

Electronic Records Management Strategy

Summary

The arrival of the Information Age means that much of our history is now recorded in electronic format, including your agency's activities. Because of that, you need to develop a strategy for managing electronic records. A government agency's electronic records management strategy must conform to legal mandates, as well as reflect your preferred management practices and technological options.

Legal Framework

Your strategy must conform to the legal mandates in such areas as:

- Providing public accountability
- Distinguishing public from not-public records
- Creating records retention schedules and carrying out disposal actions
- Developing and sustaining a trustworthy process for electronic records management

Refer to the *Introduction* for more information on legal mandates, including the:

- Official Records Act [Minnesota Statutes, Chapter 15.17] (available at: <<http://www.revisor.leg.state.mn.us/stats/15/17.html>>), which mandates that government agencies must keep records to fulfill the obligations of accountability and specifies that the medium must enable the records to be permanent. It further stipulates that you can copy a record and that the copy will be legally admissible in court.
- Records Management Act [Minnesota Statutes, Chapter 138.17] (available at: <<http://www.revisor.leg.state.mn.us/stats/138/17.html>>), which establishes the Records Disposition Panel for an orderly disposition of records using approved records retention schedules.
- Minnesota Government Data Practices Act (MGDPA) [Minnesota Statutes, Chapter 13] (available at: <<http://www.revisor.leg.state.mn.us/stats/13/>>), which mandates that your records should be accessible to the public unless categorized as not-public by the state legislature.
- Uniform Electronic Transactions Act (UETA) [Minnesota Statutes, Chapter 325L] (available at: <<http://www.revisor.leg.state.mn.us/stats/325L/>>) and Electronic Signatures in Global and National Commerce (E-Sign), a federal law (available at: <<http://thomas.loc.gov/cgi-bin/query/z?c106:S.761:>>). Both UETA and E-Sign address the issues of the legal admissibility of electronic records created in a trustworthy manner and the application of the paper-oriented legal system to electronic records.

Because different stakeholders throughout an enterprise have different needs and roles in electronic records management, the development of your electronic records management strategy requires joint planning, communication, and training.

When you begin to develop your electronic records management strategy, you should aim for a policy that integrates:

- The legal framework as it applies to your agency
- All interested stakeholders (e.g., record creators, the public, information technology staff, records management staff)
- All relevant aspects of your electronic records
- Your preferred management procedures and technologies
- Long-term storage and access needs (both legal and operational)

A sound, integrated strategy reflects the relationship between records management and your operations, and ensures that you manage records in a way that supports your daily work, supports long-term operational needs, and meets your legal requirements.

Key Concepts

As you develop an electronic records management strategy, you will need to be familiar with the following key concepts:

- The State of Minnesota's definition of a record
- Records series
- The components of an electronic record
- The records continuum
- Records management goals
- Long-term retention approaches
- General records retention schedules
- Storage options

Definition of a Record

The Records Management Act [Minnesota Statutes, Chapter 138.17] defines government records as:

Cards, correspondence, disks, maps, memoranda, microfilms, papers, photographs, recordings, reports, tapes, writings, optical disks, other data, information, or documentary material, regardless of physical form or characteristics, storage media or conditions of use, made or received by an officer or agency of the state and an officer or agency of a county, city, town, school district, municipal subdivision or corporation or other public authority or political entity within the state pursuant to state law or in connection with the transaction of public business by an officer or agency.

In short, an official record includes all information, *regardless of format*, created or used in the course of a government business function or transaction.

The definition *excludes*:

- Library and museum material made or acquired and kept solely for reference or exhibit purposes
- Extra copies of documents maintained only for the convenience of reference
- Stock of publications and processed documents
- Bonds, coupons, or other obligation or evidence of indebtedness, the destruction or other disposition of which is governed by other laws

An *electronic record* is a record created, generated, sent, communicated, received, or stored by electronic means. Like paper records, electronic records require a long-term records management strategy.

For more information, refer to the *Preserving and Disposing of Government Records* booklet. (See the Annotated List of Resources at the end of these guidelines.)

Records Series

Your electronic records will be organized into records series. A *records series* is a set of records grouped together because they relate to a particular subject or function, or result from the same activity. All records fall into a records series, and each records series should be managed according to an appropriate records retention schedule.

By managing related records as a group, you can efficiently preserve and dispose of your records. For example, all records (regardless of format) relating to a particular committee's activity on a single issue may constitute a records series that must be preserved for ten years before disposition.

Your agency will need to organize its own records series based on its unique needs within the legal framework.

Record Components

The components of any record include:

- *Content.* Factual information in the record that documents government business
- *Context.* Information that shows how the record is related to the business of the agency and other records
- *Structure.* Technical characteristics of the record (e.g., file format, data organization, page layout, hyperlinks, headers, footnotes)

Records Continuum

Aside from reflecting your legal requirements, a successful long-term records management strategy reflects the records management continuum.

The records continuum concept reflects the idea that different stakeholders create, use, manage, and retain records, not in discrete stages, but at different points throughout the record's existence. The continuum concept recognizes that records pass through identifiable stages; however, these stages are reference points, not separate functions. In other words, a record is not simply created, passed to a records manager for short-term storage, and then passed to an archivist for long-term storage. Instead, each person's activities will have an effect on all the others in the continuum. Their roles and responsibilities should be coordinated, not organized autonomously.

The continuum concept outlines four actions that recur throughout the life of a record. These actions are:

- *Identification.* Determining what constitutes a record
- *Intellectual control.* Making decisions about the record
- *Provision of access.* Enabling users to access the records
- *Physical control.* Managing the physical location and format of the record

Each person who touches the record performs one or all of these activities. For example, the records creator, records manager, and archivist all manage the physical location of the record. Therefore, all these people should collaborate on a comprehensive and well-managed electronic records management strategy.

Records Management Goals

Although the specific strategy that your agency develops and implements will be unique, all strategies share common goals. No matter what your final strategy, the records that exist in your agency should be:

- *Trustworthy*. Trustworthy records contain information that is reliable and authentic. For more information on determining the trustworthiness of information, refer to the *Trustworthy Information Systems Handbook*. (Download information is included in the Annotated List of Resources at the end of these guidelines.) A key aspect to trustworthiness is legal admissibility, i.e. whether your records will be accepted as evidence in court.
- *Complete*. Your records should have all the information necessary to ensure their long-term usefulness. You will also need to capture and maintain the necessary metadata about your records. *Metadata* is the “data about the data” that documents the relationship of the record to your agency’s activity and to other records. Metadata ensures that you can find your records. Metadata includes such elements as the record’s creator, the date of creation, and the record series to which the record belongs. (For more information on metadata, refer to the *Metadata* guidelines).
- *Accessible*. You should be able to access and locate your records in a way that meets your needs and the needs of all other concerned parties. Some records may need to be immediately accessible, while others may not. As outlined in the MGDPA, records are assumed to be accessible to the public, unless categorized as not-public by the state legislature.
- *Durable*. You also want to ensure that your records are durable. In other words, they must be accessible for the designated records retention period and stored, as appropriate, “on a physical medium of a quality to ensure permanent records,” as stated in the Official Records Act [Minnesota Statutes, Chapter 15.17]. For more information on records storage, refer to the following guidelines:
 - *Digital Media* for more information about digital media options available for electronic record storage
 - *Storage Facilities and Procedures* for information about the physical requirements for storing electronic records

Long-Term Retention Approaches

You have two viable, often compatible, approaches for the long-term retention of your records:

- *Conversion*. When you convert a record, you change its file format. Often, conversion takes place to make the record software independent and in a standard or open format. For example, you can convert a record created in WordPerfect by saving it as a Rich Text Format (RTF) file or to Microsoft Word. (For more information on file formats, refer to the *File Formats* guidelines.)

Migration. When you migrate a record, you move it to another computer platform, storage medium, or physical format. For example, when you migrate records, you may need to migrate them to another storage medium to ensure continued accessibility. For example, if you migrate records from magnetic tapes that deteriorate, you may need to migrate the records to a compact disk to ensure continued accessibility. (For more information on storage media, refer to the *Digital Media* guidelines.)

As you consider conversion and migration, consider which media are appropriate for long-term retention. You may discover that another medium (e.g., paper or microfilm) is the best option. You may also determine that you want to combine approaches, such as converting all files to an open format and migrating them to a single platform and storage medium. (For more information on migration and conversion, refer to the *Long-Term Preservation* guidelines.)

General Records Retention Schedules

Your electronic records management strategy should include records retention schedules for electronic records. A records retention schedule is a plan for the management of records listing types of records and how long they should be kept. The purpose of a records retention schedule is to serve as an on-going authorization for the management and disposition of records.

Because they have similar responsibilities and organizations, many local government entities have developed general records retention schedules for all the records commonly created by their members. General records retention schedules exist for cities, townships, school districts, counties, and courts. These general records retention schedules meet the legal requirements for each type of local agency. Your agency can adopt the general records retention schedules for your type of organization in whole, or in part, or change individual components to create a unique schedule. You may also initially choose to develop a specific schedule for your agency. However, you must submit any proposed changes to the Records Disposition Panel for approval. (For more information on the Records Disposition Panel, refer to the *Introduction*.)

Storage Options

Your options for storage include:

- *Online.* Properly designed storage in your computer system may provide full access to appropriate users. Online access means that the record is accessible immediately through your network (e.g., on your network server or on your personal computer's hard drive). This option maintains the greatest functionality.
- *Nearline.* Nearline storage includes storage in a system that is not a direct part of your network, but that can be accessed through it (e.g., an optical media jukebox). This option maintains a moderate amount of functionality.
- *Offline.* Offline storage refers to storage that is not accessible through your network (e.g., removable media such as magnetic tape). This option retains the least amount of functionality, while still maintaining records in an electronic format.

- *Paper or microfilm.* Printing records onto archival-quality paper for storage or outputting them to microfilm may be acceptable as long as the complete record, including all components and metadata, is included.

Key Issues to Consider

Now that you are familiar with some key concepts in electronic records management, you can use the questions below as you develop your own strategy. The careful consideration of these questions will help ensure that:

- All relevant stakeholders agree to the process and are ready to use the procedures outlined in the strategy once it is implemented
- The strategy meets your legal requirements, such as public accountability, records retention schedules, and trustworthiness
- You maximize efficiency by working with other agencies and gaining from their experience

Discussion Questions

- What legal issues do we face? Who will need access to our records (e.g., the public, other government agencies)? Do we have information that *must* be accessible to the public? Do we have information that is not-public as classified by the MGDPA that *must not* be disclosed to the public (e.g., social security numbers, adoption records)?
- Can we adopt one of the general records retention schedules, or do we need to modify or create an agency-specific records retention schedule and seek approval from the Records Disposition Panel?
- What are the roles of different groups and individuals in our organization in ensuring a coordinated process? How can we facilitate planning, communication, and cooperation among all individuals who create and use the electronic records? What level of control should different individuals and groups have?
- Can we cooperate with other government agencies to streamline the process and save money or time?
- What best practices can we identify and apply to our own situation?
- What is the life cycle of our data? When should we capture records? How can we describe our records continuum? At which phases along our continuum do we need to actively manage the record? Would we benefit from developing a model of our operational process to aid in this discussion?
- How will we ensure long-term preservation and access? What are our requirements under the law?

- What are our options for long-term retention? What are the advantages of each option? How would each option work in our particular situation? What is our budget?
- What technological resources do we have available? How much of our chosen process can we or should we automate?
- What sort of appraisal process will we use to determine which records to keep? How will we ensure that this process identifies all records as defined by the law?
- What staff training do we need to ensure the staff complies with the new procedures and policies?
- What elements of the electronic records do we need to keep (e.g., text content only, graphical appearance, interactivity)?
- What metadata do we need to collect and preserve?

Annotated List of Resources

Primary Resources

Hunter, G. S. "Storage, Handling, and Preservation Best Practices." In *Preserving Digital Information, A How-To-Do-It Manual*. New York: Neal-Schuman Publishers, Inc., 2000: 53–93.
These hands-on recommendations provide practical information for electronic records storage, handling, and preservation. Topics covered include useful information on the deterioration of magnetic media, recommended storage conditions, proper care and handling, file formats (including advantages and disadvantages of different formats), and other best practices.

Minnesota Historical Society, State Archives Department. *Preserving and Disposing of Government Records*. St. Paul: Minnesota Historical Society, May 2008.

<http://www.mnhs.org/preserve/records/docs_pdfs/PandD_may2008.pdf>

Developed for Minnesota government agencies, this overview of the basic principles of records management includes chapters on defining a government record, taking inventory of your records, developing records retention schedules, preserving archival records, disposing of records, and setting up a records storage area. A list of resources for more information is included, as well as information about applicable state law regarding electronic records management. Originally published by the Minnesota Department of Administration in July 2000, the guide was updated jointly by the Minnesota Historical Society and the Minnesota Government Records and Information Network (MNGRIN) in 2008.

Minnesota Historical Society, State Archives Department. *Trustworthy Information Systems Handbook*. Version 4, July 2002.

<<http://www.mnhs.org/preserve/records/tis/tis.html>>

This handbook provides an overview for all stakeholders involved in government electronic records management. Topics center around ensuring accountability to elected officials and citizens by developing systems that create reliable and authentic information and records. The handbook outlines the characteristics that define trustworthy information, offers a methodology for ensuring trustworthiness, and provides a series of worksheets and tools for evaluating and refining system design and documentation.

Stephens, D. O. and R. C. Wallace. "Electronic Records Retention: Fourteen Basic Principles." *The Information Management Journal* 34 (October 2000): 38–52.

Providing a brief, but complete, overview of the basic principles of electronic records management, this article also contains practical guidelines for developing an electronic records management strategy.

Additional Resources

Barata K., P. Cain, R. Routledge. *Principles and Practices in Managing Financial Records: A Reference Model and Assessment Tool*. London: International Records Management Trust, Rights and Records Institute, 2001.

<<http://www.irmt.org/Images/documents/assessment%20tools/mfsr.pdf>>

Of particular interest to the public sector, this handbook provides an overview of international best practices in the management of electronic financial records.

Bill Number S-761. Washington, D.C.: Library of Congress, 2001.

<<http://thomas.loc.gov/cgi-bin/query/z?c106:S.761:>>

This site provides the results of a search for E-Sign legislation in the Thomas database of legislative information on the Internet. The site lists five versions of the bill (including the final enrolled bill) for the 106th congress (1999–2000). The site provides a downloadable file of the bill, plus links to other information about the bill in the Congressional Record and committee reports.

COOL, Conservation OnLine

<<http://palimpsest.stanford.edu>>

A compilation of materials from other sources about electronic conservation, this web site includes links to resources on disaster recovery, electronic media, electronic formats, and storage environments.

International Council on Archives, Committee on Electronic Records. *Guide for Managing Electronic Records from an Archival Perspective*. Paris: International Council on Archives, 1997.

<http://www.ica.org/sites/default/files/ICA%20Study%208%20guide_eng_0.pdf>

This handbook provides a comprehensive overview of electronic records management from an archival perspective. It provides useful information on key concepts, such as life-cycle management, legal issues, technological issues, and implementation tactics, for all readers.

InterPARES Project

<<http://inter pares.org>>

This web site is a comprehensive resource for information about the InterPARES Project. This project is an international research initiative to develop a theory and methods for permanent electronic records preservation. The site includes white papers, links to additional resources, presentations, and workshop listings.

Public Records Office of the United Kingdom. *Records Management: Electronic Records.*

<<http://www.pro.gov.uk/recordsmanagement/erecords/default.htm>>

Published by the Public Records Office of the United Kingdom, this site provides a wide range of information, including downloadable documents on the management, appraisal, and preservation of electronic records; how to incorporate a policy on electronic records management; and toolkits for compiling an inventory of electronic records collections.