



Independent Communications Authority of South Africa

Pinmill Farm, 164 Katherine Street, Sandton
Private Bag X10002, Sandton, 2146

ANNEXURE A **FUNCTIONAL REQUIREMENTS**

1. Purpose of the Bid

The purpose of this bid is to appoint a service provider that will supply and implement an Electronic Document and Records Management System (EDRMS) for ICASA for a period of 36 months on a **80/20 PPPFA 2000: Preferential Procurement Regulations ,2017**.

2. Background

The Independent Communications Authority of South Africa (ICASA) is currently using Meridio EDRMS system to manage its records electronically

The National Archives and Records Service (NARS), in terms of its statutory mandate, requires governmental bodies to put the necessary infrastructure, policies, strategies, procedures and systems in place to ensure that records in all formats are managed in an integrated manner.

The NARS endorses the SANS (ISO) 15489 Records Management Standard, SANS (ISO) 23081 Metadata for Records and SANS (ISO) 15801 Trustworthiness and Reliability of Records Stored Electronically, and considers these to be the benchmarking tools for sound records management.

The primary standard for creating and managing electronic records in office environment is SANS (ISO) 16175-2: 2014. A product that

complies with these standards would possess the records management functionality required by the National Archives and Records Services of S.A. (NARS).

Detailed information regarding the management of electronic records is contained in the NARS's two publications, viz

- Managing Electronic Records in Governmental bodies: Policy, Principles and Requirements; and
- Managing Electronic Records in Governmental bodies: Metadata requirements.

2.1 Existing EDRMS infrastructure

ICASA has an existing investment in the MERIDIO EDRMS system and Kofax scanning system. The proposed solution should be able to migrate records from Meridio EDRMS to the new system.

MEDRIDIO is implemented on a Microsoft platform, that includes a SQL server as an underlying repository. The new system must run on its own server and not share a server with other systems.

3. Scope of Work

NARS provides advice and guidance to records managers for governmental bodies and has developed functional specifications for EDRMS solutions.

The specifications cover the entire lifecycle of public records, in whatever format, from creation through to destruction or transfer to archives. The core requirements set by the specifications include:

3.1 Document Management

- Provide document check-in/check-out capabilities and document-level security
- Provide version control for documents
- Support the import of documents into the repository
- Allow documents to be indexed in line with the supplied file plan

- Provide document rendition capabilities
- Provide an offline capability
- Provide document security functionality
- Provide added rights management capabilities to protect the content once checked out of the repository
- Ensure effective access and security control over records
- Ensure compliance with legislation and good practice
- Allow integration with business systems within the organization

3.2 Records Management

- Support the physical management of records
- Support and manage emails and web sites as records
- Provide the creation of a file plan including retention schedule administration
- Support retention holds for records
- Functionality to perform record/document sharing platform and effective version control
- Functionality to support full lifecycle of records management from creation to disposal of a record(s)
- Functionality to perform enterprise searching for physical and electronic records by metadata

3.3 Image Processing

- Automate document identification, indexing, classification and filing
- Support recognition engines i.e. (intelligent character recognition, optical character recognition, bar coding and so on)
- Provide imaging repair and enhancement capabilities
- Capability for future electronic (digital) signatures
- Support distributed document capture
- Support scanning/capture via multifunctional devices (MFP)
- Have an easy to use interface that is intuitive and compelling

- Support the importing and exporting of images in formats such as XML, TIFF and PDF
- Support integration of faxing solutions
- Functionality to perform back scanning and continuous bulk scanning of records
- Capability to scan various document sizes

3.4 Workflow capability

- Route “work” and/or content through the workflow via rule-based routing, sequential-routing or parallel-routing
- Support routing through multi-level hierarchy for authorizations and that each level of authorization can be modified on an exception basis
- Support rule-based triggers that can be used within workflows
- Create workflows with an intuitive, graphical design tool that provides a top-down process map and wizard-driven configuration
- Create workflows quickly from a toolbox of built-in activities that include routing choices, enterprise integration, PDF form processing, and digital signature options
- Route documents based on defined conditions or specify different actions to be taken before or after a deadline, or after a specified event occur
- Send notifications as the document moves through approved workflows
- Administer workflows across the organization, with import/export capabilities, workflow instance reporting, manual termination functionality, and user roles and security options
- Provide a business process management tool to create and manage workflows

- Create audit trails for all actions carried out within the workflow
- Include a workflow system to allow user defined workflows to be built around document and records managements process

The project needs to be approached in line with the Application Development Life Cycle Policy as defined by ICASA's IT and Services Department. (Copy available as annexure "C")

4. Deliverables and Timeframes

- 4.1 A live EDRMS solution for 100 user licences
- 4.2 Full systems documentation such as test scripts, Functional and Technical Specifications, Acceptance, Test Procedure Manuals
- 4.3 Change management Strategy that includes:
 - Training of personnel on the new system, (i.e. end users and super users, and system administrators)
 - Skills transfer
- 4.4 Migration Plan for records from the old system to the new system
- 4.5 Post implementation review strategy

It is important that the implementation of the EDRMS takes place with as little downtime as possible for ICASA to comply with its commitment of delivering a public service.

A maximum period of 6 months would be required to deliver the Development of EDRMS project after the award of the bid.

5. Reporting

The proposed solution should be able to run various reports in line with the metadata included, and provide user account management reports.

6. Terms of reference

6.1.1 System functionalities

The solution should provide the following functionalities:

6.1.1 METADATA

M.2

	Comply	Not Comply
The EDRMS application must not present any practical limitation on the number of metadata elements allowed for each item (e.g. file, volume, record). It must be able to capture the National Archives Records Services of S.A minimum mandatory metadata.		
Comment		

6.1.2 STORAGE

ST.1

	Comply	Not Comply
a) All file formats currently used by ICASA are storable in the database (MS Office formats, Adobe suite formats, Open Document format, tiff).		
b) Ability to store single documents with up to 500 MB size.		
c) Full text indexing to be carried out in the document types (MS Office formats, Adobe suite formats, OpenDocument format) most frequently used by ICASA.		
d) Guarantee of the authenticity of stored documents		
e) Administration of physical paper archives. The creation of registration cards must include metadata on title, subject, location, confidentiality, retention and volume and produce a visible unique identifier for the document.		
f) Interfaces to common backup software, compatible with ICASA system requirements.		

Comment

6.1.3 CLASSIFICATION SCHEMES/FILEPLAN

CF.1

	Comply	Not Comply
The system must support and be compatible with ICASA's file plan (an extract of the File plan will be available during the briefing session).		
Comment		

CF.2

	Comply	Not Comply
The system must be able to represent files as being organized in a hierarchy with a maximum of seven levels.		
Comment		

CF.4

	Comply	Not Comply
The system must allow for the addition of new classes at any point within any class as well as amendments to the file plan.		
Comment		

CF.5

	Comply	Not Comply

The system must support a distributed classification scheme which can be maintained across a network of electronic record repositories.		
Comment		

6.1.4 SCANNING

S.1

	Comply	Not Comply
Integration between scanner and EDRMS, so that scanned documents are automatically received in the EDRMS.		
Comment		

S.2

	Comply	Not Comply
Batch scanning with barcode separator sheets and direct automatic linking of scan to a registration card.		
Comment		

S.3

	Comply	Not Comply
High speed scanning and linking to registration card also for double-sided originals with a blank page detection/remover.		
Comment		

S.4

	Comply	Not Comply
Automatic Optical Character Recognition (OCR) and full-text indexing of scans.		

Comment

S.5

	Comply	Not Comply
Image Capture Software able to process fast high volume scans and capable of handling large scans with up to 100 MB. Minimum requirement is to process fast 100 double sided pages of text and tables/graphs in the batch scanning mode with the blank page remover.		
Comment		

6.1.5 CONTROLS & SECURITY

CS.1

	Comply	Not Comply
The system must offer access to records, files and metadata to specified users / user groups.		
Comment		

CS.2

	Comply	Not Comply
The system must keep an unalterable audit trail capable of automatically capturing and storing information about all actions that are taken upon an electronic record; file or classification scheme; users carrying out or initiating out the action; the date and time of the event. The system must also keep and maintain the audit trail as a record.		
Comment		

CS.3

	Comply	Not Comply
The EDRMS must have comprehensive controls to provide regular backup of the records and metadata and can recover records if any are lost because of system failure, accident, security breach, etc. The system must also provide automated backup and recovery procedures that allow regular backup and allow only the Administrator to restore from ERDMS backups. Full integrity of the data must be maintained after the restore.		
Comment		

CS.4

	Comply	Not Comply
Users must be allowed to indicate that selected records are "vital records"- those records that are necessary to the organization's ability to continue its business hence the protection and identification of such records is of great importance to the organization.		
Comment		

CS.5

	Comply	Not Comply
A tracking feature is needed to record the change of location for both ease of access and to meet regulatory requirements. The tracking function must record information about file movements which include unique identifier of the file or records; current location; date file sent/moved from location; date file received at location; user responsible for the move.		
Comment		

CS.6

	Comply	Not Comply

The EDRMS must restrict access to system functions per user's role and strict system administration controls. (To protect the authenticity of electronic records). The system must also prevent any change to the content of the electronic record by users and/or Administrators.		
Comment		

6.1.6 RETENTION & DISPOSAL

RD.1

	Comply	Not Comply
The EDRMS must provide a function that specifies retention schedule, automates reporting and destruction actions (should require a second confirmation) and provide integrated facilities for exporting records and metadata.		
Comment		

RD.4

	Comply	Not Comply
It must automatically record and report all disposition actions to the Administrator / Records Manager.		
Comment		

RD.5

	Comply	Not Comply
It must allow the Administrator/ Records Manager to amend any retention schedule allocated to any file at any point in the life of the file and keep records of such changes in the audit trail.		
Comment		

RD.6

	Comply	Not Comply

The EDRMS must be able to notify the Administrator regularly of all retention schedules which will come into force in a specified period, and provide quantitative reports on the volumes and types of records.		
Comment		

RD.8

	Comply	Not Comply
The EDRMS must support the review process by presenting electronic files to be reviewed, with their metadata and retention schedule information (the reason), in a manner which allows the reviewer to browse (i.e. navigate and study) the file contents and/or metadata efficiently.		
Comment		

RD.9

	Comply	Not Comply
The EDRMS must allow the reviewer to take at least any of the following actions for each file during review: mark the file for deletion; mark the file for transfer; change the retention schedule (or assign a different schedule) so that the file is retained and re-reviewed later.		
Comment		

6.1.7 CAPTURING RECORDS

CR.1

	Comply	Not Comply

<p>The EDRMS record capture process must provide the controls and functionality to:</p> <ul style="list-style-type: none"> • register and manage all electronic records regardless of the method of encoding or other technological characteristics; • ensure that the records are associated with a classification scheme and associated with one or more files; • integrate with application software that generates the records; • validate and control the entry of metadata into the EDRMS; and • must be able to detect duplications from both content and metadata. 		
<p>Comment</p>		

CR.2

	Comply	Not Comply
<p>The EDRMS must be able to capture documents from a range of different electronic document format types and structures as records.</p>		
<p>Comment</p>		

6.1.8 SEARCHING, RETRIEVAL AND RENDERING

SRR.1

	Comply	Not Comply
<p>The EDRMS must provide a flexible range of functions that operate on the metadata related to every level of record aggregation (file, class) and on the contents of the records through user-defined parameters for locating, accessing and retrieving records and/or metadata.</p>		
<p>Comment</p>		

SRR.2

	Comply	Not Comply
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The EDRMS search facilities must be integrated and must, to users, appear the same for all levels of the classification scheme.		
Comment		

SRR.3

	Comply	Not Comply
The EDRMS must provide searching tools that cover the following techniques: free text searching of combinations of record and file metadata elements and record content; Boolean searching of metadata elements.		
Comment		

SRR.4

	Comply	Not Comply
The EDRMS must allow the metadata of any object (such as record, volume, file or class) to be searched using the techniques in this section whether the object itself is in electronic form or not, and regardless of whether the object is stored on-line, near-line or off-line.		
Comment		

SRR.5

	Comply	Not Comply
The EDRMS must render records that the search request has retrieved. The EDRMS must be able to render all the types of electronic records specified by the organization in a manner that preserves the information of the records (e.g. all the features of visual presentation and layout produced by the generating application package), and which renders all components of an electronic record together.		
Comment		

M.5

	Comply	Not Comply
The EDRMS must be able to generate metadata about the access and security levels and the preservation actions taken on the records.		
Comment		

M.8

	Comply	Not Comply
Audit trail of complete life cycle.		
Comment		

M.9

	Comply	Not Comply
Customization and modification (add or delete fields, change labelling, confidentiality settings) in the metadata fields of the registration card are limited to the ICASA administrator role.		
Comment		

M.10

	Comply	Not Comply
Safety mechanism prohibiting changes to the retention schedule by mistake or unauthorized users.		
Comment		

6.2 ICASA TECHNICAL REQUIREMENTS

T.1

Implementation	Comply	Not Comply
The supplier must install, configure and transfer skills to ICASA with regards to the proposed solution, as well as any complimentary software proposed.		
Comment		

T.2

Facilities	Comply	Not Comply
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Provision must be made for integration with organizational systems such as: <ul style="list-style-type: none"> • Microsoft Exchange • Microsoft office • Fax System • HR systems • Customer relations management systems, etc. 		
Comment		

T.3

Facilities	Comply	Not Comply
ICASA has an existing investment in MERIDIO EDRMS system and Kofax scanning system. The proposed solution should be able to migrate records from Meridio EDRMS to the new system.		
The solution must be implemented on a Microsoft only platform including SQL server as underlying repository – this due to current investments in these products. System must run on its own server and not share server with other systems.		
Comment		

T.4

Facilities	Comply	Not Comply
The solution must be able to integrate to Active Directory.		
Comment		

T.5

Facilities	Comply	Not Comply
Database structures must be documented and available for report writing tools. Alternatively, the software itself must have sufficient report writing capabilities.		
Comment		

T.6

Facilities	Comply	Not Comply
Hardware requirements must be clearly specified and guaranteed for acceptable levels of performance and reliability (hardware need not be quoted on, just specified).		
Comment		

6.3 WORKFLOW MANAGEMENT

Facilities	Comply	Not Comply
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).		
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 the registration card of the attributions, deadlines and closing dates of one document.		
f) Automatic e-mail notification of persons attributed indicating key metadata of the record and hyperlinked to registration card.		
g) Clear overview in one window of all attributions to a person or to a department (reminders diary).		
h) Search for persons/departments and their attributed, closed, open and overdue attributions.		
i) Version control for documents.		
Comment		

6.4 ICASA SLA requirements

The service provider is required to base their pricing on the following SLA requirements:

	Comply	Not Comply
a) Installation (ready-to-use).		
b) Personal support at the ICASA premises within 24 hours (Monday to Friday) on demand.		
c) Helpdesk services open during ICASA business hours.		
d) Training for ICASA staff (technical and administrative) at ICASA premises.		
e) License for 100 users (for system administrators, super users and end users).		
f) Maintenance (corrective) and upgrades to available new versions for 36 months, twice renewable each time for another 12 months.		
g) 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 on demand.		

Comment

7. GENERAL

The project needs to be approached in line with the Application Development Life Cycle Policy as defined by ICASA IT and Services Department. (See Annexure "B")

The following also need to be considered by the solution provider:

- Due to the scale of this project across the ICASA divisional and regional structures, the testing of the system will take place in designated divisions;
- An IT infrastructure assessment relevant to EDRMS will be carried out;
- A detailed project plan and relevant project documentation
- Performance of Unit Testing, systems testing, user integration testing, user testing and development of a User Acceptance Test Procedure document and relevant sign-offs.