

Action Guide for
Improved Records Management in USAID

Part 4
Electronic Records Management Program

U.S. Agency for International Development
M/AS/IRD

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PART 4

Overview of

Electronic Records

Management in USAID

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KEY CONCEPTS IN PART 4

1. Types of Electronic Records
2. Creating and Scheduling Electronic Records
3. Managing and Using Electronic Records
4. Disposing of Electronic Records

What Are Electronic Records?

*...data in any form or in any format that can be read and processed
by a computer and that satisfies the legal definition of a record*

....National Archives & Records Administration

INTRODUCTION

Changing methods of creating, capturing, editing, maintaining, transmitting, retrieving, and storing federal records have increased the volume of electronic information. Records are stored on a variety of electronic media, such as CDs, floppy disks, hard disks, network disk drives, optical disks, and magnetic tapes. Records include text, graphics, sound recordings, or video recordings generated from a variety of software. Complex records are composed of multiple computer files stored in multiple locations across the computing environment. The proliferation of electronic information has resulted in electronic copies of record and nonrecord material existing simultaneously on stand alone workstations, local area networks, and computer system backup tapes.

This document deals mainly with *electronic information systems* and *electronic copies* to ensure proper preservation techniques to effectively and efficiently manage electronic records. All *electronic information systems* for USAID must be approved and scheduled by M/AS/IRD. Most of the requirements for *electronic copies* will be similar for the development of an electronic recordkeeping system. Government policies for dealing with *electronic copies* are still evolving as NARA develops guidance on managing records electronically. **Current USAID policy for preserving electronic copies dictates that paper copies must be printed and filed in the paper recordkeeping system.** In the future, M/AS/IRM will be rescheduling individual papers, after determining the best approach for disposing of electronic copies (such as destroying electronic copies after producing a hard copy for the recordkeeping system). Electronic copies that are produced (printouts) from an office automation application are distinct from a document/records management system or electronic recordkeeping system. It has not been determined how electronic mail messages will be preserved.

The purpose of this document is to provide general guidance to the Agency on managing electronic records sources and electronic information systems (all media) throughout their life cycle, including creation, maintenance and disposition. The general requirements when planning the development of electronic information system are:

- **Creation and Scheduling** involves the creation and maintenance of records sufficient to meet the documentation needs of the Agency.
- **Maintenance and storage** ensures that records are physically located and maintained in an economical manner which allows for easy retrieval, access, and dissemination, as appropriate.

- **Disposition** ensures that records within the information system are scheduled and the system is capable of transferring them to the National Archives and Records Administration (NARA) or deleting records as required by the approved USAID disposition schedule.

This overview (for both types of electronic records) does not include all the requirements, but is meant to help operating units understand factors which M/AS/IRD will consider when evaluating and scheduling electronic records.

Overview of Electronic Records Management Life Cycle

	Creation & Scheduling	Maintenance & Use	Disposition
Electronic Text Records/Electronic Copies (Email messages, word processing documents, etc.)	<ul style="list-style-type: none"> • Distinguish federal records from personal files and non-records • Develop technical documentation for end-users in managing electronic copies • Schedule specific electronic copies for all new records to comply with GRS 20 • In designing the electronic recordkeeping system (document management system), identify appropriate media to maintain electronic copies, complete form 502-1 • Activate the document summary • Identify appropriate storage media for documents such as optical disks, cartridge tapes • Link supporting and related records • Establish format (WP or ASCII) 	<ul style="list-style-type: none"> • Prepare technical documentation to use the system • Use the directory system to maintain the electronic copies • Ensure integrity of the documents • Distinguish between the final version and working copies • Know the security methodology • Use indexing/text searching capability to search for documents • Use appropriate format to permit exchange of documents on electronic media • Use the backup system to preserve records 	<ul style="list-style-type: none"> • Include approved disposition instructions in the document summary to facilitate deleting/retiring/scheduling for the authorized individual only • Comply with authorized disposition schedules for electronic copies • Retain unscheduled records until NARA disposition is approved • Retire permanent records to NARA via M/AS/IRD in accordance with disposition schedule • Prepare review list of electronic copies for retirement/destruction

	Creation & Scheduling	Maintenance & Use	Disposition
Electronic Information System	<ul style="list-style-type: none"> • In designing the electronic information system, or appropriate media to maintain electronic data, complete USAID Form 502-1 to schedule the system • Identify appropriate long term storage media for the system • Develop technical documentation for the system 	<ul style="list-style-type: none"> • Develop technical documentation to use the system • Ensure proper storage care and handling • Maintain adequate system documentation 	<ul style="list-style-type: none"> • Comply with authorized disposition schedules • Retain unscheduled records until NARA disposition is approved • Retire permanent records to NARA via M/AS/IRD in accordance with disposition schedule

1. TYPES OF ELECTRONIC RECORDS

Electronic, or machine readable, records are data in a form or in a format that can be read and processed by a computer and that can satisfy the legal definition of a record. The "computer" may be any size -- personal, mini or mainframe -- in networked or stand alone configurations.

There are many examples of records in electronic format including those listed below:

- Electronic text (word processing)
- Electronic forms
- Electronic mail (Email) and messages
- Numerical & textual electronic spreadsheets
- Graphs and graphics
- Data files
- Databases
- Machine readable indexes
- Optical images
- Electronic information systems
- Software
- Homepages and websites
- Internet and Intranet postings
- Magnetic and cartridge tapes
- CD-ROM
- USAID Electronic Information Systems
 - ▶ AETA Payroll
 - ▶ Development Experience System
 - ▶ Economic & Social Data Base

Even though there are many kinds of electronic records, the focus in this guidance is on two types of electronic records: "*electronic information systems*" and "*electronic copies*." An *electronic information system* is a system that contains and provides access to computerized federal records and other information (database system like the IRS uses to maintain tax data, or Social Security uses to

maintain benefits data, etc.) "*Electronic copies*" are a electronic records created using office automation software such as word processing, spreadsheets, other desktop applications, or electronic mail, that remain in storage on the computer system after the recordkeeping copy is produced. There are some electronic information systems that integrate both data and electronic copies which are considered unique.

The role for the end-user is to determine what *constitutes a record*. The act of creating a document using WordPerfect, for example, does not mean that the end product qualifies as an "electronic record" under federal records management guidelines. Only electronically recorded data that meet *both* conditions are Federal records.

When is an "electronic record" a "Federal record"?

When it is:

- ⇒ made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business, and
- ⇒ preserved or appropriate for preservation as evidence of agency activities or because of the value of the information it contains.

2. CREATING & SCHEDULING ELECTRONIC RECORDS

Before creating electronic records, scheduling is the very first step to be able to effectively manage the records electronically and preserve them throughout their life cycle. *Scheduling is usually the best way to determine when electronic copies are Federal records.* It is important to schedule electronic records before creation because the management of electronic records will be smoother and easier throughout the life cycle. If you wait to schedule disposition to retire or destroy at end of the cycle, it will be very difficult to establish audit trails for electronic records and to determine how it was created and for what purposes. It can lead to the accumulation of unneeded data, compromised systems security and data integrity because of the improper deletion of records and the inability to perform audit reviews.

<p><i>ACTION:</i> When creating electronic documents, identify "electronic records"</p>

Electronic Copies (Electronic Text Records)

USAID office automation software (such as word processing, electronic mail system, spreadsheets) that produces electronic copies does not meet the requirement of electronic recordkeeping at this time. The electronic record copy must be produced (printed) from the office automation software and maintained in hard copy. In the near future, the Agency will develop or procure an electronic recordkeeping system or document/records management system to maintain the records electronically. Also, NARA is developing guidance on: 1) developing or finding an electronic recordkeeping system to appropriately manage records electronically, 2) specifications or requirements for electronic recordkeeping systems, and 3) other aspects of recordkeeping in managing electronic copies.

At this point in time, other alternatives are available to maintain records electronically such as establishing a directory or using appropriate media. The Agency still must produce hard copy for a paper recordkeeping system to comply with disposition instructions. These alternatives shall be included in the technical documentation.

Presently, we are required to schedule administrative and program records to include the electronic copies. The disposition schedule should include disposition instructions to deal with the electronic copies, i.e., destroy after the recordkeeping copy is produced or destroy after x year(s).

Selection of Media

When evaluating options for selecting a storage media, each electronic record medium has its own benefits and drawbacks. The media options usually consist of either magnetic or optical media. Magnetic media are written and read using a magnetic device while optical media use lasers.

Many other factors must be considered when selecting media to maintain electronic records, particularly electronic information systems. How much maintenance is necessary to retain the records? What is the cost of storing and retrieving the records? What is the record density? What is the access time to retrieve stored records? Are the records portable, such that the records can be platform independent and able to be transferred from one medium to another (such as from optical disk to magnetic tape)?

If you plan to copy official records to an electronic medium, you must complete USAID form 502-1 and request approval from M/AS/IRD to ensure that you have meet the requirements established by NARA.

Standard Format for the Electronic Copies

When transferring permanent electronic copies to NARA, they must be converted to or be in ASCII format or another appropriate format to avoid dependency on any specific software format and to ensure the ability to access and retrieve the record in later years. The technical documentation must indicate what kind of format the Agency/Office wants to use in preserving the records, such as use WordPerfect format and later convert them to ASCII when retiring them to NARA, or convert them to ASCII at the creation of electronic records. These issues must be discussed with M/AS/IRD before implementation.

Establishing a Directory and Indexing

End-users participate in managing the electronic records by filing documents and classifying them (file naming or naming conventions) according to standardized file plans. Users shall create an electronic directory or sub-directory using naming conventions which are standardized and easy to understand. The directory/indexing shall be included in the technical documentation. Refer to your operating unit's file plan to apply appropriate file plan codes. (Check with your Records Liaison Officer or File Custodian for a copy of your office's file plan.)

Other factors to consider:

- Create file naming or naming conventions and extensions that are most common to your operating unit.
- Consult with M/IRM support staff or system administrator to assist you in establishing a central electronic directory file on the Local Area Network for your operating unit to manage your electronic files.

Identifier/Element for Electronic Copies

To ensure complete documentation, EACH ELECTRONIC COPY shall include proper identification of originators and recipients, appropriate dates, and any other information needed by the agency to meet its business needs. Each electronic text document must always contain the record characteristics required in 36 CFR 1234. You must activate the feature such as the *document summary* (WordPerfect WP5.x) or *summary information* (Microsoft Word) and fill it out each time you create a new document.

When preserving electronic mail messages in an office automation or Email system, it must include the name of the sender, intelligent representation of all addresses, date of transmission, and receipt data.

Creating and Updating Electronic Information Systems

USAID is encouraged to develop electronic information systems (such as data bases and integrated types of applications) to improve the management of agency records which are mainly data. However, the system containing such records must be designed so that adequate maintenance and disposition procedures are in

place from the start.

When designing new information systems, archives and records management regulations and policies must be addressed in the design phase and be incorporated into life cycle of the system. Other issues specific to electronic information systems should also be addressed in the design phase, particularly the storage media.

As new information systems are developed, system owners are required to submit USAID Form 502-1. If you plan to or have implemented an information system, data base management system or other electronic records, you must obtain authorization for the disposition via M/AS/IRD. Use USAID Form 502-1 or answer the questions from the form on a blank piece of paper and submit it to your Records Management Client Analyst in M/AS/IRD.

ACTION: Complete USAID Form SF 502-1 when initiating new electronic information systems.

In order to assure the long term viability of electronic records created by computer software, the computer system documentation should be available to anyone that might need to read or recreate the record. It is recommended that the USAID Records Management Client Analyst be consulted prior to initiating new systems.

USAID Form 502-1
Description of Electronic Records

U. S. AGENCY FOR INTERNATIONAL DEVELOPMENT DESCRIPTION OF ELECTRONIC RECORDS		
You must provide a system and technical recommendations with this form. Contact your primary client Analyst in WASHDC if you have any questions or concerns.		
Office Unit/Division Name		
System Owner	Phone No.	Location (Bldg. & Room No.)
1. Electronic System Name		
2. Inclusive dates of records in the system:		
3. What is the purpose or function of the electronic records system and the legal authority for the creation of the system?		
4. How is information entered into the system, i.e., what are the system inputs?		
5. How are the records arranged or sorted once they have been entered into the system? What is the primary/key unit of analysis for each file, i.e., one record is created for each _____? _____ (record unit)? What are the applications this system supports? (primary sources or providers of data to the system)		
6. What are the system outputs, i.e., screens of information, printouts, publications, final studies, tapes used for other electronic systems, etc. (the principal products of the system are, e.g., reports, tables, charts, graphic display, correspondence)		
7. Are the data in this system duplicated in either paper or electronic form elsewhere in the office or in USAID? If yes, please explain.		
8. How often are the records in the system updated or changed?		
9. How long does the information in the system need to be maintained for current agency business? Please explain briefly.		
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3. MANAGING AND USING ELECTRONIC RECORDS

This section, concerns the end-users' responsibility to continue to maintain and use their electronic copies and electronic information systems. In this section, technical documents shall be further defined, including the techniques/alternatives that were described in Section 2: Creation & Scheduling.

ACTION: Develop technical documentation before using the electronic copies and electronic information systems.

Electronic Information Systems

Technical documentation for the electronic information system is usually developed and produced before operating the system. In many cases, end-users attend training programs or are trained to use the system. For example, the payroll office has trained all the specified end-users in using American Electronic Time and Attendance System and provided them with technical documentation in using the system to process the time and attendance activity.

Technical documentation shall contain the following information. In some cases it can be included in a separate technical document for the system, e.g., the user guide or system's technical documentation.

- record definition
- physical and technical characteristics
- data dictionary
- relationship between data elements
- disposition instructions and determination of media to use to retire (the system owner is responsible for this retirement/destruction with the approval of M/AS/IRD)

Electronic copies

The technical documentation for managing and using electronic copies usually contains instructions on how to do indexing, how to search for a document, or how to get authorization at the record level. All requirements are to ensure that electronic records are available and accessible throughout their life cycle. It shall contain instructions to use specific identifier codes in the document summary that staff are required to use to be able to search and retrieve the specific documents in office automation. It also shall contain the location of the documents to be accessible to the end-user. Other topics which are to be included in the technical documentation are:

- How to prevent changes to electronic copies
- How to process the electronic copies
- How to file in the directory and naming conventions
- Where is the location of files on the LAN or whatever appropriate place
- How to establish and use multiple user access
- How to use automated regular backups or other appropriate method
- How to deal with redundant copies
- How to handle the linkage of two related electronic records
- What is required standard format for all electronic copies
- How to use/activate document summary in word processing

ACTION: Protect file integrity of electronic records through system security and regular system backups.

It is important that the integrity of all Federal records be maintained throughout their life cycle. In the technical documentation, handling electronic information requires a well planned consideration of how records will be used and maintained in the offices while protecting their integrity. Also, successfully using the system will require understanding by users or employees of their obligation and to use technical documentation. When initiating this activity, seek the support of M/IRM technical staff for assistance concerning the technical aspects of computer networks and equipment.

A lot of the above requirements in creating and maintaining electronic copies are usually used for development/procurement of electronic recordkeeping or document/record management systems. This kind of effort requires long-term planning and budgeting by the Agency or office.

4. RETIRING AND DISPOSING OF ELECTRONIC RECORDS

The final phase of the life cycle of managing electronic records is disposition.

When records are no longer needed for current Agency business, they have reached the end of their scheduled life span. Based on the scheduled disposition:

- eligible records are transferred to Federal records centers
- permanent records are transferred to NARA and
- temporary or nonrecords are disposed of

USAID's Disposition Schedule for Electronic Records is maintained in the Agency's *Automated Directives System, Section 502.5.6, Mandatory Reference: Appendix 6C*. It complements the disposition schedules for other records found in *Appendices 6A and 6B*. Often, electronic record disposition instructions may differ from instructions for records maintained in paper form, and should be consulted prior to disposing of electronic records

Electronic Copies

In USAID, both record and nonrecord materials are managed and scheduled for proper disposition. Electronic records are disposed of in accordance with the USAID Records Disposition Schedule approved by NARA. As stated earlier, it is expected that the disposition of electronic records will include provision for the disposition of the electronic copy of the record that resides on electronic mail or other office automation application, in addition to the paper copy maintained in the paper recordkeeping system.

Prior to retirement of electronic copies, an authorized individual must validate record destruction and transfer decisions. Records managers should review disposition determinations. Procedures should include the capability to enable authorized individuals to assign and change record disposition or reschedule records already in the system when disposition instructions change from the

original designations. It is important to maintain an audit trail of disposition actions.

ACTION: Consult the *Agency Automated Directives System, ADS Section 502*, for more information on records management policies and procedures, and consult the Glossary of relevant terms.

Electronic Information Systems

Most of the Disposition Schedule is devoted to the major systems maintained by USAID's Office of Information Resources Management, and to other major systems "owned" by other offices throughout the Agency. However, Part I includes a chapter which covers general types of electronic records which may be maintained by a number of offices, such as case tracking files, lists of contractors, housekeeping files, mailing lists, etc. Any electronic records system not included in this schedule should be brought to the attention of the M/AS/IRD Records Management for proper scheduling.

Retirement of Media to NARA

The most common transfer media for electronic records is magnetic tape. A copy of the electronic record and any related documentation and indexes is transferred

ACTION: Select the appropriate media for transferring electronic records for final disposition.

to NARA at the time specified in the USAID Records Disposition Schedule. Unscheduled USAID electronic records are considered permanent until a disposition schedule for USAID electronic records has been approved by NARA.

Classified information must be sent via classified e-mail channels only, with the proper classification identified on each document.

Electronic media suitable for business or archival purposes should constantly be reevaluated by users, computer operations administrators, and records management personnel. Each medium has a different life span, and records data may need to be migrated to a new medium or format in order to preserve the information. Proper selection of software, media, and file formats to be used when creating electronic records will ensure that records can be adequately read, retrieved, and duplicated until they are no longer needed. Instructions for retrieval and /or preservation must be documented in a manner to ensure long-term readability. This might include physical and technical characteristics of the records, hardware and software platforms required to read the records, a description of the form of the data, and any other technical information needed to read or process the records.

Conclusion

NARA periodically evaluates the records management programs of Federal agencies. Anyone with responsibility for creating, managing and disposing of electronic records is encouraged to consult regularly with the M/AS/IRD Records Management in M/AS/IRD for the latest policy guidance. This guidance is also evolving and will be revised as new regulations mandate a change in policy.

For assistance concerning the electronic records, or for questions concerning the definition of federal records, records management at USAID, or the procedures to manage or retire records from active office space, records destruction procedures, or other records matters, please refer to ADS Section 502 on Records Management, contact a USAID Records Management Client Analyst or the Records Liaison in the your operating unit.

ACTION: Contact Records Management for help and guidance in properly creating, managing, and retiring your electronic records.

REFERENCES

Electronic Records Management Program, USAID. ADS 502.5.6.

Electronic Records Disposition Schedule, ADS 502.5.6 Mandatory Reference, Appendix 6C.

Electronic Records Guidance, USAID, M/AS/IRD, April 1, 1998

Managing Electronic Records, Instructional Guide Series, NARA, 1990.

Disposition of Electronic Records, NARA Bulletin 98-02, March 10, 1998.

Legal Requirements Concerning the Creation, Maintenance and Disposition of Electronic Mail Messages, USAID General Notice, May 15, 1996

36 CFR 1234 Electronic Records Regulations