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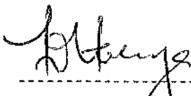
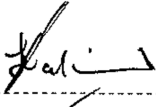

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1. Introduction

In meeting Eskom Document and Records Management Policy [1] requirements, this standard prescribes the requirements for preservation of evidence in the form of documents or records in support of the business process of registration (identification & retention), support review and authorisation, publication, archiving and disposal of documents and records within the Business Management System.

It is a principle requirement that all Eskom business functions and activities are documented or recorded to provide authentic, reliable and retrievable evidence. The documents must also be maintained and kept up-to-date for as long as the business elements they support are in use. This standard details the requirements in support of meeting the ISO9001 Quality management systems and Quality Assurance Requirements for the control of documented information.

The standard will also address, through the proper control of the content, storage and volume of records, reduce vulnerability to legal challenge or financial loss and promotes best value in terms of human and space resources through greater co-ordination of information and storage systems. This includes the long-term preservation of electronic and paper documentation for filing, archiving, retrieval, and disposal and for re-use purposes.

2. Supporting Clauses

2.1 Scope

2.1.1 Purpose

This standard defines the minimum requirements for long-term preservation of all documentation, regardless of medium that are collected, generated, and/or maintained by the business except where superseded by regulation or legislation. It describes the standard that the business needs to ensure the identification, classification, storage, retention, filing and disposal of records. Therefore the content are categorised into two groups, in support of long-term perseverance for electronic and hard copy original records.

2.1.2 Applicability

This document shall apply throughout Eskom Holdings Limited and its subsidiaries.

2.1.3 Effective date

The effective date is the date when the document is authorised.

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2.2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

- [1] 32-1: Eskom Document and Records Management Policy
- [2] 32-9: Definition of Eskom documents
- [3] 32-644: Eskom documentation management standard
- [4] 240-86973501 Engineering drawing standard – common requirements
- [5] 36-943: Engineering Drawing Office and Engineering Documentation Standard
- [6] IEC 61355: Classification and designation of documents for plants, systems and equipment

2.2.2 Informative

- [7] Act No.2: Promotion of Access to Information Act (PAIA)
- [8] Act No. 43: National Archives and Records Service Act (NARSA)
- [9] ISO 19005-1: Document management – Electronic document file format for long term preservation – Part 1 Use of PDF 1.4 (PDF-A-1)
- [10] ISO/TR 18492: Long-term preservation of electronic document-based information

2.3 DEFINITIONS

2.3.1 Disposal: A systematic program to facilitate the removal of documents that are no longer valid, nor currently in use.

2.3.2 Archive: An area under the control of the documentation centre that contains documents that are no longer valid, nor currently in use.

2.3.3 Archives: Records created or received and accumulated by a person or organization in the course of the conduct of affairs and preserved because of their historical or continuing value. The building or part of a building where archival materials are located

2.3.4 Preservation: Keeping master documents under pre-scribed conditions to ensure 100% legibility for the duration of the lifetime of the document.

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- 2.3.5 Records Retention Scheduling:** A records retention schedule identifies the length of time a records series must be retained in active and inactive storage before its final disposition to permanent storage, archival preservation, or destruction.
- 2.3.6 Records Legal Value:** These are the records which involves long or short term rights of the government or the private citizen, and which are enforceable by laws and regulations. They are more easily identified than other records. Some examples of these are patents, contracts, leases, titles, deeds, treaties, etc. Most legal documents and records are never destroyed and are usually archival in value.
- 2.3.7 Active records:** Records needed to perform current operations. They are subject to frequent use and are usually located near the user. They can be accessed manually or online via a computer system.
- 2.3.8 Electronic record:** Data stored on electronic media that can be readily accessed or changed. A piece of equipment is required to view and read electronic records.
- 2.3.9 Inactive records:** Records that do not have to be readily available but which must be kept for legal, fiscal, or historical purposes; referred to less than 15 times a year.
- 2.3.10 Archive record:** A record that has continuing or historical value and is preserved permanently by an organization
- 2.3.11 Retention:** Refers to the process of deciding which records to keep permanently and which records to be destroyed after they no longer serve a useful purpose. The retention schedule lists the types of records maintained by each department and specifies a period of time after which destruction is authorized as a matter of policy.
- 2.3.12 Optical Character Recognition:** Software program converting imaged text to editable text
- 2.3.13 Portable Document Format for Archive (PDF-A):** is an ISO-standardized version of the Portable Document Format (PDF) specialized for the digital preservation of electronic documents
- 2.3.14 Portable Document Format for Engineering (PDF-E):** is a subset of *PDF*, designed to be an open and neutral exchange format for engineering and technical documentation
- 2.3.15 Stitch:** The process of assembling different images into one new one

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2.4 ABBREVIATIONS

Abbreviation	Description
DRM	Documentation and Records Management
EDC	Eskom Document Centre.
EDMS	Electronic Documentation Management System.
OCR	Optical Character Recognition.
PDF-A	Portable Document Format for Archive
PDF-E	Portable Document Format for Engineering
QRL	Quality Records List
IM	Information Management

2.5 Roles and Responsibilities

Not Applicable.

2.6 Process for monitoring

This procedure will be monitored via audits and self-assessments.

2.7 Related/Supporting Documents

Not Applicable.

3. Long term records preservation

3.1 Electronic Documentation

3.1.1 Electronic Format

- All scanned electronic files for long term preservation must comply with ISO 19005- 1. This format will ensure that Eskom's electronic files can be migrated to new technology in years to come.
- Only original document paper size (ISO) may be used when scanning documents. The scanned copy to be filed as a PDF-A or PDF-E record for long term preservation.
- The PDF file must be made searchable by using Optical Character Recognition if possible to ensure easy retrievability

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- For retrieval purpose, at least two sets of metadata must be added manually to the file (i.e. Title and file name).The image and the searchable text may not be separated for filing purposes.
- All electronic documentation must be authentic, not altered or tampered with and supported with an auditable business process.

3.1.2 Legibility

- The validity of the original must be preserved, including handwritten notes, photographs, colour graphics etc.
- The minimum font size that should be scanned at 300 dpi X 300 dpi resolutions is 4 point type. All text that is necessary for the document to be used as backup document must be legible on the scanned image
- The minimum resolution is 300 dpi X 300 dpi (dots per inch), colour. This is also the recommended default setting for all scanned documents to be uploaded EDMS, it is recommended only these settings be used in the case where proper quality cannot be achieved.
- The emphasis is on knowledge preservation, not on artistic appearance, although the ability to reproduce the records to a fair representation of its original state must be maintained.

3.1.3 Documentation Accuracy

To insure documentation authenticity the following pre-long-term processing steps must be consideration:

- Statutory retention times of original paper copy
- Copyright (intellectual property) of others
- Duplication of documentation
- Separation of the documentation
- Format of retention or disposal of the originals
- Potential use in litigation
- Historical importance

3.2 Original records

All functional areas must ensure that the minimum requirements for original records (hard copies) are maintained, guarantee that there is no deterioration, damage or loss during the practice of preparation and / or storage.

An original document will always be the best available form of evidence for legal purposes, unless a detailed authentication process has been documented and followed to ensure effective verification. Due care should be exercised in the storage of paper based documents in their original form as they can be easily misplaced, lost, destroyed and deteriorate when handled or stored for long periods of time.

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In the event of or where there might be any potential litigation regarding any transaction, all documents relating to this matter should not be destroyed.

3.2.1 Classification

3.2.1.1 Vital Records for the Business

Each Division or business area must identify and list its records that are vital to their functional liabilities as identified through their business processes. These must be indicated in the 240-43723778 Records Retention Matrix template. The records retention matrix will capture the minimum data (title, medium, responsible person, location of master copy, format of record, the disclosure classification, retention period and disposal method using.

If such a list of records has been identified, a recovery program / plan should be tested annually in support business continuity. All records must be filed off site while all working copies may be kept on site for reference purposes only. The records recovery plan must make provision for business to resume operations within 3 days (72 hours maximum) in the immediate aftermath of an accident or disaster.

3.3 Maintenance and safe keeping

All essential business records as identified per business processes shall be kept in storage areas that are appropriate for the type of medium and preservation period. Storage conditions and handling processes should protect records from unauthorised access, loss, damage, destruction, theft and disaster.

A. Rules:

- Records should be stored in media that ensure their usability, reliability, authenticity and preservation for as long as they are needed.
- Records must be stored in areas where they are effectively protected against fire, flooding and unauthorised access.
- Records should not be exposed to conditions where rough handling, exposure to heat, damp or humid conditions, dust, pests or related hazards can damage them.
- Care must be taken not to use hazardous cleaning materials in rooms where records are kept.
- Up to date filing plan shall be kept, reflecting storage location of relevant records.
- Use fluorescent tubes that are low in ultraviolet light wherever possible in storage areas. The levels should not exceed 75µW/lumen.

B. Shelving:

- Shelves should be made of coated metal. Wooden shelving is prohibited as it can release harmful vapours, can contribute to the spread of fire or harbour insects.

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- The lowest shelf should start at least 150mm from the floor to prevent flood damage and the top of the shelving should not be less 320mm from the ceiling to allow airflow.
- Establish an on-going system for maintaining the storage facility, including:
 - Regular cleaning, using chemicals that will not leave harmful residue or fumes (Frequency capture on log and approved by Documentation manager)
 - Procedures for checking deterioration of physical storage (e.g., warped compact disks, cracked disks, and mouldy boxes).
 - Procedures for checking deterioration of electronic content (e.g., unreadable disks, inaccurately read records, missing or scrambled information on records)
 - On-going maintenance program (e.g., reading samples, spinning tapes to tighten them)
 - Regular maintenance of storage facility equipment (e.g., furnaces, air conditioners, dehumidifiers).

C. Paper based records

- Paper records should be stored neatly in file covers. Do not fold items like maps, drawings and plans to them in file covers as it will damage them
- Bulky records such as reports, minutes of meetings and other bulky material should be placed in a folder or file that is able to hold all records
- Original faxes made on thermal (heat sensitive) paper should not be placed on files as they fade over time. Photocopies of these faxes must be made and placed on the files
- Paper records should preferably be stored in acid free cardboard containers in cabinets or shelves to provide physical protection against fire and dust. The way in which files are arranged in boxes is important:
 - Files should preferably be stored upright with the spine to the back of the box
 - If thin items are stored on their edges, they must be supported to avoid curling and sagging of paper
 - Boxes should not be too big or too small, and should not be too full or too empty, as easy retrieval means less damage through handling
- Paper records should be stored at temperatures between 18-20°C and relative humidity between 45-50%.
- No records shall be removed from paper-based files without the explicit permission of the records manager.
- No alterations of any kind shall be made to records other than correspondence files without the explicit permission of the records manager.
- Should evidence be obtained of tampering with records, the staff member involved shall be subject to disciplinary action.

D. Cartographic and design records

- Maps, plans, charts and diagrams should be placed either in flat or vertical hanging cabinets specifically designed to store maps, plans and diagrams.

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- Cartographic records should be transported flat or rolled. If rolled, it must be done around a large core (at least 90 mm diameter) with a protective covering around the outside
- Do not use adhesive tape to repair torn items
- Use protective packaging for maps, plans and charts.
- Label cartographic records by writing on the back of the item with a soft pencil.

E. Photographs and negatives

- Use lint free gloves at all times when handling photographic records to prevent fingerprints from being left on the records
- Labels and identification stamps should be placed on the packaging not the record
- Photographic records should be stored in a clean, dark, climatically controlled environment

Photograph type	Storage temperature and humidity
Black and white	8-12°C and relative humidity between 30-40%
Colour	less than 5°C and relative humidity between 45-50%
Temporary & reference copies	18-22°C and relative humidity between 45-55%

3.4 Access and Security

- Records shall at all times be protected against unauthorized access and tampering to protect their authenticity and reliability as evidence of the business of Eskom.
- Security classified records shall be managed in terms of the Information Security Policy which is available from the Eskom Documentation Centre.
- No staff member shall provide information and records that are not in the public domain to the public, not providing a service to Eskom, without consulting the Chief Information Officer or Deputy Information Officer in Divisions. Specific standards regarding requests for information are contained in the Promotion of Access to Information Act (PAIA).
- Personal information shall be managed in terms of the Protection of Personal Information Act.
- No staff member shall disclose personal information of any member of staff or client of Eskom or to any member of the public, not providing a service to Eskom, without consulting the Chief Information Officer or the division delegate first.
- An audit trail shall be logged of all attempts to alter/edit paper and electronic records and their metadata.
- Records storage areas shall at all times be protected against unauthorized access. The following shall apply:
 - Only authorised staff to access applicable information.
 - Archives and other records storage areas shall be locked when not in use.
 - Access to server rooms and storage areas for electronic records media shall be managed with an access control mechanism.

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3.5 Vital Business Records

- For essential and evidential records, the following rules are mandatory:
 - Access controlled entrance (e.g., security code keypad, smart-card swipe), supported with an alarm system in case of unauthorised entry.
 - A complete register of who access the system and removal of records from the centre. A full auditable and traceable of who removes the records with date and time stamp.
 - No records shall be removed from paper-based files without having a control system in place to ensure that the records where about is tracked.
 - Records should only be removed with the explicit permission of the functional manager.
 - Records that were placed on files shall not be altered in any way without following an auditable process and approved by the departmental records manager.

3.6 Retention and disposal of records

All records shall be retained and / or disposed as per BU/Departmental Records Retention Matrix guided by 240-56296995 Standard for records retention periods, as a minimum requirement.

An original document will always be the best available form of evidence for legal and commercial purposes. Records retention will provide information on how long a record must be retained, for legal, evidentiary and operational purposes. Records become eligible for disposal at the end of the specified record retention period stipulated in the records register or records management system.

The length of time that records should be retained in offices before they are either transferred into archival custody or destroyed/deleted. As far as non-archival records are concerned the head of the department decides on the retention periods in accordance with the administrative use of the records and the legal obligations the records need to fulfil.

Records Retention will provide information on how long a record must be retained, for legal, evidentiary and operational purposes. Records Retention Schedule also specifies when a record may be disposed or destroyed. A proper Schedule will differentiate between the different formats in which records must be retained such as electronic and paper.

In the case of archival records the National Archives and Records Service of South Africa Act, 1996 as amended, determines that such records must normally be kept for twenty years. Types of records and their Retention Categories” could also be used as a baseline in classifying retention periods. Retention times vary from as little as 0 years to as long as 45 years.

Records become eligible for disposal at the end of the specified record retention period stipulated in the records register or records management system.

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4. Acceptance

This document has been seen and accepted by the Eskom Document and Records Management Forum.

5. Revisions

Date	Rev.	Compiler	Remarks
December 2015	2	T L Ndlela	Reviewed as per review date and updated to include the standard for records retention periods.
September 2011	1	T Lelibana	To replace 32 -392 and 32- 637 to include long term preservation format

6. Development Team

None.

7. Acknowledgements

This document was originally compiled by T Lelibana.

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