CHILDS Replacement Program: F2020 Q1 Assessment Report

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Background

The Arizona Department of Child Safety (ADCS) has completed the Planning and Initiation phases and is managing the Delivery phase for the Program of projects to assess, procure, design, and implement a replacement of the current Federal Administration for Children and Families (ACF), Statewide Automated Child Welfare Information System (SACWIS) compliant system known as the Children's Information Library and Data Source or CHILDS. The resulting CHILDS Replacement system will be known as Guardian and will align with the published (June 2016) ACF Comprehensive Child Welfare Information System (CCWIS) regulations.

The Planning phase work included the completion of a Feasibility Study, Cost-Benefit Analysis, the Federal Implementation Advance Planning Document (IAPD), a product and services roadmap, an overarching budget document and introduced an iterative procurement model for the Program of projects that will create the CHILDS replacement system (Guardian). The Initiation phase defined the Program delivery approach. The Delivery Phase has completed the rollout of the Mobility Solution, the selection of the Dynamics Platform, the selection of additional critical solutions including OnBase and DocuSign, and the sourcing and onboarding of key contracted resources for Training and Change Management. The primary Technical Integrator, MCS, is in place and has started solution implementation, with the integrated delivery approach restructured, solutions modeling velocity increased, and initial development of Iterations 1-8 complete.

The CHILDS Replacement Program (Guardian) includes the following components:

Program Management	Quality Management	Intake / Hotline	Case Management
Business Integration	Platform	Provider Management	Financial Management
Mobile Solution	Hosting	Data Warehouse	Interfaces
IV&V	Technical Integration	Document Management	CHILDS Decommissioning

The State of Arizona Information Technology Authorization Committee (ITAC) recommends and requires that the CHILDS Replacement Program (Guardian) engages an independent third party firm to provide Independent Assessment (IA) services.

These IA services will provide supplementary project oversight to the CHILDS Replacement Program (Guardian) stakeholders to gauge the plan viability, project management, and project governance. IA findings will be shared and communicated by the CHILDS Replacement Program (Guardian) leadership to interested stakeholders.

Executive Summary

The CHILDS Replacement Program (Guardian) will enable the ADCS to implement a strong, robust system - one that is capable of increasing efficiency and service delivery to Arizona's families and children in need. This system will also fulfill Child Safety Specialist staff business use to more effectively and efficiently, execute the mission of the Department of Child Safety. The funding requests have been approved by the sponsoring organizations ITAC, JLBC and ACF.

This independent assessment reviewed project documentation and interviewed key stakeholders. **The results of the assessment indicate that the CHILDS Replacement Program (Guardian) Is making the necessary adjustments to ensure go-live success.**

The plan continues to be viable, particularly in light of the team's acceptance of the program delivery restructuring and the resultant improvements to project efficiency and communication. Significant added focus is being given to the quality and usability of Guardian.

The CHILDS Replacement Program should focus on the following items:
- **Scope:** As technical and functional detail is added, ensure all program stakeholders understand and accept go-live scope.
- **Technical Platform & Support:** Obtain business buy in for data cleanse, migration and purge plan, content migration plan, and contingency plans for external interfaces. Document architectural patterns and routinely ensure program staff understand them.
- **Quality & Testing:** Source a full time QA Lead, increase QA capacity and test automation skills, and begin to lock down functionality for components and processes. Expand dashboards to monitor quality, test, and user acceptance metrics. Include solution *usability* and *maintainability* as concepts.

Key Plan Viability Findings	Key Project Management Practice Findings
• The program is realizing the intended benefits from restructuring the program delivery team, and is now more than ever collaborating as one implementation team.	• Stakeholder acceptance of new team structure has improved communications. Leader Standard Work credited for clarifying understanding of roles, responsibilities, and ownership.
• Key staff and specialized skills have been added, as well as better alignment of skill sets to teams and tasks.	• Integrated program schedule completed but not yet baselined, with some gaps in detail that remain.
• The integrated plan is more complete and detailed with improved ownership over components of the plan.	• Specialized resources have been onboarded to help sustain velocity without sacrificing consistency and quality of delivery.
• The MVP scope is currently on pace for go-live timeline.	• Aligning the scope and deliverables of Guardian vendor contracts to the integrated plan milestones, to decrease complexity and increase visibility into quality of the overall solution being built.
• Detailed dependencies and critical path activities are not fully clear for ECM (OnBase), Testing, Training, and OCM teams.	

Assessment Findings & Recommendations

Plan Viability

FY19 Q4	FY20 Q1	Plan Viability	Comments
➡️	⬆️	1. Completeness of Plan	The integrated plan is more complete and detailed following the program delivery team restructuring, with improved ownership over components of the plan. Work stream interdependencies are clear at the "Epic" level.
➡️	➡️	2. Project Timeline	The MVP scope is currently on pace for go-live timeline not accounting for unforeseen rework. Build, test, deployment, and training of all the in-scope functionality (including all reports, data migration, content migration, etc.) will require an extended timeline.
➡️	➡️	3. Staff Levels and Skill Sets	Specialized resources brought on board, but gaps remain to be filled. Microsoft assisting DCS in recruiting for specific roles. Improved velocity achieved due to improved staff levels, clear accountabilities, and well-aligned skill sets.
➡️	➡️	4. Project Interdependencies and Interfaces	Dependencies and critical path are captured at the "Epic" level for solution delivery Work Streams 1 to 5. Detailed dependencies and critical path activities are not yet clear enough for ECM (OnBase), Testing, Training, and OCM teams.
➡️	➡️	5. Business Implementation Approach	The program is realizing the intended benefits of restructuring. Team ownership and collaborating have seen marked improvement. Teams are following clear and consistent reporting procedures and escalation paths.
➡️	⬇️	6. Technical Platform and Support	Revising ARB process to correct misalignment and effectiveness. Data warehouse and migration plans to be executed by component in line with iteration schedule. Content migration, data cleanse, and purge plans require business buy-in.
➡️	➡️	7. Stress Test	Joint effort by DCS and MCS to complete the integrated test plan. DCS must increase QA capacity and test automation skills. The program is dedicating process testers to each work stream to begin focusing on data migration and interface related testing.
➡️	➡️	8. Post Implementation	A draft post-go-live plan built with business input is needed. Ongoing efforts to estimate the post-implementation IT organizational design, skills, and costs required to support "Day 2". Technical training is required for existing staff for "Day 2".
➡️	⬆️	9. Overall Quality Assurance	Milestones for all QA and testing activities are not yet baselined. Collaboration across the program is improving quality and reducing rework. Expanding on dashboards to monitor the quality and usability of design and build and progress of testing activities.
➡️	➡️	10. Program Management Environment	Program Sponsor is focusing "up and out", Program and Project Managers are focusing "down", and PMO is focusing "across". Clear roles and responsibilities across the majority of the program, with minor gaps for the non-service delivery team roles.

Project Management Practice

F19 Q3	F19 Q4	Project Management Practice	Comments
→	→	1. Communication Management	Adoption of program restructuring has led to improved communications. Standards (e.g. Leader Standard Work, weekly program meeting template) accepted by team members and credited for renewed ownership and clarity on roles and responsibilities.
→	→	2. Risk Management	Risks being validated to relevance. Clear Project Manager and PMO accountabilities for risk management. Collaborating effectively with DCS Policy team to account for Guardian solution compliance and policy updates.
⬂	⬆	3. Scope Management	Go-live scope must be locked down. Minor adjustments to scope across iterations and delivery work streams used to sustain velocity. ADO tool effectively being used to manage expectations and conversations about scope, timeline, effort and cost.
⬂	⬂	4. Schedule Management	Integrated master Schedule completed but not yet baselined through to post-go-live., with some gaps in detail that remain for non delivery work stream teams. Schedule management ownership and consolidation processes are established.
→	→	5. Quality Management	Usability and maintainability are the primary focus areas. Contracts revisited to improve visibility into quality of work. Adding delivery oversight for consistency and business analysts to own UAT scenarios and support end-to-end testing.
→	→	6. Financial and Contract Management	Budget variances being actively managed. Aligning the scope and deliverables of all Guardian vendor contracts to integrated program plan milestones, to decrease delivery complexity and increase visibility into quality of the overall solution being built.
→	→	7. Resource Management	MCS to provide support for historically challenging roles for DCS to fill. Leader Standard Work would be useful for non-work stream delivery roles, to clarify reporting and accountabilities.
→	→	8. Stakeholder Management	Guardian roster accessible to the whole team. Communication channels and protocols are being adopted more readily by teams and new stakeholders. Teams have clear objectives to reach targeted velocity and have defined escalation paths.
⬂	⬆	9. Organizational Change Management	Program wide emphasis and support for OCM. OCM Lead and team now recruited. Newly joined Training team completing its work plan in alignment with integrated plan.

FY20 Q1 Assessment Summary

Key FY20 Q1 Observations:

The Arizona Department of Child Safety has resolved many project challenges and identified some specific areas of improvement in the CHILDS Replacement program, between the FY19 Q4 assessment (dated May 31, 2019) and this FY20 Q1 assessment:

- **Scope**
  - Dynamics CE scope is fully documented and prioritized. The full scope of effort related to all Guardian integrations, interfaces, data warehouse, data migration, reporting, content management, and records migration is actively being finalized.
  - Adjustments to scope across iterations and delivery work streams is helping sustain program velocity, but must be proactively communicated to the remaining program so that scope does not appear to be "a moving target".
  - ADO tool effectively being used to manage expectations and conversations about scope, timeline, effort and cost.

- **Technical Platform & Support**
  - More technical detail (e.g. OnBase, DocuSign, portal, interfaces) is required to finalize the Guardian solution architecture.
  - Guardian data model, data marts, and data migration plan is being constructed and executed by component, in line with the iteration plan. Successfully migrated test data through the system. Data cleanse and purge plan requires business buy-in.
  - Better alignment is needed on the expected role of SAG and the effective use of the ARB process.

- **Quality & Testing**
  - Collaboration between development resources, the business, and testing resources is improving quality and reducing rework.
  - Need more stability in the user interface of the solution before building up test automation.
  - Go forward focus areas include the functionality, usability, release and deployment readiness, adoption, and maintainability of the solution. Expanding the use of dashboards to monitor metrics in these areas.

- **Delivery Update**
  - Stakeholders are bought into the structure and direction of the program and team going forward.
  - PMO is in a better position to monitor across the program and enforce adherence (e.g. RAID, reporting, process).
  - Contingency plan with extended timeline may be required to finish the build, test, release and training of all in-scope requirements.

FY20 Q1 Assessment Summary

Key FY20 Q1 Recommendations:

The FY20 Q1 assessment includes several recommendations for DCS to continue positioning the CHILDS Replacement Program for success:

- **Scope**
  - Develop and prioritize OnBase requirements.
  - Ensure that all program stakeholders understand and accept the go-live scope.

- **Technical Platform & Support**
  - Document the Guardian solution architecture and data model.
  - Obtain business buy in for data cleanse / migration / purge strategy and content migration strategy.
  - Document architectural patterns and routinely ensure program staff understand them.

- **Quality & Testing**
  - To execute the Test Plan, DCS must appoint a full time QA Lead, increase its QA capacity and test automation skills, and begin to "lock down" functionality for components and processes.
  - Finalize and document the test plan and test automation plan.
  - Expand dashboards to monitor quality, test, and user acceptance metrics. Include solution "usability" and "maintainability" as considerations.

- **Delivery Update**
  - Document critical path activities for the ECM team, Training team, and the OCM team.
  - Document critical dates from 01/2020 to 06/2020 where "Go / No Go" decisions need to be made.

- **Plan FY20 Q2 Assessment logistics – Target for the beginning of November 2019.**

Appendix A: Independent Assessment Process

Independent Assessment Process

Gather Baseline Information ➤ Perform Analysis ➤ Develop Report

Gather Baseline Information

- Review Project Documentation, including:
  - CIO Briefing Reports
  - Weekly Status Reports
  - Program Finance Slides
  - Guardian Master Roadmap and Integrated Schedule
  - Work Stream Work Plans
  - Contractor Organization Chart
  - Risk Register
  - Roadblock Register
  - Decision Log
  - IV&V Tracking List
- Conduct Stakeholder Interviews

Perform Analysis

- Analyze Findings
- Determine Any Gaps
- Score Each Plan Viability & Project Management Practice Component:
  - 🟢 Green = Strong Health
  - 🟡 Yellow = Moderate Health
  - 🔴 Red = Poor Health
  - ⇨ Trend = Sustaining
  - ⇧ Trend = Improving
  - ⇩ Trend = Regressing
- Assess Progress of the Previous Quarter's Recommendations

Develop Report

- Share Best Practices
- Report Key Findings
- Report Progress on Last Quarter's Recommendations
- Report This Quarter's Recommendations

Appendix B: Detailed Assessment

Plan Viability: Completeness of Plan

Best Practices

- Track against a baselined plan that includes all in-scope phases.
- Identify and monitor the critical path of the project.
- Track against identified milestones.
- Each component of the project plan or Work Breakdown Structure is assigned to a single point of responsibility.
- Perform regular risk assessment / review of plan.
- Refactor plan as appropriate when tolerances are exceeded.

Key Findings | FY19 Q4 | ⇨ | FY20 Q1 | ⬆

- Completed a detailed integrated plan in alignment with the program delivery team restructuring. There is improved ownership of the components and delivery work streams in the plan.
- Program Management layer and PMO have assumed ownership and maintenance of the integrated program plan and schedule.
- Work stream dependencies are clear at the "Epic" level.
- ECM, Training, and OCM resources being onboarded.
- Dependencies with the activities of teams that are not directly on a delivery work stream (e.g. ECM, Testing, Training, OCM) are not clearly documented. These teams' plans and deliverables are being managed to the high level milestones in the iteration schedule.

Last Quarter's Recommendations	Progress
Incorporate dependency milestones into the program plan.	• Partial
Finalize project plans for Data Management, ECM, and Integrated Shared Services work streams.	• Complete
Document project plans for Transition Management and Quality Management work streams.	• Complete
Complete the integrated program plan (draft).	• Complete

This Quarter's Recommendations

New

- Document critical path activities for the ECM team.
- Document critical path activities for the Training team.
- Document critical path activities for the OCM team.

Ongoing

- Incorporate dependency milestones into the program plan.

Plan Viability: Project Timeline

Best Practices

- Develop a complete project schedule with all tasks, activities, resources, effort and duration.
- Break the project down into major phases and sub-phases.
- Break sub phases down into tasks and sequenced in the most logical manner.
- Share timeline with sponsor, stakeholders and project team.
- Keep the project on schedule within 10%.
- Ensure sufficient time exists to complete the project if managed well.

Key Findings   FY19 Q4 ⮕   FY20 Q1 ⮕

- The minimum viable product scope is currently on pace for go-live timeline. Adjustments to lowest priority items may be required.
- An extended timeline will be required for the build, test, deployment, and training efforts for all of the in-scope functionality, reports, data migration, and content migration.
- CHILDS decommissioning timeline remains set for 2020.
- Effective communication of timeline metrics. Dependencies at the "Epic" level in the integrated program schedule make it easier to track timeline impacts and schedule tolerance.
- It is still difficult to forecast and manage timeline impacts on the activities on ECM, Testing, Training, and OCM teams.

Last Quarter's Recommendations	Progress
• Report on timeline metrics such as schedule tolerance.	• Complete
• Identify critical dates from 06/2019 to 01/2020 where "Go / No Go" decisions need to be made about solution development.	• Complete

This Quarter's Recommendations

New

- Identify critical dates from 01/2020 to 06/2020 where "Go / No Go" decisions need to be made.

Plan Viability: Staff Levels and Skill Sets

Best Practices

- Project resources (Program Manager and delivery team) have previous experience with projects of this nature.
- Create a staffing plan that matches required skills to those available and gaps as well as how to fill those gaps.
- Create options for if there is a shortage on time or knowledge from the resources on the project.
- Appropriately on-board resources.
- Appropriately engage external stakeholders.
- Ensure roles and responsibilities are clearly defined and adhered to.

Key Findings   FY19 Q4 ➡   FY20 Q1 ➡

- The appropriate staff levels and skill sets are in place.
- Estimated projections for remaining effort are based on the existing team. Recalibration of estimates and dependencies will be needed should a significant change happen to the program team makeup.
- Effectively onboarding new resources.
- Added: Guardian Specialists (DCS), API Developers (MCS), Development resources (MCS), Data Modelers (MCS), Security Architect (MCS), OnBase resources (DataBank), Training resources (ASU), OCM resources (Accenture)
- Gaps: Application Architect (DCS), Security Architect (DCS), QA Lead (DCS), QA resources (DCS/MCS), BA resources (DCS/MCS).

Last Quarter's Recommendations	Progress
• Source an Azure API developer.	• Complete
• Staff augmentation required for: data, integrations, OCM, training and user documentation.	• Complete

This Quarter's Recommendations

New

- Source a DCS Security resource (full time on Guardian).
- Source a DCS QA Lead (full time on Guardian).
- Source a Azure Premier Field Engineer or similar resource.
- Identify a UAT Lead.

Plan Viability: Project Interdependencies and Interfaces

Best Practices

- Review documented project interdependencies / dependencies.
- Review documented project interfaces.
- Review documented constraints.
- Update schedule to reflect any changes with project interdependencies / dependencies.
- Ensure the delivery process is aligned with the internal customer's delivery constraints (e.g. customer's expected delivery timeframe and any timing constraints).

Key Findings   FY19 Q4 ➡   FY20 Q1 ➡

- Dependencies and critical path are captured at the "Epic" level for Work Steams 1 to 5, with the most clarity for Dynamics CE, Reports, Integrations, Data Warehouse, and Data Migration.
- Unclear documentation of interdependencies with critical path activities for ECM (OnBase), Testing, Training, and OCM teams.
- Interface requirements for Dynamics and OnBase are being finalized through solution modelling. Primary concerns relate to portal and security access for documents and records.
- Risks are identified for the completion of external interfaces by go-live. Contingencies are in place. Need to document the critical dates to action workaround plans.

Last Quarter's Recommendations

Last Quarter's Recommendations	Progress
Document detailed interdependencies with Data Management, ECM, and Integrated Shared Services work streams.	• Partial
Update external data exchange partners dependencies and impacts as more information is gathered.	• Complete
Identify ISS representation for each work stream.	• Complete
Reinitiate meetings with external ISS agencies.	• Complete

This Quarter's Recommendations

New

- Identify dates to implement ISS contingency plans.
- Document detailed interdependencies with critical path Training activities and OCM activities.

Ongoing

- Document detailed interdependencies with Data Management, ECM, and Integrated Shared Services work streams.

Plan Viability: Business Implementation Approach

Best Practices

- Document business implementation approach.
- Schedule business requirements approvals.
- Confirm alignment with sponsor and stakeholders on approach.
- Track against identified implementation tasks.
- Document concerns / issues.

Key Findings | FY19 Q4 ➡ | FY20 Q1 ➡

- The program is realizing the intended benefits of restructuring and implementation stakeholders are collaborating as "one team".
- Work stream teams achieving desired velocity for solution modelling and design. Next focus is on how to sustain this velocity, as well as how to effectively monitor the quality and usability of the solution.
- Teams are following clear and consistent reporting procedures.
- Use of ADO functionality to prioritize work efforts, document progress, manage cross work stream dependencies and collaboration, and manage expectations for go-live timeline.
- Improvements to Change Control Board process has streamlined decision making around rework and change requests.

Last Quarter's Recommendations

Last Quarter's Recommendations	Progress
Complete data and content management requirements for CRM.	• Complete
Involve MCS developer perspective in solution modelling and design to help improve the clarity of technical documentation.	• Complete
Involve Guardian Specialist perspective through informal demos during iterations to encourage feedback and buy-in.	• Complete
Identify specific lessons learned about volume of requirements that lag across ADO stages 40 to 51.	• Complete

This Quarter's Recommendations

New

- Develop and prioritize OnBase requirements.

Plan Viability: Technical Platform and Support

Best Practices

- Develop technology implementation plan.
- Document technology requirements.
- Identify technology constraints – hardware, software, resources.
- Develop and monitor key technical and support metrics.

Key Findings | FY19 Q4 ➡ | FY20 Q1 ⬇

- The team is working to better align on expectations and effective use of Architectural Review Board (ARB) process. Also addressing challenges with SAG resource coordination, information sharing and communication of architectural decisions.
- Completing ARB backlog to begin "architecting" ahead of delivery.
- Successfully migrated test data through the system. At this point, constructing and executing plans by component for data model, data marts and data migration, in line with the iteration plan.
- OnBase requirements and content migration plan not yet defined.
- More technical details (e.g. OnBase, DocuSign, portal, interfaces) are required to finalize the Guardian solution architecture.

Last Quarter's Recommendations

Last Quarter's Recommendations	Progress
Document the Guardian solution architecture.	• Partial
Document the Guardian data model.	• Partial
Define security roles for CRM and non-CRM work streams.	• Partial
Document and communicate to program staff on architectural patterns.	• Partial

This Quarter's Recommendations

New

- Obtain business buy in for the Guardian data cleanse, migration and purge strategies.
- Document the Guardian content migration plan.
- Create a change log for architectural decisions and changes.

Ongoing

- Document the Guardian solution architecture.
- Document the Guardian data model.
- Define security roles for CRM and non-CRM work streams.
- Document and communicate to program staff on architectural patterns.

Plan Viability: Stress Test

Best Practices

- Create test plan.
- Define stress test requirements.
- Define stress test environment. Identify where/when environment is needed.
- Have a well documented process for system testing (overall capacity testing).

Key Findings | FY19 Q4 ➡ | FY20 Q1 ➡

- DCS and MCS are jointly finalizing the integrated test plan.
- Difficult to estimate expected completion of testing efforts with tasks spread across several partially-dedicated resources. At this point, limited automation is built into testing.
- In preparation to execute on test plan, DCS must appoint a full time QA Lead, increase its QA capacity and test automation skills, and begin to "lock down" functionality for components and processes.
- Need more stability in the user interface of the solution before automation of testing activities can be initiated.
- DCS is appointing QA resources to each delivery work stream, with a focus on preparing for data migration and interface related testing.

Last Quarter's Recommendations

Last Quarter's Recommendations	Progress
Forecast resource requirements for testing activities, including time to prepare for testing execution.	• Complete
Document the test strategy	• Partial
Document DCS testing dependencies with MCS delivery.	• Complete
Build detailed DCS test scripts.	• Partial
Ensure DCS testing is independent and unique from MCS testing.	• Complete

This Quarter's Recommendations

New
- Document the test automation strategy.

Ongoing
- Document the test strategy
- Build detailed DCS test scripts.

Plan Viability: Post Implementation

Best Practices

- Ensure there is adequate business and technology training for end users.
- Establish Post Implementation Review process.
- Schedule Post Implementation Review.
- Focus on assessing the following:
  - Quality of deliverables
  - Benefits realization
  - Organizational impact

Key Findings | FY19 Q4 ➡ | FY20 Q1 ➡

- Program Sponsor and Service Delivery lead working to build the post-implementation strategy for the organizational design, skills, and costs required to support "Day 2".
- A post-implementation plan is needed for IT to complement the ongoing business change following July 2020 go-live.
- Existing staff require upskilling for post-implementation. Some key skills include CRM administration, continuous integration, Azure cloud administration, and data and analytics management.
- Greater business ownership of system functionality and data is needed for the future. The business needs to be engaged to begin building its teams and skills for post-implementation.

Last Quarter's Recommendations

Last Quarter's Recommendations	Progress
Clearly define 'Complete' for key stages and activities in the work stream plans and the integrated Guardian schedule.	• Complete
Establish a Benefits Tracking Process as a component of work streams.	• No
Align acceptance criteria / KPIs with expected benefits.	• No
Define support needs for "Day 2" of Guardian.	• Partial
Determine estimated operating costs for "Day 2" of Guardian.	• Partial

This Quarter's Recommendations

New

- Define the organizational design and skills required for "Day 2" of Guardian.

Ongoing

- Establish a Benefits Tracking Process as a component of work streams.
- Align acceptance criteria / KPIs with expected benefits.
- Define support needs for "Day 2" of Guardian.
- Determine estimated operating costs for "Day 2" of Guardian.

Plan Viability: Overall Quality Assurance

Best Practices

- Ensure that quality requirements is tied to quality assurance testing processes and are clearly communicated to all the project team members.
- Ensure that there is ownership of quality assurance.
- Ensure that decision requests are made with appropriate timing.
- Ensure there are Quality Control measures in place throughout the project cycle.
- Ensure that acceptance criteria and the process for acceptance is established for each deliverable.

Key Findings — FY19 Q4 → FY20 Q1 ⬆

- DCS is enhancing its quality control mechanisms as MCS has assumed the Program and Project Management roles.
- MCS Delivery Architect function is in place to ensure consistency across work streams for design and build.
- Collaboration between development resources, the business, and testing resources is improving quality and reducing rework.
- Initiating dashboards to monitor the quality and usability of the solution and the progress of testing activities.
- Milestones are not yet baselined for all QA activities.
- Plan for building automation into both MCS and DCS testing to be finalized and adopted.

Last Quarter's Recommendations

Last Quarter's Recommendations	Progress
Enforce consistent QA processes and communication.	• Complete
Document quality assurance and testing activities in work streams, including time to prepare for testing execution.	• Partial
Involve DCS QA staff in solution modelling and demos.	• Complete
Encourage informal mid-iteration sharing of work between MCS developers / testers and DCS QA / Guardian Specialists.	• Complete
Baseline UAT milestones.	• Partial
Formalize a QA process to check for adherence to architectural patterns.	• Partial

This Quarter's Recommendations

New
- Develop dashboards to monitor QA and test metrics.

Ongoing
- Document quality assurance and testing activities in work streams, including time to prepare for testing execution.
- Baseline UAT milestones.
- Formalize a QA process to check for adherence to architectural patterns.

Plan Viability: Program Management Environment

Best Practices

- Establish a PMO as oversight for all project initiatives.
- Develop an agreed upon mandate and vision for the PMO to set it up for long-term success.
- Obtain buy-in and input from all relevant stakeholders early.
- Develop and implement standard templates and processes.
- Provide project management support.

Key Findings | FY19 Q4 ➡ | FY20 Q1 ➡

- The PMO is in a better position to monitor and enforce adherence (e.g. RAID, reports, processes). PMO responsibilities are clearly defined and spread evenly across available program stakeholders.
- Stakeholders have bought into the new structure and direction of the program team going forward. Minor adjustments to match skills with tasks are being actively managed.
- Project Management inconsistencies are effectively managed.
- Clear escalation paths for Guardian Program and HR concerns.
- Change in agency Director not expected to impact support for the program or its funding outlook. Remaining program leadership are positive about the change and clear on respective areas of focus.

Last Quarter's Recommendations	Progress
• Enhance PM reporting and consistency.	• Complete
• Finalize and post Guardian program roster.	• Complete

This Quarter's Recommendations

New

- Identify opportunities for PMO to support SAG.

Project Management Practice: Communication Management

Best Practices

- Actively follow through with an established communications plan.
- Project status review meetings are held regularly with IT leadership and relevant business stakeholders.
- Create and distribute regular program and project status updates.
- Capture and distribute meeting minutes for formal meetings.
- Variance analysis for schedule, budget, and effort is communicated on a regular basis.
- Project successes have been documented for inclusion for potential announcement and success stories.

Key Findings — FY19 Q4 ➡ FY20 Q1 ➡

- Adoption of program restructuring has improved communications.
- Leader Standard Work and Standard Work Calendar have been accepted by team members, credited for having established a clearer understanding of roles, responsibilities, and ownership.
- New Project Managers over delivery work streams have been instrumental in managing cross collaboration and synergies.
- Team showing improved confidence to raise concerns and to have concerns openly discussed and resolved during meetings.
- Fine tuning documentation and escalation of blockers and progress.
- OCM and Training teams developing a communication plan.

Last Quarter's Recommendations

Last Quarter's Recommendations	Progress
• Adoption of program-wide instant messaging platform.	• Complete
• Consider monthly all-hands program meetings	• Complete

This Quarter's Recommendations

New
- Optimize the toolset used to capture and communicate both RAID and architectural items.

Project Management Practice: Risk Management

Best Practices

- Risks are documented and have been evaluated for probability and impact.
- Document risk response plans.
- Establish regular risk reviews.
- Track and manage project risks separately from project issues.

Key Findings | FY19 Q4 ➡ | FY20 Q1 ➡

- Project Managers own the risk management process.
- Program Manager, Program Sponsor, and Business Leads own the escalation of program level risks.
- Risks are captured for critical path concerns.
- Effectively collaborating with Policy team to ensure that the solution is compliant and necessary policy changes are being captured.
- PMO owns ensuring documentation of risks and following through on mitigation strategies.
- PMO reviewing the risk register for accuracy, relevancy and completeness.

Last Quarter's Recommendations | Progress

Last Quarter's Recommendations	Progress
• Identify clear owners for risk process activities.	• Complete

This Quarter's Recommendations

New

- Ensure new vendor PMs adhere to consistent risk process.

Project Management Practice: Scope Management

Best Practices

- Document the project scope, including both in-scope and out-of-scope items.
- All in-scope deliverables are identified and reflected in the project plan.
- Project requirements have been clearly documented and are reviewed with the project team and the customer on a regular basis.
- Change control procedures have been defined and documented for managing changes to the project plan.
- Approved changes to the baselined project plan are communicated to the project team and the customer.

Key Findings | FY19 Q4 | ➡ | FY20 Q1 | ⬆

- Contingency plan with extended timeline may be required to finish the build, test, release and training of all in-scope requirements.
- ADO tool effectively being used to manage expectations and discussions around scope, timeline, and cost.
- Extended the iteration cycles in ADO to manage scope prioritization.
- Adjustments to the scope across iterations and delivery work streams is helping sustain program velocity. These types of changes need to be proactively communicated to the remaining program so that scope does not appear to be "a moving target".
- Scope of effort for Interfaces and ECM is not locked down.

Last Quarter's Recommendations

Last Quarter's Recommendations	Progress
• Track and communicate CCB scope impacts.	• Complete
• Review Priority 3 features for items that may be "first to go" if further scope reduction is needed.	• Complete
• Provide formal CCB process training.	• Complete

This Quarter's Recommendations

New

- Ensure all program stakeholders understand and accept the go-live scope.

Project Management Practice: Schedule Management

Best Practices

- Create a high-level schedule that clearly identified the major milestones and the dependencies between work components.
- Create a detailed Work Breakdown Structure (WBS) that includes all the work required to complete the project requirements.
- Regularly review the schedule to track actual versus baselined.
- A critical path analysis has been performed on the project schedule to identify activities on the Critical Path.

Key Findings | FY19 Q4 ⇨ | FY20 Q1 ⇨

- Integrated program schedule is drafted. Schedule ownership and processes for consolidation and maintenance are established.
- The team is optimizing team structures, workload, and the ability to sustain optimal velocity, and adjusting schedules accordingly.
- Program schedule contains minimal detail for non delivery work stream teams (ECM, Testing, Training, OCM). Critical path and impacts not clearly shown or identifiable. Partial progress indicated as a result of these missing details.
- Able to report on schedule variance for the solution modelling, build and test portion of the remaining timeline (through 02/2020), but not for the proceeding program-wide activities leading up to go-live.

Last Quarter's Recommendations

Last Quarter's Recommendations	Progress
• Baseline the integrated program schedule.	• Partial
• Publish the integrated schedule and critical path.	• Partial
• Highlight work stream dependencies in integrated schedule.	• Complete
• Report schedule variance and impact to critical path.	• No
• Onboard a resource to manage the integrated schedule.	• Complete

This Quarter's Recommendations

Ongoing

- Baseline the integrated program schedule.
- Publish the integrated schedule and critical path.
- Report schedule variance and impact to critical path.

Project Management Practice: Quality Management

Best Practices

- Develop an overall quality management process and plan.
- Develop the quality management plan at the beginning of the project – actively manage throughout the project delivery process.
- Ensure the quality management plan addresses both technical and business (process) issues.
- Implement and track progress against an overall quality management process and plan.
- Develop specific acceptance criteria including functional, non-functional and business process items.

Key Findings | FY19 Q4 ➡ | FY20 Q1 ➡

- Added Delivery Architect function to improve visibility into quality of work. Shifted existing QA Lead to focus on Solution Architecture. As a result, a dedicated QA Lead is needed.
- Introduced SonarCube to report on solution quality.
- Establishing ownership and weekly cadence to review quality and readiness across test, deployment, and post-implementation.
- Go forward focus areas include functionality, usability, release and deployment readiness, adoption, and maintainability of the solution.
- UAT plan is not yet documented. Shared understanding of the importance of initiating UAT as early as possible.

Last Quarter's Recommendations

Last Quarter's Recommendations	Progress
Review the quality of program wide acceptance criteria.	• Complete
Document MCS development and functional testing activities in the program Test Plan.	• Complete

This Quarter's Recommendations

New

- Define and track acceptance criteria for solution "usability" and solution "maintainability".

Project Management Practice: Financial and Contract Management

Best Practices

- The project management environment adequately supports data gathering for financial reports.
- Financial standards and procedures have been established for the project and are being followed.
- Project expenditures can be tracked and compared with specific line items of the project budget.
- Monitor adherence to all agreements.
- Manage subcontractors on the work to be performed, coordinate the subcontractor's activities, and track and review the subcontractor's performance and results.

Key Findings | FY19 Q4 ➡ | FY20 Q1 ➡

- Aligned the deliverable milestones of all vendor contracts with the integrated iteration plan and go-live milestone.
- Budget variances being actively managed.
- Budgetary implications with preliminarily approved plan to extend timeline for the delivery of non-MVP scope.
- Tracking basic earned value (how much budget and time should have been spent considering the amount of work done so far).
- Program sponsorship would benefit from greater visibility into the financial impacts of scope changes.
- DCS is gathering information on "Day 2" total cost to operate and how to optimize its licensing agreements with major vendors.

Last Quarter's Recommendations	Progress
• Determine process for 'Earned Value' concepts being incorporated within financial reporting.	• Complete
• Determine mechanism for translating / tracing scope impacts to financial impacts.	• Partial

This Quarter's Recommendations

New

- Consider engaging a licensing and vendor management expert.

Ongoing

- Determine mechanism for translating / tracing scope impacts to financial impacts.

Project Management Practice: Resource Management

Best Practices

- Clearly establish project objectives and success factors, and delegate responsibility based on work expertise and workload.
- Establish clear tasks and activities for each project team member so they know what needs to be accomplished.
- Determine the resource needs and match to availability.
- An organizational breakdown structure has been created to show lines of responsibility.
- Estimates for Business resources are planned and documented.
- Business and IT project team members are recognized for outstanding commitment or performance.

Key Findings | FY19 Q4 ➡ | FY20 Q1 ➡

- Roles and responsibilities are significantly clearer across the majority of the program. Some gaps exist for stakeholders that are not directly part of delivery work stream teams.
- Leader Standard Work definitions would be useful for non-work stream delivery roles, to clarify reporting and accountabilities.
- Business analyst and QA resources are needed to alleviate the Guardian Specialist team and refocus them on solution functionality, usability and adoption, as well as OCM and training.
- MCS to provide support for roles that have been challenging for DCS to recruit for and fill.
- Remaining gaps are identified with plans in place to fill them.

Last Quarter's Recommendations

Last Quarter's Recommendations	Progress
Clarify roles and responsibilities.	• Complete
Define Business Sponsor, Business Lead, Program Sponsor, and Program Manager roles in Leader Standard Work.	• Complete
Build detail into Leader Standard Work about who to Consult and Inform for key activities (work towards a RACI).	• No
Monitor stakeholder availability for solution modelling and design and address challenges.	• Partial
Monitor compliance to new standard weekly work schedule.	• Complete

This Quarter's Recommendations

New
- Add new Guardian roles to the Leader Standard Work.

Ongoing
- Build detail into Leader Standard Work about who to Consult and Inform for key activities (work towards a RACI).
- Monitor stakeholder availability for solution modelling and design and address challenges.

Project Management Practice: Stakeholder Management

Best Practices

- Review and maintain a stakeholder register to identify which stakeholders to communicate with.
- Inform team members on the importance and influence of different stakeholders, as well as the appropriate method to manage stakeholders.
- Follow through with communication protocol on how information is transmitted. The protocol should include who is responsible for maintaining and monitoring stakeholder communication, and the frequency and format of the communication plan.

Key Findings | FY19 Q4 ➡ | FY20 Q1 ➡

- Guardian roster maintained and accessible to the whole team.
- Formal communication protocols and informal communications are being adopted more readily by teams and new stakeholders.
- Strong leadership within each delivery work stream. Project Managers and Work Stream Leads have clear objectives to reach targeted velocity, with defined escalation points.
- Inconsistent adherence to the standard process of including detail about meetings in the meeting invitation, and opening hyperlinks to view details. All stakeholders value knowing what to prepare for.

Last Quarter's Recommendations | Progress

Last Quarter's Recommendations	Progress
• Design tactics for improving engagement and communication targeted to specific stakeholder groups	• Complete

This Quarter's Recommendations

New

- Confirm awareness of standards for sharing and accessing details about meetings in advance.

Project Management Practice: Organizational Change Management

Best Practices

- Build and maintain an Organizational Change Management Plan
- Address key points such as:
    - Engagement,
    - Quick Wins and Bright Spots,
    - Emotional Appeals,
    - Cultural Factors,
    - Environmental Factors

Key Findings | FY19 Q4 ➡ | FY20 Q1 ⬆

- OCM Lead and team onboarded and working closely with the business. Training team also onboarded more recently. There is program wide emphasis and support for both teams.
- Alignment required on OCM scope of effort.
- Leveraging past collateral and lessons learned for OCM.
- Analysis shows that the preferred learning method of most users is video. Primary focus of the Training team is to develop short video clips demonstrating key processes and solution functionality.
- With the departure of the existing Director, there is a proposed restructuring of escalation paths and Steering Committee members that will enable more appropriate quality and change controls.

Last Quarter's Recommendations

Last Quarter's Recommendations	Progress
Incorporate Guardian OCM activities into the integrated schedule.	• Partial
Outline Training work stream approach.	• Partial
Publish OCM plan, including milestones for pre- and post-deployment activities.	• Partial
Align OCM activities with UAT milestones.	• No

This Quarter's Recommendations

Ongoing

- Incorporate Guardian OCM activities into the integrated schedule.
- Outline Training work stream approach.
- Publish OCM plan, including milestones for pre- and post-deployment activities.
- Align OCM activities with UAT milestones.

Appendix C: List of Interviewed Stakeholders

List of Interviewed Stakeholders

Name	Program Role	Job Role
Alok Sharma	Solution Architect	Microsoft
Bhupinder Narang	Testing Architect	Microsoft
Brandi Lehnertz	Guardian Specialist, Team 1	Guardian Specialist, DCS
Craig Ritter	Architecture Lead	Microsoft
Harish Kothapalli	Project Manager, Teams 1 & 2	Microsoft
Heather Conley	Organizational Change Management	Accenture
James Dean	PMO, Financial Manager	PMO Manager, PCG
Jason Son	Guardian Specialist, Team 3	Guardian Specialist, DCS
Jay Cline	Infrastructure Architect	Infrastructure Manager, DCS
Jenna Panas	Training	ASU
Jim Shadrick	Work Stream Lead, Team 4	Microsoft
John Reed	Quality Assurance Lead	Quality Assurance Lead, DCS
Joshua Jackson	Program Manager	Microsoft
Jules Cannon	Project Manager, Teams 3 & 4	Microsoft
Katherine Guffey	Business Sponsor - Program Advisory Committee	Chief Quality Improvement Officer, DCS
Laura Foley	BI/BPM Analyst	BI/BPM, PCG
Linda Roberts	Program Sponsor	Chief Information Officer, DCS
Mahesh Varala	Work Stream Lead, Team 1	Microsoft
Mario Avalos	Guardian Specialist, Team 5	Guardian Specialist, DCS
Matt Grant	ECM Lead	Service Deliver Manager, DCS
Mike Faust	Business Sponsor - Steering Committee	Deputy Director, Continuous Improvement, DCS
Mike Morris	Work Stream Lead, Team 5	Data Architect, DCS
Ramanujan Raghunathan	Work Stream Lead, Team 2	Microsoft
Robert Navarro	Business Sponsor - Budget Management	Assistant Director, Budget and Finance, DCS
Ryan Clemens	Business Lead - Field Operations	Field Operations, DCS
Sandra Milosavljevic	Business Lead - Support Services	Controller, DCS
Shalom Jacobs	Business Sponsor - Steering Committee	Deputy Director, Field Operations, DCS
Stephanie Verrone	PMO, Portfolio Coordinator	Portfolio Coordinator, DCS
Toni Huynh	PMO	Project Manager, DCS
Traci Grannan	Guardian Specialist, Team 2	Guardian Specialist, DCS
Vinay Varada	Work Stream Lead, Team 3	Guardian Specialist, DCS