

## FAQ's

### General Questions

- What happens if I need a file when you have it for scanning and archiving?
- How long does it take to scan and archive a file?
- How long will it take before I can access a file on line?
- Why is scanning and electronically archiving better than paper archiving?
- What are the main benefits of electronic file management?
- How can I protect from unauthorised users?
- Do I need to let my PI insurers know that I am scanning files and destroying them once electronically held?
- How can I use word search and cut and paste functionality on all of my archived files?
- What are your costs?
- What quality controls do you use?
- How do you ensure that security of online file transmissions is maintained?
- Are scanned documents legally admissible?

Answers to all of the above questions follow. If you have a particular question to which you cannot find an answer on this website please email the question to [sales@logicstoreuk.com](mailto:sales@logicstoreuk.com). We will answer your question and post both the question and answer on this website.

### What happens if I need a file when you have it for scanning and archiving?

If the paper file is needed it will be returned to you. Alternatively, if it has already been scanned but not yet available on line it will either be emailed to you or on line availability will be expedited.

You can contact us by email, phone or fax.

You are guaranteed to have access to the file within 24 hours of contacting us.

### How long does it take to scan and archive a file?

From collection to it being available on line will usually take up to 4 business days.

### How long will it take before I can access a file on line?

The service standard is that within 5 business days of our collecting a file it will be available on line. We aim to exceed this standard but in the event of an urgently required file a phone call, email or fax will ensure that you have access to the file within 24 hours.

### Why is scanning and electronically archiving better than paper archiving?

The key is the availability on line of knowledge, information and precedent activity.

This information can be shared instantaneously with all staff in your firm.

Benefits therefore include:

- ♦ Retention of control
- ♦ Increased efficiency (and peace of mind)
- ♦ Sharing of information
- ♦ Instant access to files at the touch of a button
- ♦ Better control
- ♦ Word search and cut and paste functionality
- ♦ In built disaster recovery

Historically archiving costs have been a drain on a firm's profitability. It is recommended that scanning and archiving costs be passed on to clients by way of disbursements.

Files that are destroyed will not carry any further archiving costs giving control over future operational costs.

### What are the main benefits of electronic file management?

Please see the answer to the preceding question.

### How can I protect from unauthorised users?

Logicstore uses encrypted messaging similar to that used by Banks. Each user has a log in and a password. The system is therefore password controlled. It is, however, essential that such logins and passwords are kept secret. In the event of staff leaving then a phone call, email or fax to Logicstore will enable that person to be denied future access.

### Do I need to let my PI insurers know that I am scanning files and destroying them once electronically held?

We recommend that you let your PI insurers know the processes you are employing. In reality, your new system with Logicstore will overcome the historic problem of lost files. Your PI insurers should be more comfortable that all files that may be needed in the future will be available via the touch of a button.

Please also see 'Are scanned documents legally admissible?'

### How can I use word search and cut and paste functionality on all of my archived files?

Logicstore creates archive files within a locked pdf. Thus, files cannot be changed. However, Logicstore structures the images so that word searching can operate not only on individual files (or parts of indexed files) but also across your whole archived database.

This search facility is very powerful. For example, you may need to know which clients had a particular precedent used in their process. The global search facility will facilitate identifying such files. It may also be useful when one solicitor takes over the business of another. For example, files with a potential liability may be easy to identify if they have been scanned as part of the takeover process.

The cut, copy and paste facility that you will be used to in word operates on all pdf images allowing parts of a file and/or precedent activity to be efficiently used by all staff who have been given access to the archived files.

### What are your costs?

Logicstore fees are simple to understand and transparent. Please see the fee section of this website.

### What quality controls do you use?

Please see the answer to the following question. Logicstore operates in accordance with BIP0008:2004.

### How do you ensure that security of online file transmissions is maintained?

Logicstore makes every effort to ensure that your confidential documents remain that way - secure, confidential, unedited and valid. We take the following precautions with your security -

1. Access to your company's database of documents is achieved through usernames and passwords on our website. Communication between your office and the Logicstore server is encrypted using an SSL Certificate, meaning your information cannot be monitored by a third-party.
2. When your document is scanned, it is made available as a text-searchable PDF file, in a format and quality in accordance with BIP 0008:2004 - "Legal Admissibility of Information Stored on Electronic Document Management Systems".
3. For your company, Logicstore will generate a "Digital ID" for use within Adobe Acrobat Reader and Microsoft Windows. This small electronic file will be sent to your company on CD using secured mail - for your protection, it will never be available for download, or e-mailed to you.
4. After your document has been scanned, it will be distributed back to your company using 2 methods. The first of these will be a CD-ROM or DVD containing the file, mailed to your office securely. This file will be "signed" with your Digital ID, allowing you to safely determine that the document has not been altered since it was saved. To enhance usability and portability, this electronic document will **not** be secured - it will be able to be viewed on any computer, using Acrobat Reader. How you secure and use this CD-ROM is up to your company.
5. The other method of document distribution is through your online document database. After your CD/DVD has been shipped, your document will be **secured and encrypted** using your Logicstore Digital ID. It will then be placed on the Logicstore servers, available for your company to download immediately, via the secure website. This version of your document can only be opened by computers who have access to your company's Digital ID. In the unlikely event that someone is able to retrieve a copy of this electronic file, they are unable to open it and view the contents. This is why your digital ID will **never** be available to download, or e-mailed to anyone.
6. For ease of use, your Digital ID can be installed on computers within your company. Logicstore will provide instructions on how to achieve this.
7. If you believe you have lost your Digital ID, Logicstore can re-create a new one and re-secure your existing documents with this - like changing the locks in an apartment. This could incur a small fee.
8. Both versions of these electronic files will be locked, to avoid any editing or removal/insertion of pages. The file acts as a "snapshot" of your physical document. This can be confirmed through the electronic signature of the document.

During scanning and document handling, Logicstore will follow a strict process, with an audit trail, showing how the document was scanned and managed. This will ensure Logicstore maintains compliance with the BIP 0008:2004 Standard. At your company's request, this process and audit trail can be demonstrated to you.

### **Are scanned documents legally admissible?**

As part of its service Logicstore will provide its clients with comfort that it operates within the British Standards Code of Practice for Legal Admissibility and Evidential Weight of Information Stored Electronically (BIP0008:2004).

Clients can be assured that all files will be dealt with in accordance with the Code. Logicstore will undertake Compliance Audits of its processes and systems on a regular basis so that clients are reassured that in the unlikely event of electronically archived documents being required in a court of law they will be both admissible and carry evidential weight.

A detailed explanation of BIP008:2004 follows.

## **THE LEGAL ADMISSIBILITY OF INFORMATION STORED ON ELECTRONIC DOCUMENT MANAGEMENT SYSTEMS**

**British Standards Institution (BSI) BIP0008**

**Code of Practice on Legal Admissibility and Evidential Weight of Information Stored Electronically**

### **Introduction**

The BSI Code of Practice is concerned with 'the authenticity, integrity and availability of electronically stored information, to the demonstrable levels of certainty required by an organisation. It is particularly applicable where this stored information may be used as evidence in disputes inside and outside the legal system'

ISO 15489 (BS ISO 15489-1:2001) is the international standard on records management. As there is overlap between the BSI Code of Practice and the International Standard the 2004 revision of the Code of Practice was to ensure that the two documents could be implemented together.

The 2004 Code contains an annex mapping the content of the records management International Standard to the Code of Practice.

The Code of Practice was originally published in 1996 as BSI DISC PD 0008. It was updated in 1999 as BSI DISC PD 0008:1999. The current Code of Practice is BSI BIP 0008:2004.

### **Overview**

The issue of Legal Admissibility is at the core of records management principles. An organisation needs to be able to prove (to a court of law or some other statutory body) that the contents of a particular document or data file created or existing within an Electronic Document Management System have not changed since the time of storage. If the data file is an electronically stored image of an original paper document, an organisation must be able to prove that the electronic image is a true representation of the original. Proving the authenticity of electronically stored documents is crucial to their admissibility in a court.

In England and Wales, the main statute governing the admissibility of documents is the Civil Evidence Act 1995. This Act resolved many of the outstanding legal difficulties that had arisen through the use of computers for information storage. The Civil Evidence Act shifted the argument from legal admissibility to evidential weight or value. It makes it easier to prove the authenticity of documents, by producing the original or a copy, irrespective of the number of removes between the original and the copy and irrespective of whether or not the document is a paper one or an electronic one. The court needs to be satisfied as to the authenticity of the copy, and therefore an organisation needs to be able to demonstrate that it has administrative procedures that will satisfy the court as to a document's authenticity. Irrespective of issues of legal admissibility or evidential weight, an organisation should ensure that the electronic storage of information complies at all times with best practice. As well as needing to meet legal requirements an organisation has business and ethical reasons for ensuring that the information it controls is not mishandled.

An organisation needs to demonstrate that it complies with the five principles of information management on which the Code is based. These principles are encapsulated into a code of practice - the "Code of Practice for Legal Admissibility and Evidential Weight for Information Stored Electronically" (BIP0008) published by the British Standards Institute. Compliance with BIP0008 will ensure that the organisation manages its information according to best practice, thereby maximising the chance of electronic records being satisfactorily authenticated.

An organisation will need to have in place the following five information management components:

1. Representation of Information (i.e. an information management policy)
2. A Duty of Care
3. Business Procedures and Processes
4. Enabling Technologies
5. Audit Trails

## **I. Representation of Information**

An information management policy document will set out, for operating staff and any future litigants, the rules surrounding the various forms in which documents are held, the documents' life cycles and the legal advice sought and acted upon.

The policy should set out in as much detail as necessary the variety of documents that will be presented for storage, for example: Internal and external correspondence, reports, drawings and specifications, legal documents and, perhaps, photographs, video and audio files.

It will typically describe the different types of information held within the organisation and, for each type, specify:

- ♦ the level of security
- ♦ appropriate storage media
- ♦ formats and version control
- ♦ information management standards, e.g. quality
- ♦ retention and destruction policy
- ♦ responsibilities and roles for information management functions
- ♦ responsibilities for compliance with the code BIP0008

Any system needs to be flexible enough to satisfy the requirements of the organisation's information management policy. It must be capable of:

- ♦ meeting the highest security standards set out in the policy
- ♦ integrating with a wide range of storage media
- ♦ handling different document types
- ♦ managing documents under version control
- ♦ meeting the retention requirements
- ♦ meeting information management standards, e.g. storing images to the quality standard set out in the policy
- ♦ allowing documents to be permanently erased

The 2004 Code recommends that a document management policy be developed, expanding on the retention schedule to include such details as media type, file format, destruction policy and responsibilities.

## **2. Duty of Care**

To fulfil its responsibilities under the duty of care principle, an organisation will need to have in place:

- ♦ an awareness of the legislative and regulatory bodies pertinent to its industry
- ♦ a chain of accountability and defined responsibility for activities involving electronic document management at all levels
- ♦ a system to keep up to date with information management theory and practice, and developments among appropriate bodies and organisations
- ♦ a documented information security policy

Under the duty of care responsibilities the system must have the functionality to allow for separation of roles. The person who inputs data should not be the same person who performs quality checks. This separation of administrative roles should be able to be mirrored in the logical access controls within the EDMS.

The British Standard BS 7799: 1999 (ISO 17799) "Code of Practice for Information Security Management" is the UK/European reference document for information security. Proof of compliance with BS 7799 will usually demonstrate that an organisation has exercised a duty of care.

## **3. Business Procedures and Processes**

An organisation should have documented operating procedures (a user manual) for each of the information management systems it runs.

The procedure manual is the document that the organisation will produce, if its electronic storage methods are ever challenged, to prove to auditors, lawyers or judges that the processes are precise, secure and approved for its normal business procedures.

The user manual will typically define the following:

- ♦ Document types
- ♦ Preparation of documents prior to scanning
- ♦ Photocopies
- ♦ Batch control
- ♦ Scanning processes
- ♦ Scanning specific documents
- ♦ Image Processing
- ♦ Compression Techniques

- ◆ How information is indexed
- ◆ Quality control
- ◆ Procedures for producing authenticated output
- ◆ procedures for authenticating copies of documents
- ◆ how information is transmitted within the system
- ◆ Procedures for document retention and destruction
- ◆ System maintenance schedules
- ◆ Security and protection, including encryption and the use of digital certificates
- ◆ Backup and system recovery procedures
- ◆ Use of bureau services
- ◆ workflow
- ◆ date/time stamping
- ◆ version control

It is important for the system to be able to produce output that will ensure that a document is appropriately authenticated.

The Code insists that the procedures and processes be audited annually, or more frequently for legally sensitive archives, to make sure that the approved procedures are being observed or that new ones meet the requirements of the Code and are formally and properly incorporated in the manual

Some specific recommendations in the code include:

Preparation of documents prior to scanning

The code requires that:

"Documents should be examined prior to the scanning process, to ensure their suitability. Such factors as their physical state (thin paper, creased, stapled, etc.) and the attributes of the information (black and white, colour, tonal range, etc.) should be noted. Procedures for this examination process should be documented in the user manual."

### ***The Scanning Process***

The Code requires, for example, that records be kept on the system audit trail of key information concerning imported documents. This information should include as a minimum:

- ◆ Unique identifier for each batch of documents
- ◆ Date and time of scanning
- ◆ Identity of the person who performed the scanning
- ◆ Type of material scanned (e.g. paper document, microfilm, aperture card, etc.)
- ◆ Number of documents and number of pages in each document scanned
- ◆ Detail of post-scanning processes (de-skewing, de-speckling, etc.) performed

The Code recommends that records be kept in batches so it is easier to check that:

- ◆ All required activity has been performed
- ◆ Any anomalies have been noted
- ◆ Appropriate quality procedures have been completed
- ◆ Records of any exception processing have been made

These batching recommendations allow a company to acknowledge that its system cannot be perfect, but that it has seen the anomalies and has registered them, either with a view to correcting them or merely making note of them.

If the accuracy the system is challenged in court, the company will be able to it knows where mistakes are made.

### ***Indexing***

The Code makes the statement:

"Indexing is a vital part of the process of storing documents"

Whether the system involves automatic indexing, manual data entry, or a combination of these, the Code insists that:

"Procedures for indexing documents should be described in the user manual. These procedures should include methods of checking the accuracy of the index records created."

It sets out what should be recorded, what the audit trails should reveal and operator training requirements. It reminds the records management team to set realistic quality control criteria and processes for noting errors and levels of legibility.

### **Quality Control**

It is important to be able to demonstrate to a court that quality controls are adequate and work.

The Code sets out several important processes, including these:

"A sample set of original documents, or of documents equivalent in characteristics to the original documents, should be assembled for the purposes of bench-marking scanning system performance against the quality control criteria."

and

"The result of all quality control checks, including Test Target scans, should be recorded in the quality control log." The records manager must test and check regularly and record the results of those tests and checks.

### **Document Retention**

The Code says that all retention and destruction procedures should be recorded in the user manual. It sets out instances when, even if company policy is to destroy all documents after scanning, some papers may have to be retained:

- ◆ Where photocopies have been used to aid the scanning process
- ◆ Where the original is of poor quality and below the standard required by your system
- ◆ Where an original contains amendments that cannot be identified on a scanned image.

"No original source document should be destroyed until the write processes have been verified and appropriate backup procedures completed."

Originals should not be shredded until it is clear that the scanning and indexing processes have been completed properly and the data has been backed-up.

### **Security and Protection**

Security and protection covers user access, mixed and/or removable media storage, file transfer protocols, data and hardware security, virus infection, power failure and auditing.

The Code states:

"Where mixed-media hierarchical storage systems are used, they should be assessed to ensure that they are used in a write-once mode only."

"Data file transfers, such as moving documents from one device to another, should be controlled by the application software. It should not be possible to move documents or change index data without an entry in the audit trail."

"Although the user facilities (document input and output) may be provided in a normal (unprotected) environment, the central part of the system (file servers, data storage, system software, etc.) should be installed in a secure area with restricted physical access."

## **4. Enabling Technologies**

A typical system will be comprised of many different technologies. Each of these technologies, or rather their component parts, will need to comply with BIP0008.

The Code describes technologies that may be used in a storage system and how they should be utilised and controlled to ensure that the system will store documents in accordance with BIP0008. These technologies include:

- ◆ storage media
- ◆ access control mechanisms
- ◆ system and data integrity
- ◆ image processing
- ◆ compression techniques
- ◆ compound documents
- ◆ data migration
- ◆ document deletion

Each of these properties of an EDMS is critically important.

## ***Storage Media***

The issue of appropriate storage media is critical.

There are two types of storage media, distinguished by the medium's ability to be written to many times or just once:

- ♦ write many - or 're-writable' technologies
- ♦ write once - commonly referred to as WORM ('write once - read many') technologies

An alternative way of considering data storage technologies is to distinguish between magnetic media and optical media. In general, magnetic media are write-many technologies while optical media may be write-once or write-many. CD-RW (CD re-writable) and erasable optical disks are optical technologies that can be written to many times.

It isn't necessary to use WORM technology to comply with BIP0008. While WORM has the advantage that it is not possible to directly modify data once it has been stored, in practice data is modified by deleting the original data and writing the modified data. Each time a file is modified a new copy of the file has to be written, rather than just overwriting the existing file. The available storage space can be reduced much more quickly than expected. As WORM storage is more expensive than magnetic disk (and even RAID array), the use of WORM exclusively for storage can be expensive. Access to data on a WORM drive, particularly one in a jukebox, is slower than access to data stored in a RAID array. Data stored on magnetic disk can in principle be modified. However the risk of this happening, while significant, is small and the risk can be minimised, if not eliminated altogether, by ensuring that adequate controls are implemented in both the storage system and the EDMS access control system. Users with read only access rights cannot modify the data but those with read/write access obviously can, and therefore there is a requirement to securely log at the system level all read/write accesses so that unauthorised writes to the system can be detected.

## ***Access Control***

The system must have an adequate access control mechanism implemented so that individuals, groups and roles can be distinguished, and permissions granted based on the access control list.

## ***System and Data Integrity***

The system should provide an environment in which the integrity of the data is preserved, including the transfer of data between the EDMS software and the storage medium. Data integrity should be inherent to the EDMS and any integrity anomalies should be automatically detected and reported. Malicious attempts to change the data should be detected, though if the person acting maliciously has sufficient knowledge of the system's integrity checking mechanism, it might be possible for that person to alter a document and to 'fool' the integrity checking.

Digital signature technology ensures that the integrity of a data file or a document in a system can be verified. A document that has been digitally signed cannot be altered without invalidating the signature. The EDMS software should be capable of working with the technology that implements digital signing. The signature also has a secondary role, one of non-repudiation - the person creating a document and signing it cannot subsequently deny authorship.

## ***Compound Documents***

A compound document contains a variety of parts - photographs, graphics, text, and video perhaps. It may be disassembled and each part processed in different ways. The Code advises that they be stored on the same storage device along with the metadata needed to identify the respective locations automatically and make an "accurate and unambiguous reconstruction" of the complete document.

## ***Image Processing***

Image processing is a post-scanning technique to improve the quality of a scanned document. These processes can include de-skewing, de-speckling, background clean-up, border, "noise" and forms removal. Though there can be good reasons for improving image quality, care must be exercised in image cleanup to ensure that essential detail is not removed. The Code warns that the techniques are used "with extreme care". De-speckling, for instance, carries a high risk of removing punctuation or decimal points. Any image processing should be identified in the system user manual. Any image processing techniques used could reduce the evidential weight of subsequent retrieved images.

## ***Compression Techniques***

Systems storing scanned images normally use compression algorithms to reduce file sizes so that storage requirements are reduced and system performance improved. It is important to ensure that images, when compressed, are not subject to data loss. If the compression technique is a 'lossy' one (for example storing an image as a JPEG) then detail necessary to authenticate the stored image may be lost, reducing the evidential weight of the image. If lossy compression is used, a sample set of scanned images should be made to check and approve the level of information loss. Lossy compression should not be used for documents containing primarily text, but may be more acceptable with photographs.

## ***Data Migration***

A system should have the ability to migrate documents and data to some to other hardware/software platforms and other storage media. Documents, such as personnel records, may have a lifetime longer than the current system and therefore at some point will need to be migrated. The system should use open or industry standards for data storage rather than proprietary ones.

## **Document Deletion**

To meet the requirements of Privacy or Data Protection Acts, it may be necessary to amend or delete documents, or parts of documents. This might occur routinely, as part of the organisations' retention policy, or exceptionally as a result of legal or regulatory requirements. Note that a WORM ('write-once, read-many') storage medium could make this operation difficult.

The Code sets out acceptable methods - use of masks, index entry cancellation, document replacement, etc. - which should be identified in the user manual and whose use must be recorded in the system audit trail. See the "Guide to the Data Protection Act" for further details.

## **5. Audit Trails**

BIP0008 requires that a system must have full auditing functionality.

Without detailed audit trails (i.e. a record of a document's life history) authenticating a document, and therefore satisfying a legal body, may not be possible. In addition, irrespective of legal requirements, an organisation will require audit trails to meet its own managerial requirements, such as internal audit. The audit trail, as a minimum, should log details of each significant event in the life of a document in the system.

The audit trail should:

- ◆ be generated automatically by the system
- ◆ contain date/time stamps for each event
- ◆ be non-alterable
- ◆ be stored in accordance with the organisation's information management policy
- ◆ be subject to appropriate access control
- ◆ be securely stored and backed-up

The system should be able to provide an enquirer, with appropriate permissions, (even one unfamiliar with the processes) access to the full audit trail record and, preferably, have a reporting tool to allow production of customised reports from the trail.

There is also the issue of retention periods. If documents are kept for, say, seven years, then it is likely that you will need to keep audit information for at least seven years also.

### **Compliance with the Requirements of the Code of Practice**

To assess the current status of compliance with the requirements of the Code of Practice, the BSI publish a Compliance Workbook (BIP 0009). This Workbook consists of a series of questions, each of which needs to be reviewed and answered. Typically, it takes one to three days to complete the Workbook for the first time. Some investigations may need to be carried out on particular issues, which may lead to more time being needed. There may also be a need to consult with the system supplier.

Typical most of the compliance points are addressed by implemented systems. Compliance points that are often missing from systems include:

- ◆ no Information Policy document
- ◆ no retention schedule
- ◆ inappropriate security controls
- ◆ lack of procedural documentation
- ◆ insufficient control on document input procedures
- ◆ insufficient information about the technology from the system supplier
- ◆ use of inappropriate facilities, such as image clean-up
- ◆ no thought of future migration requirements
- ◆ lack of documentation on audit trail content and access procedures.

Each of these could potentially compromise the ability to demonstrate the authenticity of the stored documents.

### **Compliance Workbook (BSI PD0009)**

The British Standards Institution Compliance Workbook (PD0009) is available to aid implementation of the Code. Its pages parallel those of the Code, reminding and instructing systems managers what to undertake. All questions have a Yes/No tick box to ensure compliance.

### **Principles of Good Practice (BSI PD0010)**

The Image and Document Management Association (IDMA) Principles of Good Practice for Information Management, PD0010, is published by the British Standards Institution as the third in its "legal set" of guidelines. It is "Intended to help those who have responsibility for assisting their employers to develop and operate new methods ..."