



MANAGEMENT OF ELECTRONIC RECORDS

TG15-1998

**NUCLEAR INFORMATION AND RECORDS MANAGEMENT ASSOC.
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FOREWORD

[This foreword is not part of the Nuclear Information & Records Management Association Guidelines for Electronic Record keeping].

The Electronic Record keeping Sub-committee of the Regulations Committee has been comprised of many members over time. The following members had significant input to this document revision as it evolved for approval by the NIRMA Board of Directors.

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MANAGEMENT OF ELECTRONIC RECORDS

1. SCOPE

This guideline was developed by the Electronic Records Subcommittee, Regulations Committee of the Nuclear Information and Records Management Association to provide guidance concerning the management of electronic records.

Legal standards for the acceptability of records have been established and electronic records may be admitted in evidence to Federal courts for use in court proceedings (Federal Rules of Evidence 803(6)). However, the court must believe that records admitted before it are "trustworthy;" that is, they must clearly and accurately relate the facts as originally presented. This trustworthiness is established by a search of outstanding requirements or commitments to specific media, thoroughly documenting the electronic record's generation, maintenance, security and retention processes and system's operation and the controls imposed upon them.

When effective records retention procedures are implemented, electronic records pose no greater legal problem than do paper or microphotograph records, unless there are specific statutory or regulatory requirements for original hard copy records. The Federal Rules of Evidence (Rule 803(8)) provide that official records may be admitted as evidence in lieu of the personal appearance of the official responsible for the activity.

Under this rule, if the only record is electronic, organizations should ensure that procedures are established and followed so that:

- (1) the date of the record can be determined,
- (2) the date of any alterations will be automatically recorded by the system, and
- (3) it will be evident that the document was authorized to be issued (Assigned") by an appropriate official.

The guideline applies to information processing environments, and addresses the creation, maintenance, use, and disposition of electronic records. Files containing electronic records may exist in any format, and on various media, capable of being read by computer system application software and peripheral subsystems.

The guideline was developed in recognition of the increasing use of electronic systems to manage information and is based on the most recent and best practice guidance available in various industries and regulatory environments. It should be understood that this guideline was developed recognizing the constant state of technology change evident in electronic recordkeeping. Therefore, all possible efforts have been made to ensure it's applicability irrespective of technology platform or system hardware/software configuration.

Due to the unique vulnerabilities of electronic records, special measures should be taken to ensure their usability. Therefore, electronic records must be:

Retrievable

Records must be retrievably. They must be organized and indexed so that the user, who may not know the exact title or nature of the record, will be able to locate it through searches based on logical search parameters.

Intelligible

Records must be readable (viewed) on the same or comparable hardware and software. Recognizing that hardware and software technologies change over the lifetime of a record, configuration control measures must be applied to the generating and storage systems to ensure continued retrievability of the records.

Understandable

Data representing a record of an activity or process need not reflect the original form or format of data. However the data must be maintained in a human readable format and provide for a clear understanding of the content, context and structure of the original record data.

Reliable

Systems and processes must be developed to preclude alteration or corruption of the record data. Process documentation, from generation to records disposition, must be developed and approved by appropriate authority. Training should be performed for all affected personnel.

The guideline is directed to personnel who manage the creation, maintenance, use, and disposition of electronic records.

NOTE:

The following additional NIRMA Technical Guidelines should be referred to when addressing Electronic Records Program issues:

TG-11- "Authentication of Records and Media"

TG-16 - "Software Configuration Management and Quality Assurance"

TG-21 - Electronic Records Protection and Restoration"

2. DEFINITIONS

The definitions listed in Attachment A are intended to achieve a common understanding of information systems terms that are significant to the implementation of this guideline. The section is not intended to be a general glossary of information processing or records management terms (see NIRMA Glossary of Terms and Definitions).

3. SYSTEM RECORD RETENTION REQUIREMENTS

Information systems may be used to generate and maintain records. Therefore, documentation that describes the system hardware/software, its operation and use also represents a record. Consequently, record retention requirements should be identified for both the information system and the records it produces. For further information regarding system documentation see NIRMA Technical Guideline TG-16, Electronic Records Systems Configuration Control and Software Quality Assurance.

4. ESTABLISHING AN ELECTRONIC RECORDS MANAGEMENT PROGRAM

The establishment of an electronic records management program involves the identification of program elements and assignment of organizational responsibilities for implementing the program elements.

4.1 Program Documentation

The organization's Information Resource Management Program should define the system and program requirements for electronic records.

4.1.1 Policy Level Documentation

At the Policy or Directive level the Electronic Records Program is declared the official program to be followed for all electronic record activities:

- The Electronic Records Program is declared to establish controls for the generation, distribution, use, maintenance, storage, retention, and disposition of electronic records.
- It is stated that when economically and technically justified record data created electronically shall be captured, maintained and archived as electronic records.
- The Program establishes the practice of business that determines accurate reliable records within given processes and systems including;
 - Records Identification Process
 - Business Process Development
 - Business Process Documentation
- Direction to formulate business cases as a prelude to any application becoming part of the Electronic Records Program including;
 - Justification Process
 - Cost Benefit Analysis
- All electronically generated or stored records, whether from internal or external sources, should meet the requirements of the Program.

4.1.2 Global Technical Procedures

At this procedure level common/standard practices are described that will be implemented uniformly across all locations. Functional areas requiring documentation for the lifecycle management of electronic records includes, but are not limited to:

- Retention scheduling, including identification of records and associated systems configuration.
- Generation and storage system design, procurement, testing, and maintenance.
- Generation and storage system configuration control.
- System and records security.
- Media archiving including storage and inspection requirements.
- Generation, storage system and process training.

4.1.3 Application Specific Procedures

Procedures written at this level describe specific practices that will occur for specific applications, separate locations, or describe a limited area or activity. Implementing procedures developed should encompass all aspects of the chain of custody of electronic records generated or maintained by the system or application. This shall include retention and disposition of records. Included also are the applicable systems, application media, hardware, or software. All aspects of the lifecycle management of electronic records should be documented and adhere to the criteria detailed. These activities should include, but not be limited to:

- Identification and classification of records and associated systems to be maintained.
- Creation, acquisition, receipt or capture of electronic records.
- Indexing, access and use.
- Revision, editing and revision control.
- Dissemination, retention, storage and disposition of records and associated systems.
- System and data backup/disaster recovery and destruction.