Department of Transportation and Public Facilities (DOT&PF)
Administrative Services
3132 Channel Drive, Suite 350
Juneau, AK 99801

Request for Information (RFI) Number: 2522H093

TITLE: ENTERPRISE ELECTRONIC DOCUMENT MANAGEMENT SYSTEM

GENERAL INFORMATION

This Request for Information (RFI) is meant to identify potential sources and approximate costs for a **Lead Software Engineer** to work with our internal software engineering team, project management and stakeholders to carry out the planning and development of an **Enterprise Electronic Document Management System (EEDMS)**.

Responses should describe how the marketplace will meet the needs of each project phase and professional capability. Responses should include a rough idea of the costs and level of effort based on past implementations of similar contracts. Cost estimates will not become part of any later Request for Proposal (RFP) process.

Responses should not assign professional capabilities across multiple individuals (e.g., project manager, business analyst, etc.). We are looking for one fully qualified software engineer to act as the software engineering lead on this project. Responses that propose the use of multiple individuals will be disqualified.

Alaska DOT&PF Administrative Services Division's (ASD) is soliciting information for a replacement and development contract for its "eDocs" Oracle Universal Content Management (UCM) application.

The Oracle UCM (eDocs) web application is DOT&PF's current document management system. eDocs is used by multiple groups at DOT&PF, including Preconstruction, Contracting, Construction, Environmental, Radiation Safety, Materials, Right of Way, Statewide Aviation and Admin Services.

The EEDMS will replace eDocs providing a robust enterprise system for document management. The EEDMS is envisioned to be developed over SharePoint. SharePoint will act as the engine[1] for the system, performing the core functionality of document management. The project team will design and develop an Application Programming

[1] In computer programming, an engine is a program that performs a core or essential function for other programs. Engines are used in operating systems, subsystems, or application programs to coordinate the overall operation of other programs. [TechTarget, 2022]

Interface (API) wrapper[2] that removes SharePoint complexity and provides a way for software applications and websites to easily interoperate with DOT&PF's business processes and rules around document management as well as the functionality of document management. Necessary application functionality will also be built using the API. It is also envisioned that this solution will provide sustainability if DOT&PF moves away from SharePoint in the future.

Responses should support the project phases, deliverables and professional capabilities described in this RFI.

SUMMARY

The purpose of this RFI is to collect written information about the Contractor's capability to perform services related to the Design and Development (D&D) of DOT&PF's EEDMS. Due to the complexity of the task, the offeror should have the ability to analyze processes in a holistic and integrated context and recommend viable cost-effective technical and data solutions that improve program operations, reduce costs, and lower administrative burdens.

Responses should include support for the following Project Phases and Deliverables (PPD):

- Initiation – Out of Scope
- PPD-1.0 Planning (SDLC: System Investigation, Feasibility Study)
    - PPD-1.1 Work Breakdown Structure/Project Roadmap
    - PPD-1.2 Communications Plan
    - PPD-1.3 Software Requirements Specification (SRS)
- PPD-2.0 Execution (SDLC: Analysis and Design)
    - PPD-2.1 Software Design Description (SDD)
        - PPD-2.1.1 SDD: UML Class Diagrams
        - PPD-2.1.2 SDD: Use Cases
        - PPD-2.1.3 SDD: BPMN Process Diagrams
        - PPD-2.1.4 SDD: Common Vocabulary Documentation
        - PPD-2.1.5 SDD: Quality Assurance Documentation for Tracking Requirements as well as Design Changes, Approval and Risk
- PPD-3.0 Monitoring & Controlling (SDLC: Development and Testing)
    - PPD-3.1 Features Backlog and Dependency Log
    - PPD-3.2 Sprint Plan
    - PPD-3.3 Updated Quality Assurance Documentation
- PPD-4.0 Closing (SDLC: Review and Maintenance)
    - PPD-4.1 System Documentation (Requirements & design documents, architecture descriptions, source code, data dictionary, etc.)
    - PPD-4.2 Configuration Item Documentation
    - PPD-4.3 Security Plan
    - PPD-4.4 User Documentation (Manuals for end users & system administrators)
    - PPD-4.5 Closeout Report (Lessons learned, etc.)

Responses should include support for the following Professional Capabilities (PC):

- PC-1.0 Software Development Lifecycle and Agile Lifecycle
- PC-2.0 Technical Project Management
- PC-3.0 Stakeholder Management
- PC-4.0 Requirements Elicitation

[2] An application programming interface (API) is an interface that provides programmatic access to service functionality and data within an application or database. It can be used as a building block for the development of new interactions with humans, other applications or smart devices. Companies use APIs to serve the needs of a digital transformation or an ecosystem, and start a platform business model. [Gartner, 2022]

- PC-5.0 Software and Application Programming Interface Design and Development
- PC-6.0 Test-Driven Development, Agile Model-Driven Development
- PC-7.0 User Interface, User Experience Design
- PC-8.0 Teamwork and Mentoring Junior Team Members
- PC-9.0 Data Migration

BACKGROUND

DOT&PF is an executive branch department within the State of Alaska. DOT&PF designs, constructs, operates, and maintains the State's transportation infrastructure systems, buildings, and other facilities used by Alaskans and visitors. These include more than 5,600 miles of paved and gravel highways; more than 300 aviation facilities, including 237 airports; 21 harbors; and a ferry system covering 3,500 nautical miles serving 35 coastal communities.

- DOT&PF's Administrative Services Division (ASD) develops policy recommendations, provides oversight, and performs a variety of administrative functions in the department.
- ASD's Information Systems & Services (ISS) section is responsible for maintaining the information systems that support DOT&PF.

The eDocs system is a legacy system (no longer supported by Oracle) that will be wholly replaced by the new EEDMS. The current system consists of three Solaris 10 servers, each running its own copy of Oracle Universal Content Management 10gR3, Oracle Database 10gR3 and iPlanet web server. See **Attachment A** for more specific information and version numbers. The database serves as storage for system data and document metadata. The actual documents are stored on regional file servers which are mounted on the respectiveS Solaris servers. The web server presents the built-in web interface of Oracle UCM. Each eDocs server has a companion Windows server that runs the Inbound Refinery, a component which helps digest new documents into the eDocs repository.

The web interface provided by Oracle UCM is functional but clunky. A few staff members are familiar with the UCM interface. Most staff use one or more internally developed web pages that are specially configured for searching and contributing a specific class of documents, such as radiation safety office documents or storm water pollution prevention plan (SWPPP) documents. These portals show only the relevant metadata fields and ignore or preset the others.

The new eDocs system will be based on SharePoint Online, running on the State of Alaska tenant for Microsoft 365. SharePoint Online will handle the back-end functionality of storage and indexing.

ATTACHMENTS

- Attachment A eDocs Configuration Items
- Attachment B EEDMS To-be Class Diagram Working Draft

IMPORTANT NOTICE: DOT&PF will not award a contract from this RFI, nor will DOT&PF be financially responsible for the preparation, or administrative costs incurred in developing responses to this RFI. All costs associated with responding will be solely at the interested party's expense. Not responding to this RFI does not preclude participation in any future request for proposal (RFP), if any is issued. DOT&PF may or may not choose to meet with potential offerors to get further clarification of potential capability to meet requirements.

RESPONSE INFORMATION: Interested parties must submit a response **no later than 2:00PM prevailing Alaska Time on June 14, 2022**. Responses must be sent to the following:

dotstatewideprocurement@alaska.gov

Responses must include:

- Narrative description of how each PPD and PC will be met.
- Cost estimates clearly defining what is in scope.

Questions regarding this RFI must be directed to Tom Mayer, Procurement Specialist, at the following:

Department of Transportation and Public Facilities
Administrative Services Division
Attention: Tom Mayer
3132 Channel Drive, Suite 350
Juneau, AK 99801
Phone: 907-465-8855

tom.mayer@alaska.gov

NOTE: The State does not accept responsibility for failed e-mailed response deliveries. It is the responsibility of the interested party to follow up with the individual listed above to ensure your response was received prior to the deadline specified above.