

Title: <u>Tender for provision, installation, customization, training and commissioning of an electronic document management system to Sonarwa Life Assurance Company Ltd.</u>

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Deadline for bid submission. 12/10/2023

Duration of Deployment: 3 Months

TECHNICAL SPECIFICATIONS FOR THE ELECTRONIC DOCUMENT MANAGEMENT SYSTEM.

Introduction

An Electronic Document Management (EDMS) System facilitates the managerial work through file integration and control. IT has many advantages that include management support, budgetary, Security, Cooperation, privacy, and system integration.

With a good EDMS in place SONARWA LIFE will prevent loss of records, save on physical storage space, manage records easily, find documents quickly, make documents centrally available, eliminate the need for filling cabinets including storage rooms. The information stored in EDMS will be safe since the data can be duplicated offsite.

A complete EDM system comprises five elements;

- **Scanning** Major advancements in scanning technology make paper document conversion fast, inexpensive, and easy.
- Storage The storage system provides long-term and reliable storage for documents. A good storage system will accommodate changing documents, growing volumes and advancing technology.
- Indexing The index system creates an organized document filing system and makes future retrieval simple and efficient. A good indexing system will make existing procedures and systems more effective.
- Retrieval The retrieval system uses information about the documents, including index and text,
 to find scanned documents stored in the system. A good retrieval system will make finding the
 right documents fast and easy.
- Access Document viewing should be readily available to those who need it, with the flexibility to control access to the system. A good access system will make documents viewable to authorized personnel, whether in the office, at different locations, or over the Internet.
- **Documents security**: This involves protecting digital documents from unauthorized access, modification, or deletion
- **Reporting module**: The system should have the report module allowing report extraction in excel, cvs and pdf format of the type of documents stored, users, documents status, and others.
- Documents aging: The system should allow monitoring of documents aging to allow timely disposals

Features of an EDMS

1. Proposed system must facilitate scanning from network scanners, TWAIN, and ISIS scanners. Web and Windows Client scanning is desirable.

- 2. Proposed system must provide advanced image enhancement features including but not limited to: Auto generation of PDF files, auto-cropping, auto-orientation, blank page deletion, color dropout, hole punch removal.
- 3. Proposed system must provide optional full integration into network scanning appliances, including the ability to select scan destination and index directly from the panel.
- 4. Proposed system must be provided by locally represented company and able to provide same day remote support and/or on-site support within one business day of request must be available.
- 5. Proposed system must facilitate electronic document storage and indexing. Indexes must be stored in an ODBC compliant database.
- 6. Solution must provide optional database at no extra charge to SONARWA.
- 7. Proposed system must store the images in their native file format, and not in a proprietary or encrypted format. The database must store pointers to the images/scans and not store the images as blobs in the database.
- 8. Proposed system must have multiple interfaces for interacting with the software including but not limited to: Windows Client, Web Client, Mobile Client (iPhone, iPad, Android, etc.).
- 9. Proposed system must be scalable to hundreds of users and include **both** fixed and concurrent licensing options. Proposed system must not include additional fees for interchanging between concurrent and fixed user licensing.
- 10. Proposed system must provide simple integration between different software applications whether they are web-based, or windows/Linux-based. Hot key and/or integrated button integration is preferable. This integration should be available without requiring any custom programming.
- 11. Proposed system must have API's for a variety of programming languages.
- 12. Proposed system can provide Active Directory and single sign-on capabilities in all available clients.
- 13. Proposed system must provide a document viewer that facilitates rendering of and viewing of various file formats including: .dox, .dwg, .pdf, .tiff, .xls, etc. The system must support viewing documents in the document viewer or viewing documents in their native default application.
- 14. Proposed system must provide file version management with check-in/check-out controls for the user. Document version must increment upon checking in of the document. Proposed system must provide workflow capabilities. Document stamping, electronic signatures, and routing must be part of the solution. Email notifications with dynamic links to documents are preferable. Audit trails of steps of the workflow processes including
 - to documents are preferable. Audit trails of steps of the workflow processes including listing the user and time of approvals must be viewable and available (downloadable) in reporting module
- 15. A workflow administrator must have the capability to view documents currently in workflow but not completed.
- 16. Proposed system must provide indexing assisting capabilities such as: barcode reading, OCR, zonal OCR, internal database lookups, external database lookups, point and shoot OCR, etc.

- 17. Proposed system must provide hot folder monitoring, email inbox monitoring, and print monitoring. Documents must be able to be printed directly into the electronic document management system without requiring a hard copy.
- 18. Proposed system must provide document import via scanner, virtual printer, drag and drop, hot folder monitoring, email monitoring, and browse to file.
- 19. Proposed system must have robust training materials including manuals, e-learning, etc.
- 20. Proposed system must allow documents categorizations to manage access for public and confidential documents
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The EDMS system offers a means of adding documents to an online repository and associating properties with those documents to make them easier for users to locate and retrieve.

It also provides a method to check-out and check-in documents so that additional versions may be created and retained without overwriting previous versions.

It facilitates collaboration by allowing all parties to simultaneously locate and use the most recent version of an electronic document.

Additionally, the system supports a wide variety of document and data formats.

Users may upload, search, view, check-out and check-in documents according to the user group to which they belong, or the access rights specifically granted by the individual that added the document to the EDMS system.

The access to an EDMS is provided based on user groups.

SCOPE OF THE EDM SYSTEM

Electronic Document Management System must cover the following modules:

- ➤ Internal documents module: this module deals with various institution's employee's daily applications like items requisition, mission approval, memo, appointment requests and many more internal applications and approvals.
- External document management Module: this one deals with all documents received and entered from outside the institution, with this feature one can track a document from the first destination until its archived.
- ➤ Electronic archiving/filling module, it deals with archiving task electronically. With its powerful search engine, you can search and find any document previously entered in the system.

Functional requirements of the EDMS

The following are functions of the system modules in details:

Before using the system, each user/employee will be given username and password, and its signature will be captured and loaded into the system. All employees will not have the same role and right, their role and right will be given according to the designation and authorization levels and policy.

Once the user is authenticated and authorized, he/she can use any of the three modules of the system including:

1. Internal documents module:

This module allows the authenticated user/employee:

- ✓ To initiate a request after selecting the type of it,
- ✓ The give the request an automatic reference number,
- ✓ To add any supporting documents as attachment to his/her request,
- ✓ To provide the approval line of his/her request,
- ✓ To send the request to the first reviewer,
- ✓ To comment on the request/annotations, add an attachment then forward/reverse/reject the request if he/she is the reviewer/approver,
- ✓ Re-initiate his/her reversed request.

At each step of a document process, the related signature is added to the document electronically and an email notification is sent to the concerned users/employee.

2. External document management Module:

This one allows to the authenticated receptionist

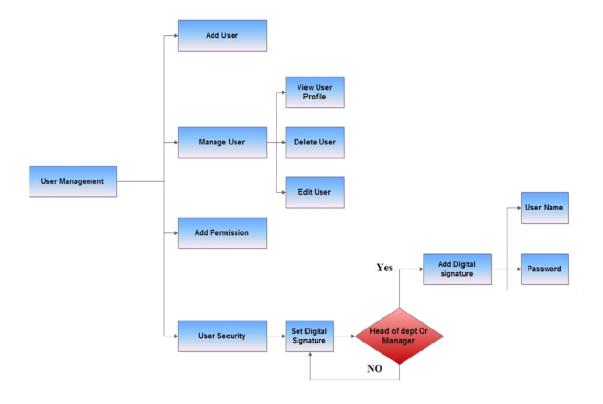
- ✓ To add an outside document in the system, by filling all required information like document source, document title, destination, date...
- ✓ The give the document an automatic reference number,
- ✓ To orient a document to appropriate destination/employee.
- ✓ Ability to add more pages within the same file after the scanned document has been processed form a complete file for archiving;
- ✓ Ability to notify a user that a document was added.

The destination can take an appropriate action (re-orient / archiving) on the document, check the trace and previous comments of the document.

3. Electronic archiving/filling module

- ✓ Deals with archive of all loaded documents in the system,
- ✓ Using folder structure viewer, you can browse any document and check its content,
- ✓ Or you can use the built-in powerful search engine when searching any document stored in the system.
- ✓ The technology solution must be able to correctly classify documents by means of metadata to ensure their swift availability at any time.
- ✓ In long-term archiving, keeping evidence or logs that identify the actions taken on the documents is vitally important.
- ✓ Maintaining the integrity of the document is necessary for it to have legal value over time
- ✓ An e-audit is the record of each operation related with the system or the document life-cycle, necessary in the event of litigation requiring documents to be provided to third parties
- ✓ User management should also have an audit trail to view the changes made on a given user profile affected

User management



Training:

The training shall cover the user training on operational functions of the system as well as the technical and administration of system administrators.

There shall be sufficient transfer of knowledge and skills to users and system administrators.

Technical support:

The supplier shall provide technical support of the system for a period of at least one year and will always be ready to support in case of any upgrades on the system without additional costs to licensing costs

Duration of the implementation, training and deployment

The system shall be deployed in a period not exceeding 3 months which include the system implementation, testing, training of users and technical staff and final launch.

Team Composition

1. Project Manager

Project Manager Responsibilities:

- Discussing projects parameters with sonarwa life staff, executives, and software developers.
- Planning out the blueprints for this software project, including defining the scope, allocating resources, setting deadlines, laying out communication strategies, and indicating tests and maintenance.
- Assembling and leading the project team.
- Participating in and supervising each stage of the project.
- Ensuring the project stays on schedule and adheres to the deadlines.
- Ensuring the project adheres to the budget as closely as possible.
- Determining and overseeing consistent testing, evaluation, and troubleshooting of all modules in all stages of completion.
- Tracking milestones, deliverables, and change requests.
- Serving as a liaison to communicate information regarding changes, milestones reached, and other pertinent information.
- Delivering completed software product to SONARWA LIFE and performing regular checks on the product performance.

Project Manager Requirements:

- A bachelor's degree in information technology, software development management, software engineering, computer science, or a related field.
- At least one project management certification: PMP, ITIL, PRINCE2 or other related Certification.
- Over 4 years of proven experience in project management and software development.
- Good working knowledge of project estimation techniques.
- Excellent technical knowledge.

- Good leadership, decision-making, and organization skills.
- Strong attention to detail and multi-tasking skills.
- Having led successful implementation of an enterprise software in a large Life insurance company in the last 5 years.

2. Systems deployment engineer

The deployment engineer is a computer system specialist who installs and maintains networks, software, or computer systems.

Responsibilities include:

- Troubleshooting issues related to routers and wireless networks, training customers how to
 use methods or implement upgrades, and ensuring that security is functioning properly on
 all network assets.
- Skills of the deployment engineer include proficiency with networks protocols, proprietary programs, and equipment.
- Should have a working knowledge of build tools, container technology, Linux systems, microservices, and messaging technology. Because this position involves troubleshooting to resolve issues with installing and activating the software, strong technical problemsolving skills are also essential

Qualifications for a deployment engineer be at least a bachelor's degree in computer science, software engineering, or a related field with 4 years' experience

- Relevant professional certification in system administration and hardware maintenance:-Microsoft Windows or Linux certifications in systems administration
- Relevant COMPTIA A+ certification or similar for hardware, networking, cloud or mobile devices.

3. Software Engineers/programmers (1)

A Software developer with practical skills in Java, C#, .Net, C, python, and other modern web based development tools as well as database Development is generally responsible for the development, design and implementation of new or modified software products or ongoing business projects.

Responsibilities.

- Researching, designing, implementing, and managing software programs
- Testing and evaluating new programs
- Identifying areas for modification in existing programs and subsequently developing these modifications
- Writing and implementing efficient code
- Determining operational practicality
- Developing quality assurance procedures
- Deploying software tools, processes, and metrics

- Maintaining and upgrading existing systems
- Training users
- Working closely with other develop.

Qualifications

- A degree and a technical background is required in a Software Developer role. Degrees in the following subjects should be highlighted as particularly advantageous: Computer Science, Computer Software Engineering, Software Programming and Development, Engineering or other relevant degree.
- Professional Certification in modern web based software development tools and environments.
- At least 4 years working on applications development and deployment in large insurance company.

The user management of the system must cater for the following:

The system must be able to manage users through the following modules:

- 1. Addition of users:
- 2. Manager user access rights and authorization levels
- 3. Users should be able to append their signatures on the processed, reviewed or verified documents and approved documents;

System hardware/OS Requirements

The **Electronic Document Management System** should be hardware or OS independent and should not require high performance hardware devices for its optimum operations.

A server with:

- ➡ Windows or linux versions should be sufficient.
- ♣ Latest Mysql 6.0 or newer version or MS Sqlserver 2008 or 2017.

Technical requirements for the bidder:

A suitable bidder shall fulfill a minimum of the following requirements:

1. A registered company with more than 2 years of experience in the ICT sector;

- 2. At least three staff members with a degrees in computer science/Information technology with a minimum of 2 years of experience in software development of electronic document management systems
- 3. Demonstrated experience in deployment and management of electronic document management systems;
- 4. A minimum of 3 letters of recommendation for having accomplished similar work in a large organization in the last 4 years.