IN THE SUPREME COURT OF THE STATE OF ARIZONA

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JAN 2 7 1999			
NOEL K. DESSAINT CLERK SUPREME COURT BY ALL ALL ALL ALL ALL ALL ALL ALL ALL AL			

In The Matter Of:)	
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TECHNICAL STANDARDS FOR)	Administrative Order
THE ELECTRONIC REPRODUCTION)	No. 99- ¹⁰
OR IMAGING OF COURT RECORDS)	
)	

On April 7, 1998, the Supreme Court took action in the matter of Rule 79 (f), Arizona Rules of Civil Procedures and Rule 29 (B) (2), Rules of the Supreme Court (R-97-0037). It directed that the matter be "referred to the Commission on Technology for drafting of proposed standards for maintenance and preservation of photographic or electronic images of original records." The Commission on Technology undertook to develop this document to establish standards for the use of imaging technology in the courts and to ensure the accessibility, transferability and retrievability of information stored on optical and other non-traditional media. These standards are consistent with recognized existing industry standards and open systems architecture and policies. They are designed to help courts avoid proprietary systems and enable them to safely and more efficiently maintain and share electronic court records.

Now, therefore, pursuant to Article VI, Section 3, of the Arizona Constitution,

IT IS ORDERED that the attached Administrative Requirements for the Electronic Reproduction or Imaging of Court Records be approved and distributed to the chief justice of the Supreme Court, the chief judge of each division of the Court of Appeals, the presiding judge of the Superior Court of each county, and the clerk of the Supreme Court, each division of the Court of Appeals, and the Superior Court.

IT IS FURTHER ORDERED that these standards apply to all court records kept by the Arizona courts in accordance with state statutes and Rules of Court, to the methods by which court records are electronically reproduced or imaged, to the methods and formats by which these court records are stored, archived, and reproduced for the purpose of maintenance and preservation in accordance with the Rules of Court, this and other applicable Administrative Orders and Records Retention Schedules, and include the public access provisions of the Rules of Court.

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Dated this	day of, 1999.	
	THOMAS A. ZLAKET	
	Chief Justice	

January

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ADMINISTRATIVE REQUIREMENTS FOR THE ELECTRONIC REPRODUCTION OR IMAGING OF COURT RECORDS

A. General Requirements

- 1. Non-proprietary Systems that the courts use to image, store, and access court records must adhere to open systems standards. Imaging systems that employ proprietary designs, formats, software or media, or require use of non-standard devices to access court records shall not be used. Vendors must certify adherence to industry and open systems standards which are published in ANSI/AIIM standards documents.
- 2. Courts must employ security procedures that prevent unauthorized modification or deletion of records.
- 3. Courts must establish written procedures to ensure records in imaging systems are deemed to be a true and correct copy of the original document.
- B. <u>Imaging and Indexing Requirements</u>
- 1. The imaging system shall use a non-proprietary file format such as TIFF; or
- 2. If using a proprietary file format is unavoidable, the vendor must provide a bridge to a non-proprietary file format standard in accordance with ANSI/AIIM MS53-1993 Recommended Practice; File Format for Storage and Exchange of Image; Bi-Level Image File Format: Part 1 as updated or superceded.
- 3. The court shall secure from the vendor a detailed definition and description of the image file format structure used in the imaging system.
- 4. The imaging system must support scanning densities of 300 pixels per inch or higher.
- 5. Scanning quality must adhere to the standards presented in American National Standard for Information and Image Management Recommended Practices for Quality Control of Image Scanners (ANSI/AIIM MS44-1988 (R1993)).
- 6. Compression/Decompression the imaging system must support the current CCITT image compression/decompression Group 3 or Group 4 techniques without

proprietary alterations to the algorithm. If the use of a proprietary compression algorithm is unavoidable, the system must provide a gateway to either Group 3 or Group 4 standards (or to a compression standard subsequently adopted by ANSI).

- 7. Indexing The imaging system shall utilize an index storage method based on standard relational database technology with access using ANSI SQL.
- 8. An index entry verification shall be performed to ensure that all the images are easily and accurately retrievable.
- 9. The indexing process shall also identify documents which are subject to approved criteria for purging prior to any conversion to a permanent archival format.

C. Accessibility and Migration Requirements

- 1. Courts must insure that the public is afforded reasonable access to court records, consistent with the principles of Arizona Supreme Court Rule 123, Access to Public Records.
- 2. Accessibility requires that "migration paths" are planned so devices, media and technologies used to store and retrieve court records are not allowed to become obsolete and they are promptly replaced or upgraded.
- 3. For an existing imaging system, any new equipment or software is required to be "backward-compatible" or vendors must guarantee conversion of 100% of the image and index data to the new system so access to existing electronic court records is never impeded.
- 4. Electronic images must be periodically refreshed in order to insure their accessibility for as long as required by the record retention schedules of the Arizona Supreme Court. Such procedures may require recopying of images to new media.
- 5. The system must ensure that access to imaged data conforms with court rules on public access which define categories of records that are restricted or available to the public.
- 6. Document images must be an exact and unaltered replica of the original document.

D. Retention and Storage Requirements

- 1. Custodians of public records must protect records from deterioration, loss, or destruction (Rule 29, Rules of the Supreme Court; ARS §41-1347(A), ARS §41-1350).
- 2. All recording media used for storing court electronic records must comply with ANSI/AIIM standards.
- 3. The manufacturer's recommendation for storage and use of optical media shall dictate the criteria for storing and using such media.
- 4. Optical media (WORM, CD-ROM, DVD) used for storing court records must be inspected and tested regularly to verify its good condition. Validation of a random sampling of the media must be performed at least once annually.
- 5. Only non-reusable media shall be used for storing court records electronically for archival purposes.
- 6. Courts must insure that records generated by or received for the courts are preserved in accordance with approved records retention schedules of the Arizona Supreme Court.

E. Glossary of Terms

AIIM - Association for Information and Image Management

ANSI - American National Standards Institute

ASCII - American Standard Code for Information Interchange

Archival - relating to that point in the electronic document management process when the subject matter (e.g. case) associated with a document is no longer subject to modification, the file of related documents has been purged per approved records retention schedules, and the long-term or permanent copy of the document(s) is created and maintained so as to reasonably assure its permanent preservation.

Backward-compatible - the ability of a system to read documents and information from earlier versions without loss of data integrity.

CCITT - Consultative Committee on International Telegraphy and Telephony

CD-ROM - Compact Disc - Read Only Memory

Digital Image - the digital representation of a document.

DVD - Digital Video Disc

Electronic Records - all records that require the aid of a computer to read the record.

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Dated this	27th	day of	January	, 1999.

THOMAS A. ZLAKET Chief Justice

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Administrative Requirements for the Electronic Reproduction or Imaging of Court Records

IEEE - Institute for Electrical and Electronic Engineers

Imaging - The process of using computer technology to record, store, and access or view court documents and court records.

Index - descriptive locator information about the digital images (files) that allows the user to accurately identify a file on an electronic storage medium.

ISO - International Standards Organization

Migration - the process of upgrading to new technologies while preserving accessibility to existing court records.

OCR - Optical Character Recognition. A technique by which characters can be machine-identified, then converted into codes (such as ASCII) which can be processed by a computer.

Pixel, PEL - The smallest element of a display surface that can be independently assigned color or intensity.

Proprietary - vendor-specific or non-standard technology

Refresh - The copying of an image or a whole storage medium for the purpose of preserving or enhancing the quality of the images.

Reproduction - the process of making an identical copy from an existing document on the same or different media.

SQL - Standard Query Language

TIFF - Tagged Image File Format A standardized file format or tag that defines the exact data structure of the associated image.

WORM - Write Once Read Many