

**§ 1234.28 Security of electronic records.**

Agencies shall implement and maintain an effective records security program that incorporates the following:

(a) Ensures that only authorized personnel have access to electronic records.

(b) Provides for backup and recovery of records to protect against information loss.

(c) Ensures that appropriate agency personnel are trained to safeguard sensitive or classified electronic records.

(d) Minimizes the risk of unauthorized alteration or erasure of electronic records.

(e) Ensures that electronic records security is included in computer systems security plans prepared pursuant to the Computer Security Act of 1987 (40 U.S.C. 759 *note*).

[55 FR 19218, May 8, 1990. Redesignated at 60 FR 44641, Aug. 28, 1995]

**§ 1234.30 Selection and maintenance of electronic records storage media.**

(a) Agencies shall select appropriate media and systems for storing agency records throughout their life, which meet the following requirements:

(1) Permit easy retrieval in a timely fashion;

(2) Facilitate distinction between record and nonrecord material;

(3) Retain the records in a usable format until their authorized disposition date; and

(4) If the media contains permanent records and does not meet the requirements for transferring permanent records to NARA as outlined in § 1228.270 of this chapter, permit the migration of the permanent records at the time of transfer to a medium which does meet the requirements.

(b) The following factors shall be considered before selecting a storage medium or converting from one medium to another:

(1) The authorized life of the records, as determined during the scheduling process;

(2) The maintenance necessary to retain the records;

(3) The cost of storing and retrieving the records;

(4) The records density;

(5) The access time to retrieve stored records;

(6) The portability of the medium (that is, selecting a medium that will run on equipment offered by multiple manufacturers) and the ability to transfer the information from one medium to another (such as from optical disk to magnetic tape); and

(7) Whether the medium meets current applicable Federal Information Processing Standards.

(c) Agencies should avoid the use of floppy disks for the exclusive long-term storage of permanent or unscheduled electronic records.

(d) Agencies shall ensure that all authorized users can identify and retrieve information stored on diskettes, removable disks, or tapes by establishing or adopting procedures for external labeling.

(e) Agencies shall ensure that information is not lost because of changing technology or deterioration by converting storage media to provide compatibility with the agency's current hardware and software. Before conversion to a different medium, agencies must determine that the authorized disposition of the electronic records can be implemented after conversion.

(f) Agencies shall back up electronic records on a regular basis to safeguard against the loss of information due to equipment malfunctions or human error. Duplicate copies of permanent or unscheduled records shall be maintained in storage areas separate from the location of the records that have been copied.

(g) *Maintenance of magnetic computer tape.* (1) Agencies shall test magnetic computer tapes no more than 6 months prior to using them to store electronic records that are unscheduled or scheduled for permanent retention. This test should verify that the tape is free of permanent errors and in compliance with National Institute of Standards and Technology or industry standards.

(2) Agencies shall maintain the storage and test areas for computer magnetic tapes containing permanent and unscheduled records at the following temperatures and relative humidities:

Constant temperature—62 to 68 °F.

Constant relative humidity—35% to 45%