Appendix 12 – Documentation

See the RFP Section 1.2 and Task Order Section 1.2 for a complete list of all abbreviations and acronyms.

1. Overview

Documentation requirements include the following:

SDLC Design Documentation – Complete documentation necessary for maintenance, analysis and modification of custom components.

Source Code Documentation – Proper notation of source code with consistent notes throughout the code.

Systems Operations Manual – Complete Operations Manuals which describe how to perform daily, weekly, monthly, and annual operations. This section shall include troubleshooting.

Code Release Notes – Each release of functionality shall be documented as an artifact in the knowledge management database.

System User Guide – A User Manual documenting all of the transactions, supervisor functions, and typical features that end users of the DIWS 2 System at all levels will need to understand how to use the system.

System Integrated Help – Online help features built into the DIWS 2 System that allow users to hit a single key (such as F1) and bring up context sensitive help for any operation in the DIWS 2 System.

Training Documentation – All training materials as described in Appendix 4.

Knowledge Management System – A knowledge management repository as described in Appendix 3 Section 4.2.2 Knowledge Management System Content.

2. General Information – Documentation

Documentation shall be reviewed and validated for completeness and accuracy as part of the offeror's SDLC. The Contractor shall obtain approval from the State for the format of all documentation. Documentation shall be consistent with State and MVA standards, industry standards, and the Style Guide or agreed upon templates.

2.1 Documentation Expectations

2.1.1 SDLC Design Documentation

The Contractor shall obtain approval from the MVA Project Manager for all SDLC documentation and deliverables.

The following represents minimum requirements for the SLDC documentation.

2.1.1.1 Introduction

Overview of the components being described referencing the conceptual design and additional information useful in understanding the solution.

2.1.1.2 Module List

Complete list of physical modules as appropriate to development language, including name and function.

2.1.1.3 Module Design and Specifications

For all modules or technical elements the following, and other appropriate information, shall be described:

1. Name and description
2. Function
3. Inputs, protocols and layouts
4. Outputs, protocols and layouts
5. Process specifications
6. Physical location and related implementation information such as server hardware and software

2.1.1.4 Business Rules

Description of or reference to business rules that have been implemented or accessed in another component.

2.1.1.5 Workflow

Description of or reference to workflows that have been implemented or accessed in another component.

2.1.1.6 Reporting Design and Specifications

Layouts, designs, intended schedules, and other specifications related to report production.

2.1.1.7 Unit Test Information

Reference to or inclusion of information to guide the development and planning of unit tests.

2.1.1.8 Related Logical and Physical Data Model Information

1. Inclusion of, or reference to relevant portions of the logical or physical data model

2. Explanation of data structures implemented to support transient data

3. Constraints

4. Indexes

5. Keys

2.1.1.9 Security Designs and Considerations

1. Information associated with tracking and fulfilling security requirements

2. Information associated with the implementation of Role Based Access Control

3. Database access roles and access rights

4. Access rights required by the software components to perform the intended functions

2.1.1.10 ICD (Including Integration and Interface Design Specifications)

1. Description of the purpose and nature of the interface, and the version of the interface

2. Platforms supported for accessing the interface

3. Description of the type of interface (e.g., programming, graphical user)

4. Examples using each component of the interface (e.g., sample code for each API)

5. Restrictions and dependencies on software libraries, compilation and linking when writing code to access the interface

6. Direction of the interface (e.g., into DIWS 2, out of DIWS 2, bidirectional)

7. API/procedure/function and other invocational parameters and interactions between these parameters (e.g., parameter name, data type, constraints, input/output, enumerated, pointers)

8. Configuration parameters for the interface, including those that the external system has access to or is allowed to change, and those parameter the external system does not have access to or is not allowed to change

9. Threading and parallelism supported by the interface (e.g., restrictions placed on concurrent invocation of the same API)

10. Performance and capacity limitations of the interface (e.g., the results of load testing)

11. Security concerns and restrictions (e.g., encryption, credentials, policies)

12. Interactions between APIs and persistence of state (e.g., establishing a session for multiple invocations, permanence, use of SSO)
13. Administrative controls and reports
14. Troubleshooting (e.g., logs, audit trails, enabling debug capability, capturing I/O traffic)

2.1.2 Source Code Documentation

The Contractor shall document the source code during development. Source code shall be commented in accordance with industry standards so that code is easily decipherable. Source code commenting standards shall be presented at the beginning of the project and included in the source code documentation, and reinforced as part of knowledge transfer to MVA OIR staff.

A description of source code noting schema, coding paradigms, and methodologies shall be created by the Contractor and included in the Systems Operations Manual.

Note that while the majority of the DIWS 2 functionality is expected to be delivered as a COTS ECM product, some custom software may be required for the integration (e.g., Appendix 10 External Systems Integration) and administrative functionality (e.g., Appendix 6 Accounts Payable, Appendix 7 Human Resources, and Appendix 8, Procurement).

2.1.3 Systems Operations Manual

The Contractor shall create a Systems Operations Manual that documents technical and administrator functions in the system.

The operations and support documentation shall clearly define the troubleshooting steps associated with the solution, support processes, and problem workarounds for the DIWS 2 System.

The materials shall be incorporated into training materials, reference materials, online help, other applicable materials, and the Knowledge Management System content.

The Systems Operations Manual shall include at minimum:

1. Database models with explanations of key relationships
2. Security protocols and user administration
3. Interface protocols (including starting, stopping and managing interfaces)
4. Networking diagrams
5. System configuration processes and parameters
6. Overall capacity and performance monitoring methods for processors, storage, memory, networks, users, licensing and other metrics
7. System startup, shutdown, and disabling procedures
8. Backup and failover processes
9. Troubleshooting

10. Other relevant administration sections needed to maintain the Contractor's architecture

2.1.4 Code Release Notes

For each release of new system code, the Contractor shall create Release Notes to accompany the code. Release Notes shall include the following infforrmation:

1. Release date of code (this is when the code is ready, not the deployment date)
2. Name of components being released
3. Inventory of all components (and version/release identifiers) included in the release
4. Release type (major/minor)
5. Purpose of release (e.g., new functionality, defect fix, O/S upgrade)
6. Release script (method of procedure)
7. Required downtime (a documentation release may not require downtime)
8. Deployment window (and planned outage window if downtime is required)
9. Release environment
10. Release approval or acceptance name (typically the MVA Project Manager) and date
11. Potential impacts to other parts of the system (e.g., this release includes NMVITS checks which may trigger a stop on all other title transactions)
12. Rollback script if problems exist
13. Description as code is released into production

Release Notes shall be provided for the following items:

1. New functionality
2. Changes to existing functionality
3. Bug fixes and other defects
4. Optimizations

Release Notes shall be delivered at the time of moving code from the development environment to the test environment used for UAT. Release Notes shall be delivered to the MVA Project Manager in a format ready for distribution to all affected stakeholders.

2.1.5 System User Guide

The Contractor shall deliver a System User Guide documenting all features of the system. The System User Guide shall be written in a format that includes the following sections:

1. Overview and purpose of the function
2. Pre-requisites for initiating the function (capture an image, index an image, verify an image, retrieve an image, create a DVD, e-mail an image, fax an image,, etc…)
3. Steps to complete the function

4. Expected output upon completion
5. Common alternative workflows with references to that section of the user guide (e.g. If the transaction fails to authenticate, the user may put the transaction in a pend/save status.)

2.1.6   System Integrated Help

The Contractor shall create, populate, and maintain an integrated help system (Integrated Help) that assists users during a transaction. At minimum the System Integrated Help shall allow for context sensitive help to link directly to an electronic version of the System User Guide and open directly to the steps to complete the function without additional searching. Additional help features such as mouse-over descriptions, pop-ups, guided tutorials, or other user assistance that may be unique to the Contractors solution are also desired.

The Contractor shall integrate the system help in a format where the text content is easily editable by a super user and minimizes or eliminates the need to make code changes to update the System Integrated Help.   While the State desires documents to be in a standard format such as MS Word, integrated help typically must be integrated into the architecture or using a third-party tool. As mentioned in Section 2.4 Documentation Tools, the MVA will allow third-party tools to manage help and system documentation if proposed by the Contractor.

2.1.7   Training Documentation

The Contractor shall create training manuals, quick reference materials, and other user support materials to support the system. Training materials shall be developed using the same tools as the System User Guide and adhering to the Style Guide.

The Contractor shall include the cost of all documentation tools in the Price Sheet that are used in their proposed solution. See Section 2.4 Documentation Tools regarding the Contractor being responsible for the cost of all documentation tools. The State may need to purchase these tools to take over documentation after the Contract has been completed.

2.2   Synchronizing Documentation

The documentation syncing model illustrated in Figure 1 Synchronizing Documentation, represents how the MVA will maintain all system documentation after system go-live. The goal is to keep all documentation and support tools synchronized. During the course of the project the Contractor shall be expected to follow this model (or a similar model) to develop and update all system documentation.
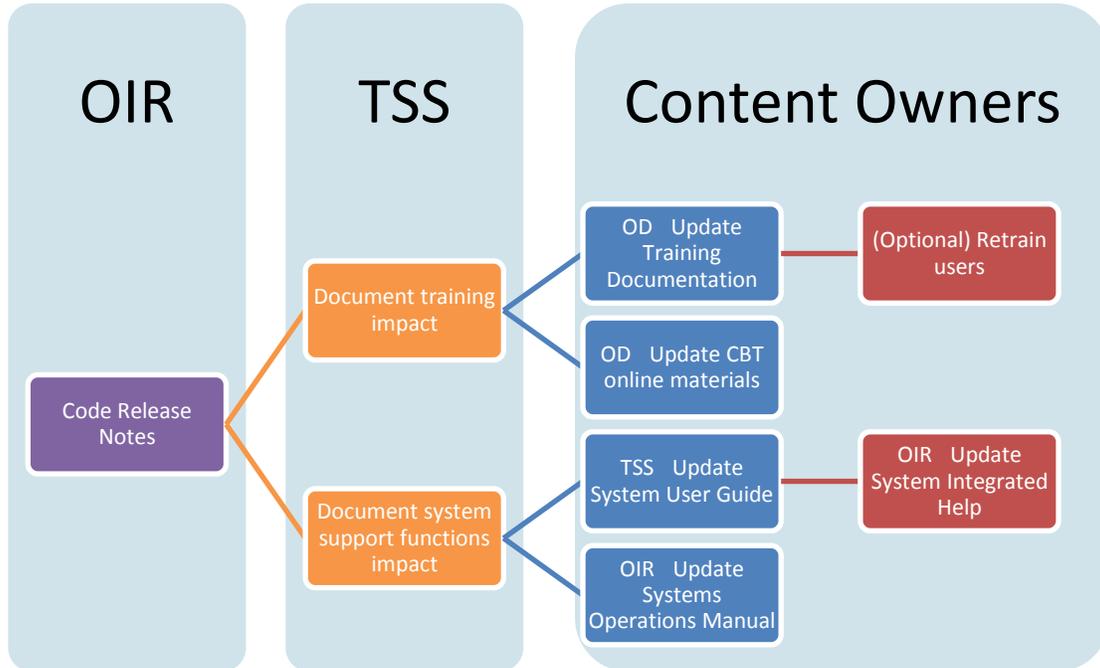
Figure 1 Synchronizing Documentation

Today, issues get to TSS through the helpdesk. Issues are assigned to TSS by the Helpdesk or through self-service in the helpdesk.

2.3   Integration between Support and Development – The Contractor shall define and implement procedures that integrate operations and support activities with development activities. For example, open tickets and other issues that are reported to TSS may result in defects that need to be fixed. Defects shall be addressed through the SDLC process workflows and mapped to release schedules. Tickets and fixes shall then be reflected in manuals and training materials.Knowledge Management System Content

The Contractor shall develop and maintain the Knowledge Management System content, working collaboratively with TSS and MVA staff throughout the Contract term. See Appendix 3, Section 4.2.2 Knowledge Management System Content, for details on the Knowledge Management System.

See Appendix 3, Section 4.2.1 Support Documentation, for details on support documentation that is maintained in the Knowledge Management System.See Appendix 2, Section 6. Configuration and Document Management, for details on the Configuration and Documentation Management Plan (CDMP).

.

2.4 Documentation Tools

The Contractor shall deliver all documentation in a format that is editable by State staff and appropriate for the size and complexity of the documentation. Contractor shall be responsible for the approach, implementation, training, and cost of all documentation tools.

The MVA will allow third-party tools to manage help and system documentation if proposed by the Contractor. Any use of third-party tools shall be identified in the response to this RFP.

3. Response to Documentation Requirements

The table below identifies the topics which the Offeror shall address in its Technical Proposal. Each topic in the response shall be identified with a heading corresponding to the table below. Responses should not be placed in the table.

Offeror shall refer to the referenced section of the Task Order to fully understand the State's requirements and expectations when preparing the response. The Offeror shall address the topics/questions identified in the table but is expected to elaborate or add additional information as appropriate to fully understand the Offeror's solution and approach.

The Offeror should provide a detailed description of the proposed solution but does not need to address every item or sentence in a particular section. The Offeror's response shall be construed to be inclusive of all requirements referenced by the table and shall bind the Offeror to all such requirements unless the Offeror specifically addresses partial or non-compliance in its response. Offerors shall describe requirements that cannot be met or that can only partially be met as part of the final question of the response table.

The Offeror shall adhere to any page limit for the topic.

In some topics below, the State has requested a sample of work from a previous project or a draft version of an artifact for this project (e.g. include a draft Project Plan for this project). These items are identified below and shall be included in [TAB O] and not inserted into the narrative. Such items are not included in page limits. If requested items are not available, briefly describe.

Response Requirements			
Appendix 15 Documentation			
Appdx Ref	Topic Title	Response Requirements	Page Limit
2.1.1	SDLC Design Documentation	Describe your techniques and processes for preparing SDLC Design Documentation. Describe the level of detail. Describe how you ensure consistency across all artifacts.	
2.1.2	Source Code Documentation	a. Describe your techniques and processes for documenting source code. Describe how you ensure consistent documentation across all code. b. Include a sample of code where the source code is annotated that demonstrates the extent to which you intend to document source code.	

Response Requirements			
Appendix 15 Documentation			
Appdx Ref	Topic Title	Response Requirements	Page Limit
2.1.3	Systems Operations Manual	a. Describe how you build a System Operations Manual over the course of the contract. b. Include a sample of a process from a System Operations Manual.	
2.1.5	System User Guide	a. Describe how you build a System User Guide over the course of the contract. b. Include a sample of a transaction from a System User Guide.	
2.1.6	System Integrated Help	a. Describe how System Integrated Help functions in your solution. Describe what level of detail you will include in the System Integrated Help. b. Describe any other electronic help features that may exist in your solution to support end users. c. If using a third-party solution to manage the integrated help, identify the tool and describe how you will transition the use of this tool to MVA resources during the project. d. Include a screenshot of any features described.	
2.2	Synchronizing Documentation	a. Identify any tools you will use to create, edit, and maintain documentation. Describe how you keep all documentation in sync throughout the life of the project. b. Describe how all types of documentation will be turned over to the State after the Warranty Period. c. Explain how you will help the State support the documentation syncing model described in Figure 1 Synchronizing Documentation.	
2.3	Knowledge Management System Content	a. Describe the methodology for the implementation, execution, and management of all documentation processes. b. Describe how this methodology will be integrated into the project plan to guide the project to a successful conclusion. c. Include a summary (high level) CDMP for this project. d. Describe the approach for meeting the requirements for the Documentation Plan.	
2.4	Documentation Tools	Describe all documentation tools that you are proposing.	

Response Requirements			
Appendix 15 Documentation			
Appdx Ref	Topic Title	Response Requirements	Page Limit
	Requirements not Met	The State assumes that the Offeror will meet all requirements described in Appendix 12 of the TO. Identify any areas that cannot be met and explain why those areas cannot be met.	