Request for Proposal 18-017

Attachment F1 Technical Proposal Requirements

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OVERVIEW

The Technical Requirements are organized into two (2) sections:

- Foundation present the elements that set the overall standards and methods to be employed throughout the duration of the project
- Document Management present the specific requirements that will be required of the Electronic Document Management Solution (EDMS) throughout the duration of the project

Each section of requirements presents an overall description of the section followed by responsibilities of the State, responsibilities of the vendor and key performance measures:

RESPONSIBILITIES

- State responsibilities are presented in a separate subsection entitled State Responsibilities
- Responsibilities for the vendor are presented in table format in a separate subsection titled Vendor Responsibilities

KEY PERFORMANCE MEASURES

Key performance measures are presented in a table identifying the service quality the State is requiring, along with the measurement and the anticipated service level threshold.

SECTION FOUR FOUNDATION REQUIREMENTS

4.1 PROJECT MANAGEMENT

4.1.1 OVERVIEW

The EDMS will be guided by industry best practices. The project will follow the Project Management Institute's (PMI) program management standards as published in the Project Management Body of Knowledge (PMBOK), as much as practicable.

4.1.1.1 PROJECT MANAGEMENT OFFICE (PMO)

The State will establish a Bureau of Motor Vehicles/Commission (BMV/C) Systems Modernization PMO responsible for coordinating the BMV/C system projects and programs to improve organizational performance and efficiency.

The BMV/C Systems Modernization PMO will be responsible for management and oversight of the Systems Modernization initiative and will report to the BMV/C Commissioner. The EDMS is defined as a project that will report to the BMV/C Systems Modernization PMO.

4.1.1.2 INDEPENDENT VALIDATION AND VERIFICATION (IV&V)

An IV&V vendor will be selected through a separate Request for Project Services. This IV&V vendor will work closely with the PMO. The vendor awarded the IV&V contract is prohibited from bidding on any of the components of this Request for Proposal (RFP). All BMV/C Systems Modernization initiative and project staff are required to cooperate with the IV&V vendor throughout the duration of their project.

4.1.1.3 PROJECT MANAGEMENT APPROACH

The BMV/C Systems Modernization PMO is responsible for developing, administering, and maintaining the project management approach as recorded in the Project Control Documents (PCDs). The EDMS vendor must establish an overall project management approach to govern its individual project team. The approach of each vendor must follow the guidelines established by the BMV/C Systems Modernization PMO.

Each vendor must agree and adhere to the overall BMV/C project management approach that will govern the BMV/C Systems Modernization initiative.

4.1.1.4 RESPONSIBILITIES

The BMV/C Systems Modernization PMO and the IV&V vendor will provide management services to the State. For this reason, subsequent sections describe the project management responsibilities for each entity:

- State (to include the State and any of its designees)
- Vendor

The responsibilities listed below apply throughout the RFP.

Additional responsibilities may be presented as they apply to a specific task or subject.

The EDMS vendor will be accountable for its responsibilities, regardless of the section in which they appear.

4.1.1.5 STATE RESPONSIBILITIES

ID	Responsibility
100000	Establish BMV/C Systems Modernization PMO
100100	Oversee the Project Management approach that will govern the
	BMV/C Systems Modernization initiative
100200	Oversee the BMV/C Systems Modernization integrated project
	management plans that address the PMBOK knowledge areas:
	Integration, Scope, Time, Cost, Quality, Human Resources,
	Communication, Risk, and Procurement
100300	Review the Draft deliverables and Final deliverables
100400	Comment on the Draft deliverables and Final deliverables
100500	Approve the Draft deliverables and Final deliverables
100600	Monitor vendor performance
100700	Define the goals and objectives of the BMV/C Systems
	Modernization initiative
100800	Communicate the goals and objectives of the BMV/C Systems
	Modernization initiative to all stakeholders
100900	Provide access to State Management and Subject Matter Expertise for
	the approval of the deliverables required to meet the goals and
	objectives

4.1.1.6 VENDOR RESPONSIBILITIES

ID	Requirement
101000	Provide a dedicated, experienced project team for the life of the
	project
101100	Work collaboratively to prepare, submit, and obtain approval for
	individual Project Management approaches and plans
101200	Comply with all laws, policies, procedures, and standards dictated by
	the State in meeting the goals and objectives of the EDMS

ID	Requirement
101300	Work collaboratively to execute and maintain individual Project
101000	Management approaches and plans
101400	Address all PMBOK knowledge areas, including Integration, Scope,
	Time, Cost, Quality, Human Resources, Communication, Risk, and
	Procurement, throughout all System Development Life Cycle (SDLC)
	phases, and throughout the implementation and operational phases
101500	Prepare and submit to the BMV/C for approval the project
	management plans for meeting the goals and objectives regarding
	Document Management
101600	Manage all activities to the approved project management plans
101700	Submit for review and approval all changes to the approved project
	management plans
101800	Demonstrate the ability to administer the project management plan,
	monitor and control project work, change control, and close the
	project
101900	Develop, administer, and maintain a project schedule (work plan)
102000	Prepare and submit the detailed project schedule (work plan) which
	addresses each phase of the System Development Life Cycle (SDLC)
	and identifies all integration points between all vendors and the State
	including but not limited to interfaces, inputs, and outputs that the
	vendor requires from other vendors, the State, or other entities
102100	Execute and obtain approval for the detailed project schedule (work
	plan) which addresses each phase of the System Development Life
	Cycle (SDLC) and identifies all integration points between all vendors
	and the State including but not limited to interfaces, inputs, and
	outputs that the vendor requires from other vendors, the State, or
102200	other entities
102200	Prepare and submit weekly updates to the project schedule (work plan)
102300	Prepare and submit the draft deliverables for State review and
102400	comment in accordance with the project schedule (work plan)
102400	Prepare and submit the final deliverables for State review and approval in accordance with the project schedule (work plan)
102500	Provide necessary resources to the State to assist in the coordination
102300	of the Integrated project schedule (work plan), Issue Management,
	Change Management, and Integration Management Change Control
102600	Prepare for and conduct requirements confirmation sessions with all
102000	necessary State Management, SMEs, and other vendors
102700	Prepare and deliver for approval the Requirements Traceability Matrix
102700	and the Basis for Decision Document to support confirmed
	requirements
102800	Maintain and collaborate with the State in populating the
	Requirements Traceability Matrix
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4.1.2 ISSUE MANAGEMENT

Issue identification, tracking, and resolution is a key activity that must be maintained throughout the life cycle of the EDMS.

The vendors will follow an approach to identify and track all EDMS issues, using an automated issue tracking system.

The Issue Tracking System must provide, at a minimum, the following:

- Description of the issue
- Priority of the issue
- Dependencies and plans for resolution
- Staff responsibility assignments
- Impacts, if appropriate
- Targeted and actual resolution dates
- Resolution action

Reports generated by this protocol will become a part of the Weekly Status Report. This issue tracking protocol will be developed in collaboration with the BMV/C Systems Modernization PMO and will be monitored by the State.

4.1.2.1 STATE RESPONSIBILITIES

ID	Responsibility
102900	Monitor all BMV/C Systems Modernization issues

4.1.2.2 VENDOR RESPONSIBILITIES

ID	Requirement
103000	Adhere to the Issue Management process and requirements
103100	Provide an automated issue tracking system to identify and track all
	issues
103200	Document the discovery of any issue within one (1) calendar day of
	discovery
103300	Track all issues in the issue tracking system
103400	Provide necessary resources to the State to assist in the coordination
	and resolution of the issues
103500	Provide resources adequate to resolve issues in a timely manner based
	upon State priorities and schedule
103600	Prepare and submit weekly issue management reports as part of the
	Weekly Status Report or as a separate report on a frequency requested
	by the State

4.1.3 INTEGRATION MANAGEMENT CHANGE CONTROL

Performing integrated change control is the process of reviewing all change requests, and approving and managing changes to evaluate the impact to time, cost, and quality.

The Integrated Change Control process includes the following change management activities:

- Review, analyze, and approve change requests or orders promptly
- Update PCDs
- Communicate status to stakeholders
- Monitor outcomes

The EDMS is expected to respond efficiently and effectively to the ever-increasing complexity of the motor vehicles environment brought about by policy changes at the city, county, State, and Federal level and by continuous business process improvement.

To stimulate and support innovative responses to the demand for change, the vendors are required to participate in the change evaluation process.

4.1.3.1 CHANGE TRIGGERS

Change can be initiated or triggered by:

- City, county, State, or Federal government through policy or rule changes
- Vendor or State to reduce time, reduce cost, or improve quality
- Other entities or external drivers

4.1.3.2 CHANGE REQUESTS

Vendor requests for change to approved deliverables, software, processing, procedures, manuals, forms, reports, and other approved project artifacts will follow the change management process described in the following section.

All vendors must participate fully in the BMV/C System Modernization change management process and ensure that they analyze and understand the impact of all changes regardless of the originating party.

4.1.3.3 CHANGE MANAGEMENT PROCESS

The State will develop a change management process. Although the details of this process are not completing now, a sample of the BMV/C project change management process is in the Bidder's Library for reference.

The purpose of this change management process is to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes to the systems, services, and IT infrastructure, to minimize the number and impact of any related incidents upon service.

All BMV/C system and solution vendors must participate in the change management process. Vendor compensation for changes will be considered at the State's discretion, only when the change management process is followed.

The change management process will apply to all proposed changes and will address the following concepts:

- All proposals for change must be initiated through a change request
- Any document resulting from the change request shall be binding upon agreement and signature of all associated parties
- The State expects that the BMV/C systems and services will maintain continual city, county, State, and Federal compliance. For this reason, all vendor costs to put into effect any changes required to maintain this compliance will be considered included in the contract price resulting from this procurement
- Routine changes made in the ordinary course of the vendor's provision of services within the scope of its contract that do not change performance levels or reduce the vendor's capacity to attain established performance thresholds, including but not limited to changes to operating procedures, schedules, or equipment configurations, must be made at no additional cost to the State. Key performance measures are specified in Section 4.1.7 Quality Management and presented in subsequent Key performance measures sections
- Examples of routine changes that are included in the routine maintenance of the BMV/C systems to be performed at no additional cost to the State include but are not limited to:
 - Activities necessary for the BMV/C systems and services to function in compliance with city, county, State, and/or Federal law, State policies, or State operating manuals including deficiencies found after implementation of modifications incorporated into the BMV/C systems and services
 - Activities necessary for the system to meet the performance requirements detailed in this RFP
 - Activities necessary to ensure that data, tables, programs, and documentation are current and that errors are found and corrected
 - Data maintenance activities for updates to tables, including database support activities
 - Changes to scripts or system parameters concerning the frequency, number, sorting, and media of reports

- Changes approved for vendor compensation are subject to the provisions of the contract
- All change requests are defaulted to no cost maintenance change requests until the State approves changing the status to a non-maintenance change through the change control process. Determination of such status including vendor dispute of status shall not delay the implementation of the change request
- For changes that are non-maintenance changes, and therefore will incur an additional cost, the vendor(s) shall provide an initial firm fixed price estimate for the completion of requirements and design. At the completion of requirements and design, the vendor(s) shall provide a firm fixed price estimate for the completion of the change. The estimates shall include the staffing level by position and other appropriate detail supporting the estimate, as requested by the State
- If new services are to be provided in exchange for fixed or not-to-exceed compensation, the vendor is solely responsible for any costs more than the specified compensation

4.1.3.4 STATE RESPONSIBILITIES

ID	Responsibility
103700	Develop BMV/C Systems Modernization PMO Change Management
	process
103800	Administer BMV/C Systems Modernization PMO Change
	Management process

4.1.3.5 VENDOR RESPONSIBILITIES

ID	Requirement
103900	Adhere to the change management process and requirements including,
	but not limited to, review and approval of change requests being
	released into production and post-implementation review changes
104000	Follow established change management processes to evaluate Change
	Requests submitted by the BMV/C as needed by the Business or
	required by Legislative change (State and Federal)
104100	Document change requests utilizing a format and process approved by
	the State
104200	Complete all applicable fields on the State approved change request
	template accurately within a timeframe defined by the State
104300	Submit a change request for any identified deficiency within three (3)
	business days or within a timeframe defined by the State
104400	Develop a Deliverable Expectation Document or an Impact Analysis
	Document in response to change requests that includes estimates for
	effort, resources, costs and impacts to system
104500	Maintain the change request process and ensure that the process and
	testing results comply with specified quality and timeliness standards
104600	Assist the State in identifying policy changes at the local, State, and
	Federal levels

ID	Requirement
104700	Develop recommendations to suggest best practices enhancements,
	accompanied by a written cost/benefit analysis, on a scheduled
	determined by the State
104800	Provide necessary resources to the State to assist in the coordination of
	the changes including, but not limited to, presenting the proposed
	change to the State and other designated vendors for review and
	planning purposes
104900	Ensure that there is adequate forward scheduling of change to
	accommodate the State and any impacted vendors
105000	Notify the State of any requirements gathering, design, and walk-
	through meetings, and allow authorized State staff to participate
105100	Provide a weekly report that includes a listing of each outstanding
	change request along with State requested documentation

4.1.4 SCOPE MANAGEMENT

Scope Management encompasses the processes that are responsible for verifying and controlling project scope including collecting requirements, scope definition, and creating Work Breakdown Structures (WBS) in accordance with PMBOK.

Throughout the EDMS project the vendor must:

- Demonstrate its understanding of the key components of the EDMS
- Develop, administer, and maintain a Scope Management Plan for the EDMS
- Demonstrate its ability to manage the scope of the EDMS project

4.1.4.1 SCOPE MANAGEMENT REQUIREMENTS MANAGEMENT PLAN

A major component of the Scope Management Plan will be the Requirements Management Plan. A key component of the Requirements Management Plan is the Requirements Traceability Matrix. The EDMS vendor must develop and maintain a Requirements Traceability Matrix that addresses:

- Assumption definition, tracking, and traceability
- Business requirement definition, tracking, traceability, and test verification
- Technical and functional requirement definition, tracking, traceability, and test verification
- Tracing and analysis of deliverables to requirements

This Requirements Traceability Matrix will be maintained and updated throughout the System Development Life Cycle (SDLC) as described in Section <u>4.2 System Development Life Cycle</u>.

4.1.4.2 REQUIREMENTS TRACEABILITY MATRIX OVERVIEW

The Requirements Traceability Matrix maintains linkage from the source of each requirement through its decomposition to implementation and verification. It is produced and maintained during the SDLC.

The Requirements Traceability Matrix is built during the Requirements Validation phase of the SDLC and is a deliverable of this phase.

Traceability is an essential activity of the project and ensures that the correct product is being built during each phase of the SDLC.

Requirements Traceability Matrix Outline

This outline specifies the minimum content elements for the Requirements Traceability Matrix document.

Revision	Provide a revision history	y table with column titles: Revision Number,
History		and Summary of Changes
		, – –
Responsibilities		arding the responsibilities for the Requirements
	l	as who is responsible for maintaining the
	matrix	
List of Sources	Document all sources for	r the requirements to be traced in the matrix
for		
Requirements		
	Contract Requirements	Document the source for all contractual
	_	requirements that were specifically defined
		in the contract and all supporting
		documents, including but not limited to the
		RFP. The specific requirements can be listed
		in this section, or the section of the contract
		containing the requirements noted. Include
		any contract requirement identifiers. Note
		any abbreviation that will be used to signify a
		contract requirement source in the physical
		1 1 1
	C t D	matrix, i.e. Contract Requirement = CR
	System Requirements	Document the sources from the system
		requirements specification (SyRS) created for
		the project, include the SyRS identifier. Note
		any abbreviation that will be used to signify a
		system requirement source in the physical
		matrix, i.e. System Requirement= SyRS

	Software Requirements	Document the sources from the software
		requirements specification (SRS) created for
		the project, include the SRS identifier. Note
		any abbreviation that will be used to signify a
		software requirement source in the physical
		matrix, i.e. Software Requirement = SRS
	Detailed Design	Document the sources from the detailed
	Requirements	design specification (DDS) created for the
		project, include the DDS identifier. Note
		any abbreviation that will be used to signify a
		contract requirement in the physical matrix,
		i.e. Detailed Design Requirement = DDS
Requirements	Create a matrix table or s	preadsheet containing the following
Traceability	information:	
Matrix		
	Requirement Source	Document the requirement source by name
		or abbreviation
	D.	
	Requirement	Insert the requirement description from the
	Description	source
	Contract Reference	Document the contract reference or
		identifier
	SyRS Reference	Document the SyRS reference or identifier
	SRS Reference	Document the SRS reference or identifier
	DDS Reference	Document the DDS reference or identifier
	Test Case Reference	Document the test case reference or
		identifier
	Test Log Reference	Document the test log reference or identifier
	Requirement Satisfied	Note if the requirement was or has been
		satisfied
	Comments	Record any notes related to the requirement
References	Provide any references us	sed in the creation of the Requirements
	Traceability Matrix	-

4.1.4.3 STATE RESPONSIBILITIES

ID	Responsibility
105200	Oversee the overall project scope
105300	Oversee the overall coordinated project requirements management plan

4.1.4.4 VENDOR RESPONSIBILITIES

ID	Requirement
105400	Provide requirements traceability software and develop and maintain
	the software

Refer to additional requirements related to the Requirements Traceability Matrix maintenance in <u>Section 4.2 System Development Life Cycle</u>.

4.1.5 TIME MANAGEMENT

Time Management includes processes concerning the time constraints of the project. It deals with:

- Activity definition
- Sequencing
- Resource estimating
- Duration estimating
- Schedule development
- Control

Upon contract award, the State will oversee the effort to finalize the EDMS project schedule (work plan) that identifies key integration points, milestones, and deliverables.

Project management reporting requirements are defined as part of the Communication Management Plan in Section <u>4.1.9 Communication Management Plan</u>.

4.1.5.1 STATE RESPONSIBILITIES

ID	Responsibility
105500	Oversee the overall coordinated project schedule (work plan)

4.1.5.2 VENDOR RESPONSIBILITIES

ID	Requirement
105600	Manage project schedule (work plan)
105700	Regularly report progress on key milestone and deliverable progress for project schedule (work plan)
105800	Develop, maintain, and administer a time management plan throughout the project
105900	Manage the time constraints of the project

4.1.6 COST MANAGEMENT

Cost management includes processes related to the cost constraints of the project. Some of the processes included in this knowledge area are:

- Cost estimating
- Budgeting
- Control

4.1.6.1 STATE RESPONSIBILITIES

ID	Responsibility
106000	Be responsible for overall EDMS cost management

4.1.6.2 VENDOR RESPONSIBILITIES

ID	Requirement
106100	Administer and develop a cost management plan for the project
106200	Maintain a cost management plan for the project
106300	Manage costs of the project

4.1.7 QUALITY MANAGEMENT

Quality management describes the processes used to assure that the project meets its quality requirements and obligations. It consists of:

4.1.7.1 QUALITY PLANNING

Quality planning involves ensuring that the proper project management principles have been applied. These principles include resource management, cost management, and project planning. Another aspect of project quality planning involves planning for the quality of the deliverables.

4.1.7.2 QUALITY ASSURANCE (QA)

Quality management also includes QA tests. These tests use a system of metrics to determine whether a quality plan is proceeding in an acceptable manner. QA tests measure both project quality and customer satisfaction with product quality.

Quality measurements are identified throughout the RFP. These measurements will be presented in a subsection entitled Key Performance Measures. The measurements presented in this RFP should be used for the purpose of developing proposal responses. Upon contract initiation, these measurements will be used to guide discussions and requirements gathering sessions between the State and the vendor. The result of these sessions will be a final QA test measurement.

The EDMS vendor shall develop the criteria for measuring and monitoring performance.

The State shall have final approval of determination of calculations for performance measures and thresholds.

The vendor shall also suggest the methods used to evaluate its performance as well as the method it suggests be used for communicating its performance to the State. The State retains approval authority over suggested methods. The State favors methods that provide "dashboard"-like reporting capabilities and online access to trend analysis. In addition, the vendor will provide the State with significant visibility into ongoing operations.

QA occurs before a problem is identified; quality control is reactionary and occurs after a problem has been identified.

4.1.7.3 QUALITY CONTROL

Quality control involves operational techniques meant to ensure quality standards. Quality control steps include problem identification, problem analysis, and correction.

Throughout the lifecycle of the project, the State and vendor will institute the Shewhart Cycle or Deming Circle four step processes for Continual Improvement (Plan, Do, Check, and Act).

When a measure is not met, the responsible vendor(s) must:

- Document the issue
- Assess the issue
- Complete Root Cause Analysis (RCA)
- Prepare a plan for remediation
- Submit the plan to the State and component vendors for approval
- Execute the plan
- Assess the results of the plan

Failure to satisfy the remediation plan will result in the requirement for Corrective Action Plans (CAPs) to correct any deficiencies identified. All CAPs must be completed as required by the State and within the specified time frames.

Quality management is an integral part of the BMV/C Systems Modernization initiative and as such must be integrated into all component activities. A collaborative approach to quality will:

- Ensure input and recommendations are promoted and documented in a timely manner
- Promote early identification and prevention of problems
- Share solutions and institute process improvement to avoid similar issues in the future
- Communicate changes that affect general work procedures or standards

All vendors must ensure that they have an ongoing quality management process for their component and that this process is designed to fully integrate with the efforts of the State and the other component vendors. This will take the form of information sharing, regular meetings to review quality data feedback, and establishing of common continual improvement goals and objectives.

4.1.7.4 STATE RESPONSIBILITIES

ID	Responsibility
106400	Review of the Quality Management Plan
106500	Approve the Quality Management Plan
106600	Development of an integrated BMV/C Systems Modernization Quality
	Management Plan
106700	Initiate Corrective Action Plans (CAPs)
106800	Monitor Corrective Action Plans (CAPs)

4.1.7.5 VENDOR RESPONSIBILITIES

ID	Requirement
106900	Collaborate with the State and other designated vendors to define
	quality measures to include the required service level objectives, the
	process of measuring them, and the process to be carried out in the
	event that they are not met
107000	Develop an approved Quality Management Plan that focuses on being
	proactive and preventing problems rather than allowing problems to
	occur
107100	Establish cooperative working relationship between the project team
	including, but not limited to, the other vendors
107200	Review to identify and correct errors in work products and deliverables
107300	Ensure that work products and deliverables meet business objectives,
	end-user expectations, and defined requirements
107400	Employ quality methods and controls
107500	Initiate quality improvement recommendations
107600	Provide a well-researched and clearly-explained root-cause analysis
	(RCA) for any issue including, but not limited to, a description of
	problem, action plan to be taken, and measures that will be taken to
	prevent such a problem in the future
107700	Monitor quality continually and audit operations to ensure accuracy
	throughout the life cycle of the project
107800	Assign sufficient staff to conduct the quality assurance (QA) process
	who are independent of those performing the work

ID	Requirement
107900	Develop a quality assurance (QA) monthly report to be delivered
	through the implementation phase that summarizes the quality
	assurance activities performed during the month to include, but not be
	limited to, a description of the activities performed, a detailed analysis
	of the QA review findings, statistics summarizing the findings, a
	discussion of problems identified and how and when the vendor plans
	to correct problems, steps the vendor has taken to prevent the problem
	from recurring, and recommendations to improve the overall process
108000	Implement continual quality improvement activities that include
	corrective action plans for identified deficiencies
108100	Provide a report within ninety (90) calendar days of receipt of the audit
	or on a schedule agreed to by the State detailing the corrective measures
	undertaken to respond to audit findings
108300	Comply with applicable Federal regulations (e.g., ADA, OSHA)
	throughout engagement

4.1.7.6 KEY PERFORMANCE MEASURES

ID	Key Performance Measure	Threshold
108200	Accuracy of process	99% of process activities and
		results
108400	Compliant with Indiana Law in all	100% compliance
	activities	
108500	Compliant with all requirements for	100% compliance with privacy
	privacy and security in all activities	and security regulations
108600	Breaches in data access	No data access breaches
108700	Breaches in data access shall be made	Within fifteen (15) minutes of
	known to the State	the breach
108800	Customer satisfaction with process	(TBD during requirements
	activities and results	validation sessions)

4.1.8 HUMAN RESOURCE MANAGEMENT

Human Resource Management includes the processes that deal with obtaining and managing the project team and includes:

- Human resource planning and acquiring
- Developing and managing the project team

Vendors must provide qualified and adequate staff to fulfill all their contractual responsibilities.

4.1.8.1 KEY STAFF REQUIREMENTS

Each vendor must provide a project manager during the Development phase up through the Installation and Acceptance phases of the SDLC and an account manager during Operations and Maintenance.

The following table shows key staff positions and the requirements for the individual positions:

EDMS IMPLEMENTATION

Title	General Responsibilities	Minimum Qualifications
EDMS Project	Perform contract administration	Required:
Manager	 Manage project schedule (work plan) and resources Communicate with the State through formal correspondence Perform QA Responsible for all design, development, and implementation activities 	 Five (5) years of successful (on time, within budget) project management experience for government or private sector projects of similar size and complexity Bachelor's degree
		Preferred: PMP Certification Previous experience with EDMS development, management of projects that required collaboration with other vendors, and management of projects of similar size and complexity
Test Manager	Develop and executes test plans	Required:
	and test scenarios Coordinate defect resolution identified in test case execution	 Bachelor's degree Demonstrated leadership in test methodology, automation, and test processes Five (5) years' experience in various phases of testing, designing, and developing complex enterprise applications

Title	General Responsibilities	Minimum Qualifications
		Preferred:
		 Certified Software Tester
		(CSTE) credential
		 Previous experience with
		EDMS development,
		management of projects
		that required
		collaboration with other
		vendors, and
		management of projects
		of similar size and
		complexity

EDMS MAINTENANCE AND OPERATIONS

Title	General Responsibilities	Minimum Qualifications
Account	 Perform contract administration 	Required:
Manager	Manage project	■ Five (5) years of
	 Manage schedule and resources 	government or private
	 Communicate and correspond with 	sector management
	the State	experience
	■ Perform QA	 Bachelor's degree
	 Resolve issues 	
		Preferred:
		 Previous experience with
		EDMS development,
		management of projects
		that required
		collaboration with other
		vendors, and
		management of projects
		of similar size and
		complexity

4.1.8.2 PROJECT RESOURCE STAFFING PLAN

The Project Resource Staffing Plan will address the vendor's resource plans during all phases of implementation as well as the resource plans to support the operations to include:

- Number, type, and categories of staff proposed
- Staff qualifications
- Staff work location
- Ongoing training requirements
- Plan for new or reassigned staff to include:
 - Recruitment
 - Transition
 - Training

The State reserves the right to reduce the staffing plan and replace categories of staff or certain individuals with State staff or other contracted staff. For example, the State may elect to outsource all testing and replace testing staff with other contracted testing staff.

4.1.8.3 STATE RESPONSIBILITIES

ID	Responsibility		
108900	Oversee the development and maintenance of an integrated human		
	resource management plan that defines all key project staff roles and		
	responsibilities, facilitates a productive working relationship, and		
	resolves staff performance issues		
109000	Coordinate use of State staff resources		
109100	Approve the Project Resource Staffing Plan		
109200	Approve resumes of key staff		
109300	Approve any changes to key staff after contract execution		
109400	Identify changes to any staff member who is not performing to the		
	State's expectations		
109500	Request changes to any staff member who is not performing to the		
	State's expectations		

4.1.8.4 VENDOR RESPONSIBILITIES

ID	Responsibility
109600	Develop and adhere to an approved Project Resource Staffing Plan
109700	Administer and maintain the approved project staffing including, but not limited to, provision of adequate staffing during every phase of the
	contract
109800	Update the Project Resource Staffing Plan annually for approval by the
	State
109900	Maintain responsibility for all costs related to providing staff necessary to meet the requirements in this RFP including, but not limited to, staff, staff expenses, staff overhead, staff travel, or any related staff expenses, except as specifically provided in the contract

ID	Responsibility	
110000	Staff must successfully clear the BMV/C criminal background checks	
	and pay for associated checks	
110100	Replace any employee on the project with a background unacceptable	
	to the State	
110200	Ensure that all staff clearly understand the initial and ongoing roles and	
	responsibilities	
110300	Identify, report, and resolve performance issues for its entire project	
	staff including, but not limited to, employees and subcontractors	
110400	Minimize the impact to project progress resulting from staff turnover	
110500	Propose a replacement of key positions that meets state approval within	
	7 (seven) calendar days of the termination date of employment of any	
	given key staff member	
110600	Provide written notification to the State of any vacancies of key	
	positions within five (5) business days of receiving the key staff person's	
	notice to terminate employment or five (5) business days before the	
	vacancy occurs, whichever occurs first	

4.1.9 COMMUNICATION MANAGEMENT

Communication management describes communication vehicles of a project, identifying and managing stakeholder expectations, communication planning, performance reporting, and information distribution.

The BMV/C's approach to communication is open, accurate, direct, and promotes coordination and cooperation among all BMV/C staff and vendors.

The State will establish a BMV/C Systems Modernization electronic project library using Microsoft SharePoint that will be used by the entire project team. All deliverables and documents related to this project must be managed in this electronic library.

4.1.9.1 COMMUNICATION MANAGEMENT PLAN

The BMV/C Systems Modernization PMO will be responsible for developing an integrated Communication Management Plan. The purpose of the integrated Communication Management Plan is to document and guide the approach to project communication throughout the project life cycle.

The EDMS vendor will develop a Communication Management Plan for the EDMS project to document and guide the approach to project communication throughout the project life cycle that will address the following:

- Project status reporting
- Project communication among vendors and project staff identified in the project organization chart
- State stakeholder communication with the BMV/C and other applicable State agencies
- Focused and timed communication to external stakeholders

4.1.9.2 STATE RESPONSIBILITIES

ID	Responsibility
110700	Establish the electronic project library
110800	Approve the Communication Management Plan

4.1.9.3 VENDOR RESPONSIBILITIES

ID	Requirement	
110900	Develop an approved Communication Management Plan for	
	communication needs and expectations	
111000	Execute approved Communication Management Plan	
111100	Conduct meetings as directed by the State in order to share information	
	and updates on program and vendor-related issues and to report on	
	current action items	
111200	Conduct recurring senior level business meetings quarterly, or as the	
	BMV/C deems necessary, reporting on performance, issues, and	
	opportunities for improved performance and functionality	
111300	Coordinate activities necessary for the scheduling and management of	
	ad hoc meetings as directed by the State	
111400	Require key personnel participation in meetings as directed by the State	
111500	Submit status meeting agenda and status report to State at least one (1)	
	business day prior to the meeting and subsequently prepare the meeting	
	minutes in a format and within a predefined time approved by the State,	
	but no later than within ten (10) business days of the meeting	
111600	Provide monthly operations status reports for each business process	
	managed by the vendor addressing operations, outstanding issues, and	
	action items and other content specified by the State at least one (1) day	
	prior to meeting to allow for State review	
111700	Develop annual operations management report for each of the vendor's	
	business processes to present the annual project schedule (work plan)	
	proposed for the coming year and performance assessment from the	
	past year, in a format and delivery schedule approved by the State	

4.1.10 RISK MANAGEMENT

Risk management describes the processes concerning:

- Planning for risk management
- Identifying risks
- Performing qualitative and quantitative risk analysis
- Planning risk responses

Over time, risk management is responsible for managing and controlling risks.

The Risk Management Plan is a key tool in managing risks. It must address risk monitoring and control.

At the initiation of the EDMS project, the vendor will implement an EDMS Risk Management Plan that will include:

- Process and timing for risk identification
- Process for tracking and monitoring risks
- Tools and techniques that will be used in risk identification and analysis
- Methods for quantifying and qualifying risks
- Instructions for performing risk response planning

4.1.10.1 STATE RESPONSIBILITIES

ID	Responsibility
111800	Oversee the development and maintenance of the Risk Management
	Plan
111900	Approve the Risk Management Plan

4.1.10.2 VENDOR RESPONSIBILITIES

ID	Requirement
112000	Develop a Risk Management Plan based on the standard established
	and approved by the State
112100	Continually use the approved Risk Management Plan

4.2 SYSTEM DEVELOPMENT LIFE CYCLE

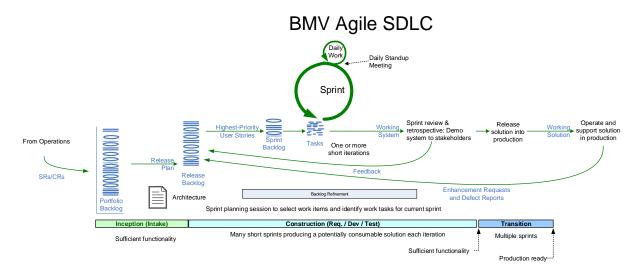
The SDLC is designed to create high quality system(s) that:

- Meet or exceed customer expectations
- Reach completion within time and cost estimates
- Work effectively and efficiently in the current and planned Information Technology (IT) infrastructure
- Is inexpensive to maintain and cost-effective to enhance

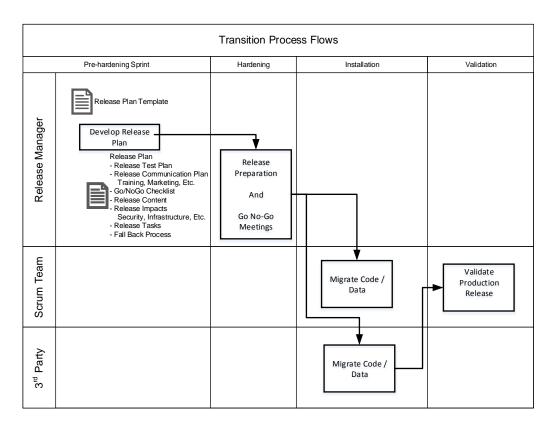
The SDLC methodology serves as a programmatic guide to project activity and provides a flexible but consistent way to conduct projects to a depth matching the scope of the project.

The BMV/C Information Technology Department (ITD) uses agile processes for SDLC. This methodology is documented in the Indiana BMV/C Agile Playbook Standard Operating Procedure available in the Bidder's Library.

The following is a high-level diagram of the BMV/C Agile SLDC:



Key components of the BMV/C Agile SDLC are the structured release plans and release schedules. Change requests from across the organization are received via a standardized intake process and are then prioritized and scheduled into releases. The following is a high-level diagram of the release or transition process:



The BMV/C will not dictate the development or implementation approach the vendors utilize to develop and implement their solution. The BMV/C does; however, expect vendors to provide structured release management which is coordinated with the existing BMV/C intake and release schedule processes when designing, developing, and implementing any integration to existing BMV/C systems (such as the System Tracking and Record Support (STARS) system). In addition, after the initial implementation, the BMV/C expects the vendors to coordinate any maintenance and operations changes related to their solution with the existing BMV/C intake and release schedule processes.

The following is a sample release schedule:

Tag	Title	Begin Date
R17.1	Release #1 - 2017	January 26, 2017
S1.1	Release 1, Sprint 1	January 3, 2017
HS1.1	Release 1, Hard Sprint 1	January 16, 2017

R17.2	Release #2 - 2017	February 23, 2017
S2.1	Release 2, Sprint 1	January 30, 2017
HS2.1	Release 2, Hard Sprint 1	February 13, 2017

Tag	Title	Begin Date
R17.3	Release #3 - 2017	April 20, 2017
PC17.3	Pre-Chill meeting with LOB	January 25, 2017
CH17.3	Chill Date	January 27, 2017
FR17.3	Freeze Date	February 13, 2017
S3.1	Release 3, Sprint 1	February 27, 2017
S3.2	Release 3, Sprint 2	March 13, 2017
S3.3	Release 3, Sprint 3	March 27, 2017
HS3.1	Release 3, Hard Sprint 1	April 10, 2017

R17.4	Release #4 - 2017	June 30, 2017
PC17.4	Pre-Chill meeting with LOB	March 22, 2017
CH17.4	Chill Date	March 24, 2017
FR17.4	Freeze Date	April 10, 2017
S4.1	Release 4, Sprint 1	April 24, 2017
S4.2	Release 4, Sprint 2	May 8, 2017
S4.3	Release 4, Sprint 3	May 22, 2017
S4.4	Release 4, Sprint 4	June 5, 2017
HS4.1	Release 4, Hard Sprint 1	June 19, 2017

R17.5	Release #5 - 2017	August 24, 2017
PC17.5	Pre-Chill meeting with LOB	May 22, 2017
CH17.5	Chill Date	May 24, 2017
FR17.5	Freeze Date	June 15, 2017
S5.1	Release 5, Sprint 1	July 3, 2017
S5.2	Release 5, Sprint 2	July 17, 2017
S5.3	Release 5, Sprint 3	July 31, 2017
HS5.1	Release 5, Hard Sprint 1	August 14, 2017

R17.6	Release #6 - 2017	October 19, 2017
PC17.6	Pre-Chill meeting with LOB	July 19, 2017
CH17.6	Chill Date	July 21, 2017
FR17.6	Freeze Date	August 14, 2017
S6.1	Release 6, Sprint 1	August 28, 2017
S6.2	Release 6, Sprint 2	September 11, 2017
S6.3	Release 6, Sprint 3	September 25, 2017
HS6.1	Release 6, Hard Sprint 1	October 9, 2017

Tag	Title	Begin Date
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DB17.1	Code Table Change	November 16, 2017
DBS17.1	DB Release Sprint 1	October 23, 2017
DBHS17.1	DB Release Hard Sprint 1	November 6, 2017

R17.7	Release #7 - 2017	December 29, 2017
PC17.7	Pre-Chill meeting with LOB	September 13, 2017
CH17.7	Chill Date	September 15, 2017
FR17.7	Freeze Date	October 10, 2017
S7.1	Release 7, Sprint 1	November 6, 2017
S7.2	Release 7, Sprint 2	November 20, 2017
S7.3	Release 7, Sprint 3	December 4, 2017
HS7.1	Release 7, Hard Sprint 1	December 18, 2017

R18.1	Release #1 - 2018	March 1, 2018
PC17.7	Pre-Chill meeting with LOB	November 15, 2017
CH17.7	Chill Date	November 17, 2017
FR17.7	Freeze Date	December 18, 2017

4.2.1 STATE RESPONSIBILITIES

ID	Responsibility
112200	Manage the activities and the vendors to successful completion of all system
	development, including oversight of deliverables, documents, and other work
	products
112300	Oversee the activities and the vendors to successful completion of all system
	development, including oversight of deliverables, documents, and other work
	products
112400	Adhere to responsibilities related to this phase specified in the Project
	Management section of this RFP

4.2.2 VENDOR RESPONSIBILITIES

ID	Responsibility
112500	Document and provide vendor SDLC methodology
112600	Develop a structured release schedule for implementation of new
	functionality
112700	Submit release schedule to the BMV/C for review
112800	Modify release schedule as required by the BMV/C
112900	Coordinate any EDMS implementation of integration to existing and future
	BMV/C systems with the BMV/C Information Technology Department's

ID	Responsibility
	(ITD) agile SDLC
113000	Coordinate any changes to the vendor's EDMS after initial implementations
	(in the Maintenance and Operations phase) with the BMV/C Information
	Technology Department's (ITD) agile SDLC

4.3 SYSTEMS ENVIRONMENT

The environment used by the EDMS will follow the standards identified by the State. There are currently four (4) environments for the BMV/C transactional system STARS:

- Production
- Training
- Parallel
- User Acceptance Testing (UAT)

The following is a high-level diagram of the current STARS environments and their interactions:

• Fee changes are entered via the Code Table **Training Production** Environment • The Data Management Team in IT scripts the changes into the UAT • Training environment is database to allow testing by a copy of production the QA Team in the UAT (code and data) Environment Staging of training scenarios is challenging, Code Table therefore the refresh of **Parallel** this environment (code and data) lags production significantly · Normally copy of production (code and data) utilized for bug resolution • Code changed and used **UAT** FEE CHANGES for regression testing after UAT and before release • UAT data refreshed from production Used for QA testing and TFS . I demos • Code developed on developer machines • Code is unit tested on development machines by the developer • On occasion, the QA Team performs testing on the developer machine prior to the push to UAT /#### /minus • Code is then checked into TFS Build to incorporate into UAT Environment Developer machines

Overview of Current Environments

At a minimum, the BMV/C requires the EDMS to provide Production, Training, Parallel, and UAT environments similar to the current STARS environment structure. The BMV/C anticipates that

non-production environments will contain limited data sets to minimize storage impacts and costs.

These environments are described in the following sections.

4.3.1 PRODUCTION ENVIRONMENT

Production is the main user environment. Barring unforeseen circumstances, all work done by users will be accomplished in this environment.

4.3.2 TRAINING ENVIRONMENT

This will support the training of both users and technical support of the solution. This environment has the same requirements as the Production environment with the latest copy of the solution and any training data loaded; however, the training environment will be re-built periodically and after each round of classes. Training should be available during the life of the entire solution. Training requirements for the EDMS are detailed in <u>Section 4.10 Training</u>.

4.3.3 PARALLEL ENVIRONMENT

Parallel is a copy of the production environment which is primarily used for staging and post-production testing including bug resolution and regression testing.

4.3.4 TESTING ENVIRONMENT

The testing environment is used to test changes prior to releasing into production. Testing requirements for the EDMS are detailed in <u>Section 4.5 Testing</u>.

4.3.5 STATE RESPONSIBILITIES

ID	Responsibility
113100	Review any proposed changes to the environments
113200	Approve any proposed changes to the environments
113300	Ensure that any changes in the State environments are coordinated with the vendor
113400	Oversee the development and implementation of the environment

4.3.6 VENDOR RESPONSIBILITIES

ID	Requirement
113500	Utilize the environments as specified in the Systems Environment section of
	this RFP
113600	Provide environments to facilitate all requirements identified in this RFP,
	including but not limited to training, testing cycles, and testing needs
113700	Provide the State, its designees, and vendors access to the appropriate
	environments to support all testing cycles and testing needs identified in this
	RFP

ID	Requirement
113800	Provide all equipment, facilities, staffing, training policies, and procedures
	necessary to maintain the environments throughout the life of the contract

4.4 TECHNICAL STANDARDS

This section describes the requirements for the BMV/C Technical Standards that will govern the EDMS throughout the entire SDLC.

The EDMS Solution must comply with the following standards and guidelines established by the State of Indiana's Office of Technology (IOT), including but not limited to:

- Policies, procedures, and standards
- Security
- Technology roadmap resources

As vendor designs their EDMS for the BMV/C, the BMV/C is interested in exploring the possibility of leveraging existing technology currently in use within the State of Indiana and the BMV/C. The vendor is encouraged to review the current IOT Services Catalog to determine if there are services that the vendor might leverage as part of their overall cost effective EDMS. If the vendor is proposing an on-premise solution, the vendor should also include the costs of any required State supported infrastructure, using the Services Catalog.

The Indiana Office of Technology (IOT) standards and guidelines and Services Catalog are located on the IOT website: http://www.in.gov/iot/

Note: Multiple agencies within the State of Indiana currently use the State-owned Oracle WebCenter Content (WCC) to manage electronic documents. This option is available to the vendor and described in the IOT Services Catalog.

Refer to the Bidder's Library for information on current hardware, software, and licenses.

4.4.1 STATE RESPONSIBILITIES

ID	Responsibility
113900	Enforce adherence to the technical standards specified in this section
114000	Review all technical documentation
114100	Approve all technical documentation
114200	Evaluate vendor requests and plans to deviate from the standards
114300	Approve vendor requests and plans to deviate from the standards

4.4.2 VENDOR RESPONSIBILITIES

ID	Requirement
114600	Provide a solution that supports the BMV/C current OS (Windows 7) or
	higher

ID	Requirement
114610	Use applicable IOT provided software, including but not limited to anti-virus software, with the ability to be updated on a regular basis
114620	Receive software updates as required by Indiana Office of Technology (IOT) and be responsible for testing the updates to ensure that the EDMS software was not impacted by the changes
114630	Ensure that installed software and licenses are kept current and be responsible for testing all software updates to ensure that the system or software are not impacted by the changes
114700	Validate that the solution conforms to the United States Access Board Section 508(c)(3)
114810	Integrate hardware, software and services with other BMV/C systems by participating fully in developing, implementing and maintaining a cohesive and workable plan that ensures availability to the solutions and services to support the business operations
114900	Use BMV/C Active Directory authentication for user access
115000	Receive and store the BMV/C system unique customer IDs (UIDs) that are issued by STARS
115100	Provide sufficient EDMS licenses to the BMV/C and authorized users designated by the BMV/C, at no additional cost to the users
115200	Provide appropriate licenses which must be transferrable to the State upon ninety (90) days' notice from the State or contract termination, for licensed software required to properly operate and maintain the application or other infrastructure
115300	Schedule monthly OS updates during the defined State of Indiana Maintenance window
115400	Notify the BMV/C of EDMS software updates as they become available and advise the State of the potential benefits of the enhancements or upgrades
115500	Develop an upgrade release plan that is coordinated with the BMV/C release schedule
115600	Update the EDMS at no additional cost to the State with no degradation to existing versions
115700	Complete State form RFC for all system changes including upgrades, system patches, and monthly updates
115900	Negotiate rates for licenses that do not exceed the State's negotiated Quantity Purchase Agreement (QPA) rates with the software/hardware vendor for existing products that are in State inventory or for new products that are used in the development and operations of the BMV/C system
116000	Provide on-premise software that is hosted within the State's data center or provide a cloud hosted solution that is FedRAMP certified
116100	Develop and maintain the network architecture and documentation for the EDMS
116200	Submit reports for server and network performance and trend analysis to ensure that there are no bottlenecks in the network and servers
116500	Provide the capacity to accommodate twenty-five (25%) percent growth of users and volume, from baseline
116600	Submit for approval any planned deviations from the guidelines and standards

ID	Requirement
116700	Record and submit technical documentation as deliverables
116800	Document all processes including but not limited to expected inputs, data
110000	types expected, possible alternate flows, and outputs
117100	Create and maintain a data architecture plan that includes the application of a
11/100	logical data model, data definition/dictionary, metadata development and
	maintenance approach, data standards, structure data standards, vocabulary
	standards, data sharing standards, and data security standards
117210	Maintain EDMS availability twenty-four (24) hours a day, seven (7) days a
	week, unless otherwise approved by the State
117300	Provide EDMS maintenance support twenty-four (24) hours a day, seven (7)
117300	days a week with 99% uptime
117500	Ensure software is compatible with current IOT server recommendations
117510	Conduct assessment to determine impacts of server upgrades to the EDMS
117600	Provide recommended end of life cycle for all hardware and software
11,000	proposed as part of this project
117800	Analyze the BMV/C's anticipated volume of transactions and data and make
117000	recommendations for upgrades or change as necessary
117900	Provide adequate storage and capacity to maintain system reliability and speed
	for the BMV/C's current and anticipated volume of transactions and data
118000	Provide a solution with easily expandable storage capacity
118100	Develop user and data storage capacity plan at the time of project planning
118400	Perform two (2) rounds of performance stress testing with production load to
110100	execute the user and data storage capacity plan at least three (3) months prior
	to "Go-Live"
118500	Perform regular capacity planning to ensure that proposed EDMS is sized
	appropriately for the State workload
118600	Track and report on the capacity and utilization of the EDMS
118900	Automatically monitor for production delays or issues and notify designated
	users
119000	Provide EDMS patches as issues are identified by the vendor or the BMV/C
	in accordance with the BMV/C patch schedule
119100	Provide a fault tolerant solution that includes the consideration of
	redundancies for production and disaster recovery environments
119200	Create and follow a clear escalation procedure through the appropriate chain
	of command to ensure that the production issue is getting the appropriate
	attention to meet the level of urgency
120100	Establish, implement, manage and maintain the metadata development and
	maintenance approach, metadata and standards
120200	Publish the metadata standards, data standards, structure data standards, and
	vocabulary standards
120300	Provide plans for a regular backup and maintenance schedule for the EDMS.
	The vendor must also specify the tools/techniques for performing this
	scheduled maintenance of the servers and network equipment. Coordination
	with IOT staff will be required if the vendor proposes to host their application
	in the IOT data center. Refer to the Business Continuity and Disaster
	Recovery section of this RFP

ID	Requirement
120400	Provide plans, and coordinate with IOT staff, for regular backup and
	maintenance schedule for network and server, specifying the tools/techniques
	for performing this scheduled maintenance of the servers and network
	equipment
121000	Identify, establish and maintain the hardware/software/middleware
	components and maintenance plan for the EDMS
121100	Establish and maintain a continuous quality improvement process for the
	EDMS

4.5 TESTING

The State plans to monitor the vendor's activities throughout the SDLC and expects the vendors to support all testing cycles described in this section, to include:

- Construction and Unit Test
- Conversion Testing
- QA Testing
- UAT
- Regression Testing
- Operational Readiness Review (ORR)
- Pilot Operations

4.5.1 MASTER TEST PLAN

The State requires that a comprehensive Master Test Plan be developed for the EDMS. The purpose of the Master Test Plan is to document and guide the approach to testing throughout the life cycle of the project. The plan must document all aspects of testing and the approach that will be used.

The Master Test Plan covers the approach and methodology for all aspects of testing and must include:

- Definition of test philosophy (including objectives, required levels or types of testing, and basic strategy)
- Strategy for maintaining testing environments to facilitate all testing cycles and testing needs identified in this RFP
- Strategy for reporting impacts resulting from changes implemented through the change management process
- Strategy to be used for creating and populating the test database and maintaining the files during iterative testing
- Strategy for collaboration and sharing of test cases with the State, its designees, and component vendors to support applicable testing cycles
- Description of testing for the EDMS, including:
 - How the testing will satisfy specific objectives and demonstrate that the requirements are met
 - What design modules shall undergo control or data flow analysis

- How each phase of the testing is determined to be complete, including the formal reports/debriefings conducted
- The testing facilities, environment, and specific testing tools to be used
- Processes and procedures that will be used for releasing testing results, data reduction and analysis, and review of test results
- Pass-fail criteria, testing timeframes, and method for tracking pass-fail test results
- Identification, for each testing cycle, of:
 - Facilities/tools to be used
 - Staff/resources
 - Method for review of test case and procedures
 - Configuration management
 - Procedures for releasing test results
 - Test data refreshing
 - Planned testing environment
- Acceptance criteria that determines whether a phase of testing has been completed to include criteria such as number and types (severity/priority) of defect
- Testing cycles to include:
 - Construction and unit test
 - Conversion test
 - QA test
 - UAT
 - Regression test
 - ORR
 - Pilot operations

4.5.2 CONSTRUCTION AND UNIT TEST

The State plans to monitor the vendor's activities during the construction and unit testing task using technical reviews and audits. The purpose of the technical reviews and audits will be to demonstrate that completed applications perform as desired by the State. Technical reviews and audits will be scheduled as necessary throughout the construction and unit testing task.

4.5.2.1 CONSTRUCTION AND UNIT TEST ACTIVITIES AND DELIVERABLES

- Master Test Plan
- Test materials packet as described in <u>Section 4.5.10.1</u>
- Construction and unit test results:
 - Test results from the complete test tracking system for each requirement
 - Identification and classification of all defects
 - Defect resolution
 - Retest results
 - Requirements that could not be tested due to failure or unavailability of precursors
 - Implications to the next cycle of testing
 - Construction and unit test summary report
 - System ready for promotion to next cycle of testing

4.5.3 CONVERSION TESTING

The conversion testing task or mock conversion requires the vendor to prepare a comprehensive set of test scenarios, with applicable test cases and expected test results to test the migration and conversion of all data and files required to support the operation of the EDMS and STARS. The objective of conversion testing is to demonstrate that all data required to support BMV/C processing is available, accurate, and ready for operation.

4.5.3.1 CONVERSION TESTING ACTIVITIES AND DELIVERABLES

- Updated Master Test Plan
- Test materials packet as described in <u>Section 4.5.10.1</u> to include converted test data sets
- Conversion test results:
 - Test results from the complete test tracking system for each requirement
 - Identification and classification of all defects
 - Defect resolution
 - Retest results
 - Requirements that could not be tested due to failure or unavailability of precursors
 - Implications to the next cycle of testing
- Weekly reports of testing status which cover the status of testing scheduled for that
 week, including metrics on number of tests completed, number deferred or
 cancelled, results of the tests executed, defects identified by level, and corrections
 undertaken
- Confirmation that data is ready to support EDMS processing

4.5.4 QUALITY ASSURANCE TESTING

The QA testing task requires the vendor to prepare a comprehensive set of test scenarios, with applicable test cases and expected test results. Authentic data from reference files and authentic converted data is to be included as appropriate, during QA Testing and all subsequent testing phases. The objective of QA testing is to demonstrate that applications function correctly on the vendor's hardware in a production-type environment.

4.5.4.1 QUALITY ASSURANCE TESTING ACTIVITIES AND DELIVERABLES

- Updated Master Test Plan
- Test materials packet as described in <u>Section 4.5.10.1</u> to include converted test data sets
- QA test results:
 - Test results from the complete test tracking system for each requirement
 - Identification and classification of all defects
 - Defect resolution
 - Retest results
 - Requirements that could not be tested due to failure or unavailability of precursors

- Implications to the next cycle of testing
- Weekly reports of testing status which cover the status of testing scheduled for that
 week including metrics on the number of tests completed, number deferred or
 cancelled, results of the tests executed, defects identified by level, and corrections
 undertaken

4.5.5 USER ACCEPTANCE TESTING

UAT provides an opportunity for State system users and vendor staff to determine the adequacy of the system design and functionality.

- UAT will be conducted only on a fully tested and operations-ready EDMS which includes all software features such as online systems
- UAT will be conducted in a controlled environment separate from all other environments using cycle times determined between the vendor and State

4.5.5.1 USER ACCEPTANCE TESTING ACTIVITIES AND DELIVERABLES

- Updated Master Test Plan
- Test materials packet as described in <u>Section 4.5.10.1</u> to include converted test data sets
- UAT results:
 - Test results from the complete test tracking system for each requirement
 - Identification and classification of all defects
 - Defect resolution
 - Retest results
 - Requirements that could not be tested due to failure or unavailability of precursors
 - Implications to the next cycle of testing
- Weekly reports of testing status which cover the status of testing scheduled for that
 week including metrics on the number of tests completed, number deferred or
 cancelled, results of the tests executed, defects identified by level, and corrections
 undertaken
- A system that functions in compliance with EDMS requirements and is ready for promotion and Parallel testing
- Finalized documentation for use in the Production environment. Refer to <u>Section</u>
 4.11 <u>Documentation</u>

4.5.6 REGRESSION TESTING

Regression testing is the final step prior to the implementation of any phase of the system replacement. Regression testing will commence at the completion of UAT.

4.5.6.1 REGRESSION TESTING ACTIVITIES AND DELIVERABLES

- Updated Master Test Plan
- Test materials packet as described in <u>Section 4.5.10.1</u> to include converted test data sets
- Regression test results:
 - Test results from the complete test tracking system for each requirement
 - Identification and classification of all defects
 - Defect resolution
 - Retest results
 - Requirements that could not be tested due to failure or unavailability of precursors
 - Implications to next cycle of testing
- Weekly reports of testing status which cover the status of testing scheduled for that
 week including metrics on the number of tests completed, number deferred or
 cancelled, results of the tests executed, defects identified by level, and corrections
 undertaken
- A system that functions in compliance with EDMS requirements and is ready for promotion to Production
- Finalized documentation for use in the Production environment. Refer to <u>Section</u>
 4.11 Documentation

4.5.7 OPERATIONAL READINESS REVIEW

ORR involves validating all the operations and hardware/software/telecommunication aspects of the system. This review will involve comparing all operational components of the replacement system against the ORR checklists. An ORR Plan should be in place to ensure operational readiness.

The ORR task is designed to ensure that the vendor and the EDMS are ready to perform the basic functions such as processing all inputs, pricing claims correctly, meeting all reporting requirements, using a properly functioning data communications network, meeting system performance requirements, and having a demonstrated backup capacity.

ORR testing will include a volume test of thirty (30) days of production capacity volumes to demonstrate that the EDMS and the vendor staff is prepared for full production.

4.5.7.1 OPERATIONAL READINESS REVIEW ACTIVITIES AND DELIVERABLES

- ORR Plan
- Completed ORR checklists as described in <u>Section 4.5.7.2 Operational Readiness</u> Review Checklists
- Completed ORR Corrective Action Plan for all EDMS outstanding issues and problems with a plan to correct or resolve these issues
- Updated user manuals and operational procedures documents as needed

- ORR report that demonstrates the vendor and EDMS are ready to begin operations
- Completed Post-Implementation Plan

4.5.7.2 OPERATIONAL READINESS REVIEW CHECKLISTS

The ORR Plan must include extensive checklists for each functional area containing items related to the preparedness of that function for a successful implementation. ORR checklists must be developed focusing on the additions, changes, and omissions that result during the transition from the legacy system to the replacement system.

Many of the following functional areas may not be exposed to any change from the transition to the replacement system but must be included in the ORR process to validate this fact.

Examples of checklist functional areas include but are not limited to the following:

- System security
- System access
- System backup and recovery procedures
- Hardware and software installation
- Interfaces
- State staff training
- All system user and operations documentation including procedure manuals
- Imaging operations
- Confidentiality of data
- Report generation and distribution processes

4.5.8 PILOT OPERATIONS

Pilot operations will include a test of the EDMS processing in a full operational environment from receipt of a document through STARS processing. End-to-end EDMS functionality will be fully tested.

An additional component of pilot operations is the demonstration and verification of data security and disaster prevention and recovery procedures.

Pilot operations will be conducted to validate the capacity and processing of the EDMS in a tightly controlled production environment. At the State's discretion, pilot operations may be limited to selected regions or operational activities.

4.5.8.1 PILOT OPERATIONS ACTIVITIES AND DELIVERABLES

- Pilot operations test result
- A fully functional EDMS including branch operations, central office operations, and support services
- Official vendor notification to the State of the completion of pilot operations indicating readiness for full production operations

4.5.9 IV&V AND STAKEHOLDER REVIEW

The focus of the IV&V and stakeholder review is on reviewing testing phase results, risk management, and the implementation of:

- Measures to determine the vendor's results during each of the testing phases
- Risk management associated to the problems identified during any of the testing phases

The IV&V and stakeholder review activities will be performed in concert with the testing phases listed in the previous sections.

4.5.10 TEST DOCUMENTATION REQUIREMENTS

For each phase of testing, the vendor must prepare and deliver the following documentation:

- A test materials packet
- An updated Requirements Traceability Matrix with test results
- A test results packet
- Vendor certification of successful test completion

4.5.10.1 TEST MATERIALS PACKETS

The test materials packet must include but not be limited to the following:

- Test cases
- Expected results
- Test procedures; test scripts must include, at a minimum:
 - Roles and responsibilities of both the vendor and State personnel
 - Application scripts and operating system scripts
 - Constraints
 - Initialization
 - Termination
 - Actions to perform in case of error
 - Data analysis procedures
 - Interfaces exercised

The vendor must refine the test procedures and scripts throughout the life of the system to reflect the as-built design and current requirements

4.5.10.2 TEST RESULTS

The test results packet must include the following:

- Transmittal report
- Test log
- Incident report
- Summary results report to include:
 - Identification of the items, features, and operations tested
 - Summary of all features and operations tested and the test steps taken
 - Summary of the results of testing for each operation and feature tested, including any limitations of the testing strategy
 - Variances from expected results, including recommendations for corrective action or alternative solutions for each variance noted
- Comprehensive assessment of readiness for subsequent test phases or for statewide operation

4.5.11 STATE RESPONSIBILITIES

ID	Requirement
121300	Approve the Master Test Plan
121400	Develop criteria by which success or failure of each testing phase allows
	the vendor to move onto the next testing or development phase
121500	Determine at which point acceptability or approval of each testing phases
	allows the vendor to move onto the next testing or development phase
121600	Participate in User Acceptance, Regression, ORR and Pilot testing cycles

4.5.11.1 VENDOR RESPONSIBILITIES

ID	Requirement
121700	Provide Master Test Plan covering approach and methodology for all
	testing cycles
121800	Provide all deliverables specified in each testing cycle
121900	Address defects identified in testing cycles
122000	Resolve system abends during the execution of the cycle
122100	Manage all testing activities as directed by the State
122200	Assist the State users with User Acceptance, Parallel, ORR, and Pilot
	testing cycles
122300	Provide the State, its designees, and State designated vendors access to test
	cases and test data to facilitate execution of applicable testing cycles
122400	Accept test data submitted by the State on hard copy or electronic media
122500	Execute test data submitted by the State in the testing cycle specified by
	the State
122600	Execute system testing for all change requests to include regression testing,
	before changes are promoted to the production environment

ID	Requirement
122700	Conduct walk-throughs of system changes that are ready to be moved into
	the production environment including but not limited to an online
	demonstration and a discussion of programs that are impacted by the
	system change, as specified by the State

4.6 BUSINESS CONTINUITY AND DISASTER RECOVERY

As the BMV/C modernizes their systems and processes, the goal is to replace manual business processes with business processes that are completed in a real-time environment. The demand will continue to be for systems and solutions that provide instant responses 24 hours a day, 7 days a week.

For this reason, it is imperative that the EDMS vendor place the highest priority on business continuity. Business continuity refers to those activities performed daily to maintain service, consistency, and recoverability.

The EDMS vendor is required to develop and maintain a Business Continuity Plan (BCP) and demonstrate their ability to execute that plan. In addition, the EDMS vendor must collaborate to develop, maintain, and execute a BMV/C integrated BCP.

The BMV/C integrated BCP must provide adequate backup and recovery for all BMV/C operations, both manual and automated, including all functions required to meet the backup and recovery standards:

- Recovery Time Objective (RTO)
- Recovery Point Objective (RPO)

The BMV/C will take the lead in developing the BMV/C integrated BCP.

4.6.1 BUSINESS CONTINUITY PLAN

The BCP is created to:

- Prevent interruptions to normal business
- Protect critical business processes from natural or manmade disasters
- Provide a strategy to allow for the resumption of normal business activity

At a minimum, the vendor must demonstrate their ability to develop and execute a BCP that documents the following:

Overview	 Identify all critical information areas such as: LAN/WAN Telecommunication Applications and data Identify potential disruptive events Staff duties Manmade events
Scope and Plan Initiation	Describe operations (vendor and State)
Pian initiation	Create detailed account of workList resources
	List resourcesDefine management practices
	 Define roles and responsibilities of:
	BCP Committee
	Senior Management
Business	Address primary goals:
Impact	 Criticality prioritization
Analysis (BIA)	 Downtime estimation (maximum tolerable downtime) not to exceed thirty (30) calendar days in the event of a catastrophic or natural disaster. Not to exceed ten (10) minutes in the event of other disasters caused by such things including but not limited to criminal acts, human error, malfunctioning equipment, or electrical supply Resource requirements BIA results Assessment materials gathering Vulnerability assessment Quantitative loss criteria Qualitative loss criteria Information Analysis
	 Results and recommendations
ВСР	Recovery Plan
Development	■ Continuity strategy

4.6.2 DISASTER RECOVERY PLAN (DRP)

The DRP must present:

- A statement of actions taken before, during, and after a disruptive event
- Procedures required to respond to an emergency and to provide back up operations during a disaster

The EDMS vendor must demonstrate their ability to provide the most appropriate backup

systems and facilities to address the recommendations of the business impact analysis. Testing of the DRP must be conducted on a regular basis. The State will not acknowledge that recoverability exists until the plan is tested and the State is able to verify the accuracy of the plan.

At a minimum, the DRP must include the following:

Overview	Goals and objectives
Data	Describe the consideration and ultimate selection of the following backup
Processing	systems and facilities:
Continuity	Reciprocal (mutual aid agreements)
	 Subscription services
	Hot site
	■ Warm site
	Cold site
	Mobile site
	Multiple centers
	Transaction redundancy
	Electronic vaulting
	Remote journaling
	 Database shadowing
	Backup and maintenance schedule
Testing	Describe the consideration and ultimate selection of the following:
	Testing checklist: How the DRP will be distributed for review
	Structured walkthrough: How the business managers will be walked
	through the test plan review
	Simulation: Practice session including all involved individuals
	 Parallel: Primary processing does not stop
	Full interruption: Cease normal operations
Recovery	Describe recovery team duties
Procedures	 Implement the recovery procedures in a disaster
	 Assure critical functions operating at backup site
	Retrieve materials from offsite storage
	 Install critical systems and applications
	 Describe salvage team duties separate from recovery team
	Return primary site to normal operating conditions
	Clear and repair primary processing facility
	 Describe normal operations team, returning production from disaster
	recovery to primary
	 Address other recovery issues
	External groups
	Employee relations
	Fraud and crime
	Financial disbursement

4.6.3 STATE RESPONSIBILITIES

ID	Responsibility
122800	Approve the Business Continuity Plan (BCP) and Disaster Recovery Plan
	(DRP)
122900	Monitor implementation of the Business Continuity Plan (BCP) and any
	safeguards to be implemented
123000	Perform periodic review of compliance with Business Continuity Plan (BCP)
	requirements, including review of the risks
123100	Provide State staff to provide input to the development of the Business
	Continuity Plan (BCP) and Disaster Recovery Plan (DRP)
123200	Coordinate IOT staff and vendor if network and server are hosted

4.6.4 VENDOR RESPONSIBILITIES

ID	Requirement
123300	Develop a Business Continuity Plan (BCP) specified in the BCP section of this RFP
123400	Develop a Disaster Recovery Plan (DRP) specified in the DRP section of this RFP
123500	Continually ensure that the Business Continuity Plan (BCP) and Disaster Recovery Plan (DRP) meet applicable state and federal requirements for Business Continuity and Disaster Recovery
123600	Establish the approved Business Continuity Plan (BCP) and Disaster Recovery Plan (DRP)
123700	Ensure adherence to the approved BCP and DRP through quarterly desktop exercises as well as full recovery drills once a year
123800	Prior to assumption of EDMS operations, execute a live demonstration of the operation of the Business Continuity Plan (BCP) that will be tested as part of Acceptance Testing
123900	Provide a semi-annual report following the review of data processing continuity activities to ensure maintenance of Selected Disaster Recovery Site and Transaction Redundancy processes
124000	Generate and provide a report of the backup site review
124100	Execute backup procedures within timeframes defined by the State
124200	Submit backup site review report to the State within thirty (30) days of completion of the review
124300	Provide continual progress reports to resolve reported failures every fifteen (15) minutes, updating the service desk and key staff, identified by the State
124400	Solution shall include an off-site disaster recovery option, with a high-level description of the Solution's disaster recovery processes provided, to ensure the Solution remains available for the BMV/C license issuance including servers, data, and the central production site which will require duplicate footprint at IOT DR Site with Failover/Failback capability, MHA preferred, that must be tested annually

4.7 DATA CONVERSION

Data conversion entails the planning and development, testing, migration, and conversion of all data and files required to support ongoing BMV/C operations.

The EDMS vendor is responsible for the data conversion of all electronic documents stored in the current EDMS and the successful demonstration, through comprehensive testing of conversion processes, that all data required to support this RFP's Document Management requirements will be available, accurate, and ready for operations.

The Data Conversion schedule must align to the vendor's SDLC plan as defined in <u>Section 4.2</u> <u>System Development Life Cycle</u>.

4.7.1 DATA CONVERSION PLAN

The Data Conversion Plan (DCP) will consist of the planning, development, testing, and coordination of all data and file conversions required to support the operation and must include the following:

- Identification of all data elements and sources of Electronic Document Management data
- Plan to secure the data
- Plan to develop data conversion requirements including:
 - Data cleansing activities, as appropriate
 - Coordination with the current EDMS vendor to address data conversion issues
 - Identification of all interfaces and coordination points with the current EDMS vendor and the BMV/C ITD staff
- Testing plan as specified in Section 4.5.1 Master Testing Plan, that includes:
 - Coordination with all appropriate BMV/C vendors and interfaces
 - Conducting technical reviews and audits of conversion tests with the State and BMV/C vendors to validate content, identify, document, and resolve any issues or questions, and facilitate the acceptance process
 - Conducting technical reviews of all data conversion processes including errors, methods of correction, and success and failure metrics
- Development of conversion software and/or manual procedures, testing of conversion programs and procedures, and preliminary conversion of all files
- Development of data conversion documentation to include:
 - Detailed Data Mapping document:
 - Mapping of existing EDMS data to new EDMS data repositories at the table and attribute level
 - Crosswalks for standardization of values
 - Data initially identified to be converted
 - Actions taken
 - Problems encountered
 - Problem resolution
 - Before and after versions of all manually and automated data conversions
 - Dependencies

- Outstanding issues and final results
- Metadata on all converted data structured in a manner that can be transformed into "rules" for backwards conversion. For example, metadata that is suitably coded (XML output)
- Conversion roll back plan identifying strategies for dealing with delays to the conversion effort

4.7.2 DATA CONVERSION SCHEDULE

As a part of the overall project schedule (work plan), the vendor shall outline the tasks, durations, and dependencies to successfully execute the DCP.

4.7.3 CONVERSION TEST RESULTS

- The vendor shall submit conversion test results. The report must include results of the complete final data conversion process in a State approved format and must contain the following information:
 - Test results including issues encountered and the impact upon other table or file conversions
 - Methods used to resolve issues or an action plan for resolving outstanding issues
 - Pre-conversion and post-conversion versions of each table or file converted, including default values
 - Pre-conversion and post-conversion versions of all interface partner files
 - Auto-generated reports as required by the BMV/C to validate converted data at detail and summary record levels, (including run dates and times) and are retrievable for a series of conversion activities
 - A summary and metrics for the status of the conversions, including the number of problems identified by type of problem, number of problems corrected, any outstanding issues, and the effect of any findings on the implementation schedule

4.7.4 STATE RESPONSIBILITIES

ID	Responsibility
124500	Approve Data Conversion documentation as specified in this section
124600	Assist the vendor in identifying sources of data for conversion
124700	Clarify, at the vendor's request, data element definitions, record layouts, and
	file descriptions
124800	Review the number of data elements to be converted to the new EDMS
124900	Authorize the number of data elements to be converted to the new EDMS
125000	Review the Conversion Test Results, including the approval of test result
	metrics
125100	Approve the Conversion Test Results, including the approval of test result
	metrics
125200	Provide staff time for walkthroughs of the Data Conversion Plan (DCP) and
	results

4.7.5 VENDOR RESPONSIBILITIES

ID	Requirement
125300	Develop, maintain and successfully execute the Data Conversion Plan (DCP)
125400	Develop, maintain and successfully execute the Data Conversion Schedule as
	part of the overall project schedule (work plan)
125500	Provide all necessary support, both technical and programmatic, to facilitate
	the correct conversion of all required data from the current system, Fortis
125600	Assist in identifying sources of data for conversion
125700	Provide data requirements
125800	Evaluate current data fields and data inherent to the current Document
	Management Solution to convert to current industry standard data fields and
	data
125900	Align Data Conversion Schedule to the vendor's System Development Life
	Cycle (SDLC) plan
126000	Ensure that data conversion be completed within an agreed upon timeframe,
	in full accordance with defined quality standards, and prior to user acceptance
	testing
126100	Submit Conversion Test Results which include results of the complete final
	data conversion process in a State approved format
126200	Submit Conversion Test Results which detail at a minimum, issues
	encountered and the impact upon other table or file conversions, methods
	used to resolve issues or an action plan for resolving outstanding issues, pre-
	conversion and post-conversion versions of each table or file converted,
	including default values, pre-conversion and post-conversion versions of all
	interface partner files, auto-generated reports as required to validate
	converted data at detail and summary record levels, which include run dates
	and times, and are retrievable for a series of conversion activities, a summary
	and metrics for the status of the conversions, including the number of
	problems identified by type of problem, number of problems corrected any
	outstanding issues, and the effect of any findings on the implementation schedule
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4.7.6 LEGACY DATA CONVERSION

As an additional conversion effort under consideration, the BMV/C currently maintains 45 years of historical documents in microfilm, microfiche, and comfilm. Documents maintained in these formats are difficult to locate and quality is beginning to deteriorate over time. The BMV/C wishes to convert all existing microfilm, microfiche, and comfilm records into electronic records, indexed according to the data conversion rules that will be applied to the records maintained in Fortis. In addition, the BMV/C is interested in converting these documents into machine editable text to facilitate search capabilities. Currently, there are approximately 45 million Microfilm records and 7 million Microfiche records.

If the BMV/C decides to utilize the EDMS vendor to complete this additional data conversion effort, the following requirements would apply to this conversion effort, in addition to the data conversion requirements already presented in this section.

4.7.6.1 STATE RESPONSIBILITIES

ID	Responsibility
126300	Assist the vendor in identifying sources of legacy data for conversion,
	including the legacy documents in microfilm, microfiche, and comfilm
126400	Clarify, at the vendor's request, current legacy document organization
126500	Identify the schedule and sequence for digitizing legacy documents
	including microfilm, microfiche, and comfilm

4.7.6.2 VENDOR RESPONSIBILITIES

ID	Requirement
126600	Develop, maintain and successfully execute the Legacy Data Conversion
	Schedule as part of the overall project schedule (work plan)
126700	Convert legacy documentation, microfilm, microfiche, and comfilm into
	an electronic format that facilitates word search, indexing, and image
	storage and retrieval capabilities as described in the Document
	Management section of this RFP
126800	Establish a legacy document disposal plan to address the destruction of
	documents including hard copy files, microfilm, microfiche, and
	comfilm

4.8 PRIVACY STANDARDS

It is the responsibility of the BMV/C to safeguard its customer's personal information and to establish procedures for the protection and disclosure of records, particularly highly restricted personal information contained in those records. All BMV/C associates, contract workers, and full or partial service provider employees must use extreme caution in the protection, handling, and disclosure of all customer information.

The proper handling of customers' information requires all BMV/C associates, contract workers, and full or partial service provider employees to adhere to the BMV/C policies and procedures pertaining to accessibility, protection, containment, and disclosure of personal information and vehicle records, including limiting access through technology.

The BMV/C requires that all vendors adhere to defined policies, processes, and procedures to protect and safeguard BMV/C customers' personal information.

The BMV/C requires that all vendors provide the functionality needed to protect and track Personally Identifiable Information (PII) and conform to BMV/C privacy standards.

4.8.1 STATE RESPONSIBILITIES

ID	Responsibility
126900	Oversee compliance with privacy standards
127000	Assist the vendor in completing required monitoring and auditing activities

4.8.2 VENDOR RESPONSIBILITIES

ID	Requirement
127100	Adhere to the Bureau of Motor Vehicles Personal Information Security
	Standard Operating Procedure (SOP)
127200	Adhere to the Bureau of Motor Vehicles Policy 2008 – 013 Personal
	Information Security
127300	Adhere to State of Indiana statute relating to Privacy and Disclosure of
	Bureau Records (IC 9-14-13)

4.9 SECURITY

The State has robust and comprehensive security standards that permeate all levels of the organization. IOT has been tasked with establishing and maintaining these security standards. The security standards include assessing security risks, developing and implementing effective security procedures, and monitoring the effectiveness of those procedures.

The following link introduces the IOT Information Security Framework: https://www.in.gov/iot/files/Information_Security_Framework.pdf.

The BMV/C maintains an Information Security Program to protect the confidentiality, integrity, and operational availability of PII and other information resources, and to comply with Federal and State regulations and contractual requirements. The Information Security Program is governed by BMV/C Policy 2014 - 001 Information Security. This policy is available in the Bidder's Library under the file name "Personal Information Security Policy.pdf".

In addition to the State standards outlined above, the State requires that each vendor support all current and future State security guidelines.

4.9.1 STATE RESPONSIBILITIES

ID	Responsibility
127400	Oversee Security Compliance
127500	Assist the vendor in completing required monitoring and auditing activities

4.9.2 VENDOR RESPONSIBILITIES

ID	Requirement
127600	Adhere to the policies and standards defined in the IOT Information
	Security Framework
127700	Adhere to BMV/C Policy 2014 – 001 Information Security Policy

4.10 TRAINING

Training will be an important part of the EDMS. The EDMS vendors will be responsible for:

- Training their own staff to use their systems
- Training the State staff to use their systems, as requested by the State
- Developing and updating the Training Plan
- Submitting training status reports
- Developing training manuals

To assure a common look and feel for all training manuals and documentation, the EDMS vendor will work with BMV/C Organizational Development (OD) to develop the training manual and training documentation templates.

The EDMS vendor will be responsible for providing training to technical staff and designated business users who heavily utilize the system and will have read and write access to the EDMS. The EDMS vendor will be responsible for providing "train-the-trainer" training for OD staff. OD will be responsible for training staff who have only view access to the system such as branch personnel.

For the purposes of this proposal, the vendor should expect to train the following:

User Roles	Estimated Users
Document management users (intake, indexing,	30 users including 5 managers
Workflow management	100 users including 25 managers
Document read and write	100 users including 25 managers
System Administration and Technical Support	10 users

4.10.1 TRAINING PLAN

The State requires that the EDMS vendor develop a Training Plan. The purpose of the Training Plan is to document and guide the approach to training throughout the life cycle of the project.

The Training Plan must cover the approach and methodology for all aspects of training and must detail all activities leading up to and including the proper use of the EDMS. The Training Plan activities must ensure full preparedness for execution and performance of all EDMS operations and maintenance responsibilities and must include the following:

- Assessment and identification of training needs
- Number and type of participants to be trained
- Training schedule for all staff and anticipated attendance, including the proposed number of classroom style sessions for completion prior to implementation of the EDMS
- Outline and agenda for proposed training sessions designated by audience
- Description of the professional background, skills, training experience, and knowledge of subject matter of proposed trainers
- Examples of training materials

- Description of technology, such as web design, that will be used to perform training responsibilities
- Training methodology and presentation modes
- Inclusion of all business and technical functions of the EDMS
- Evaluation criteria
- Description of how evaluations will be used to improve course content and presentations
- Process for operational inputs as a result of training including but not limited to issues identified through evaluation of service requests (e.g. help desk tickets)
- Plans for remedial training and sessions needed to cover new or modified policies, new program regulations, new equipment, or new system procedures which occur as a result of changes to the system
- Plans for continuing education of State and vendor staff and orientation training for new staff

Upon completion of the training plan, if the complexity of the training and the number of trainees increases by more than 10%, the BMV/C will work with the vendor to review the proposed costs and adjust accordingly.

4.10.1.1 TRAINING PLAN UPDATES

The vendor shall develop and submit an annual Training Plan update that includes the following, as applicable to the scope of the vendors' training responsibilities:

- Evaluation of the Training Plan for possible revision, as part of the change management process outlined in <u>Section 4.1 Project Management</u>
- Review and update of the Training Plan, including State approval. The Training Plan must be submitted to the State for approval thirty (30) business days prior to the end of the operational year of the EDMS or within five (5) business days of an update. Updates must:
 - Describe how Subject Matter Experts (SMEs) will be used on an ongoing basis
 - Update all components of the Training Plan

4.10.2 TRAINING REPORTS

4.10.2.1 ANNUAL TRAINING REPORT

All vendors shall develop and submit an annual training report that summarizes, at a minimum, the previous year's accomplishments, issues, and lessons learned. The report must include, at a minimum:

- Number of participants trained during the previous year
- Training subject(s)
- Training objective(s)
- Training methodology and presentation styles
- Evaluation techniques and overview of responses

- Lessons learned
- Total number of hours of State staff training
- Sample copies of material(s) used in training sessions

4.10.2.2 MONTHLY TRAINING STATUS REPORTS

All vendors shall develop and submit a monthly training status report delivered within five (5) business days after the last business day of the month. The Training Status Report must include but not be limited to the following, as applicable to the scope of the component vendors' training responsibilities:

- Training progress
- Status of the actual training as compared to the training outlined in the Training Plan and Training Plan updates
- Training session details including but not limited to training location, length of meeting, and who received training
- Number of State staff who registered for training and the number that attended training
- Narrative summary of changes, progress, problems, and remediation of those problems in the training programs
- Narrative summary of participants' evaluation responses regarding the effectiveness of the training

4.10.3 STATE RESPONSIBILITIES

ID	Responsibility
127800	Designate State staff to participate in training
127900	Approve vendor staff that are recommended as trainers
128000	Direct the vendor to make appropriate training staff changes as deemed
	necessary
128100	Review training plans and updates, including dates, times and locations of
	training
128200	Approve training plans and updates, including dates, times and locations of
	training
128300	Review training materials and manuals
128400	Approve training materials and manuals
128500	Align training with other BMV/C training opportunities whenever possible
128600	Review training status reports
128700	Designate staff to meet with the vendor on a routine basis and as a contact
	point for training issues
128800	Audit any and all training provided by the vendor as deemed necessary

4.10.4 VENDOR RESPONSIBILITIES

ID	Requirement
128900	Create a detailed Training Plan to document logistics, training structure, and approach

ID	Requirement
129000	Develop and submit a Training Plan that ensures appropriate and timely
12,000	training of all applicable participants
129100	Provide a Training plan that includes assesing training needs, developing
12/100	training topics, and addressing training needs based on input of the State
	and other designated vendors
129200	Make appropriate changes and/or modifications within ten (10) business
	days in cases where the State disapproves vendor training recommendations
	including, but not limited to, staff trainers, training courses, course content,
	presentation method, training plans, training manuals, updates, or status
	reports
129300	Identify training topics for users at various levels of learning (e.g. new
	associates, seasoned associates)
129400	Identify types and levels of training by role (e.g. user, super-user, system
	administrator, technical support)
129500	Identify major training topics by role (e.g. user, super-user, system
	administrator, technical support)
129600	Identify most effective training methods for the topic and audience (e.g.
	classroom training, training manuals, job aids, hands-on training, e-Learning
120700	modules)
129700	Ensure any electronic training modules are Shareable Content Object
	Reference Model (SCORM) compliant for incorporation into Electronic
129800	Learning Management (ELM) for tracking Create all training materials
129900	Involve Subject Matter Experts (SMEs) in developing class materials for the
127700	courses being presented
130000	Involve Subject Matter Experts (SMEs) as active participants in regularly
	auditing the courses to ensure that trainers are knowledgeable and effective
	in training others in the subject matter being presented
130100	Submit training materials for BMV/C review and approval at least 60 days
	prior to deployment and finalization of the training schedule
130200	Submit training materials in electronic format
130300	Provide updated training materials when a system change or upgrade is
	released
130400	Utilize the most current material available when selecting item(s) for use in
	training course/classes
130500	Create a training schedule that aligns with installation schedule in
	coordination with the BMV/C
130600	Submit training schedule to the BMV/C for review and approval
130700	Provide all hardware, software, other equipment, and materials required to
120000	conduct training
130800	Maintain a technical training environment that is capable of supporting
130900	concurrent application training classes Create avaluation tools to measure success of training (e.g. knowledge)
130900	Create evaluation tools to measure success of training (e.g. knowledge
131000	checks, learner comprehension, quizzes) Execute training in coordination with the BMV/C Organizational
131000	Development and Document Management departments
	Development and Document management departments

ID	Requirement
131100	Provide train-the-trainer training for BMV/C training personnel on using
	the solution, reports, and related end-user topics
131200	Provide training for BMV/C technical staff on routine maintenance,
	troubleshooting, and other technical related topics
131300	Provide training for appropriate business users by area
131400	Train staff to skill levels required to competently perform their job duties
131500	Provide role based training to all State designated users authorized to
	access, view, and use the Document Management system in their assigned
	work tasks
131600	Provide to State staff the opportunity for training on a variety of dates and
	times using approved training methods
131700	Utilize online and computer-based interactive training classes through a
	web-based user interface effective the first day of Operational Readiness
	Review (ORR)
131800	Complete training prior to the completion of Operational Readiness Review
	(ORR)
131900	Develop Frequently Asked Questions (FAQs)
132000	Provide additional FAQs and other training content related to the
	Document Management system monthly
132100	Update Frequently Asked Questions (FAQs) quarterly
132200	Categorize FAQs by topic to assist stakeholders with common questions
	regarding the Document Management system
132300	Provide trained staff with the skill levels needed to ensure full preparedness
	for the performance of all training responsibilities
132400	Provide adequate staff to meet the needs of the required training program
	activities
132500	Update the training manual on a State defined timeframe
132600	Store training manuals electronically
132700	Submit a Monthly Training Status Report

4.11 DOCUMENTATION

The success of the EDMS implementation approach requires that the vendor share as much information as possible with the State. For this reason, the State requires that the EDMS vendor create and maintain up-to-date system and user documentation for their solution as an integral activity of the vendor's SDLC.

All documentation must be created and maintained in the State specified SharePoint site to make documentation accessible and to ensure that audit trails of development activity and decisions are visible to all project participants.

The system and user documentation objectives include:

- Provide comprehensive EDMS user materials that include all components of the system with clear documentation of business and technical operating procedures
- Maintain accurate system documentation
- Maintain comprehensive user manuals including but not limited to internal procedures manuals and operating procedures manuals for each component

4.11.1 STATE RESPONSIBILITIES

ID	Responsibility
132800	Define documentation requirements for each phase of the project
132900	Review the format for system and user documentation
133000	Approve the format for system and user documentation
133100	Review all documentation before publication and use
133200	Provide final approval of all documentation before publication and use

4.11.2 VENDOR RESPONSIBILITIES

ID	Requirement
133300	Maintain all project documents and solution documentation, current and
	archived, electronically on a SharePoint or similar State acceptable
	collaboration software product, readily accessible by the State
133400	Provide comprehensive documentation for all software and hardware
	provided as part of the solution
133500	Provide to the State complete, accurate, and timely documentation of the
	operational system(s)
133600	Develop a standard format for uniform presentation of all system and user
	documentation
133700	Prepare documentation in accordance with the State's timeliness and quality
	standards
133800	Update documentation throughout all phases of the vendor's SDLC
133900	Update operating procedure manuals throughout all phases of the vendor's
	SDLC
134000	Provide user and system documents in final form, maintaining availability
	through online help facilities, for use in the Installation and Testing Phase
	as part of User Acceptance Testing (UAT)
134100	Provide a complete online accessible Data Dictionary including, but not
	limited to, definitions of all data elements and tables where they reside
134200	Review and update all manuals periodically, to determine if clarifications
	and updates are needed including, but not limited to, internal procedure
	manuals and operating procedures manuals
134300	Update the system, user, and other appropriate documentation to reflect
	system changes as changes take place, as part of the Change Management
	process as specified in the Project Management section of this RFP no later
	than ten (10) business days after executing the change

4.12 SERVICE DESK

The Service Desk must ensure that any issues that arise from the EDMS be addressed expeditiously either by resolving the request directly or by accurately triaging the request. The BMV/C expects the EDMS vendor to participate in the current ticket review and resolutions process. This process is presented in the Bidder's Library. The BMV/C also expects the EDMS vendor to proactively notify the State of any issues that may impact accuracy and efficacy of the BMV/C operations, as it relates to document management.

4.12.1 VENDOR RESPONSIBILITIES

ID	Requirement
134500	Perform root cause analysis and problem resolution for any tickets that are
	escalated to the EDMS vendor
134600	Provide support for all on-site functionality during all operational hours at
	the BMV/C
134700	Establish and maintain a notification protocol for all users to report any
	problem or issue that affects operations, data accuracy or integrity
	immediately
134800	Provide software troubleshooting self-help guides

4.12.2 KEY PERFORMANCE MEASURES

ID	Key Performance Measure	Threshold
134400	Respond to all reported issues reported	Respond to 100% of reported
	by the BMV/C	issues within 30 minutes

4.13 ENGAGEMENT AND TRANSITION

The services to be performed under this procurement are vital to the State and must be continued without interruption. It is critical that there be agreements and procedures in place to ensure a seamless transition and uninterrupted service throughout the implementation of the EDMS.

The current EDMS vendor has an agreement with the State to provide transition services to facilitate a smooth transition to the new EDMS vendor, if they are not selected as a result of this procurement effort.

Having taken over the operations, the current EDMS vendor would be required to transition to the new EDMS that will result from this effort.

4.13.1 TRANSITION PLAN

The Transition Plan for the incoming EDMS vendor must include the following:

- Staffing plan for the transition that describes sufficient experienced personnel to ensure that the services called for by this contract are established and ready to be implemented according to the plan
- Comprehensive check list of all vendor start-up activities

4.13.2 STATE RESPONSIBILITIES

ID	Responsibility
134900	Provide access to all current systems and operational procedures
	documentation
135000	Provide policy documentation as requested
135100	Approve all Transition Plans, including but not limited to the transition
	staffing plans
135200	Approve the check-off list of start-up activities
135300	Approve modifications to the operational procedures as appropriate
135400	Provide written approval for the new vendor to begin operations
135500	Validate vendor adherence to Transition Plans and the established project
	schedule (work plan)
135600	Collaborate with the vendor to provide appropriate time and resources for
	the vendor to fully complete all phases of the transition
135700	Collaborate with the vendor to execute the Transition Plan
135800	Resolve conflicts of engagement/transition activities between various
	vendors
135900	Resolve duplication of engagement/transition activities between various
	vendors
136000	Mediate conflicts as needed between the incumbent vendor and the new
	vendor

4.13.3 VENDOR RESPONSIBILITIES

ID	Requirement
136100	Review the disengagement Transition Plan from the current vendor
136200	Plan and perform vendor phase-in and phase-out transition activities
136300	Provide a Transition Plan to be reviewed and approved by the State prior to
	the start of transition
136400	Provide business and technical transition project management services
	through appropriate staff responsible for managing the Transition Plan
136500	Prepare and submit modifications to the operational procedures as
	appropriate to the State for approval
136600	Develop a comprehensive check-off list of all vendor start-up activities
136700	Provide the State with regular transition status reports and updates according
	to the agreed upon project schedule (work plan) and status of the start-up
	check-off list

ID	Requirement
136800	Report the status of project activities against a detailed implementation plan
	which shall identify critical implementation benchmarks and contingency
	plans in the event that critical benchmark dates will be missed
136900	Schedule and conduct meetings to review plans and documentation
	requirements during the transition/phase-in period of this contract
137000	Provide business and technical transition project management services
	during the transition
137100	Execute the approved Transition Plan

4.14 DISENGAGEMENT

Disengagement includes end of contract transition planning to ensure a seamless operational transition to the State or its designee. Prior to the conclusion of the contract, the vendor must provide assistance to the State to assure that all responsibilities are transitioned appropriately.

Key issues for disengagement include:

- Phase-in training
- Efficient transition activities
- Staffing continuity
- Uninterrupted service

For this reason, disengagement planning must commence at least six (6) months prior to the vendor's contract expiration date. The State may require that these services begin earlier as needed for an orderly transition. At the State specified time, the vendor must submit a Transition Plan for the designated systems and services. The plan must include:

- Proposed approach to turnover
- Tasks and subtasks for turnover
- Schedule for turnover
- Planned State resource requirements during turnover
- Documentation update for procedures during turnover

The State has the right to initiate the disengagement process for any service under the vendor Scope of Work with thirty (30) days written notice. The notice of termination initiates these disengagement activities and responsibilities.

4.14.1 STATE RESPONSIBILITIES

ID	Responsibility
137200	Approve the vendor's Transition Plan
137300	Provide appropriate notice of disengagement for implementation of the Transition Plan
137400	Collaborate with the vendor to execute the Transition Plan
137500	Validate vendor's adherence to Transition Plan and established schedule

ID	Responsibility
137600	Provide appropriate time and resources for the vendor to fully complete all
	phases of the transition
137700	Review the Transition Results Report
137800	Approve the Transition Results Report
137900	Reimburse the vendor for all reasonable disengagement costs as described in
	the contract for services
138000	Mediate conflicts of disengagement activities between various vendors
138100	Mediate duplication of disengagement activities between various vendors

4.14.2 VENDOR RESPONSIBILITIES

ID	Requirement
138200	Provide, at onset of contract, an end of contract transition plan
138300	Review and update transition plan annually, based on the status of the
	system
138400	Initiate disengagement plan at least six (6) months prior to the contract
	expiration date or upon thirty (30) day written notice from the State
138500	Provide sufficient experienced personnel during the phase-in, phase-out
	period to ensure that the services called for by the contract are maintained at
	the required level of proficiency
138600	Provide appropriate staff, including at least one management level resource,
	to be responsible for the completion of the transition plan
138700	Provide phase-in training to the successor on the project in the maintenance,
	operation, and support activities of the Document Management Solution at
	least three (3) months prior to the end of the contract or any contract
	extension
138800	Exercise best efforts and cooperation to affect an orderly and efficient
	transition to a successor including providing sufficient experienced
	personnel during the phase-in, phase-out period to ensure that the services
	called for by the contract are maintained at the required level of proficiency
138900	Produce a transition results report that documents completion of each step
	of the transition plan
139000	Transfer to the State or its designee all licenses, leases, telecommunications,
	software, hardware, and other related infrastructure required for the
	continued complete operation of the Document Management system, within
	ninety (90) days from receipt of the State's request
139100	Provide the State with all existing documents, data, files and other pertinent
	information necessary for the new vendor(s) to perform required services

SECTION FIVE DOCUMENT MANAGEMENT

5.1 OVERVIEW

The BMV/C is seeking an EDMS to enhance and support day to day operations. The BMV/C's primary goals are:

- Select an EDMS system to service the entire BMV/C organization's business uses, while being flexible and scalable and sufficiently agile to support future, expanded uses throughout the BMV/C organization
- Select an EDMS that will support the BMV/C integrated program and information management objectives now and in the future
- Select a COTS EDMS that integrates with the BMV/C's current technology
- Select a vendor that is experienced in integrating its EDMS with other systems and processes and will facilitate rapid responses to changes in market, policies, and technology for many years to come

The following sections provide the Business and Functional Requirements that BMV/C desires of their EDMS.

5.1.1 STATE RESPONSIBILITIES

ID	Responsibility
139200	Establish performance expectations
139300	Establish the policy and procedures related to the EDMS
139400	Maintain BMV/C standards and policies
139500	Approve changes to performance expectations
139600	Communicate changes to performance expectations
139700	Define scope of documents and images that will be managed in the EDMS
139800	Define document retention periods by document type

5.1.2 VENDOR RESPONSIBILITIES

ID	Requirement
140300	Provide EDMS hardware and software to support all business processes of
	the Bureau of Motor Vehicles as specified by the State
140500	Maintain EDMS hardware and software to support all business processes of
	the Bureau of Motor Vehicles as specified by the State
141100	Ensure that all imaging and workflow components shall meet industry
	standards as approved by the State
141200	Work with the State to identify all documents that will be scanned and stored
	in the EDMS
141400	Allow concurrent users system access without impacting system responses or
	causing process degradation
141600	Provide functionality to implement 90% of required functionality via
	configuration rather than customization

ID	Requirement
141700	Validate system response times for online requests and searches of stored
	images do not exceed specified timeframes
141800	Support online retrieval for viewing, copying, and printing
141900	Automate real-time retrieval of scanned documents, based on user-defined
	criteria
142000	Provide audit controls
142100	Provide traceability to identify data and data fields that have been changed
142200	Identify changed data, both before and after the change
142300	Record the history of inquiries, responses, changes, and other modifications
	to data using user-configurable online and batch audit trail functionality
	including, but not limited to, date and time and User IDs
142400	Provide online real-time viewing and printing of all audit trail and audit
	history information
142500	Allow for the creation and storage of document templates or forms
142600	Provide functionality to add additional forms and extract additional data in
	the future
142700	Provide functionality to configure new forms in the system
142800	Provide the ability select from a pre-defined list of common annotations
142900	Provide the ability to define and modify common annotations
143000	Provide the ability to add free form text annotations and/or comments
143100	Provide the ability to associate key auditing information with each
	annotation action including but not limited to user ID, date and time of
	action
143200	Provide the ability to add multiple annotations to the same document,
	maintaining a history of each annotation and the key auditing information
143300	Provide the ability to display the most current annotation, while also
	presenting the previous annotation in a unique presentation format such as
	grayed out historical annotation
143400	Provide the ability to delete document annotations
143500	Provide functionality to electronically redact documents
143600	Provide functionality to automatically redact documents based on defined
4.40500	business rules
143700	Provide the ability to associate key auditing information with each redaction
4.42000	including but not limited to user id, date and time of action
143800	Provide functionality to view redacted information with proper security
143900	Provide functionality to edit redaction with proper security
144000	Support the collection and storage of electronic signatures on a document
144100	Provide the ability to highlight all or part of an electronic document
144200	Provide ability to edit highlights with proper security
144300	Provide to associate key auditing information with each highlighting action
4.4.4.00	including but not limited to user ID, date, and time of action
144400	Provide functionality to configure document retention rules by document
4.4.500	type
144500	Maintain electronic documents and related metadata for defined retention
	period by document type

ID	Requirement
144600	Implement a storage strategy to comply with online retrieval Key
	Performance Measures (KPMs)
144700	Purge data that is beyond the defined retention period
144705	Support single sign-on based on BMV/C Active Directory Authentication
144710	Capture user information from the BMV/C Active Directory including, but
	not limited to name, division, location, organization, effective date, contact,
	and email
144715	Capture user type from the BMV/C Active Directory including, but not
	limited to internal, external, and public organization
144720	Support an authentication mechanism that complies with State security
	requirements and accommodates users operating within the BMV/C
	network domain as well as users remotely accessing the system
144725	Support the central management of user account access privileges based on
	the BMV/C Active Directory groups
144730	Provide administrative management functionality to define user access based
	on the BMV/C Active Directory groups
144735	Provide administrative management functionality including, but not limited
	to creation, inquiry, changes, and deletions of administrative users
144740	Provide the ability to configure task specific user rights
144745	Allow authorized users to define access to business applications, and assigns
	roles and responsibilities to different instances of content categories or types
144750	Support different privileges for users to create, view, store, and update
	documents as needed in the BMV/C
144755	Support different privileges to view or mask specified data such as Social
	Security Number or Financial Information
144760	Enforce the most restrictive set of rights/privileges or accesses needed by
	users/groups or processes acting on behalf of users, for the performance of
	specified tasks
144765	Limit access to view/update information based on user role, access rights,
	and program rules
144770	Support read-only user roles and allows read-only access to data
144775	Limit DBA permissions
144780	Provide access to data through workflow processes to authorized users on a
	need to know basis
144785	Provide documentation to authorized users on a need to know basis
144790	Allow a user's access to be temporarily or permanently blocked in
	coordination with the BMV/C Active Directory
144795	Limit access to authorized devices only
144798	Prevent users from having multiple user-types
144799	Maintain disabled users to ensure history of user's identity and past actions

5.1.3 KEY PERFORMANCE MEASURES

ID	Key Performance Measure	Threshold
139900	Time to retrieve online request for	Retrieve 100% of requests in real
	information stored within the last 10	time
	years	
140100	Time to retrieve online request for	Retrieve 100% of requests within
	information stored within the last 11 -	60 seconds
	45 years	

5.2 INTAKE

The BMV/C requires an EDMS which accepts documents from a variety of sources including scans, emails, faxes, electronic uploads, and interfaces. The BMV/C wishes to automate verification of image quality where possible and provide immediate notification to users if scans or uploads are unreadable or unacceptable.

The BMV/C currently utilizes Right Fax and fax cards for two (2) multi-function printers.

5.2.1 VENDOR RESPONSIBILITIES

ID	Requirement	
144800	Scan at point of receipt including but not limited to the branch front desk or	
	through self-service scanning	
144900	Scan documents with the option to scan in true color, grayscale, and black	
	and white	
145000	Scan documents of varying paper sizes and weights including envelopes	
145100	Scan single-sided and double-sided documents	
145200	Scan complex submissions including mixed batches of documents of varied	
	sizes and types	
145300	Scan multiple documents in a manner to ensure that they can be indexed to	
	the same transaction, customer, or case	
145400	Provide a minimum scanning resolution of 300 dpi	
145500	Identify multiple versions of the same document, regardless of layout or	
	unique barcode	
145600	Facilitate re-scanning of documents and automatically associate the updated	
	document with the original	
145700	Manage batching and scanning of documents	
145800	Produce necessary barcodes to associate all documents to a single	
	transaction, customer or case	
145900	Automatically assign unique batch numbering and batch naming conventions	
146000	Support configurable batch or transaction delimiters based on document	
	type or other identifiers as specified by the State	
146100	Import documents from interfaces for inclusion in the document	
	management system. Files may include information for multiple UIDs that	
	must be indexed to individual UIDs in a readable format such as a defined	
	document template	

ID	Requirement	
146200	Automate inbound and outbound transmittal of images via secured email or	
	electronic facsimiles	
146300	Capture images and information through batch jobs	
146400	Allow automated import of batches into image-based workflow that	
	supports mixed types of forms/transactions within a batch	
146500	Execute batch jobs in the order specified by the State	
146600	Validate proper execution of batch jobs in the appropriate order	
146700	Export images and information through batch jobs	
146800	Provide document balancing and control procedures	
146900	Develop and implement an upload page and/or application to allow	
	documents to be submitted via a desktop, mobile device, or tablet including	
	but not limited to iPads, iPhones, and Android devices	
147100	Support mandatory input fields on the user interface screens	
147200	Capture documents submitted by a user via multiple devices, including but	
	not limited to desktop, mobile device, or tablet including but not limited to	
	iPads, iPhones, and Android devices	
147300	Capture multiple documents in a single user-session	
147400	Support on-screen notification of, at a minimum, data saves, data validation	
	errors, and other mandatory fields	
147500	If document interaction occurs on multiple screens, allow navigation	
	between multiple, related input screens without losing information input	
	from any previous screens	
147600	Complete document upload transaction from the myBMV web portal within	
	five (5) seconds	
147700	Capture all externally received documents into the document management	
	system accurately on the first attempt	
147800	Capture documents in electronic format and associate date stamps, digital	
	stamps, and time stamps	
147900	Capture documents in multiple formats including but not limited to ASCII,	
	BMP, GIF, HTML, JPEG, PDF, RTF, TIFF, CCITT, and XML	
148000	Capture images from sources including, but not limited to scanners, faxes,	
	mobile devices, web portals, and web applications	
148100	Display the captured image at a size large enough for the user to validate	
	image quality upon completion of scan	
148200	Allow user to confirm that the captured image may be saved	
148300	Validate that captured documents are acceptable including checks for	
	legibility, folded pages, and orientation	
148400	Provide ability to rotate images	
148500	Provide ability to zoom and size images	
148600	Provide ability to utilize special characters	
148700	Identify blank pages while scanning and indexing documents	
148750	Eliminate identified blank pages during document scanning and indexing	
148800	Store images from sources including, but not limited to scanners, faxes,	
	mobile devices, web portals, and web applications	

ID	Requirement	
149000	Notify user if a scan is acceptable or unacceptable and request rescan if	
	needed. Acceptable scans should address scan quality characteristics	
	including correct orientation and visual clarity	
149100	Communicate errors to the end user in plain language with an explanation of	
	required action	
149200	Allow a user to re-capture a document image	
149300	Store images in industry standard formats including, but not limited to,	
	ASCII, BMP, GIF, HTML, JPEG, PDF, RTF, TIFF, CCITT, and XML	
149400	Store document images in their original form prior to being read through an	
	OCR and/or ICR device for data capture and input	
149500	Reproduce scanned documents in true color, grayscale, or black and white	
149600	Allow authorized users to view multiple formats including but not limited to	
	ASCII, BMP, GIF, HTML, JPEG, PDF, RTF, TIFF, CCITT, and XML	
149700	Export images and information in real time	
149800	Export images in various formats including but not limited to ASCII, BMP,	
	GIF, HTML, JPEG, PDF, RTF, TIFF, CCITT, and XML	

5.3 INDEXING AND VALIDATION

The BMV/C wishes to utilize Optical Character Recognition (OCR) to more efficiently identify and index documents. Ideally, the EDMS will automatically categorize the most common document types and extract key data elements by document type.

5.3.1 VENDOR RESPONSIBILITIES

ID	Requirement	
149900	Index images to support the BMV/C business processes and other State	
	defined criteria	
150000	Provide the user with the ability to define document indexes	
150100	Provide configurable data fields including, but not limited to, transaction	
	error type, transaction error description, application status, and quality	
	verification	
150200	Define document indexes to support the most efficient document retrieval	
150300	Index documents to facilitate document research and retrieval of all related	
	documents	
150400	Automatically index documents, as specified by the State	
150500	Automatically assign document indexes to support the most efficient	
	document retrieval	
150600	Automatically assign document indexes to minimize the need for manual	
	indexing	
150700	Automatically index from bar codes or other special characters	
150800	Index documents using both full-text and field-based approaches	
150900	Facilitate re-indexing of a document to correct indexing errors	
151000	Assign documents which were not automatically indexed to an exception	
	queue for manual classification	

ID	Requirement	
151100	Provide ability to manually index documents when unable to automatically	
	index	
151200	Provide functionality to manually modify or correct indexing	
151300	Allow for storage of document index metadata including but not limited to	
	creation or updated timestamp, version number, or other user defined	
	metadata applicable to the BMV/C	
151400	Associate electronic documents together, as specified by the State	
151500	Provide a direct link to and from all source document(s)	
151600	Attach or link separate files including, but not limited to, Microsoft Word	
	documents to the imaged document for additional clarification	
151700	Provide Optical Character Recognition (OCR) capability to extract data from	
	electronic documents	
151800	Provide Application Oriented OCR that allows for capturing rich	
	information contained in color images such as Driver's Licenses, ID cards,	
	invoices, screenshots, mobile device screenshots and other types of images	
151900	Provide Intelligent Character Recognition (ICR) capability to extract data	
	from scanned and faxed documents	
152000	Capture information using OCR, ICR, and barcodes	
152100	Ensure complete images, correct extracts of data via OCR and ICR, and	
	correctly index images with resolution of all documents	
152200	Capture data from the common document types including but not limited to	
	Resident Alien & Permanent Resident Cards (I-551), Social Security	
	Administration Statements, U.S. Passports / Passport Cards, birth	
	certificates, and marriage certificates and populate forms with this	
450000	information appropriately	
152300	Extract defined data elements based on document type including, but not	
150400	limited to, first name, last name, date of birth, and Social Security number	
152400	Convert any document, as specified by the State, into machine editable text	
450500	to facilitate searching, highlighting, and copying text	
152500	Ensure quality, legibility, and resolution of all documents	
152600	Establish a validation process of key data elements in accordance with State	
150700	directives	
152700	Identify required documents by transaction	
152800	Identify duplicate scans	
152900	Associate potential duplicate scans together	
153000	Provide functionality to flag images and electronic documents for review	
	including but not limited to tax review or potential fraud	

5.4 INTEGRATION

The BMV/C requires an EDMS which integrates with existing technology including the transactional STARS system, the BMV/C's Credential Issuance solution, and the BMV/C partners. The BMV/C seeks to move towards more automated and efficient operations, minimal manual intervention, and data integrity between systems.

The current EDMS and STARS interact by exchanging information to facilitate document indexing and to extract key information from documents to update STARS.

Simultaneous to the implementation of the EDMS, the BMV/C will also be implementing a new Credential Issuance Solution effective 12/01/2018. It will be critical for the EDMS vendor to collaborate and coordinate efforts with the Credential Issuance Solution vendor to communicate document and transaction status changes with the Credential Issuance Solution with the goal of automating the end-to-end credentialing process. The BMV/C anticipates that a detailed implementation for the Credential Issuance Solution will be available mid-September. As additional information is finalized, information will be posted to the Bidder's Library.

The BMV/C also maintains relationships with seven (7) partners at 15 partner locations. These partners currently utilize Kofax Express to scan documents on behalf of the BMV/C. In addition, the BMV/C currently shares information with other State of Indiana agencies such as the Indiana State Department of Health.

5.4.1 VENDOR RESPONSIBILITIES

ID	Requirement	
153200	Securely exchange customer and transaction data with all specified systems	
153300	Integrate into all BMV branch locations statewide with minimal adjustment	
	or modification to counters or other environmental or structural	
	components	
153400	Integrate with the BMV/C's transactional system STARS	
153500	Identify the customer from the transactional system STARS	
153600	Extract existing customer information from STARS based off transaction,	
	driver's license number, or other criteria as defined by the State	
153700	Integrate with STARS to auto populate transaction information from	
	relevant data from scanned documents	
153800	Provide a means to correct errors while ensuring data integrity between the	
	EDMS and BMV/C systems (i.e., where customer records are merged or	
	unmerged, both systems should reflect the same customer detail)	
153900	Integrate with the BMV/C's credential issuance solution	
154000	Integrate with the BMV/C Fraud and Security Enforcement Case	
	Management System	
154100	Integrate with the BMV/C partner systems	
154200	Integrate with the State of Indiana and Federal agency systems as required	

5.5 REPORTING

The BMV/C requires operational reporting related to transaction and document volumes, errors, processing times, and workloads. The BMV/C requires both standard reports and ad hoc reporting capabilities. Reporting must be available for export and must support drill down and summary level views.

5.5.1 STATE RESPONSIBILITIES

ID	Responsibility	
154300	Establish and/or approve, as appropriate, the production reports	
154400	Establish and/or approve, as appropriate, the ad hoc reports	

5.5.2 VENDOR RESPONSIBILITIES

ID	Requirement	
154700	Provide standards reports available in solution to the BMV/C	
154800	Create up to twenty (20) customized reports as requested by the State	
154900	Support generation of reports for all BMV/C requirements in this RFP	
155000	Provide management reports identifying the volume and processing time of	
	documents by department, type, and other criteria defined by the State	
155100	Provide management reporting on historical workflow activity including	
	volume of work completed and average processing time by department,	
	workgroup, individual, or document type	
155200	Provide user performance reports that measure process performance,	
	throughput, and provide comparative history	
155300	Provide system performance reports, to include accounting of all system	
	issues and errors	
155400	Provide status reports that provide document and workflow status	
155500	Provide error reports	
155600	Provide audit reports for all changes and deletions of documents and	
	associated information	
155700	Provide audit reports to identify inappropriate user access	
155800	Provide a document inventory report to include, but not be limited to,	
	document type, document name, document ID number, and customer	
	number	
156000	Provide transaction statistical reports including, but not limited to, processed	
	transactions, completed transactions, transactions with errors, number of	
	records accessed by user, and number of active users	
156100	Provide report of transaction volumes and errors by branch, scanner, and	
	user	
156200	Support frequency reporting including, but not limited to, hourly, daily,	
	weekly, bi-weekly, monthly, semi-monthly, quarterly, semi-annually, and	
	annually	
156400	Provide headers, footers, date, time stamps, and page numbers on reports	
	generated	
156700	Provide predefined and ad hoc reports in both detail and summary formats	
45.000	with drill-down capabilities	
156800	Provide reporting roll-up to the highest data level including, but not limited	
457000	to customer, product, and transactions	
157000	Provide a reporting tool that allows the BMV/C to configure their own	
4.554.00	reports	
157100	Support ad hoc report creation and modification by data element selection	
157200	Support the creation of reports of the lowest element within the BMV/C	
	system (i.e., any BMV related data element)	

ID	Requirement	
157300	Support report creation functionality including, but not limited to batch and	
	real-time	
157400	Support ability to create reports by user, user group, branch, and department	
157500	Support reporting where date range can be selected	
157600	Support standard/recurring reporting	
157700	Reject specific data elements from all system reporting including, but not	
	limited to, sealed records, undercover records, whitelist records, and PII	
157800	Support the creation, inquiry, changes, and deletions of stored system	
	generated reports	
157900	Provide varying report formats including, but not limited to, standard	
	reports, Excel, Word, Adobe PDF, CSV, and comma delimited	
158100	Provide the capability to access reports online and in printed formats	
158200	Support electronic delivery of reports	
158300	Support availability of reports to various users including, but not limited to,	
	internal staff, external staff, customers, and business partners	
158400	Support automated electronic delivery of reports via a subscription function	
158500	Support availability of reports in any internal file structure including, but not	
10000	limited to, the BMV/C intranet, SFTP, and user directories	
158600	Provide dashboard views of the work that gives an overview of the complete	
120000	picture of the workload and work progress by department, workgroup,	
	individual, or document type	
158700	Display user dashboard to include business, operational, and task data	
130700	including workflow volume, number of documents handled via exception	
	queue, and number of documents handled automatically	
158900	Provide online real-time querying, retrieving, and report generation of	
130700	operational data	
159000	Provide online real-time querying, retrieving, and report generation of audit	
10,000	trail and audit history	
159100	Identify scanned images and electronic documents using multiple query and	
10,100	search options	
159200	Provide range searches for index dates and numbers	
159300	Support searches on date variations, e.g. 7/1/10 should return 07-01-10, or	
	July 1, 2010	
159400	Provide the capability to save search criteria for reuse, modify stored	
	searches, and apply further criteria to the search	
159600	Support report-print destinations including, but not limited to, printer,	
	screen, file, and downloads	
159700	Support printing imaged documents (individual or groups of documents),	
10,,00	based on user-defined criteria	
159800	Notify users of new reports as defined by the State	
159900	Develop notification criteria for managing unexpected or unusual disruption	
10,,00	in operation of the Document Management system	
160000	Implement notification criteria for managing unexpected or unusual	
100000	disruption in operation of the Document Management system	
160100	Archive specific reports for a State specified period of time	
100100	1 There specific reports for a state specified period of time	

5.5.3 KEY PERFORMANCE MEASURES

ID	Key Performance Measure	Threshold
154500	Time to produce production reports	100% timely with agreed upon
		production schedule
154600	Time to produce ad hoc reports	100% timely with agreed upon
		production schedule

5.6 USER EXPERIENCE

The BMV/C requires an EDMS which has a configurable, easy-to-use user interface and provides users with access to documents and data based on authorization levels. User access should be role or profile based and should integrate with BMV/C Active Directory authentication.

5.6.1 VENDOR RESPONSIBILITIES

ID	Requirement	
162500	Provide a browser-based solution that includes an easy-to-use Graphical User	
	Interface (GUI) with context sensitive help	
162700	Provide an easy to navigate and configurable interface for user preferences	
162800	Provide session management abilities such as session timeout, prevention of	
	duplicate logins, remote logout, and location-specific session timeouts	
162900	Allow default views which are configurable by user group	
163000	Display user home page / dashboard which is configurable by user group	
163100	Display updates to work queue on dashboard in real time	
163200	Allow authorized users to view multiple images simultaneously in separate	
	windows	
163250	Prevent multiple users from editing the same document simultaneously	
163300	Allow authorized users to view thumbnail images	
163400	Support jumping pages in documents via thumbnails and typing in page	
	numbers	

5.7 WORKFLOW

The BMV/C requires workflow functionality to automatically route documents for review based on business rules. The BMV/C wishes to utilize work queues to distribute, manage, and track work items to resolution. Workflows should be configurable and allow for notifications and reminders if needed.

5.7.1 STATE RESPONSIBILITIES

ID	Responsibility
163500	Establish the policy and procedures related to EDMS Workflow
163600	Review business processes and workflows
163700	Approve business processes and workflows

5.7.2 VENDOR RESPONSIBILITIES

ID	Requirement
163800	Document all BMV/C EDMS business processes
163900	Maintain all BMV/C EDMS business processes
164000	Ability for users to develop and maintain administrative workgroups
164100	Ability for users to maintain assignments to administrative workgroups
164200	Ability to assign work queues to workgroups, based on criteria defined by the
	State
164300	Allows users to define rules for work assignment routing and work
	assignment priorities
164400	Capture work assignments for resolution to different workgroups or users
164500	Define sets of activities or procedures for specified categories of work
	assignments or work groups
164600	Store work assignments for resolution to different work groups or authorized
	users
164700	Manage all key workflow activities by time stamping, matching, and indexing
	to the appropriate user or stakeholder and notating with the user ID
164800	Provide work-routing capabilities
164900	Distribute work assignments for resolution to different groups or users
165000	Automatically route documents or images to the next sequential work queue
165100	Manage work assignments for resolution to different groups, authorized
	users, external parties, and subcontractors, as defined by the State
165200	Provide work assignment escalation management
165300	Route requests to other workgroups or users during the life cycle of the work
165400	Automatically route work items to the next responsible user or workgroup
	upon the completion of a predefined event or process
165500	Provide the ability to change key data related to work item to trigger a re-
	route or transfer to a different workgroup
165600	Support reassignment of work to another authorized user or work group
	when a user is unavailable
165700	Track work assignments for resolution to different groups, authorized users,
	external parties, subcontractors
165800	Ensure that key information including, but not limited to, name, email
	address, phone number, and job title are in sync with the BMV/C Active
	Directory
165900	Organize work items into work queues
166000	Manage work queues for each work group for routing of requests
166100	Support prioritization of work queues, as defined by the State
166200	Provide flexible and on demand sorting of the work assignments in work
	queues by data fields
166300	Provide audit tracking of all work items
166400	Provide workflow integration to allow workflows to be configured for
	creation, approval, and distribution of documents
166500	Configure workflow using visual drag and drop functionality

ID	Requirement
166600	Provide integrated notes and comment functionality in document
	management workflow
166700	Provide additional workflow related capabilities including, but not limited to,
	internal messaging between authorized users and work groups
166800	Define workflow tasks often coupled with messaging so that content
	managers are alerted to changes in content
166900	Provide the ability to set time-based alarms and reminders
167000	Provide the ability to automatically notify an authorized user after certain
	thresholds have been met
167100	Provide the ability to automatically notify an authorized user when specified
	work items or work queues meet certain conditions including, but not limited
	to, severity level, status, due date, and item description
167200	Generate system notifications/alerts/messages to defined staff based on
	criteria defined by the State
167300	Provide configurable queues for exception processing
167400	Route potential duplicate scans to exception queue for review
167500	Route confidential documents for special handling
167600	Provide data fields to set document or batch status to values, including but
	not limited to, In Process, Complete, or On Hold
167700	Track workflows and produce statistics