listing of all open areas of concern, our recommendations, and the action taken by the CCMS-V4 Project Team. As items are resolved, they will be moved to Appendix B. Key statistics are summarized below:

- **There were no new areas of concern identified this month.**
- **The IPO/IV&V Team strongly believes that this project will continue to be a high risk project due to the constraints imposed by the budget, schedule, and resources.**

Item Number	Area of Concern	Recommendation	Action Taken
Apr10.1	QA Report Metrics	Continue the use of metrics in the QA Reports, but include a definition or interpretation of all metrics shown in the reports.	4-2010 – New this month. 5-2010 – There is no change in this action item. 6-2010 – There is no change in this action item. 7-2010 – There is no change in this action item. 8-2010 – There is no change in this action item, although the CCMS-V4 Project Team reported working with Deloitte to change the QA report content. 9-2010 – There is no change in this action item. 10-2010 – There is no change in this action item since no new QA Report has been published. 11-2010 – There is no change in this action item since a new QA Report will not be published until December.

Appendix B: Matrix of Areas of Concern (Closed)

The matrix below provides a listing of all closed areas of concern, our recommendations, and the action taken to resolve the issues by the CCMS-V4 Project Team. Key statistics are summarized below:

- No areas of concern were closed this month.

Item Number	Area of Concern	Recommendation	Action Taken
Jul07.1	Aggressive schedule	The schedule should be reviewed to ensure that ample time has been allocated to each phase of the project.	<p>09-2007 - No action taken that SEC is aware of.</p> <p>10-2007 – At this point in the project it is difficult to determine if there is ample time allocated to each phase of the project. This item will remain in a watch status (e.g., once Test Planning activities have begun, it will be easier to determine if enough time is allocated to testing activities).</p> <p>11-2007 to 04-2008 – Although 12 weeks were added to the schedule, there is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>05-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>06-2008 – There is still concern that there is insufficient time allocated to testing. This item will remain in watch status until the Test Plan deliverable has been reviewed by SEC.</p> <p>07-2008 – There is concern that there is not enough time to complete the review of the FFD. In addition, there is concern that there is insufficient time allocated to testing and that test planning has not been fully engaged. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>08-2008 – 27 additional days were added to the schedule for review of the FFD. It is unknown at this point whether the additional days are sufficient to allow a thorough review and better ensure the highest quality product possible. Moreover, because test planning is slow to start, SEC still has concerns about the time allocated to the testing phase. This item will remain in watch status.</p> <p>09-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>10-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>11-2008 – It continues to be unknown at this point whether the review timeframe will be sufficient to allow a thorough review. This item will remain in watch status.</p> <p>12-2008 – It is unclear how the extended review timeframe will impact the overall schedule. This item will remain in watch status.</p> <p>1-2009 – The Core application, Portals, and Statewide Data Warehouse portions of the FFD will be completed by March 30, 2009. The Data Exchanges portion is expected to be completed by April 15, 2009. This item will remain in watch status.</p> <p>2-2009 – All portions of the FFD are on track for completion by March 30, 2009 and April 15, 2009, respectively. This item will remain in watch status.</p> <p>3-2009 – The Portals and Statewide Data Warehouse will be accepted by March 31, 2009. The Core application will be completed by March 31, 2009. Data Exchanges will not be completed until the end of April. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>4-2009 – The FFD was signed off May 1, 2009. The Data Exchanges are expected to be completed by May 22, 2009.</p> <p>5-2009 – The Data Exchanges are expected to be completed by June 5, 2009.</p> <p>6-2009 – While the IPO/IV&V Team believes the schedule is aggressive and will remain aggressive for the duration of the project adding to project risk, the RPO and AOC have extended the schedule through contract amendments. At this point, the RPO and AOC have accepted the project risk as neither the schedule nor the budget can be changed.</p>
Aug07.1	JAD Schedule	<p>There does not appear to be a comprehensive schedule of JADs so that participants can plan time accordingly. Thus, Deloitte Consulting should prepare a detailed schedule that sets realistic timeframes needed to JAD each functional area and ensure the schedule is agreed to by all relevant parties.</p>	<p>09-2007 – The schedule should be completed in October 2007.</p> <p>10-2007 – A revised schedule was completed in October 2007. While the schedule provides more details than previous versions, it still does not address the detailed planning that must be conducted to ensure coverage of all functional areas and the workflows associated with each.</p> <p>11-2007 to 04-2008 – JAD scheduling has improved to the point that this is no longer an area of concern. Consequently, this item has been closed. Over the past few months, Deloitte Consulting has been diligent in setting and adhering to its JAD schedule. As the project enter the final design stage, participants appear able to plan time accordingly to ensure they are available to participate in tracks as needed and share their subject matter expertise. Meetings were also held to hear concerns that more time was needed to review developing requirements—resulting in more time added to the overall project development schedule.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Sep07.1	Requirements Gathering	Ensure that a detailed JAD schedule includes a plan for how the workflow inter-relationships will be addressed.	<p>10-2007 – While the workflows and interrelationships have not yet been addressed, the AOC has instituted cross-track meetings as part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements are being gathered.</p> <p>11-2007 to 04-2008– The cross-track meetings have proven to be an essential, needed part of the JAD process to identify overlapping issues and better ensure consistency across the tracks where requirements were being gathered. However, to SEC’s knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>05-2008– To SEC’s knowledge, the workflows and interrelationships have not yet been addressed.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas. This step should help address some of our concerns. However, since the final design is nearing completion, there is little value in fully mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.1	Project Oversight Activities	Assign person in role of day to day project management responsible for ensuring that issues are resolved timely, do not impact downstream work efforts, and are not in conflict with other project activities, legal provisions, or branch policy.	<p>11-2007 to 04-2008– It was explained that Bob Steiner, the AOC Project Manager, performs these activities and that a Project Management Consultant familiar with V2 and V3, Sean Yingling, will be assigned to assist the Development Project Manager (Bob). This item will remain in watch status over the next month to ensure the activities are being performed.</p> <p>05-2008– SEC will continue to monitor this item until a Responsibility Matrix indicating the project management component responsibilities that are designated to Sean and Bob is developed. The matrix will ensure that no workload gaps exist.</p> <p>06-2008– To date, a Responsibility Matrix has not been provided to SEC for review.</p> <p>07-2008– SEC will work with Bob Steiner and Sean Yingling to better understand the project management responsibilities.</p> <p>08-2008– Bob and Sean have established a seamless working relationship. Bob has ultimate responsibility for all project management activities. Sean’s focus rests with coordinating the FFD review, reporting to the Steering Committee, and following up on issues with the V4 Court Project Managers.</p>
Oct07.2	JAD Session Documentation	Utilize new template or other mechanism to document detailed JAD Session minutes including areas of discussion, results or actions taken, agreements reached, and issues raised as well as distribute timely for approval.	<p>11-2007 to 04-2008 – Starting in mid-April, the JAD tracks created a new template to ensure consistency across JADs for documenting decisions reached and meeting outcomes. However, since it appears that the new template is only used in isolated instances, this item will remain in watch status over the next month.</p> <p>05-2008 – It is not clear whether an AOC CCMS member will be appointed to monitor and summarize decisions made in the JAD sessions, and subsequently elevate those of potential interest to the Steering Committee, especially those that may require higher level buy-in.</p> <p>06-2008 – Since the final design is nearing completion, there is little value in mitigating this concern.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Oct07.3	Governance Structure and Escalation Process	Clarify and establish the complete governance structure to eliminate confusion related to issue escalation process and decision-making.	<p>11-2007 to 04-2008 – The CCMS Governance Model was distributed to committee members. This item will remain in watch status over the next month to ensure its use.</p> <p>05-2008 – The CCMS Governance Model appears to be in use and effective in allowing participation in project decisions regarding project scope, cost, and schedule.</p>
Apr08.1	Unelear Requirements	<p>Review the requirements to determine the types of clarifications needed for understanding in order to avoid confusion during downstream activities such as coding and preparing for testing.</p> <p>As of our 09-2008 review of the FFD, we have suggested the following additional recommendations:</p> <ol style="list-style-type: none"> 1. Identify and evaluate subjective text in FFD (such as may or could) and clarify within the context of use; 2. Perform a traceability exercise to link use cases to business rules—again to reduce need for individual interpretation; 3. Review business rule part of each section to ensure complete and clear rules have been incorporated into the use case. 4. Evaluate pre and post-conditions to ensure they are correct and complete. 	<p>04-2008 – New this month.</p> <p>05-2008 – It is not clear whether action has been taken on this issue.</p> <p>06-2008 – The AOC has implemented a requirement review process that will be conducted both vertically (within a given subject area) and horizontally (within a business process that crosses subject areas). This item will remain in watch status over the next month to review this process.</p> <p>07-2008 – This item remain in watch status until a better understanding can be achieved and SEC evaluates the review process.</p> <p>08-2008 – SEC will assess this item during their review of the FFD deliverable.</p> <p>09-2008 – SEC has begun to assess this item and will continue to evaluate progress during the AOC/Court review of the FFD deliverable.</p> <p>10-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>11-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>12-2008 – It is not clear whether action has been taken on this issue. This item will remain in watch status.</p> <p>1-2009 – The RPO Management Team is currently developing plans to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>2-2009 – The RPO Management Team continues to mitigate the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>3-2009 – The RPO Management Team continues to discuss the risk, and identify the impact on the current planned testing effort (more resources or extended duration), as well as the impacts to project cost, schedule, required or expected Court functionality, and overall quality. This item will remain in watch status.</p> <p>4-2009 – An updated resource schedule is being developed that will forecast resource needs between now and the beginning integration testing. This item will remain in watch status.</p> <p>5-2009 – An estimate of the number of Court SMEs needed for testing has been provided. However, more SMEs with Family and Juvenile expertise will be needed. This item will remain in watch status.</p> <p>6-2009 – The IPO/IV&V Team has continued to express their concern that the ambiguity surrounding the interpretation of final requirements presents a risk to the construction and testing phases of the project. Data is being captured by the AOC Software Quality Assurance Team during early testing that should assist in defining the extent of the problem and any future concerns will be raised as part of the testing assessment.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Dec08.1	Standardization and Configuration	It is not clear what impact the Standardization and Configuration requirements will have on the FFD and on long-term maintenance of the application. Once all Standardization and Configuration requirements have been defined, the requirements should be traced back into the FFD and reviewed again.	<p>12-2008 – New this month.</p> <p>1-2009 – In the month of January, a Court Executive Management work group was established to address the concerns surrounding the standardization and configuration requirements.</p> <p>2-2009 – The RPO Management Team reported that the Standards and Configuration Management Group will determine whether configurable items are statewide standards or local configurations and that these decisions will not impact the FFD.</p>
Dec08.2	Single Point of Contact for ISD	A single point of contact should be established for AOC that can track and manage daily progress on ISD-related activities	<p>12-2008 – New this month.</p> <p>1-2009 – It is not clear where the roles and responsibilities are documented and whether David Corral, selected as the single point of contact, has the authority to make decisions on behalf of ISD. Virginia Sanders-Hinds will work with IPO/IV&V to better understand the ISD roles and responsibilities within the project.</p> <p>2-2009 – It was clarified that Virginia Sanders-Hinds is the single point of contact with the authority to make decisions on behalf of ISD.</p>
Mar09.1	Justice Partners (Interfaces) Plan	Determine the state and progress of the common “State” interfaces which are currently being reviewed by the Justice Partners and assess the progress for project schedule impact.	<p>4-2009 – The “State” interfaces are being addressed with the Justice Partners. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p> <p>5-2009 – The “State” interfaces are being addressed with the Justice Partners at both the State and local levels. ISD has stated that the schedule impact will be evaluated once the Data Exchanges deliverable has been signed off (now anticipated for 6-5-09) and the actual interfaces have been finalized and agreed to. This item will remain in watch status.</p>

Item Number	Area of Concern	Recommendation	Action Taken
			<p>6-2009 – The “Statewide” interfaces are being addressed with the Justice Partners. – A plan has been defined for day-one critical exchanges and each Justice Partner will be given a Microsoft Project Plan to follow. The AOC will continue to work closely with each Justice Partner to anticipate any potential challenges. However, it is not clear if and when the Justice Partners will participate in PAT. This item will remain in watch status.</p> <p>7-2009 - The CCMS-V4 Project Team has clarified that the Statewide Justice Partners will participate in PAT. This item will be closed out.</p>
Mar09.2	Document Management Plan	Determine the state and progress of the agnostic “generic” interface to support any existing document management solution and assess the progress for project schedule impact.	<p>4-2009 – The “generic” interface is currently under development. This item will remain in watch status. The RPO Management Team has stated that the requirements for document management were gathered during design and have been signed off. The AOC is in the process of standardizing the document management interface for all courts but is unsure whether this effort will be complete prior to Go Live for CCMS-V4. This item will remain in watch status.</p> <p>5-2009 – The “generic” interface is currently under development. This item will remain in watch status.</p> <p>6-2009 – The “generic” interface is currently under development and will have a solution that supports the courts at Go Live. Currently, the early adopter court uses FileNet and is scheduled to test this interface during PAT. For each of the remaining Courts, the agnostic “generic” document management interface will be finalized, if needed, during the deployment effort. This item will remain in watch status.</p> <p>7-2009 – The CCMS-V4 Project Team has clarified that the Lead Courts which use FileNet are scheduled to test this interface during PAT. This item will be closed out.</p>

Item Number	Area of Concern	Recommendation	Action Taken
Aug10.1	PAT Plan	Either modify the PAT Plan or establish risks for each of the points identified by IPO/IV&V in this report and implement appropriate corrective actions to mitigate the risks.	<p>8-2010 – New this month. On September 15, 2010, the IPO/IV&V Team received a revised PAT Plan, Version 1.1, dated September 9, 2010 for review that may address some of the IPO/IV&V areas of concern.</p> <p>9-2010 – The IPO/IV&V Team is reviewing the current version, 1.3, of the PAT Plan, which we know from our preliminary assessment address some of the areas of concern. Until we complete our review, the Item will remain open.</p> <p>10-2010 – The IPO/IV&V Team reviewed version 1.4 of the PAT Plan and found that all previous concerns have been remedied. This item will be closed.</p>

Appendix C: Project Oversight Review Checklist

To assist us in determining whether the CCMS-V4 project is on track to be completed within the estimated schedule and cost, the Project Oversight Review Checklist is used to identify and quantify any issues and risks affecting these project components.

The checklist format provides a quick reference for the assessment of the project management practices and processes in place over the CCMS-V4 project and will assess the adequacy or deficiency of the area. Further, the checklist may provide comments on the specific items reviewed, interviews conducted, and general practices observed for requirements presented under the five categories identified below. These requirements are consistent with industry standards and accepted best practices such as the Project Management Institute (PMI)'s Project Management Body of Knowledge (PMBOK) and the Institute of Electrical and Electronic Engineers (IEEE) standards. Use of these checklists will assist us in commenting on the effectiveness of the project activities.

- Planning and Tracking
 - Procurement
 - Risk Management
 - Communication
 - System Engineering

No updates were made to the Project Oversight Review Checklist this month.

Project Oversight Review Checklist

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		The business case has been finalized. The project goals, objectives, and expected outcomes are documented in the Deloitte Consulting Statement of Work. The key stakeholders and sponsors are identified and documented in the Project Management Plan for CCMS-V4.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project plan that has been approved is loaded into Microsoft Project. Deloitte Consulting will update the schedule with construction and testing details after the requirements are complete.
Is completion of planned tasks recorded within the PM software?	X		Completion of milestones is tracked within Microsoft Project.
Are actual hours expended by task recorded at least monthly within PM software?		X	Actual hours for Deloitte Consulting staff are tracked weekly within Playbook Navigator, but are not shared with the AOC as this is a fixed price development contract. The AOC has historically not tracked this information.
Are estimated hours to complete by task recorded at least monthly within PM software?		X	Estimated hours to complete for Deloitte Consulting staff are tracked weekly but are not shared with the AOC as this is a fixed-price development contract. Any deviations occurring to planned dates are discussed at an internal weekly meeting between AOC and Deloitte Consulting.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans?	X		There is a formal staffing plan for Deloitte Leads that is shared with the AOC. Deloitte Consulting tracks internal project staffing with respect to acquisition, schedule for arrival and departure of specific staff, and staff training plans. The AOC does not currently have a CCMS-V4 Staffing Plan; staff are allocated at the CCMS level and not at the specific project level.
Have project cost estimates, with supporting data for each cost category, been maintained?	X		While development costs are tracked internally by Deloitte Consulting, they are not shared with the AOC since this is a fixed-price development contract. The AOC tracks the project budget, monies encumbered, and monies expended to date in an Access database.
Are software size estimates developed and tracked?	X		Deloitte Consulting has included estimates for Final Design, Final Construction, Testing, and Conversion.
Are two or more estimation approaches used to refine estimates?	X		A Bottom Up estimate is performed by the Deloitte Consulting Project Manager and a Top Down estimate is performed by the Lead.
Are independent reviews of estimates conducted?	X		There are multiple internal reviewers consisting of Deloitte Consulting, AOC, and Court staff.
Are actual costs recorded and regularly compared to budgeted costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Currently, AOC costs are tracked at the overall CCMS level. At this point, a daily (or on-demand) Access database report can be printed showing project budget, monies encumbered, monies expended to date, and monies forecasted to be spent.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Planning and Tracking			
Is supporting data maintained for actual costs?	X		Development costs are tracked internally by Deloitte Consulting and not shared with the AOC since this is a fixed-price development contract. Yet, the RPO has invoice level data to support its actual cost data tracked in its Access database.
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	X		This information is reported weekly, monthly, and quarterly.
Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration mgmt plan?	X		The CCMS-V4 Configuration Management Plan outlines the process and procedures followed for Configuration Management.
Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?	X		This information is tracked in eRoom and in the weekly, monthly, and quarterly status reports.
Is user satisfaction assessed at key project milestones?		X	Deloitte Consulting has stated that user satisfaction is assessed at key project milestones in the form of deliverable review. All deliverable comments are logged, reviewed, and categorized to indicate if a response is needed. According to Deloitte Consulting, all defects or other comments that require a response are addressed and tracked through closure. Other validation processes include proof of concepts, UI prototypes, design sessions, design council sessions, and cross track meetings. As such, Deloitte Consulting believes that acceptance of the deliverable is evidence of user satisfaction. While there are no satisfaction surveys used or assessments performed at key project milestones, the AOC agrees that there are several opportunities to talk through and resolve deliverable disagreements on a case by case basis.
Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?	X		Planning is in compliance with a formal system development life-cycle (SDLC) methodology.
Is there a formal enterprise architecture in place?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point in time, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project. SEC will be investigating the AOC enterprise architecture further as the project progresses.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	X		Project Closeout activities are planned to occur and we will evaluate and comment whether the planned activities occurred at the project closeout. In the interim, Lessons Learned sessions are being conducted at various project phases to identify possible process improvements.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, "alternative procurement") and their required processes followed?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Is a detailed written scope of work for all services included in solicitation documents?	X		The AOC has stated that they adhere to Policy Number AOC 7.2.1 (Procurement of Goods and Services) which is overseen by Grant Walker in the Business Services Unit. The initial procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle.
Are detailed requirement specifications included in solicitation documents?	X		Detailed requirements were included in Exhibit B of the Statement of Work. These will be expanded upon during Detailed Design. Thus, we will review or evaluate those requirements when developed.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. For ongoing SOWs, independent third-party vendors are used to review and recommend procurement planning and execution practices.
For large-scale outsourcing, is qualified legal counsel obtained?	X		The procurement phase was complete prior to the point that SEC was brought into the project. Thus, we did not review or evaluate the procurement vehicle. The AOC utilized outside counsel for the V4 Development Contract.
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X		The Risk Management Plan contains the process and procedures for risk. Risks are tracked within eRoom and are discussed during the weekly and monthly status meetings. In addition, the Deloitte Consulting Project Manager meets with the CCMS Product Director weekly to discuss risks.
Does the management team review risks and mitigation progress at least monthly?	X		The management team reviews risks at weekly and monthly status meetings.
Are externally developed risk identification aids used, such as the SEI "Taxonomy Based Questionnaire?"		X	Additional risk identification aids are internal to Deloitte Consulting and are not shared with the AOC. The AOC is not using any other risk identification aids.
Communication			
Is there a written project communications plan?	X		This information is contained in the CCMS-V4 Communication Management Plan.
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		Written weekly, monthly, and quarterly status reports are prepared and discussed with the project management team as well as the Steering Committee/Oversight Committee. In addition, there are executive meetings held to brief the Lead Court CIOs.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
Communication			
Are there written escalation policies for issues and risks?	X		This CCMS-V4 Project Management documentation contains this information.
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		The Product Management Group has primary responsibility for working through the issues and risks. Additionally, issues and status are shared with lead court information officers, court executive officers at bi-weekly steering committee meetings as well as with selected presiding judges at the quarterly oversight committee meetings. The RPO is also working diligently to seek input and have stakeholders assume an active ownership role in the development process.
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		AOC and Court staff are planned to be involved from requirements gathering through testing and into implementation.
Do users formally approve/sign-off on written specifications?	X		The requirements will be approved by the AOC and Court staff.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		The RPO Management Team has reported that Deloitte Consulting is using Clear Quest and Clear Case to manage defects and Rational Requisite Pro to track requirements.
Do software engineering standards exist and are they followed?	X		This CCMS-V4 development standards documentation has been reviewed by SEC and found to be adequate.
Is a formal system development life-cycle (SDLC) methodology followed?		X	<p>Deloitte is using an overlapped waterfall SDLC as evidenced by the structure of their project plan and the manner in which activities are performed.</p> <p>CMMI Level 3 requirements require that a defined, standard, consistent process and process measurement be followed. This would require that:</p> <ul style="list-style-type: none"> • Technical processes are defined in writing; • Project roles are clearly defined; • Staff are trained in standard methods and process activities before they are assigned to roles; and • Technical management activities are guided by defined processes. <p>It is not clear where the processes and roles are documented and whether the CCMS-V4 Project is CMMI Level 3 compliant.</p>
Does product defect tracking begin no later than requirements specifications?	X		Product defect tracking occurs during deliverable review. Users submit defects by entering comments in the deliverable. Each defect is tracked to closure within the deliverable. Any corresponding response is attached to the original defect in the body of the deliverable. Before approval of the deliverable, the AOC confirms that all defects have been appropriately addressed.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Practices and Products	Practice in Use	Practice Not in Use *	Notes:
System Engineering			
Are formal code reviews conducted?		X	Two levels of code reviews are conducted. Automated reviews of code are conducted using the JCART tool which checks for and highlights unacceptable coding practices. Any issues identified through the JCART execution have to be resolved before the code can be included in the build. Additionally, manual code reviews are conducted by the Architecture Leads (Technical Analysts, Development Leads and the Framework Team). Code review checklists are created and stored in ClearCase. Deloitte should implement a process for ensuring that the coding standards are adhered to as opposed to the AOC assessing the compliance after completion.
Are formal quality assurance procedures followed consistently?	X		The quality assurance documentation was updated to include CCMS-V4. As more QA related data is collected and reported by Deloitte Consulting, the IPO/IV&V Team will be reviewing these reports to assess how data is represented in the reports—such as through metrics—and identify issues with processes if the metrics indicate negative trends.
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	AOC and the Court staff will sign-off on acceptance test results. Acceptance criteria have been established as 0 Severity-1 incidents, 0 Severity-2 incidents, and not more than 50 Severity-3 incidents.
Is the enterprise architecture plan adhered to?		X	The CCMS-V3 architecture will be updated to support CCMS-V4. At this point, the AOC does not have an enterprise architecture. However, the AOC Enterprise Architect is actively involved in the project.
Are formal deliverable inspections performed, beginning with requirements specifications?	X		All deliverables are approved by the AOC and Court staff.
Are IV&V services obtained and used?	X		SEC has been hired to perform IV&V.

* Either the practice is not in use or there is insufficient information for SEC to verify its use.

Appendix D: IPO/IV&V Project Scorecard

For November 1, 2010 – November 30, 2010 Time Period

Process Area	JUN 2010	JUL 2010	AUG 2010	SEP 2010	OCT 2010	NOV 2010	REMARKS
Communication Management							Day-to-day communication continues to be strong.
Schedule Management							The schedule remains aggressive and a re-planning effort is under review.
Scope Management							Project scope is managed and controlled through a variety of avenues.
Risk Management							Risks are reported, discussed, and managed on a weekly basis.
Issue Management							Issues are discussed/reported weekly at various project management and Executive Committee meetings.
Resource Management							AOC and Deloitte's level of project resources are being defined.
Cost Management							ISD costs and RPO costs are maintained in separate databases and there is no effort to combine these in the near future.
Quality Management (Client Functionality)							We are unable to conclude on the quality of the client functionality due to the absence System test defect data related to Deloitte's execution of the System Test scripts.
Quality Architecture							Quality Architecture is currently adequately defined from an industry-sound SEI approach.
Configuration Management							CM, for documentation, is being well controlled through the eRoom and JCC web sites that have built-in controls for CM.
System Engineering Standards and Practices							Deloitte Consulting appears to be following currently accepted systems engineering standards and practices.
Requirements Identification and Traceability							The IPO/IV&V Team has concerns with the lack of traceability between use cases and business rules.
Detailed Design Review							The Technical Design documentation was delivered to the RPO, but is an artifact and not a deliverable. Therefore, the Detailed Design cannot be assessed.
System Development Quality and Progress							The technical architecture and design is proceeding on the defined schedule with only minor changes.
Testing Practices and Progress							Testing continues to be a concern.

	Green – On Track
	Yellow – Warning
	Red – Significant Problems
↑ ↓	

Appendix E: IPO/IV&V Background, Scope, and Methodology

The California Case Management System (CCMS) is a statewide initiative to bring the courts together to use one application for all case types. CCMS is managed by the Administrative Office of the Courts (AOC) Southern Regional Office (SRO) in Burbank with the participation of the AOC Information Services Division and superior courts in the planning, design, and development sessions. Over the next 2 years, the AOC plans to expand the functionality of the current interim CCMS applications and develop the next phase—CCMS-V4—that will include family law, juvenile dependency, and juvenile delinquency case types as well as incorporate the V2 and V3 products and update the system's technical architecture and environments. Toward this end, the AOC has executed a contract with Deloitte Consulting to design and develop the V4 component—yet, the success of the V4 Project relies on every party working in harmony toward common goals.

Background:

For all high criticality technology projects such as CCMS-V4, industry best practices strongly encourage independent oversight. Ideally, the independent project oversight process begins during the feasibility study and continues through project closeout. Deficiencies, issues, findings, and recommendations identified by the oversight process should be incorporated into the appropriate project management processes. As the project progresses, the independent review and assessment approach should track the disposition of findings and recommendations in terms of corrective action and implementation of oversight recommendations.

An Independent Project Oversight (IPO) effort is intended to audit system development, acquisition, and maintenance controls to assure a structured project management methodology is adhered to and managed through activities such as project scheduling, risk management, and change management. A primary goal is to provide impartial oversight of the responsibilities and activities of the project office. Similarly, the Independent Verification and Validation (IV&V) provides unbiased oversight of the technical deliverables such as program code, test scripts and results, and network configurations and processes used to create the product. It is intended to evaluate products against system requirements and whether processes used follow the intended life cycle methodology.

However, these efforts are not designed to guarantee success of the CCMS-V4 application nor will the IPO/IV&V efforts ensure the completeness of business requirements designed by the CCMS-V4 team or the ability of the end system functionality of the application built to meet court needs statewide.

Appendix E: Continued

Scope and Methodology

In July 2007, the Judicial Council of California, Administrative Office of the Courts (AOC) hired our firm, Sjoberg Evashenk Consulting, Inc. (SEC) to provide Independent Project Oversight (IPO) and Independent Verification and Validation (IV&V) Services over the California Case Management System (CCMS) V4 product currently in development. Working under the oversight of the AOC Internal Audit Services and on behalf of the Regional Administrative Director and CCMS Product Director at the Southern Regional Office (SRO), our objectives are to monitor the services, deliverables, milestones, deadlines, and functionality of the CCMS-V4 project and communicate status, progress, issues, and potential challenges to the success of the project as designed. The IPO/IV&V efforts are designed to give assurance, from an independent and unbiased perspective, that the process and procedures employed to build and manage the CCMS-V4 application as planned are followed and adhere to industry standards as well as that potential risks and issues are known by project decision makers. The IPO/IV&V effort cannot require change, but any identified and reported findings and results should be considered by the project sponsors.

To provide appropriate and independent review, analysis, and oversight on the CCMS-V4 project, SEC will generally provide monitoring efforts from July 2007 through April 30, 2011 relative to the following areas:

- Project management and System Development Life Cycle (SDLC) processes, procedures, and communication
- Adherence to schedule
- Techniques and processes employed for risk management, issue management, and communication strategies
- Requirements gathering as part of JAD Sessions
- Completeness of Functional Design and Technical Design
- Traceability of requirements from one SDLC phase to the next
- Testing techniques and processes employed
- Compliance with project management and technical contract requirements

However, the IPO/IV&V efforts will not review or address the completeness of the business requirements being developed cooperatively by Deloitte Consulting, SRO staff, and court Subject Matter Experts (SMEs) as part of functional design joint application development (JAD) sessions. While business requirements will be reviewed from a technical perspective to assess whether they contain sufficient levels of specificity to ensure proper coding and end-user functionality as planned, SEC cannot ensure that all critical business processes and steps are appropriately captured in the business requirements to meet court needs.

Appendix E: Continued

Additionally, our efforts do not address the management surrounding the application developer's budget. Because the AOC awarded Deloitte Consulting a fixed-price contract, a time and material type review and analysis is not warranted in this situation.

Moreover, to provide appropriate and independent review, analysis, and oversight over the CCMS-V4 project, the following parameters need to be met in allowing SEC to perform activities unimpeded:

- Understanding/agreement by all project participants on our independent role and importance of timely information sharing and meeting scheduling;
- Inclusion as a seamless member of the project team;
- Timely knowledge of and inclusion in all project meetings;
- Commitment from all project participants to attend meetings scheduled with the IPOC/IV&V;
- Unfiltered access to all documents, data, deliverables, and personnel deemed relevant by the IPOC/IV&V Team; and
- Full disclosure of project knowledge including items such as project issues, risks, change requests.

If there are challenges in adhering to those parameters, we will escalate our issues and/or concerns to the Internal Audit Services Manager, CCMS Product Director, RAD, CCMS Steering Committee, and CCMS Oversight Committee as necessary or appropriate. Working in conjunction and coordination with the AOC's Internal Audit Services to complete this Statement of Work, we will perform the following tasks:

IPO Specific Tasks

- Conduct meetings, as needed, with key project staff to obtain first-hand information as to the objectives of the project, identify the key players and their roles, and the interrelationship and communication structure between all parties as well as review documents such as organization charts and governance structure.
- Attend meetings, as needed, key court/AOC and vendor personnel to obtain information on their responsibilities, objectives, communications, and schedules.
- Conduct observations, on-going interviews, and document examinations to monitor meeting timelines, deliverables, and milestones as described in the schedule.
- Review project planning/management deliverables and documentation to comment on compliance with industry best practices and adherence to documented project processes
- Perform initial assessment of Project Management processes and documents (project management plan, communication plan, change management plan, implementation plan, etc).

Appendix E: Continued

- Participate in certain critical requirements gathering and physical design sessions (JAD sessions) as deemed necessary or at the direction of the Internal Audit Services Manager to provide expertise courtroom operations (family law, criminal, and traffic), finance, distributions, and audit as well as on the V2 and V3 retrofit and validate processes are being followed.
- Provide an Implementation Strategy Review. This review would consist of an analysis of the implementation approach and the action plan for accomplishing implementation.

IV&V Specific Tasks

- Review Requirement Traceability and Contract at end of Functional Design, Technical Design, and Test Preparation.
- Provide a Functional Design and Requirements Traceability Review. The Functional Design review would consist of an analysis of the Functional Design Specification to assess the readability, consistency, and testability of the design. The Functional Design review will identify issues such as non- testable requirements, vague requirements, requirements that are in conflict or not consistent with each other, etc. The Requirements Traceability review will ensure that all of the contractual requirements have been addressed and are accounted for.
- Provide a Technical (software) Design and Requirements Traceability Review. The Technical Design review would consist of an analysis of the Technical Design Specification to assess the readability, consistency, and testability of the technical design as well as identification of any potential weaknesses in the design. The Technical Design review will identify where the Technical Design may be in conflict with the Functional Design. The Requirements Traceability review will ensure that the design has addressed all of the functional requirements.
- Provide a Test Methodology and Requirements Traceability Review. The Test Methodology review would consist of an analysis of the Test Methodology and a sampling of test scripts which will be traced to the requirements and to the design specification as well as reviewing the data elements necessary for the scripts. The Requirements Traceability Review will ensure that all of the test cases/scripts have been developed to test the design and the functional requirements.
- Review a statistically valid sample of source code (coded based on requirements documented in JAD sessions). Approximately 40 modules will be reviewed which would provide early feedback on compliance to coding standards and comparisons to the design requirements.

Appendix E: Continued

- Review a statistically valid sample of test scripts (unit, integration, system, user acceptance, product acceptance) for compliance with requirements from both a technical perspective and from a court operations perspective (testing enough scenarios/scripts covering critical and most frequent business cases both on a positive/ideal flow and on an exception basis).

IPO/IV&V Combined Tasks

- Assess Systems Development Life Cycle (SDLC) practices to comment on compliance with industry best practices and adherence to documented project processes.
- Review agreed-upon vendor deliverables including, but not limited to Functional Design, Technical Design, Test Methodology, Implementation Strategy, V2 Requirements and V3 Requirements, to comment on compliance with Deliverable Expectations Document (DED).
- Identify and assess any new or ongoing challenges, barriers, risks, or issues.
- Attend meetings, as needed, where deliverables, strategies, timelines, and status are being considered.
- Maintain a log tracking IPO/IV&V issues that delineates any challenges, barriers, risks, issues, defects, milestones changed or missed, and observations warranting discussion and monitoring; monitor the resolution of such issues; document the resolution and closure of each matter.
- Conduct bi-weekly briefings with the RAD and designated Project Manager(s) discussing all previous work and any updates or new developments.
- Compile the results of the IPO/IV&V monitoring efforts in writing. In addition to compliance issues, the report will also contain any other significant findings, conclusions, and recommendations including the identification of risks, lessons learned, best practices, or performance exceeding minimum requirements as well as comment on severity or criticality and impact or consequence of items discussed.
- Ascertain and report on follow-up efforts taken on corrective actions needed and implementation of oversight recommendations.
- Provide reports to the RAD and designated Project Manager(s) on a monthly basis, or more frequent if necessary, based on project stage criticality.

Appendix F: SEC Activities - Performed & Planned

Completed SEC Activities for November 2010

During November, SEC performed the following activities:

- Monitored QA Metrics;
- Monitored Re-Planning Efforts;
- Monitored Testing Efforts through HP Quality Center;
- Attended weekly and monthly Project Management Meetings, weekly Technical Architecture Meetings, and monthly Steering Committee Meetings, as well as participated in CCMS-V4 IPO/IVV Project Meetings;
- Performed analysis of areas in Project Oversight Review Checklist Appendix C; and
- Identified and tracked potential risks, observations, and issues as well as discussed and prepared monthly IPO/IV&V written status reports.

Planned SEC Activities for December 2010

SEC plans to conduct the following activities over the next month:

- Attend, observe, and participate in a variety of CCMS-V4 meetings including weekly Project Management Meetings, monthly Project Management Meeting, monthly RPO Management Meeting, monthly ISD Meeting, weekly Technical Architecture Meetings, CIO Meetings, and monthly IPO/IVV Project Meeting;
- Attempt to identify schedule for and attend new CCMS Management Committee meetings and new CCMS Executive Committee meetings, as well as identify the composition of the committee members;
- Review technical documents prepared and discussed at weekly meetings as well as other documents distributed as part of weekly and monthly meetings;
- Continue review and comment on the Testing Documentation in terms of sufficiency of detail including implementation of integration test plan and PAT plan;
- Monitor results of product testing, when started, in terms of progress in script executions, frequency and severity of defects identified, and resolution of defects;
- Continue review of HP Quality Center data and investigate different method of tracing requirements as suggested by the AOC Testing staff; and
- Prepare monthly IPO/IV&V status report that identifies and tracks new risks or issues as well as accomplishments and review prior issue resolution.

