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**KRWSA - KERALA
PROCUREMENT OF GOODS
UNDER
SHOPPING PROCEDURES**

*(For Contracts valued less than the
equivalent of US \$1,00,000 each)*

**Project : Second Kerala Rural Water Supply & Sanitation
Project**

**Supply and setting up of a Document Management
Solution (DMS) for KRWSA**

**INVITATION FOR QUOTATIONS FOR SUPPLY OF
GOODS UNDER SHOPPING PROCEDURES**

No.KRWSA-PMU/3234/2017-DBSA

Date 15 -11-17

Dear Sirs,

Sub : **INVITATION FOR QUOTATIONS FOR SUPPLY AND SETTING UP OF A DOCUMENT MANAGEMENT SOLUTION (DMS) FOR KRWSA – REG:-**

1. You are invited to submit your most competitive quotation for supply of the following goods :-

Brief Description of the Goods	Specifications*	Quantity	Delivery Period	Place of Delivery	Installation Requirement if any
Supply & Setting up of a Document Management Solution (DMS) for KRWSA	Detailed specification attached as Annexure	1 No.	Within 30 days from the receipt of supply order	The Executive Director PMU,KRWSA, 3 rd Floor, PTC Towers, SS Kovil Road,Thampanoor-695001 Ph:0471 2337005	Yes

* Where ISI certification marked goods are available in market, procurement should generally be limited to goods with those or equivalent marking only.

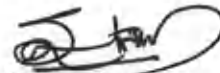
2. Government of India has received a Credit No. 5027-IN from the International Development Association (IDA) in various currencies equivalent to US\$ 155.3 Million towards the cost of the Second Kerala Rural Water Supply & Sanitation Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.
3. **Bid Price**
- The contract shall be for the full quantity as described above. Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
 - All duties, taxes and other levies payable on the raw materials and components shall be included in the total price.
 - GST/Vat/Sales tax in connection with the sale shall be shown separately.
 - The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
 - The Prices shall be quoted in Indian Rupees only.

4. Each bidder shall submit only one quotation. Bidder shall not contact other Bidders in matters relating to this Quotation.
5. **Validity of Quotation**
Quotation shall remain valid for a period not less than 45 days after the deadline date specified for submission.
6. **Evaluation of Quotations**
The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which
 - (a) are properly signed ; and
 - (b) conform to the terms and conditions, and specifications.

The Quotations would be evaluated for all the items together.

GST/Vat/Sales tax in connection with sale of goods shall not be taken into account in evaluation.

7. **Award of contract**
The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.
 - 7.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
 - 7.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the supply order.
8. Payment shall be made immediately after delivery of the goods.
9. **The warranty/ guarantee shall be for a period of 5 years from the date of installation and acceptance as indicated in the specification.**
10. You are requested to provide your offer latest by **3.00 PM hours on 01/12/2017** in a sealed envelope writing "**Quotation for Supply and Setting up of a Document Management Solution (DMS) for KRWSA**". No other forms of quotations are accepted.
11. The quotations will be opened at **3.30 PM hours on 01/12/2017** in the presence of the bidders or their representatives who choose to attend.
12. We look forward to receiving your quotations and thank you for your interest in this project.



Name: **M.P. Salim**
Director (Finance & Administration)
Address: KRWSA, 3rd Floor,
PTC Tower, SS Kovil Road,
Thampanoor, Trivandrum.
Tel. No. 0471 - 2337006
Fax No. 2337004

Tender specifications

Supply and setting up of a Document Management Solution (DMS) for Kerala Rural Water Supply and Sanitation Agency (KRWSA)

Open Call for Tenders

1. Background

Kerala Rural Water Supply and Sanitation Agency (KRWSA), which was constituted as a special purpose vehicle to implement Jalanidhi - a World Bank aided Rural Water Supply and Sanitation Project has successfully developed a viable alternate model for service delivery based on community participation to ensure responsive service delivery. Ensuring accountability and transparency is a pre requisite in engendering responsive service delivery.

The Kerala Rural Water Supply and Sanitation Agency (KRWSA) is planning to setup a new full-fledged Document Management System (DMS). The new Document Management System (DMS) must have all the features of state of the art services like Optical Character Recognition (OCR) of scanned documents, full-text search in attachments, and convenient registration of e-mail. Furthermore electronic and scanned paper records have to be registered and stored in a secure manner guaranteeing authenticity and different levels of confidentiality. The main focus in the KRWSA for the coming years lies on the management of records.

2. Scope and duration of the contract

Within one month from the entry into force of the contract, the contractor shall deliver and install a fully-integrated (ready-to-use) DMS at the KRWSA premises at PTC Towers, SS kovil Road, Thampanoor, Thiruvananthapuram, and provide related services as specified in this document including training. The system will undergo an acceptance test of 15 days duration. Provided this test is successful, the Agency will sign a certificate of acceptance.

The required system must be a comprehensive solution for the electronic archiving and filing of documents. In addition to the core functions of an electronic archive like document storage, filing, search and retrieval, the system shall allow workflow management, batch scanning with barcode, tight integration with MS Office and the administration of paper archives.

The KRWSA aims at concluding a service contract with the successful tenderer for a period of 24 months with the option of two renewals each time for another 12 months. As to the contract's terms and conditions, reference is made to the draft contract which forms part of the tender documents.

The contractor will deliver and deploy the complete solution within 1 month from the entry into force of the contract, so that it is ready to use (including documentation, user manuals, initial training, etc.).

Depending on need and without being bound to do so, the KRWSA may request the contractor by means of order letters to provide a number of additional services including the purchase of system and application upgrades and software add-ons or extensions, technical consultancy assistance in case of development, modification or upgrade needs as well as additional training.

3. Mandatory requirements of DMS

It is a general, mandatory requirement that the system complies with the generic Model Requirements for the Management of Electronic Records (MoReq Specification - version 2001).

Equally 'Scope of the solution' is the requirements listed below (3.1-9) which are of special importance to the KRWSA.

Quotations which do not comply with these requirements in their Bid, entirety (below table 1) will be rejected as technically non-conform.

Therefore, tenderers are required to document in writing and in an easily verifiable manner that the proposed system meets all these requirements.

Scope of the solution

Infrastructure (Hardware) requirements (Attached as annexure – I)
General
Compliance with MoReq (Model Requirements for the management of Electronic Records)
3.1 Storage
a) All file formats currently used by the KRWSA are storable in the server (MS Office formats, Adobe suite formats, Open office format, tiff, drawings etc)
b) Ability to store single / group of documents in any size
c) Full text indexing to be carried out in the document types (MS Office formats, Adobe suite formats, etc) most frequently used by the KRWSA

d) Proper authenticity of stored documents
e) Interfaces to common backup software, compatible with KRWSA system requirements
3.2 Scanning
a) Integration between existing scanning facilities. So that scanned documents shall transferred to DMS Server
b) Image Capture Software is able to process fast high volume scans and capable of handling large scans with up to 100 MB.
3.3 Search
a) Free text search using a search engine that indexes the content in the document database enabling efficient retrieval
b) Simple search function with web browser interface following the XHTML 1.0 transitional specification
c) Advanced search in metadata fields
d) Highlighting of searched words in the results
3.4 Metadata
a) Registration card allows mandatory metadata as specified in the ANNEXURE
b) Registration interface for metadata for all types of documents, which all staff can use without specific training
c) Linking of different registration cards to each other, especially in the case of a reply to an incoming mail
d) Linking of a registration card to a classification file
e) Authority to make changes in the filing structure and transfer of records to new or modified files can be restricted to the administrator [role]
f) Life cycle management of documents (automatic tracking of retention, transferal and destruction periods)
g) Audit trail of complete life cycle
h) Customization and modification (add or delete fields, change labelling, confidentiality settings) in the metadata fields of the registration card are limited to the database administrator role
i) Safety mechanism prohibiting changes to the retention schedule by mistake or unauthorized users
3.5 Security
a) Login, password and user settings, groups, etc are designed and managed by administrator role

b) Different confidentiality settings for groups and individuals (e.g., HR, Finance, Admin, Technical) to be managed by the administrator. Different levels of confidentiality for different groups (e.g., high level of confidentiality for Admin, lower confidentiality setting for Finance)

c) Authentication of users against KRWSA system requirements

3.6 System integration

a) Compatibility with the KRWSA system requirements software / hardware, namely:

- Metadata storage: MS SQL server 2005

- Server OS environment: MS Windows server OS

- Client OS environment: MS Windows 8.1 or later

b) Integration / compatible with KRWSA systems (MS Office, especially MS Word and MS Excel), network infrastructure, etc

3.7 Workflow

a) Workflow management

b) Creation of different action codes (attributions) for different tasks with different automatic deadlines (e.g., today's date plus 14 days) A workflow example would be a registered letter that is first attributed by the Document Management Officer to a Person A and then attributed from Person A by Person A to Person B with the assignment to draft a reply within a given deadline

c) Possibility to attribute one document to several persons with different action codes

d) Attributed persons can themselves close attributions and make re-attributions to different staff members indicating the dates of attribution and closure as well as the name of the person who made them

e) Clear overview in one window of all attributions to a person or to a department

h) Search for files/departments and their attributed, closed, open and overdue attributions

i) Version control for documents

3.8 Language

User interface, personal support, online, documentation (installation and user manuals, etc.) training as specified in 3.9 in English

3.9 Licenses and services

The contractor must provide the following as part of the offer and included in the price

a) Installation of the Hardware, software, necessary licenses and applications (setting up the full environment and make it ready-to-use)

b) Helpdesk services open during KRWSA business hours (Monday to Saturday 10.00-17.00)

c) Training for KRWSA staff (technical and administrative, 4 days for 4 administrators at the KRWSA premises)

h) Additional services (scenario: 20 days within the first 24 months) including the purchase of system and application upgrades and software add-ons or extensions, technical consultancy assistance in case of development, modification or upgrade needs as well as additional training on demand

4. Requirements in detail

4.1 Compliance

The system must manage and control electronic records according to the standards for compliance and the requirements for legal admissibility and security, and must be capable of demonstrating this compliance.

4.1.1 The system must meet legal requirements as set forth by local, state, and national law.

4.1.2 The system must meet administrative requirements.

4.1.3 The system must meet national and international standards.

The standards will vary from system to system. For applicable standards, consult the websites and publications for the following organizations:

- International Organization for Standardization (ISO) ~ <http://www.iso.ch>
- National Information Standards Organization (NISO) ~ <http://www.niso.org/>
- American National Standards Institute (ANSI) ~ <http://www.ansi.org/>
- AIIM International ~ <http://www.ansi.org/>

4.1.4. The system must meet all "best practice" guidelines.

Many national organizations have developed guidelines for their specialty areas. These guidelines represent requirements that are generally accepted practices or industry standards.

4.2 Record Capture

The term capture represents the processes of registering a record, deciding which class it should be classified to, adding further metadata to it, and storing it in the DMS.

It is recommended that, whenever possible, the capture function be designed into electronic systems so that the capture of records is concurrent with the automatic creation of records.

- 4.2.1 The system must capture a record for all defined functions and activities.

Records may be captured within a system manually or by automatically by the system itself either as part of the system's workflow or through a batch process. The type of business processes should determine the exact method of creation.

- 4.2.2 The system should capture records through an automated process.

Ideally, the capture of records would occur automatically without human intervention. This could be done utilizing a business process or a workflow engine.

- 4.2.3 The system must capture all metadata elements specified during the system design process, and retain them with the record in a tightly bound relationship.

- 4.2.4 The system must ensure that records are associated with a classification scheme, and are associated with one or more electronic files.

Electronic files can be defined simply as a set of electronic records. A file is a group of records accumulated and kept together because they deal with the same subject, activity or transaction. In other words, there is some common bond or relationship between records in a file. Electronic files need not have real existence; often they are virtual entities and exist because the metadata attributes of the records and the application software allows users to view and manage folders as if they physically contained the records assigned to them.

- 4.2.5 The system must register the record by assigning it a unique identifier and documenting the date and time when the record entered the document management system.

An identifier is an attribute that distinguishes individual instances of a record or file within a system. It is recommended that the identifier be a number or alphanumeric sequence that is automatically and randomly generated.

4.2.6 The system must maintain a logical relationship between the record and the transaction of documents.

4.2.7 The system must allow a compound document to be captured as a single record.

Some electronic records, such as web pages with graphics or e-mail messages with attachments, are composed of more than one component. The system must capture all of these components and maintain them as one record. This means maintaining the relationships between the components to ensure future retrieval, rendering, management, and retention or disposal.

or,

The system must allow a compound document to be captured as linked simple records.

In this strategy, each part of the compound record will be captured separately then linked to the other parts.

4.2.8 The system must support versioning.

Sometimes, records have more than one version that must be captured. The system must allow either the capture of all versions as one record or the capture of each version as separate records. In the later case, a version number should be added to the metadata.

4.2.9 The system must be able to capture a variety of different types of documents. These must include records from on-line transaction processing systems (OLTP), databases, scanned documents, the most commonly used office documents and e-mail messages.

4.2.10 The system must ensure the reliability of the capture process.

To make a system like this work, the capture process must be reliable as records are migrated from the creating system or storage medium to the DMS. Records cannot be lost or changed during the capture process.

4.3 Classification Scheme

Classification is the systematic identification and arrangement of records into categories according to logically structured conventions, methods, and procedural rules represented in a classification scheme.

The classification scheme, sometimes also called a file plan, is a diagram, table, or other representation categorizing the creator's records, usually by hierarchical classes, and according to a coding system expressed in alphabetical, numerical, or alphanumeric symbols. The benefits of a good classification scheme are "1) providing linkages between individual records; 2) ensuring records are named in a consistent manner over time; 3) assisting in the retrieval of all records related to a particular activity; 4) determining appropriate retention periods for records; 5) determining security protection appropriate for sets of records; 6) allocating user permissions for access to or action on particular groups of records; and 7) distributing responsibility for management of particular sets of records."

- 4.3.1 The system must support and be compatible with the organization's or the application's classification scheme.

When the classification scheme is non-existent or only partially constructed, or when designing a new system, it is strongly recommended that the classification scheme be based upon business processes and the identification of the business transactions that create records.

- 4.6.2 The system must automatically assign appropriate classification metadata to records and files and to classes within the classification scheme at the point of creation and capture.

4.4 Authenticity

In order to trust / ensure that a record is authentic, the user must be assured that the systems that create, capture, and manage electronic records maintain inviolate records that are protected from accidental or unauthorized alteration and from deletion while the record still has value. The following requirements must be met to ensure that a record's integrity can be proven.

- 4.4.1 The system must maintain secure and inviolate records, including record content and metadata that documents content, context and structure.

Preserving an inviolate record and all record components is absolutely vital for proving the authenticity of records. To ensure that records are protected, the system must control access to its records and log access through audit trail functionality. In some

cases, a record may be modified as part of a business process. Modifications of this type may be handled through version control.

4.4.2 The system must ensure that records cannot be deleted by any means except as directed by a retention schedule.

4.4.3 The system must undergo regular and systematic audits to verify system integrity.

Software bugs and insecure access points, along with other problems, can destroy the authenticity of the records a system contains. Regular system audits can help prevent these problems.

4.5 Audit Trails

A system audit trail is a record that tracks operations performed on the system. In essence, the audit trail documents the activities performed on records and their metadata from creation to disposal. These activities may be initiated by users, system administrators, or by the system itself by means of automatic processes. The audit trail typically documents the activities of creation, migration and other preservation activities, transfers or the movement of records, modification, deletion, defining access, and usage history. By maintaining evidence of activities undertaken on records and files, a detailed audit trail is critical for ensuring that a system meets all basic requirements for a viable records management environment.

4.5.1 The system must maintain audit trails for all processes that create, access and use records, categories or files of records, metadata associated with records, and the classification schemes that manage the records.

These processes include, but are not limited to, creation, import or export process, access and use of a record, electronic files, metadata, classification schemes, and disposition schedules.

At a minimum, it tracks:

- What data or information was accessed
- Who performed these functions; and
- When they were performed.

4.5.2 The audit trail data must be unalterable.

The system must ensure that audit trail data cannot be modified in any way.

- 4.5.2 The audit trail must be logically linked to the records they document, so that users can review audit information when they retrieve records.

This logical relationship must be maintained even when the records and audit are stored in different systems.

4.6 Metadata

In the context of archives and records management, metadata is structured or semi-structured information that documents the creation, management and use of records through time and across domains. Recordkeeping metadata can identify, authenticate and contextualize files and the people, processes and systems that create, manage and use them.

- 4.3.2 The system must be capable of extracting metadata elements automatically from records when they are captured.
- 4.3.3 The system must permit metadata values to be retrieved and captured from lookup tables or from calls to other software applications.
- 4.3.4 The system must allow creators of records to enter manually pertinent record metadata that cannot be captured automatically.
- 4.3.5 The system must support the validation of metadata that is entered by users, or metadata that is imported from other systems.
- 4.3.6 Metadata must be logically linked to the records, files, and classes it documents, so that users can review metadata information when they retrieve records.
- 4.3.7 The system must allow for the modification or reconfiguration of metadata sets, but the authorization to make changes must be restricted.

4.7 Security and Control

The system must include quality control mechanisms to ensure that consistent and accurate business records are created.

- 4.7.1 The system must allow only authorized personnel to create, capture, update or purge records, metadata associated with records, files of records, classes in classification schemes, and retention schedules.
- 4.7.2 The system must control access to the records according to well-defined criteria.

A user must never be presented with information that he or she is not permitted to receive. The criteria for access will vary according to the type of data or records contained in the system.

4.8 Preservation Strategies, Backups and Recovery

The system must incorporate a strategy or plan for backing up and preserving records.

- The system must produce a report detailing any failure during a conversion or transfer and identifying records that were not successfully exported.
- The system must retain all records that have been exported until confirmation of a successful transfer process.
- The system must provide automated procedures that allow for the regular backup and recovery of all records, files, metadata, and classification schemes.

4.9 Access and Use

The system must ensure access to and use of business records for current business and future research needs.

- 4.9.1 The system must ensure that records can be easily accessed and retrieved in a timely manner in the normal course of all business processes or for reference or secondary uses.
- 4.5.3 The system must allow all record content and all record and file metadata to be searchable.
- 4.5.4 The system must allow searching within an electronic file, across files, at any level in the classification scheme hierarchy.
- 4.5.5 The system must ensure that all components of a file, including contents, relevant metadata, notes, attachments, etc., can be accessed, retrieved and rendered as a discrete unit or group and in a single retrieval process.

5. Documentation

All system policies and procedures must be defined and documented. This documentation helps to ensure continuing access to records within the system, and can be used to help prove the authenticity of a record.

The documentation should include at a minimum an overview of the purpose and uses of the system; policies and procedures for system operation and maintenance, quality

control, security, testing, and records retention; and software/hardware specifications and operation.

- Documentation must be accurate and up-to-date.
- Documentation must be written clearly and concisely.
- Documentation must readily available and accessible.

6. System Testing

The performance and reliability of system hardware and software must be regularly tested.

Annexure – I

Infrastructure (Hardware) requirements

Item	Specifications
Processor	Intel® Xeon® E5-2620 v4 2.1GHz,20M Cache,8.0GT/s QPI,Turbo,HT,8C/16T (85W) MaxMem 2133MHz
Processor Speed, Cache	2.1 GHz, 20MB
Processor Support	Server Should Support 2x22Core Processors for future scalability
Chipset	Intel Chipset C612 or above
Memory	64 GB memory DDR4, registered, ECC, 2400 MHz, or above RDIMM using 32GB DIMMS. Scalable to 1536 GB. 24 DIMM Slots should be provided for scalability
Memory Property	Advance ECC, Memory Scrubbing, SDDC (chipKill), Rank Sparing and Memory Mirroring support.
Hard Disk Drives	7 x 6TB SAS 12 Gb/s Business Critical Hot - Plug Hard Disk Drives
RAID Controller	Raid Controller 12G SAS/SATA HDD support RAID levels 0, 1, 10, 5, 50 6 and 60 with minimum 2 GB cache with battery backup, Safe store encryption support
Ports	5 x USB 2.0, 5 x USB 3.0, 1 VGA, 4 nos of 1G Ethernet and 1 Dedicated 1G Service LAN for Management (IPMI 2.0 Compliant).
Drive bays	System should be configured with minimum 8 nos. of 3.5" drive bays for installing Hard Drives. It should be support SAS, SATA and SSD Drives.
Graphics Controller	Integrated Graphic controller. With min video memory of 256 MB
Ethernet Ports	4 numbers of 1 GB Ethernet Port supporting PXE-Boot and iSCSI boot support
Expansion Slots	6 x PCI-Express 3.0 lots (At least 3 Should be x16)
Optical Drive	DVD-RW
Fans	5 nso. of Fans should be redundant and hot plug
Redundant Power Supply	Hot Swappable redundant (1+1) power supply 800 watts or better. 94% Efficient or better
Energy Efficiency	System be supplied with high energy efficient power supply units (94 % efficiency rate) and less fans
Form Factor	Rack Mountable, 2U
Operating System Support	Microsoft Windows server 2016, windows 2012 R2, Windows 2008 R2, vSphere 5.0, VMWare vSphere5.5, Suse Linux Ent Server 11, RHEL 6, RHEL 5, Citrix XenServer, Oracle Linux 7
Operating System	The server should be configured with Widows 2016 operating system
Operating Temperature	The server should support a operating temperature of 5 Degree C to 45 degree C
Humidity	From 10 % to 85 %
Rack mount kit	Should provide rack mounting kit and Rails to mount the server on RACK
Management Software	Management software should have below features as standard or if any license is required for below features should be provided. <ul style="list-style-type: none"> System management tools should be from the same OEM.

	<ul style="list-style-type: none"> • Should support Unattended, Local and Remote installation.
	<ul style="list-style-type: none"> • Event Management, Threshold management, Asset Management, Performance Management.
	<ul style="list-style-type: none"> • Prefailures and analysis, Automatic System Recovery and restart.
	<ul style="list-style-type: none"> • Monitoring and control power consumption
	<ul style="list-style-type: none"> • Raid Management, Storage management
	<ul style="list-style-type: none"> • Update Management (Bios and Firmware), Online Diagnostics
	<ul style="list-style-type: none"> • Single sign on and Role based access control should be provided.
	<ul style="list-style-type: none"> • Power consumption Monitoring, Power Consumption Control should be provided.
	<ul style="list-style-type: none"> • Power Consumption history for atleast 1 year should be available
	Drivers and Firmwares should be available for free till the complete life of the server
Compliance	ROHS,WEEE, CSAc/us, FCC Class A, CE, CB
OEM Status	The OEM should be reputed concern, having global presence
	The OEM should have minimum 15 years of development experience and production know-how
	Among FORTUNE's top 500 global companies
Warranty	5 Years Onsite Manufactures Warranty; SLA should be 24x7 Recovery