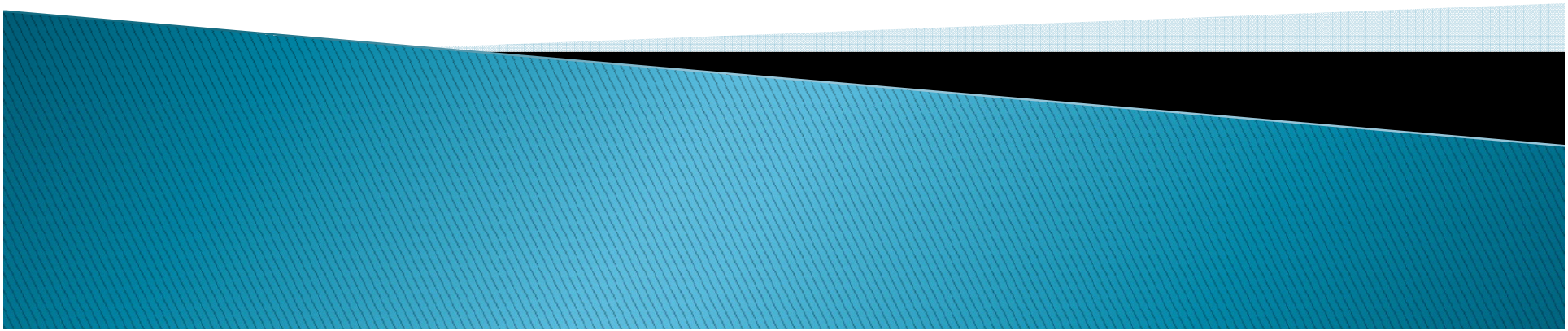
INTRODUCTION TO ELECTRONIC RECORDS MANAGEMENT

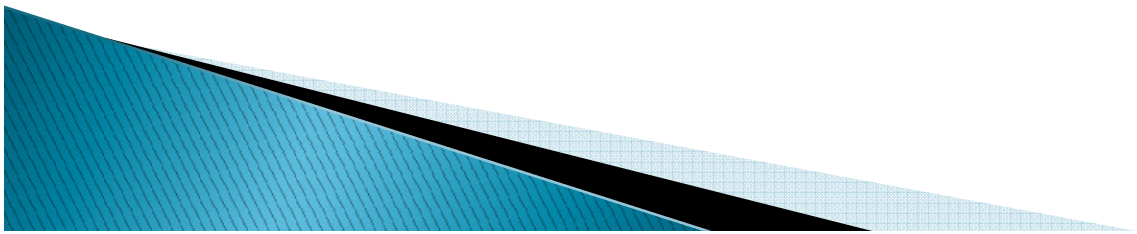
AZIMAH MOHD ALI
DIRECTOR
GOVERNMENT RECORDS DIVISION
NATIONAL ARCHIVES OF MALAYSIA



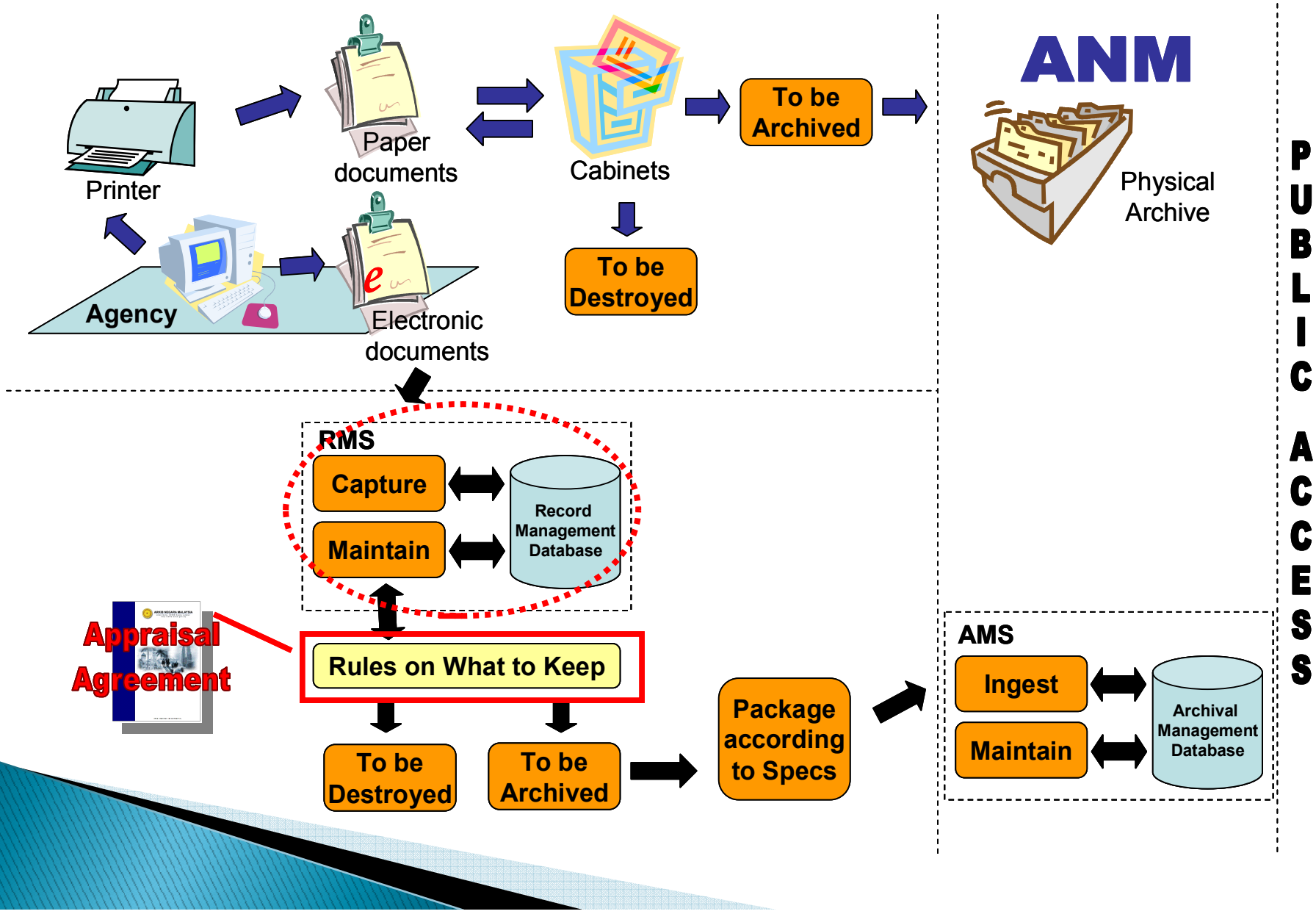
CONTENT

- DEFINITION
  - ELECTRONIC RECORDS/DIGITAL RECORDS
  - ELECTRONIC DOCUMENT MANAGEMENT SYSTEM
  - ELECTRONIC RECORDS MANAGEMENT SYSTEM
  - ELECTRONIC DOCUMENT AND RECORDS MANAGEMENT SYSTEM

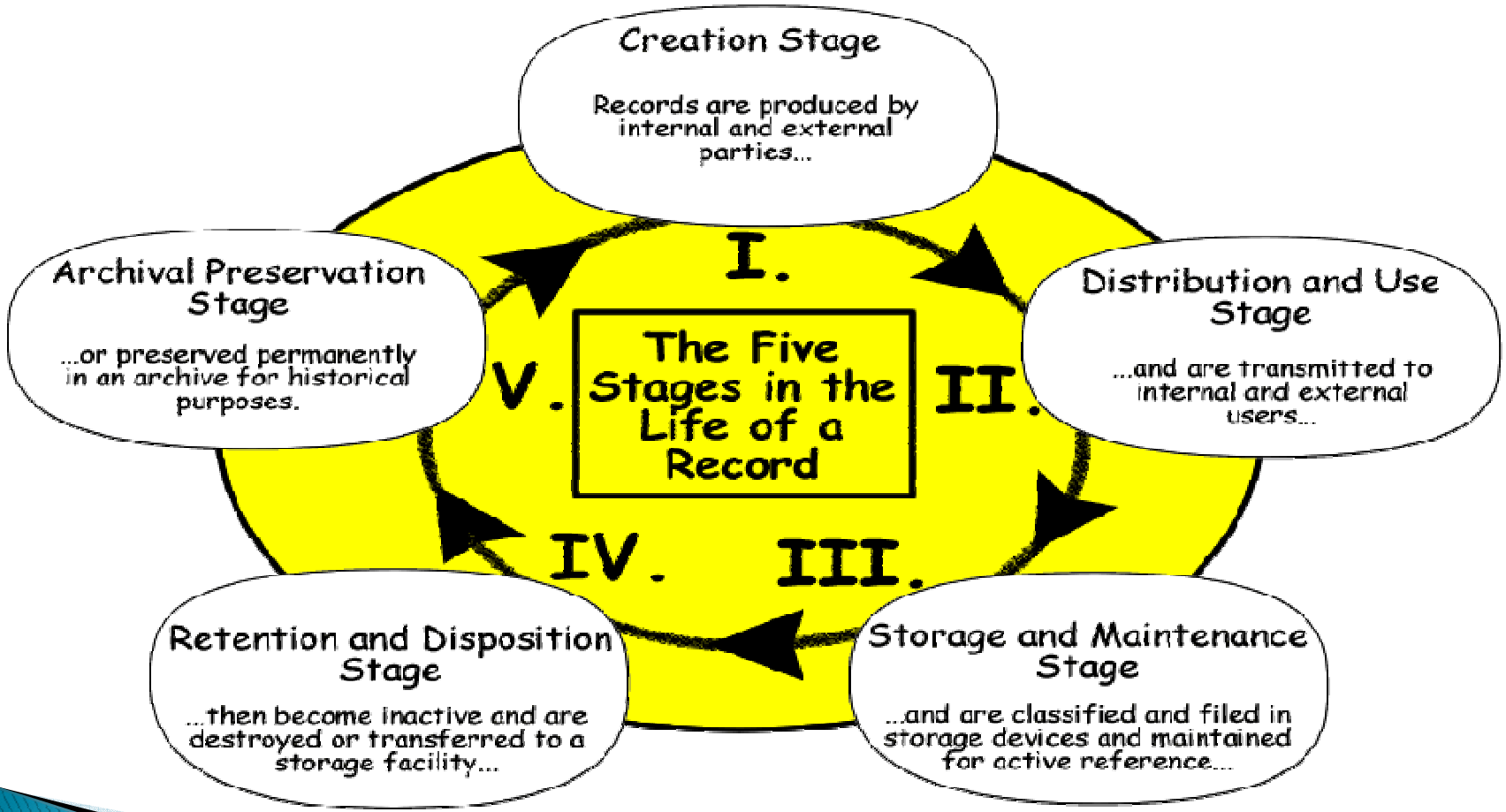
- DIFFERENCES BETWEEN ERMS AND EDMS
- ELEMENTS OF ELECTRONIC RECORDS
- CHARACTERISTICS OF ELECTRONIC RECORDS MANAGEMENT SYSTEM
- CONDITIONS FOR ELECTRONIC RECORDS MANAGEMENT SYSTEM
- ELECTRONIC RECORDS MANAGEMENT SYSTEM PROCESSES



SCENARIO OF RECORDS MANAGEMENT



LIFE CYCLE OF A RECORDS



DEFINITION

ELECTRONIC RECORDS/DIGITAL RECORDS

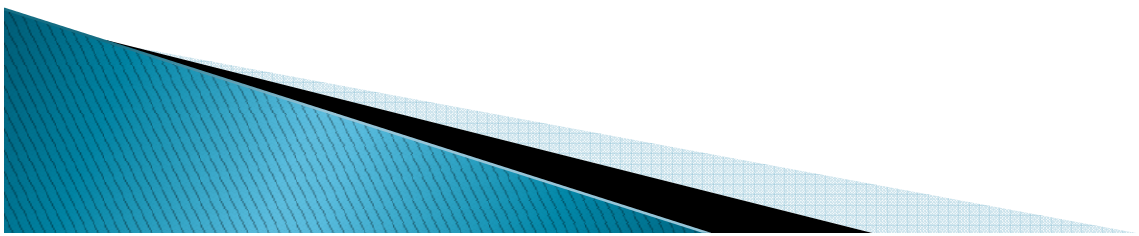
Records consisting of data and information which is input, created, manipulated and/or stored on electronic media which show evidence of actions and decisions occurring during transactions of government business. Also referred to as machine-readable records.

DEFINITION

ELECTRONIC DOCUMENT MANAGEMENT SYSTEM

An electronic document management system (EDMS) is software system for organizing and storing different kinds of documents. This type of system is a more particular kind of document management system, a more general type of storage system that helps users to organize and store paper or digital documents.

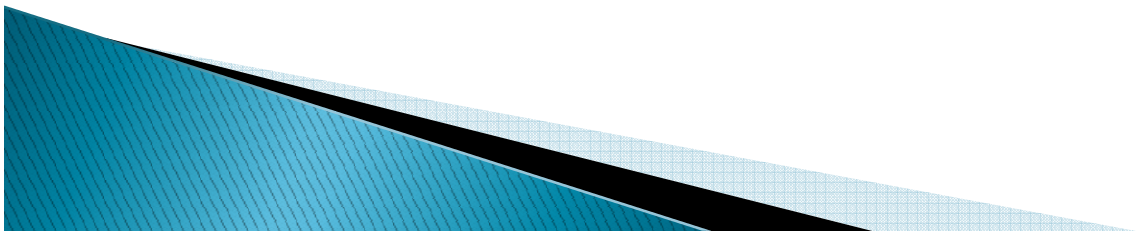
An electronic document management provides a way to centrally store a large volume of digital documents. Many of these systems also include features for efficient document retrieval.



DEFINITION

ELECTRONIC RECORDS MANAGEMENT SYSTEM

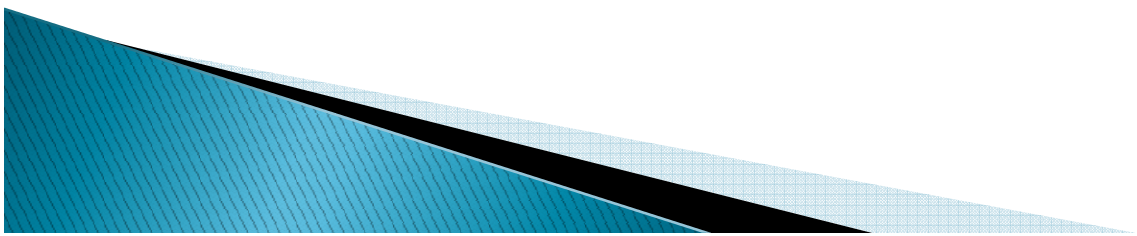
The application of records management principles to electronic records. The management of records using electronic systems to apply records management principles.



DEFINITION

ELECTRONIC DOCUMENT AND RECORDS MANAGEMENT SYSTEM

An EDRMS is a software application that manages a range of digital information, including word-processed documents, spread sheets, emails, images and scanned documents. An EDRMS can combine both document management and records management functionality.



DIFFERENCES BETWEEN EDMS AND ERMS

EDMS

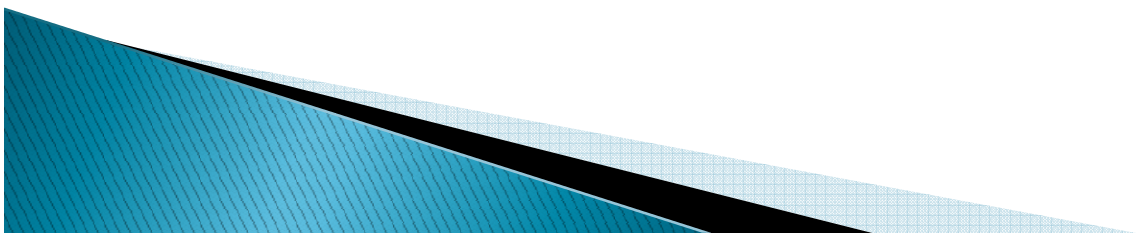
I. Is not restricted to records
II. Will not usually include the contextual aspect of records
III. Allows document to be modified and /or exist in several versions
IV. May allow documents to be deleted by their owners
V. May include retention controls
VI. May include a document classification and storage structure, which may be under the control of users
VII. Is intended primarily to support day-to-day use of current documentation for business or information purposes

ERMS

I. Is a record-keeping system
II. Must include the contextual aspect of records and their inter-relationships
III. Prevents records from being modified
IV. Prevents records from being deleted except as part of the controlled disposal schedule
V. Must include rigorous retention controls
VI. Must include classification scheme which determines the record arrangement structure and is maintained by a designated "administrator"
VII. May support day-today working but is intended to provide a secure repository for the preservation of and access to meaningful business records overtime

ELEMENTS OF ELECTRONIC RECORDS

- Content
  - **The message** – The information conveyed by documentary material.
- Structure
  - **How the information is arranged** – The physical or logical form of a documentary material or a set of documentary material.
- Context
  - **Interrelationship with other records and the process or transaction in which it was created/received** – The organizational, functional, and operational circumstances (activity) in which documentary material is created and/or received and used.



CHARACTERISTICS OF ELECTRONIC RECORDS MANAGEMENT SYSTEM

AUTHENTIC

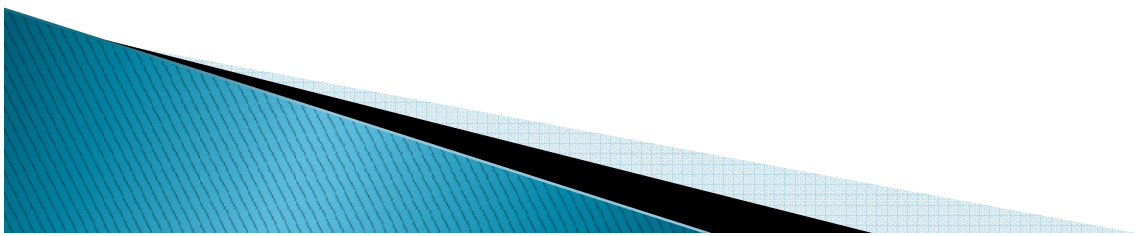
It must be possible to prove that a record is what it purport to be and that it has been made or sent by the alleged person and at the time purported.

Records need to be protected against unauthorized addition, deletion, alteration, use or concealment and the making, receipt and transmission of records needs to be controlled to unsure that records makers are authorized and identified.

CHARACTERISTICS OF ELECTRONIC RECORDS MANAGEMENT SYSTEM

RELIABLE

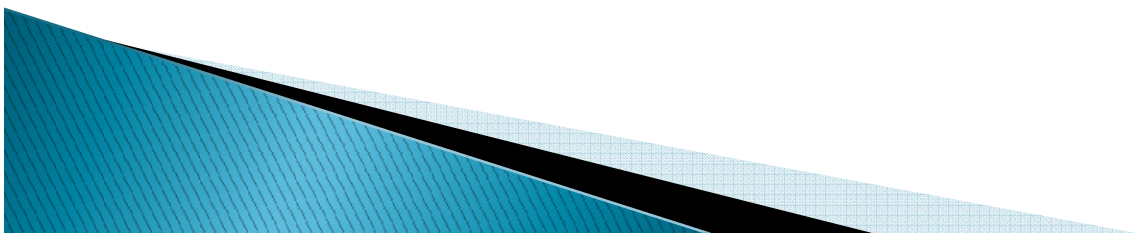
It must be possible to trust the content of a record as an accurate representation of the transaction to which it attests. It should be made and captured in a timely manner by an individual who has direct knowledge of the event or generated automatically by processes routinely used by the organization to conduct the transaction.



CHARACTERISTICS OF ELECTRONIC RECORDS MANAGEMENT SYSTEM

COMPLETE AND UNALTERED

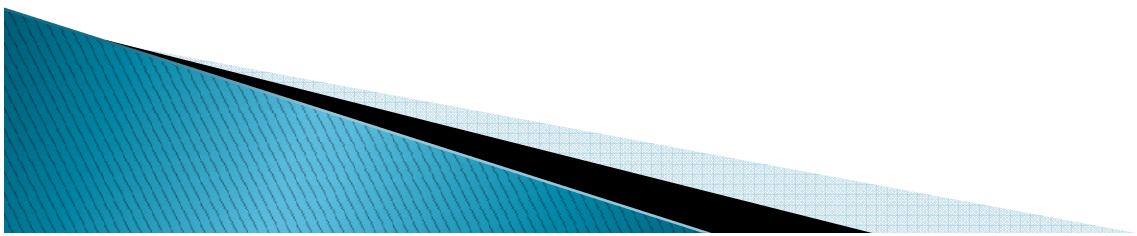
It must be possible to protect a records against unauthorized alteration and to monitor and track any authorized annotation, addition or deletion.



CHARACTERISTICS OF ELECTRONIC RECORDS MANAGEMENT SYSTEM

USEABLE

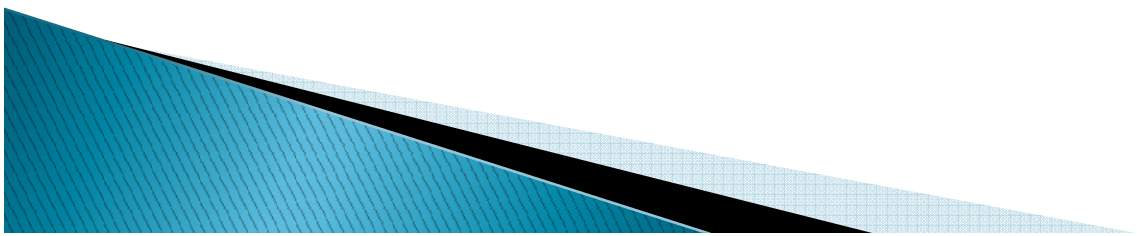
It must be possible to locate, retrieve and interpret a record and understand the sequence of activities in which it was made and used for as long as such evidence is required.



CHARACTERISTICS OF ELECTRONIC RECORDS MANAGEMENT SYSTEM

INTEGRITY

It must be possible to implement control measures, such as access monitoring, user verification, authorized destruction, security and disaster mitigation to prevent unauthorized access, destruction, alteration or removal of records and to protect them from accidental damage or loss.



CONDITIONS FOR ELECTRONIC RECORDS MANAGEMENT

Records are captured

capture is a process of placing document into a records management system and assigning metadata to describe the records and place it in context, so that the record can be managed over time.

Records are maintained

records should be maintained within the records system are based on an assessment of the regulatory environment, business and accountability requirements and the risk.

Records are usable

records can be transmitted, accessed, rendered and redacted.

ELECTRONIC RECORDS MANAGEMENT SPECIFICATION

- MS ISO 16175-1:2012

  Information and Documentation - Principles and Functional Requirements for Records in Electronics Office Environments - Part 1: Overview and Statement of Principles (ISO 16175-1:2010, IDT)

- MS ISO 16175-2:2012

  Information and Documentation - Principles and Functional Requirements for Records in Electronics Office Environments -Part 2: Guidelines and Functional Requirements for Digital Records Management Systems (ISO 16175-2:2011, IDT)

ELECTRONIC RECORDS MANAGEMENT SPECIFICATION

- MS ISO 16175-3:2012

  Information and Documentation – Principles and Functional Requirements for Records in Electronics Office Environments –Part 3: Guidelines and Functional Requirements for Digital Records in Business Systems (ISO 16175-3:2010, IDT)

MS ISO 16175-2:2012

- The requirements are intended to:

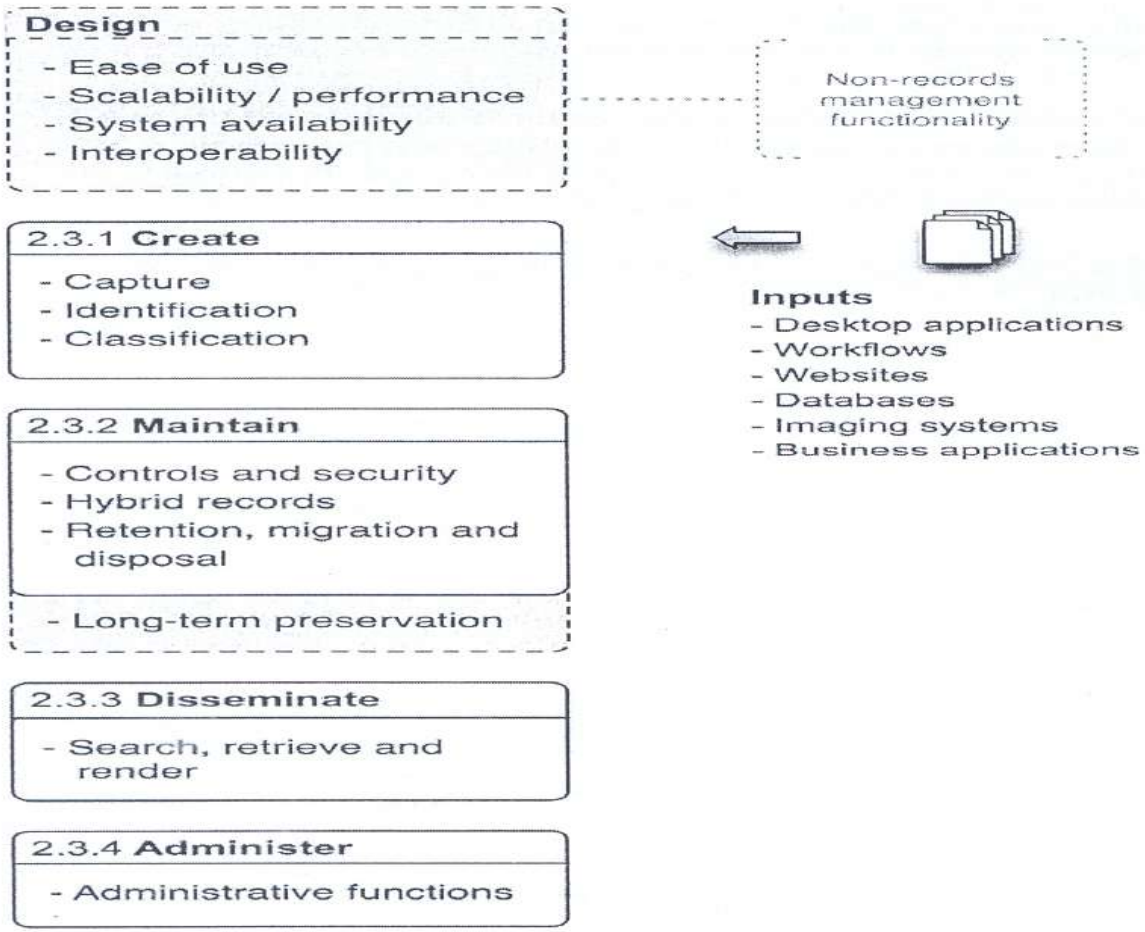
  a. set out the processes and requirement for identifying and managing records in digital records management systems,

  b. set out the records management functionality to b e included in a design specification when building, upgrading or purchasing digital records management systems,

  c. inform records management functional requirements in the selection of commercially available digital records management systems,

  d. review the records management functionality of, or assess the compliance of, an existing digital records management systems

Figure 1: Model of high-level functional requirements for digital records management systems

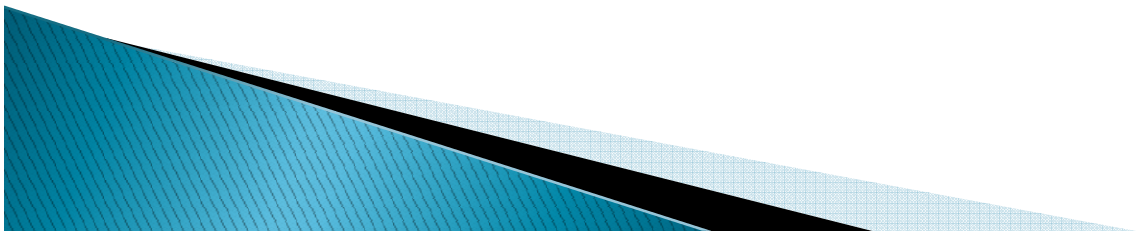


NOTE 1 Solid grey shading indicates functionality not detailed in *Part 3: Functional requirements*.

NOTE 2 This model depicts the functional requirements that are the components of digital records management systems. It does not depict the sequence of work processes that digital records management systems perform.

ELECTRONIC RECORDS MANAGEMENT PROCESSES

- Capture
- Registration
- Classification
- Access and Security Classification
- Identification of Disposition Status
- Storage
- Use and Tracking
- Implementation of Disposition



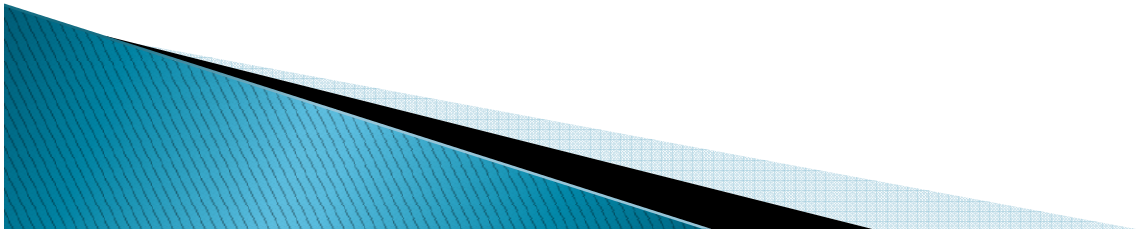
ELECTRONIC RECORDS MANAGEMENT PROCESSES

CAPTURE

Capture is the process of placing a document into a records management system and assigning metadata to describe the record and place it context. The capture and maintenance of metadata should occur as a normal part of business and information and records management processes. Where possible, the creation and capture of metadata should be automated.

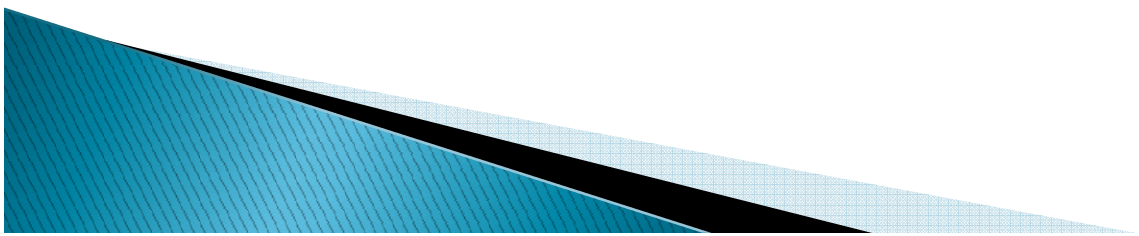
METADATA

Metadata is "data about data". The term is ambiguous, as it is used for two fundamentally different concepts (types). **Structural metadata** is about the design and specification of data structures and is more properly called "data about the containers of data"; **descriptive metadata**, on the other hand, is about individual instances of application data, the data content.



METADATA

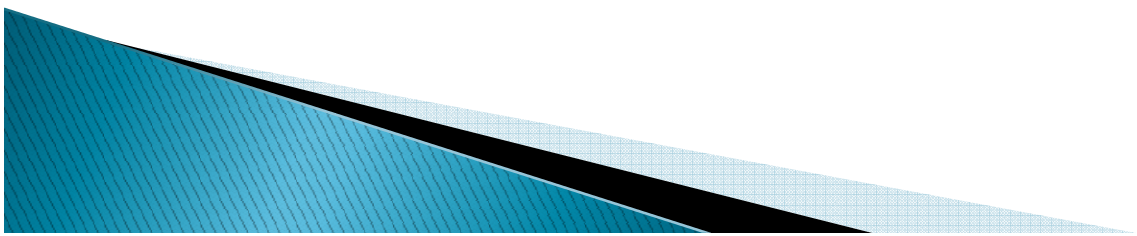
- Some examples of metadata are:
  - title
  - author
  - any registration number or other unique identifiers
  - date created or received
  - subject matter
  - format
  - history of use.



ELECTRONIC RECORDS MANAGEMENT PROCESSES

REGISTRATION

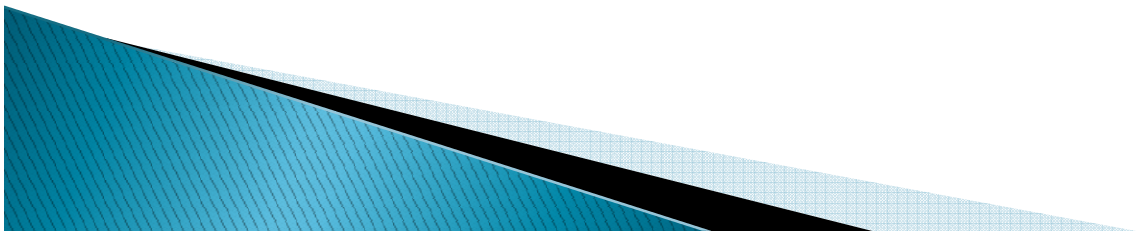
Registration is a way of formalizing the capture of the records into the records system. Records can be registered at more than one level of aggregation within a records system.

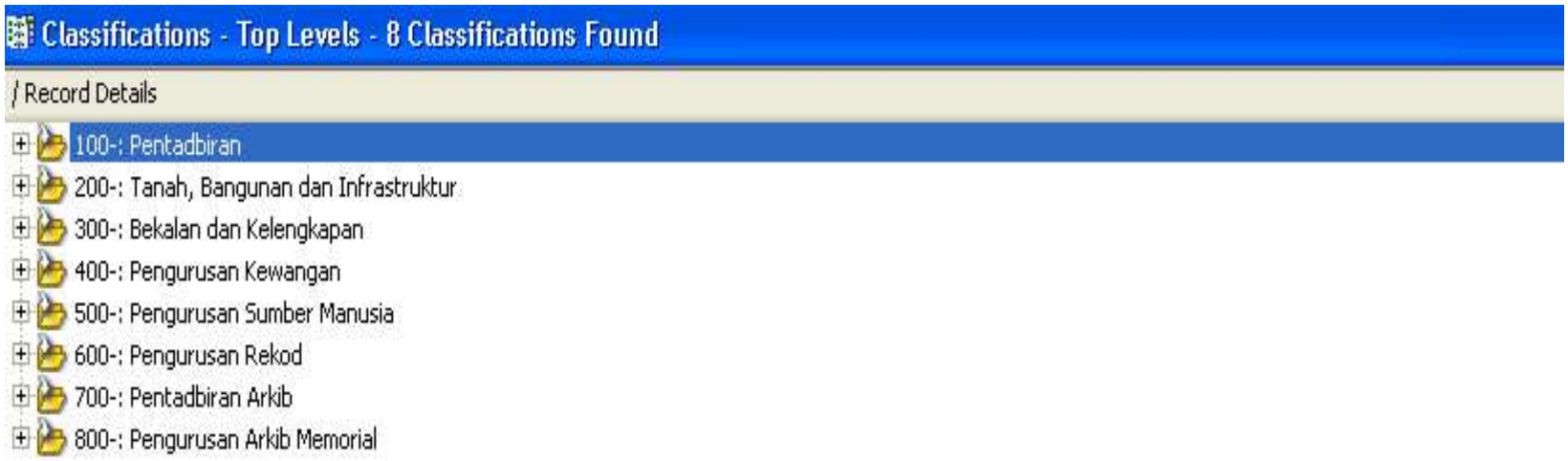


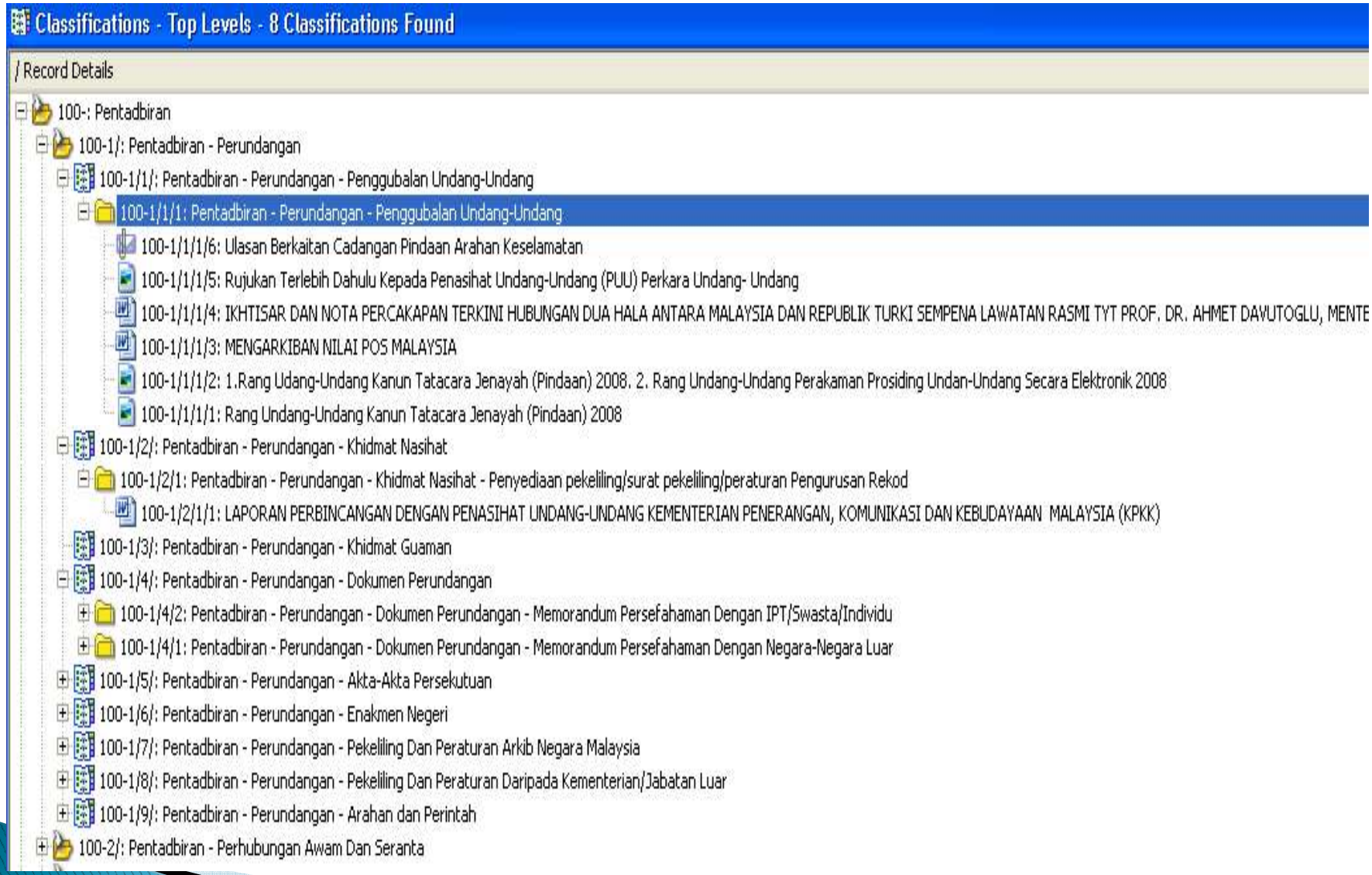
ELECTRONIC RECORDS MANAGEMENT PROCESSES

CLASSIFICATION

Classification is a process of identifying the category or categories of business activity and the records they generate and of grouping them, if applicable, into files to facilitate description, control, links and determination of disposition and access status.



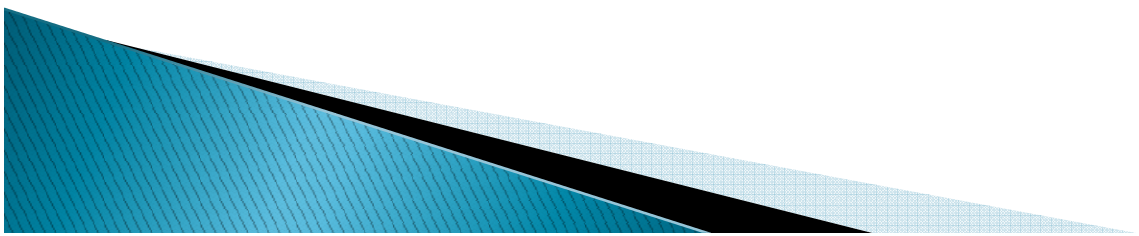

Classifications - Top Levels - 8 Classifications Found
/ Record Details
100-: Pentadbiran
200-: Tanah, Bangunan dan Infrastruktur
300-: Bekalan dan Kelengkapan
400-: Pengurusan Kewangan
500-: Pengurusan Sumber Manusia
600-: Pengurusan Rekod
700-: Pentadbiran Arkib
800-: Pengurusan Arkib Memorial


Classifications - Top Levels - 8 Classifications Found
/ Record Details
100-: Pentadbiran
100-1/: Pentadbiran - Perundangan
100-1/1/: Pentadbiran - Perundangan - Penggubalan Undang-Undang
100-1/1/1: Pentadbiran - Perundangan - Penggubalan Undang-Undang
100-1/1/1/6: Ulasan Berkaitan Cadangan Pindaan Arahan Keselamatan
100-1/1/1/5: Rujukan Terlebih Dahulu Kepada Penasihat Undang-Undang (PUU) Perkara Undang- Undang
100-1/1/1/4: IKHTISAR DAN NOTA PERCAKAPAN TERKINI HUBUNGAN DUA HALA ANTARA MALAYSIA DAN REPUBLIK TURKI SEMPENA LAWATAN RASMI TYT PROF. DR. AHMET DAVUTOGLU, MENTE
100-1/1/1/3: MENGARKIBAN NILAI POS MALAYSIA
100-1/1/1/2: 1.Rang Udang-Undang Kanun Tatacara Jenayah (Pindaan) 2008. 2. Rang Undang-Undang Perakaman Prosiding Undan-Undang Secara Elektronik 2008
100-1/1/1/1: Rang Undang-Undang Kanun Tatacara Jenayah (Pindaan) 2008
100-1/2/: Pentadbiran - Perundangan - Khidmat Nasihat
100-1/2/1: Pentadbiran - Perundangan - Khidmat Nasihat - Penyediaan pekeliling/surat pekeliling/peraturan Pengurusan Rekod
100-1/2/1/1: LAPORAN PERBINCANGAN DENGAN PENASIHAT UNDANG-UNDANG KEMENTERIAN PENERANGAN, KOMUNIKASI DAN KEBUDAYAAN MALAYSIA (KPKK)
100-1/3/: Pentadbiran - Perundangan - Khidmat Guaman
100-1/4/: Pentadbiran - Perundangan - Dokumen Perundangan
100-1/4/2: Pentadbiran - Perundangan - Dokumen Perundangan - Memorandum Persefahaman Dengan IPT/Swasta/Individu
100-1/4/1: Pentadbiran - Perundangan - Dokumen Perundangan - Memorandum Persefahaman Dengan Negara-Negara Luar
100-1/5/: Pentadbiran - Perundangan - Akta-Akta Persekutuan
100-1/6/: Pentadbiran - Perundangan - Enakmen Negeri
100-1/7/: Pentadbiran - Perundangan - Pekeliling Dan Peraturan Arkib Negara Malaysia
100-1/8/: Pentadbiran - Perundangan - Pekeliling Dan Peraturan Daripada Kementerian/Jabatan Luar
100-1/9/: Pentadbiran - Perundangan - Arahan dan Perintah
100-2/: Pentadbiran - Perhubungan Awam Dan Seranta

ELECTRONIC RECORDS MANAGEMENT PROCESSES

ACCESS AND SECURITY CLASSIFICATION

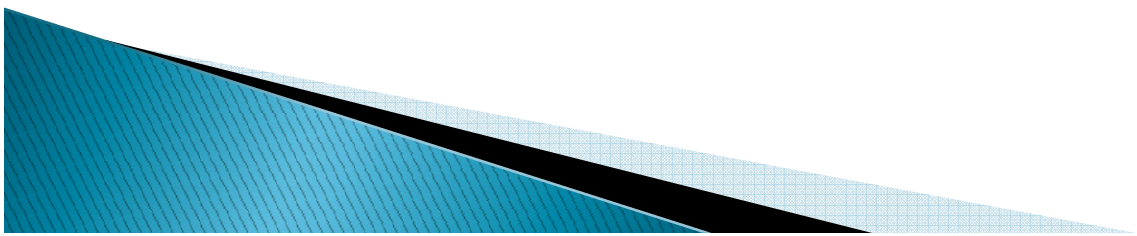
The access and security classification may be assigned in consultation with the business unit to which the records belong.



ELECTRONIC RECORDS MANAGEMENT PROCESSES

IDENTIFICATION OF DISPOSITION STATUS

Electronic records systems identify the disposition and retention period of the record at the point of capture and registration.



RECORDS DISPOSITION AUTHORITY OR RETENTION SCHEDULE

- Instruments to standardize the decision-making may range from guidelines identifying what documents should be destroyed or capture into records systems to a formally approved schedule of classes of records, retention periods and appropriate disposition action that is submitted for approval by an external authority.

ELECTRONIC RECORDS MANAGEMENT PROCESSES

STORAGE

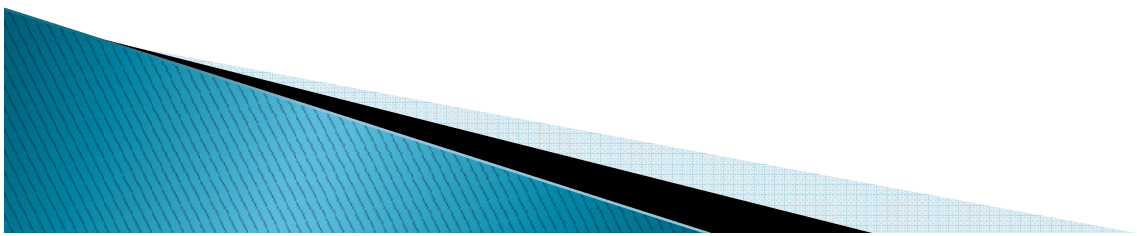
It is important to determine efficient and effective means of maintaining, handling and storing records before the records are created and then to reassess storage arrangements as the records' requirements change.

ELECTRONIC RECORDS MANAGEMENT PROCESSES

USE AND TRACKING

Use of the record is a records management transaction that may need to be captured by the system to form part of the metadata.

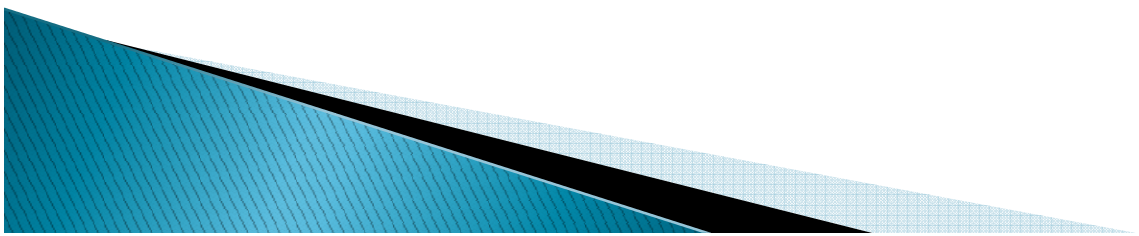
The tracking of records usage within records system is a security measure for organization.



ELECTRONIC RECORDS MANAGEMENT PROCESSES

IMPLEMENTATION OF DISPOSITION

Records with similar disposition dates and triggering actions should be readily identifiable from the records system. The use history of records due for disposition actions needs to be reviewed to confirm and amend the disposition status



REFERENCES

- MS ISO 2223:2009
  Information And Documentation – Records Management Part 1 & 2 (ISO 15489 : 2001 Information And Documentation – Records Management Part 1 & 2, IDT)
- MS ISO 16175-2:2012
  Information and Documentation – Principles and Functional Requirements for Records in Electronics Office Environments – Part 2: Guidelines and Functional Requirements for Digital Records Management Systems (ISO 16175-2:2011, IDT)
- Shepherd , Elizabeth, MANAGING RECORDS – A HANDBOOK OF PRINCIPLES AND PRACTICAL, facet Publishing, London, 2003.

Thank you

- MTCP, 3 JUNE 2014
  NATIONAL ARCHIVES OF MALAYSIA