The UA System requires that the Contractor provide a complete and comprehensive set of services that are required to ensure project success within the planned timeline and budget as detailed in the contractual agreement between the UA System and the Contractor. Following is a high-level list of the implementation services that are required; however, additional services may be required to ensure implementation success in accordance with the Contractor’s methodology.

The remainder of this document provides a detailed description of the services to be included in any proposal. These services shall be addressed in the Statement of Work included in the contractual agreement between the UA System and the Contractor.

Each section includes a listing of minimum expected deliverables applicable to that section, along with a responsibility matrix indicating the System’s expectation as to whether the Contractor or the UA System has a lead or assist role for a specified project activity. For the purposes of this RFP, the terms “Lead” and “Assist” as applied to these responsibility matrices are defined as follows:

**Lead** – in reference to roles and responsibilities, means that the assigned team has primary responsibility for managing, guiding, and performing the activity, and completing any deliverable items; and

**Assist** – in reference to roles and responsibilities, means the assigned team will actively help the lead team successfully complete the activity.

1.0 Plan Phase

**1.1 Project Management**

*Project Manager*

The Contractor is expected to provide an experienced Project Manager who is accountable for all services and deliverables provided under the Contract resulting from this RFP, and who should work to ensure the on-time delivery and successful deployment. This individual will report to the UA System’s Project Management Office (PMO) and should function as the UA System's primary point of contact with the Contractor. The Contractor’s Project Manager is expected to respond to day-to-day problems, manage issues, provide status reports, participate in weekly status meetings, and manage personnel resources. It is preferred that the Project Manager be certified by the Project Management Institute as a Project Management Professional (PMP).

*Project Work Plan*

A comprehensive work plan shall be submitted within fourteen (14) days of project start. The work plan should be jointly developed and include tasks to be performed by the UA System and Contractor personnel. The following standards apply to the work plan:

* Project management activities should be documented in the work plan;
* The work plan should outline a plan for the entire project;
* The work plan should include tasks, schedules, dependencies, critical paths, and responsible parties (both Contractor and UA System staff) assigned to each task;
* The work plan should include all deliverables that support the Proposed Methodology and Approach;
* Estimated work effort, duration, start and end dates should be shown for each task;
* Appropriate milestones should be identified in the work plan to gauge the project’s progress toward meeting desired target completion dates; and
* Any assumptions made in developing the work plan should be included in this section.

The Contractor should also provide a Staffing Plan that addresses each of the Contractor’s project staff as well as the necessary project staff to be provided by the UA System. The Staffing Plan should show the plan of usage (days per month) on a monthly basis for each resource over the period of the project.

Throughout the project, the Contractor’s Project Manager shall monitor project activities, update the project plan, develop further detail as appropriate, and work closely with the UA System Project Manager. At the end of each month, the Contractor’s Project Manager shall submit an updated project plan that is resource balanced and loaded for the remaining months’ activities.

*Project Time Reporting*

The Contractor should describe its approach for providing project time reporting to support the Project Plan and other required reporting.

By the 15th of each month, the Contractor shall report in MS Excel or other System approved format, actual hours worked during the previous month for each Contractor team member. Hours worked shall be exclusive of travel time.

*Status Reporting*

The Contractor shall provide weekly status reports to reflect the major activities for the reporting period. The weekly status report shall serve as the agenda for weekly status meetings. Topics to be covered shall include, but not be limited to, the following:

* A listing of significant departures from the Project Work Plan with explanations of causes and effects on other areas, and remedies to achieve realignment;
* Changes to project objectives, scope, schedule, or budget;
* A listing of tasks completed since the last report;
* Tasks that were delayed and reasons for delay, with revised completion dates and remediation steps;
* Updates for previously delayed tasks;
* Planned activities for the next scheduled period;
* Summary of major concerns, risks, and issues encountered, proposed resolutions and actual resolutions;
* Identification and discussion of any security issues (if applicable); and
* Any other topics that require attention from the UA System PMO and/or Sponsors.

*Issue Resolution*

The Contractor shall provide and use a proven methodology and software tool for issue identification, tracking, and resolution that shall be accessible to UA System Project Team members. The issues tracking process shall integrate into configuration management, software change control, testing processes, and the overall project management methodology. Topics that shall be included are:

* Issue identification;
* Issue tracking, reporting, and trending;
* Issue review, prioritization, and assignment;
* Issue analysis;
* Issue resolution;
* Issue escalation;
* Issue follow-up (for resolutions with lead time); and
* Impact to the overall project schedule and budget.

After award, the UA System and the Contractor should agree on a protocol for collaboratively resolving implementation issues. This protocol is expected to address the topics above, responsible parties, and specific steps to be taken on issues or disputes arising during the implementation process.

*Risk Management Plan and Procedures*

The Contractor shall provide a Risk Management Plan and Procedures to identify, assess, and communicate potential risks to the project, as well as, to proactively identify and manage actions to avoid, transfer, mitigate, and/or manage those risks.

*Communication and Cooperation*

The Contractor shall communicate and cooperate with all parties involved in the IAM Project. The Contractor's staff shall have excellent communication skills and conduct themselves professionally and courteously in all instances.

The Contractor shall maintain active communication to ensure project success. Communications between parties shall be performed through, but are not limited to:

* Regularly scheduled and ad hoc on-site meetings;
* Voice and web conferencing system;
* Email;
* Weekly written status reports provided to the UA System by the Contractor;
* Required Project Plans; and
* Other reports as required.

*Project Controls, Standards, and Procedures*

The Contractor shall provide project controls, standards, and procedures for all project tasks. These items are required to be submitted for review and approval by the System’s project leadership before the implementation. These requirements include, but are not limited to:

* Managing Project Documentation – Includes templates used (e.g., configuration setting and procedures, operational and technical design specifications, test case scenarios, change request procedures, etc.), organization of project directories, naming conventions, and version control procedures;
* Meeting Procedures – Includes techniques and technology solutions to ensure that meetings are efficient, productive and discussions, decisions, and action items are adequately documented;
* Development Standards – Includes standards and procedures for design specifications, review and approval processes, unit testing, and other controls to ensure quality and consistency, and processes to verify and validate that any work products requiring code are developed and implemented per all requirements and other agreed upon standards;
* Scope Management – Includes scope control processes to ensure that work is not performed on out-of-scope features, functions, or tasks unless the UA System grants advanced written authorization. This includes processes to provide a competent assessment of the impact of potential scope changes to assist with the System’s decision-making processes;
* Communications Management - Includes project communication plan and the types, frequency, sensitivity classification, and target audience for each communication;
* Deliverable Outlines – Includes Deliverable Expectation Documents (DED) that identify the content (i.e. outline), the acceptance criteria for the deliverable as required by the UA System, the review complexity, and the UA System approvers for each deliverable; and
* Deliverable Reviews - Includes the process and time periods whereby the UA System determines the readiness of a deliverable for formal submission, provides feedback on deficiencies, and conducts subsequent reviews.

*Information Security Risk Management Plan*

The IAM Project involves the integration with systems that maintain confidential, sensitive, and public data. Employees and representatives from the Contractor’s firm will likely have access to these systems and data to support various activities throughout the life cycle of the project. To ensure that necessary and appropriate risk mitigation steps are taken from the beginning of the project through its completion, the Contractor shall develop, maintain, and assess compliance with an Information Security Risk Management Plan (ISRMP) that shall establish how the project will protect the data assets of the UA System while delivering services of the contract. The elements of the plan shall include, but are not limited to, the following:

* Classification of systems in scope (for either replacement or interface) in terms of the degree of sensitivity of the data resident in those systems;
* Development of control procedures to safeguard data (including where appropriate the masking or scrambling of confidential data where data are converted or interfaced);
* Development of procedures for incident management;
* Incorporation of UA System data security procedures;
* Definition of the responsibilities of the project team members, UA System stakeholders to ensure the data are managed properly in accordance with the plan, policies, and procedures;
* Definition of approach to monitor, audit, control, and report on compliance with the plan; and
* Communication and escalation procedures used to notify appropriate UA System personnel of a security-related breach.

**1.1.1 Deliverables:**

* Project Work Plan
* Status Reports
* Issues Management Plan
* Risk Management Plan
* Communications Plan
* Project Control, Standards, and Procedures
* Information Security Risk Management Plan

**Table 1: Project Management Responsibility Matrix**

| **Activities** | **Contractor** | **System** |
| --- | --- | --- |
| Report to Project Governance | Assist | Lead |
| Develop Weekly Status Report | Lead | Assist |
| Develop Project Work Plan | Lead | Assist |
| Manage Project Work Plan and Associated Reporting | Lead | Assist |
| Conduct Project Team Meetings | Lead | Assist |
| Develop Issues Management Plan | Lead | Assist |
| Manage Issues | Lead | Assist |
| Develop Risk Management Plan | Lead | Assist |
| Manage Risks | Lead | Assist |
| Develop Project Time Reporting Plan | Lead | Assist |
| Manage Project Time Reporting | Lead | Assist |
| Develop Information Security Risk Management Plan | Lead | Assist |
| Manage Compliance with Information Security Risk Management Plan | Lead | Assist |
| Consultant Team Resource Management | Lead | Assist |
| UA System Team Resource Management | Assist | Lead |
| Develop Project Control, Standards, and Procedures | Lead | Assist |
| Manage Project Control, Standards, and Procedures | Lead | Assist |

##### 1.2 Project Team Training

Contractor shall provide required software training to the project team.

2.0 Architect Phase

##### 2.1 IAM Process Design

The Contractor shall lead work group sessions and provide tools and other services as required to complete the IAM Process Design. At a minimum, the Contractor’s approach to process design should address the following:

* Multiple workshops by process area;
* Use of the IAM software during the workshops;
* Identification of change impacts in terms of process, policy, and skill sets;
* Discovery, analysis and design for integrations and conversions;
* Inclusion of key UA System subject matter experts (SMEs) beyond the Project Team members;
* Architecting of required processes and roles;
* Architecting of reports to support IAM processes and identification of any needed custom reports; and
* Identification of software gaps.

**2.1.1 Deliverables:**

* IAM process and roles design
* Integration requirements for configured and custom interfaces
* Reports Inventory (more detail in Section 2.3.3.4)
* Software gaps inventory

**Table 2: Business Process Design Responsibility Matrix**

| **Activities** | **Contractor** | **System** |
| --- | --- | --- |
| Provide subject matter expertise on business process requirements | - | Lead |
| Coordinate UA System participation in workshops | - | Lead |
| Conduct IAM process design workshops | Lead | Assist |
| Develop IAM Process and Roles Design documents | Lead | Assist |
| Develop Change Impact Assessment document | Lead | Assist |
| Develop Design Document | Lead | Assist |
| Develop Software Gaps Inventory | Lead | Assist |

3.0 Configure and Prototype Phase

##### 3.1 Software Configuration

The Contractor shall lead the configuration of all IAM software. The Contractor shall use the highest applicable industry standards for sound and secure software configuration practices. The "highest applicable industry standards" shall be defined as the degree of care, skill, efficiency, and diligence that a prudent person possessing technical expertise in the subject area, and acting in a like capacity, would exercise in similar circumstances.

The Contractor should then describe its approach and methodology to be used to configure the IAM software in accordance with the new IAM process design. This section is expected to also describe:

* Tools and procedures available to aid in the software configuration process;
* Documentation provided to support the software configuration;
* Process for validating configuration; and
* Process used to ensure effective knowledge transfer to UA System staff.

**3.1.1 Deliverables:**

* Project Team Training on Configuration Tools and Process
* Configured Application Software
* Updated Documentation to Support Configuration

**Table 3: Software Configuration Responsibility Matrix**

| **Activities** | **Contractor** | **System** |
| --- | --- | --- |
| Conduct Project Team Training on Configuration Tools and Process | Lead | Assist |
| Conduct Prototyping Sessions | Lead | Assist |
| Coordinate UA System Participation in Prototyping Sessions | - | Lead |
| Configure Software | Lead | Assist |
| Review and Approve Configuration | Assist | Lead |
| Verify Expected Software Functionality | Assist | Lead |
| Update software documentation with configuration | Lead | Assist |

##### 3.2 Integration and Interfaces

For the purposes of this Scope of Services, integration is defined in broad terms as two (2) systems sharing data regardless of the batch or real-time nature of the data exchange. Integration means sharing of data and a process or workflow and, where possible, allowing for more near real-time processing of data or the elimination of duplicate data residing on two (2) systems.

The Contractor shall deliver an Integration Strategy and Interface Plan document that shall include but is not limited to:

* Analysis and assessment to identify needed integration points or data interfaces;
* Identification of secure data transfer needs for third parties;
* Identification of responsibilities and UA System personnel assigned as contact for the interface; and
* Graphical representation of the interface environment.

The Contractor shall provide, at a minimum, the following services for interfaces and integration:

* Managing all activities related to interfacing data with IAM solution, including the coordination of interface development efforts;
* Developing a detailed data interface plan document;
* Coding of interface programs that transform and load data to IAM solution in accordance with program specifications;
* Coding of interface programs that extract and transform data from IAM solution in accordance with program specifications;
* Performing unit testing of the interface programs;
* Developing reports and other means for UA System personnel to audit the results of interfacing;
* Designing of test scripts for all phases of testing;
* Facilitating of user acceptance testing; and
* Development of monitoring and notification mechanisms tested in development but for use in the production environment that immediately alert specified UA System personnel when real-time interface issues occur between the IAM solution and other systems.

The UA System shall be responsible for subject matter knowledge of existing interfaces and associated data. UA System subject matter experts are expected to be available to consult with the Contractor during the development of the interface plan and specifications, and to assist with the determination and adoption of acceptable alternatives to interfaces wherever feasible. The UA System shall be responsible for coding the legacy application side of the interface.

**3.2.1 Deliverables:**

* Integration Strategy and Interface Plan
* Completed Automated Interfaces, which include alerts for processing issues
* Integration Platform (if applicable) and Interface System Training of UA System Personnel on Use and Support

**Table 4: Interface and Integrations Responsibility Matrix**

| **Activities** | **Contractor** | **System** |
| --- | --- | --- |
| Integration Strategy and Interface Plan Document | Lead | Assist |
| Analysis and assessment of integration/ interface requirements | Lead | Assist |
| Approval of real-time and batch interfaces for design | - | Lead |
| Real-time and batch Interface design | Lead | - |
| Real-time and batch Interface development and unit test: required transformation and load processes to IAM solution, and extracts from IAM solution | Lead | Assist |
| Real-time and batch Interface development and unit test: Extracts from legacy and external systems and load processes to legacy and external systems | Assist | Lead |
| Conduct Integration/System testing | Lead | Assist |
| Interface User Acceptance Testing | Assist | Lead |
| Management reporting and deployment tracking of production interfaces | Lead | Assist |
| Training of UA System project team resources on integration platform (if applicable) | Lead | - |

##### 3.3 Data Conversion

The Contractor shall be responsible for managing all activities related to converting legacy data as required to IAM solution. The Contractor shall develop a detailed Data Conversion Plan document that includes, at a minimum, the following:

* All data to be loaded or entered in the new system;
* Data sources;
* Expected data volumes;
* Determination of conversion method and load process (i.e., manual, automated, or semi-automated method);
* Roles and responsibilities and timing requirements for the conversion effort; and
* Extraction, transformation and load methods to be used.

The Contractor shall provide the following data conversion services:

* Coordinating pre-conversion activities such as verification of data to be converted, archiving, purging, and cleansing of legacy data by UA System resources;
* Developing programming specifications in accordance with the detailed data conversion plan that includes coding and unit and integration testing for the conversion programs;
* Coding of conversion programs that transform and load data to IAM solution in accordance with program specifications;
* Building any crosswalk file structures required to assist the UA System in developing test scenarios and conducting acceptance testing;
* Performing unit and integration testing of the conversion programs developed by the Contractor;
* Developing reports and other means for UA System personnel to validate converted data;
* Running conversion programs and working with the UA System to validate the accuracy of results in the production environment following all conversion activities; and
* Maintaining a conversion log to track the accuracy of all conversion efforts.

The UA System will be responsible for subject matter knowledge of existing applications and associated data. The UA System expects to perform all data cleansing and manual conversion processes, with the expertise and guidance of the Contractor. Manual conversions are defined as “manual” when the Contractor and the UA System agree that the volume is too low to justify the cost of developing an automated conversion program.

The UA System will code and unit test conversion programs that extract data from the legacy applications and output the data using the formats and protocols specified in the programming specifications for use in the transformation and load processes.

The UA System will also be responsible for verifying the accuracy of the converted/loaded data through participation in all levels of testing.

The Contractor shall execute and participate in at least two (2) complete and successful test runs of the end-to-end conversion process. Test exercises shall consist of the following:

* UA System resources extracting data from legacy systems;
* Contractor loading data extract files provided by the UA System, and
* Contractor providing reports/query results so that UA System staff may validate the accuracy and completeness of the conversion programs and related activities.

The UA System will be responsible for developing test scenarios and conducting the acceptance testing of conversion programs with the assistance of the Contractor. The UA System PMO will define the timing, requirements, and acceptance criteria for the test conversions. In support of conversion ‘test runs’, UA System staff responsible for manual entry and correction, data reconciliation and acceptance, technical support, issue resolution and executive level go/no-go decision-making should be available to role play their tasks in real-time.

**3.3.1 Deliverables:**

* Completed Data Conversion Plan
* Completed Conversion Programs and Crosswalks
* Successful Completion of end-to-end Conversion Test Runs
* Successfully Converted Data into Production Environment

**Table 5: Data Conversion Responsibility Matrix**

| **Activities** | **Contractor** | **System** |
| --- | --- | --- |
| Manage Conversion Activities | Lead | Assist |
| Create a Data Conversion Plan for migrating data between legacy systems and IAM solution | Lead | Assist |
| Design and document Data Mappings | Lead | Assist |
| Extract data from legacy systems | Assist | Lead |
| Provide Subject Matter Expertise for legacy system data | Assist | Lead |
| Transform and import extracted data into IAM solution; create crosswalk structures how does this relate to above; transform? | Lead | Assist |
| Perform Data Cleansing | Assist | Lead |
| Provide guidance to the UA System on performing required data clean-up efforts identified through the mock data conversion process | Lead | Assist |
| Execute test run conversions and production conversion automated processes | Lead | Assist |
| Present test conversion results to Project Governance | Assist | Lead |
| Validate quality and accuracy of converted data for mock conversions and production conversion | Assist | Lead |
| Perform manual conversion of data (including non-electronic data) and crosswalks | Assist | Lead |

##### 3.4 Reports, Queries, and Forms

The Contractor shall provide services and tools to accomplish two (2) broad objectives upon go-live:

* Deploy all the necessary reports, queries, and forms in conjunction with the appropriate preparation of end-users to know how to access, execute, and apply the data to their respective functions; and
* Define and train select UA System personnel on the software tools and methodologies to address future reporting needs of the UA System.

The Contractor shall provide the following services, at a minimum, to develop the Reports, Queries, and Forms Strategy and Plan:

* Identify reports, queries, and forms required for normal business operations in the respective operational areas; and
* Create a disposition for identified reports when IAM solution is deployed;
  + Using standard reports, on-line inquiry pages, or other on-line data access methods;
  + Developing custom queries using tools resident to the IAM solution; or
  + Query using another tool for reporting.

The UA System is committed to leveraging the delivered reports, queries and views; however, it is anticipated that there may be a need for custom reports.

In support of the establishment of appropriately trained UA System personnel on the software tools and methodologies to address future reporting needs of the UA System, the Contractor shall provide the following services:

* Reporting Tools Training Strategy development; and
* Knowledge transfer assessment.

**3.4.1 Deliverables:**

* Reports, Queries, and Forms Strategy and Plan

**Table 6: Reports, Queries, and Forms Responsibility Matrix**

| **Activities** | **Contractor** | **System** |
| --- | --- | --- |
| Managing Reports, Queries and Forms Activities | Lead | Assist |
| Reports, Queries and Forms Inventory, Disposition, and Prioritization | Assist | Lead |
| Provide Subject Matter Expertise on Delivered Forms, Reports, and Queries | Assist | Lead |
| Reports, Queries and Forms Design | Lead | Assist |
| Reports, Queries and Forms Design Review and Approval | Assist | Lead |
| Reports, Queries and Forms Development and Testing | Assist | Lead |

4.0 Test Phase

The Contractor shall provide testing plans, scripts, processes, tools, and test execution services that are necessary and prudent for a system of this magnitude, including, but not limited to:

* Unit Testing – Validates that modular configuration values and individual development objects operate per approved design specifications;
* System Testing – Validates that dependent processes and operational requirements within an operational area can be fully executed and produce the pre-defined and expected results for each test script;
* Integration Testing – Validates that dependent processes across operational areas and IAM components interact seamlessly. Validates that configurations, security, data conversion programs, interfaces, reports, and forms work together;
* Performance (load/stress) Testing – Validates the readiness of the application to support the UA System’s transaction and user volumes and will include both interface/batch transactions and on-line/ end-user response times; and
* User Acceptance Testing – Validates the system is functioning as designed, verifies the conversion process, and confirms that the system is ready to be moved into the production environment.

The Contractor shall provide tools to facilitate the testing process, including those tools used for performance testing. The Contractor shall provide training on the proposed testing tools to all UA System staff that are expected to use the proposed testing tools.

The Contractor shall deliver a series of Test Plans that cover specific procedures and practices to be followed throughout the project. These plans shall cover all types of testing:

* Unit Test Plan – Included as part of each development item. Acceptance criteria are defined by the detailed design documents. Depending upon Contractor’s testing approach, this plan may also include unit testing of software configuration values;
* Systems Test Plan – Includes testing of IAM components being implemented within the operational area including configured, modified, and un-modified system components, reports, forms, on-line and batch job streams, security roles and interfaces. Includes entrance and exit criteria for the system test and documents the basis for UA System acceptance of the System Test;
* Integration Test Plan – Includes testing of solution components being implemented, including configured, system components, reports, forms, on-line and batch job streams, security roles and interfaces that apply cross functionally. Includes entrance and exit criteria for the integration test and documents the basis for UA System acceptance of the Integration Test;
* Performance Test Plan – Documents the approach, test protocols and test cases for conducting a performance test to verify the ability of the system to perform for the anticipated transaction volume and number of users. The Performance Test Plan will include entrance and exit criteria for the performance test and document the basis for UA System acceptance of the Performance Test; and
* User Acceptance Test Plan – Documents the approach, test protocols, test cases, testing environment set-up and refresh scheduling, identified users, and any required training necessary to complete acceptance testing. The Acceptance Test Plan will include entrance and exit criteria for the acceptance test and document the basis for UA System acceptance of the Application System Test.
* Security Test Plan – Documents the approach for testing or otherwise establishing that security configuration requirements (Section 2.3.3.6) and all the UA System’s IT Security Policies have been met. Security testing shall be integrated into each phase of testing, as appropriate for that phase of the overall testing effort.

All Test Plans shall include the following:

* Procedures for tracking, reporting, and correcting incidents identified during testing;
* Roles and responsibilities of participants and facilitators;
* Examples of forms, templates, and/or tools used for testing; and
* Approaches to address testing for negative results and provide for regression testing, when necessary, to ensure that incidents are appropriately resolved without creating other unexpected consequences.

The Contractor shall conduct tests in accordance with the approved test plans. All test results must be documented, exceptions analyzed and any software defects corrected. The Contractor shall provide a comprehensive list of testing scenarios for each component early in the project to assist the UA System Project Team members with development of additional scenarios to be used in testing. In addition, the Contractor shall lead selected UA System Project Team members through the test process to facilitate knowledge transfer, so they may review the test process and outcomes and learn about system operations and functionality.

The Contractor shall conduct performance testing for the fully configured and tested software prior to commencing live operations. Mechanisms utilized to monitor and verify technical performance with respect to user response time metrics must be described and documented in detail. These tasks must be coordinated and performed with the appropriate UA System technical staff.

The Contractor shall conduct security testing to ensure security requirements and UA System policies and standards are met. Security testing shall be performed in accordance with the Security Test Plan.

The UA System shall have the responsibility for conducting acceptance testing of the entire application. The Contractor shall provide assistance during such testing. This assistance shall include:

* Creating the acceptance testing environments on the production hardware, as appropriate;
* Loading configuration values, converting data, and establishing user security in accordance with the “go-live” deployment plan;
* Submitting off-line jobs;
* Performing backups;
* Restoring databases as required;
* Tracking, resolving & reporting issue status for issues identified during testing;
* Analyzing and explaining outcomes; and
* Answering questions from testers as they arise.

Successful completion of this test will be required before the software can be approved for production use.

**4.0.1 Deliverables:**

* Completed Test Plans for Unit Testing included with Development Items
* Completed Test Plans for Systems, Integration, Performance, User Acceptance, and Recovery
* Completed Testing Scenarios
* Successfully Completed Tests
* Completed Acceptance Testing Assistance
* Documented procedures for monitoring & capturing user-response time metrics
* Completed Tuning Resulting from Performance Tests

**Table 7: Testing Responsibility Matrix**

| **Testing Type** | **Activities** | **Contractor** | **System** |
| --- | --- | --- | --- |
| Unit Testing | Develop Unit Test Plan | Lead | Assist |
|  | Unit Testing for custom development units (i.e. conversion, reports, integrations) | Lead | Assist |
| Unit Testing for interfaces and conversion components developed by the UA System (e.g., extract processes from legacy and external systems and load processes to legacy and external systems) | Assist | Lead |
| Manage and Track status of activities | Lead | Assist |
| System Testing | Develop System Test Plan | Lead | Assist |
| Provide sample test scripts and lists of scenario topics developed from other projects | Lead | - |
| Develop system test scripts for forms, reports, interfaces, conversion components, and workflows | Lead | Assist |
| Develop system test scripts for interfaces and conversion components developed by the UA System | Assist | Lead |
| Test forms, reports, interfaces, conversion components, and work flows | Lead | Assist |
| Test interfaces and conversion components developed by the UA System | Assist | Lead |
| Perform issue resolution for forms, reports, interfaces, conversion components enhancements, and work flows | Lead | Assist |
| Perform issue resolution for interfaces and conversion components developed by the UA System | Assist | Lead |
| Manage and track status of activities | Lead | Assist |
| Integration Testing | Develop Integration Test Plan | Lead | Assist |
| Develop integration test scripts | Lead | Assist |
| Execute integration test | Lead | Assist |
| Perform issue resolution for forms, reports, interfaces conversion components, and work flows | Lead | Assist |
| Perform issue resolution for interfaces and conversion components developed by the UA System | Assist | Lead |
| Manage and track status of activities | Lead | Assist |
| Performance Testing | Develop Performance Test Plan | Lead | Assist |
| Document procedures to capture and monitor user-response time metrics | Lead | Assist |
| Conduct Performance Testing | Lead | Assist |
| Perform issue resolution as required to meet performance requirements | Lead | Assist |
| Manage and track status of activities | Lead | Assist |
| User Acceptance Testing (UAT) | Develop User Acceptance Test Plan | Lead | Assist |
| Provide examples of test scripts and lists of scenario topics developed from other projects | Lead | Assist |
| Provide UAT Tester training | Lead | Assist |
| Develop UAT scripts | Assist | Lead |
| Execute UAT | Assist | Lead |
| Support UAT Testers | Assist | Lead |
| Set-up the UAT environment, submit batch jobs, perform backups, restore databases, and execute data conversion loads as reasonably required to support acceptance testing | Lead | Assist |
| Maintain user profiles and security configuration for UAT testers. | Lead | Assist |
| Provide issue resolution for forms, reports, interfaces, conversion components, and work flows | Lead | Assist |
| Provide issue resolution for interfaces and conversion components developed by the UA System | Assist | Lead |
| Manage and track status of activities | Assist | Lead |

5.0 Deploy Phase

5.1 Technical Team Training and Knowledge Transfer

The Contractor shall deliver a Technical Training Strategy and Plan that addresses all technical training, including but not limited to the following:

* Technical and operations personnel training to support development, implementation, and production; and
* Knowledge transfer training to a core group of administrative, programming, security, service desk, and other technical and operations personnel to support independent operations capability before conclusion of the Contractor’s post-implementation support responsibilities.

The Technical Training Strategy and Plan shall be based on a comprehensive technical training needs assessment conducted by the Contractor in conjunction with overall Organizational Change Management activities. The Technical Training Strategy and Plan shall include, but is not limited to the following:

* Training Approach for each technical training need (i.e., project team training, technical and operations training, and knowledge transfer);
* Recommended Training Delivery Channel(s) for each Training Approach;
* Alignment of training needs to learning phases and training courses and events;
* Job Aid Strategy; and
* Sustainment Strategy.

The Technical Training Plan shall also include the preparation and training of UA System training resources to establish an ongoing training organization (not for delivery of training for the implementation but to allow the UA System to support sustainment training needs).

All training materials must be reviewed and approved by the UA System prior to the start of training delivery. The Contractor shall provide all electronic source documents and graphics used in the development and presentation of training across all training delivery channels.

All training is expected to be provided at training facilities provided by the UA System.

*Technical and Operations Personnel Training*

Based on the recommended approach, the Contractor shall provide training to ensure that UA System personnel have developed the necessary skills required to successfully operate and maintain the IAM solution. It is assumed that UA System personnel will perform all operations and system administrative functions with assistance as needed by the Contractor when live operations commence. Training topics shall include, but are not limited to:

* Systems operations;
* Technical support;
* Monitoring and performance tuning;
* Troubleshooting,
* Procedures for handling IAM software updates and all other tasks necessary to provide support for the IAM system;
* Training on all components of the operating environment that are new to the UA System; and
* Training on the use of the Contractor’s development tools, system management, and application administration tools.

*Knowledge Transfer Training*

The Contractor shall provide training to core technical, operations, and service desk personnel to facilitate knowledge transfer before conclusion of the Contractor’s post-implementation support responsibilities. Training content should address, but is not limited to:

* Software configuration;
* UA System operation procedures for use during the Project;
* System administration responsibilities, log on/log off procedures, and security;
* Other topics necessary to educate UA System personnel on ‘system housekeeping’; and
* Most likely service desk scenarios.

The Knowledge Transfer Training should be consistent with the knowledge and skills transfer process described below.

**5.1.1 Deliverables:**

* Comprehensive Technical Training Plan and Training Curriculum
* Satisfactorily-Delivered Technical and Operations Personnel Training
* Satisfactorily-Delivered Software and Operations Knowledge Transfer
* Training Materials

**Table 8: Technical Training Responsibility Matrix**

| **Activity** | **Contractor** | **System** |
| --- | --- | --- |
| Technical Training Needs Assessment | Lead | Assist |
| Develop Technical Training Strategy | Lead | Assist |
| Develop Technical Training Plan | Lead | Assist |
| Provide Enterprise policies applicable to training materials | Assist | Lead |
| Populate training environment with UA System-specific data and initial transaction data to support training delivery and user scenarios, if needed based on training strategy | Lead | Assist |
| Develop Technical Team training materials (includes system procedures and IAM process steps) | Lead | Assist |
| Manage training registration and course scheduling | - | Lead |
| Provide locations and equipment for training sessions | - | Lead |
| Provide digital copies of learner materials | - | Lead |
| Deliver Technical Training Events | Lead | Assist |
| Provide Knowledge Transfer of all training materials, regardless of training delivery channel, and environment maintenance | Lead | Assist |

5.2 Documentation

The Contractor shall develop, maintain, and provide technical and end-user documentation, systems and operational documentation, system configuration documentation, and procedural documentation, including manuals, quick reference guides, tutorials, on-line help, and other techniques as appropriate. The Contractor shall keep documentation current throughout the project.

5.3 Organizational Change Management

The Contractor shall support the UA System in creating a structured method and approach, to support a successful transition to the new IAM processes and related processes impacted by the software. The Contractor shall support UA System personnel to orchestrate change activities. Contractor and UA System team members shall support the change process where required, lending both subject matter expertise and assistance by creating content and supporting materials.

**Table 9: Organizational Change Management Responsibility Matrix**

| **Activity** | **Contractor** | **System** |
| --- | --- | --- |
| Develop Change Management Strategy and Supporting Plan | Assist | Lead |
| Develop Communications Strategy and Plan | Assist | Lead |
| Develop End-User Training Strategy and Plan | Assist | Lead |

5.4 Implementation / Deployment (Roll-out) Support

The UA System requires an extensive and carefully structured approach to the implementation and deployment of the IAM solution. This includes the organization and execution of cut-over activities necessary to transition operations to the new system. The Contractor must provide support throughout the entire implementation period. More specifically, the UA System requires the services described below at a minimum.

*Deployment Cut-over (Go-Live) Plan*

The Contractor shall deliver a detailed Deployment Cut-over Plan to reflect all project activities that impact deployment of IAM into the production environment. This deliverable shall document all steps required to make a successful cut-over to the production environment, including specific cut-over tasks, planned and actual dates for tasks completed, task responsibilities, task dependencies, estimated work effort required to complete each task, task status, results of task completion, and sign-off for each task completed. Additionally, the plan shall include:

* Final data conversion activities;
* Technical preparation and system change-over activities;
* Resolution of all identified security issues;
* Development of a cut-over activities checklist;
* Staffing requirements, by role and responsibilities, for both Contractor and UA System staff for all deployment/cut-over activities; and
* Deployment schedule.

*Production Cut-over (Go-Live) Checklist*

The Contractor shall maintain a Cut-Over Checklist that tracks each activity required to ascertain that the IAM system is ready for deployment. This checklist must be reviewed with the Project Management Office (PMO) personnel starting no later than six (6) months before go-live with increasing frequency as the Go-Live date approaches to confirm:

* All testing has been successfully completed;
* All staff have completed end-user and management training;
* All data has been cleansed, converted, and accepted by the users;
* All interfaces are functioning as required;
* All site preparation requirements have been met; and
* End-user support has been established.

*Establish Procedures for End-User Support*

The Contractor shall provide services to prepare procedures, establish processes, train personnel, track incidents, and participate in the delivery of end-user support.

**5.4.1 Deliverables:**

* Service Desk and Support Strategy
* Deployment Cut-over (Go Live) Plan
* Production Cut-over (Go Live) Checklist

**Table 10: Deployment Support Responsibility Matrix**

| **Activity** | **Contractor** | **System** |
| --- | --- | --- |
| Develop Cut Over Plan | Lead | Assist |
| Develop Cut Over Checklist | Lead | Assist |
| Develop Service Desk Procedures | Assist | Lead |
| Execute Cutover Plan | Lead | Assist |

5.5 Post-implementation Support

The Contractor must provide post-implementation support for three (3) months after Go-Live for all implemented functionality. This post-implementation maintenance and support will consist of technical and operational support, and must be provided by skilled personnel who have become familiar with the project over the course of the implementation effort.

**5.5.1 Deliverables:**

* Periodic Status Report of Team Support Activities

**Table 11: Production Maintenance and Support Responsibility Matrix**

| **Activity** | **Contractor** | **System** |
| --- | --- | --- |
| Provide service desk infrastructure and tools for service management activities | - | Lead |
| Manage Service Desk | Assist | Lead |
| Address system issues as requested | Lead | Assist |