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## Electronic document management — Vocabulary —

### Part 1:

## Electronic document imaging

*Gestion électronique de documents — Vocabulaire —*

*Partie 1: Imagerie documentaire électronique*

(Revision of ISO 12651:1999)

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## Foreword

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ISO 12651-1 was prepared by Technical Committee ISO/TC 171, *Document imaging applications*, Subcommittee SC 3, *General issues*.

ISO 12651 consists of the following parts, under the general title *Electronic document management — Vocabulary*:

— *Part 1: Electronic document imaging*

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# Electronic document management — Vocabulary —

## Part 1:

## Electronic document imaging

### Scope

This part of ISO 12651 defines terms and concepts relevant to electronic document imaging and identifies relationships among the entries. In order to facilitate their translation into other languages, the definitions are drafted to avoid, as far as possible, any peculiarity attached to a language.

This part of ISO 12651 is intended to facilitate communication in the field of electronic document management and is limited to document management elements within the scope of TC171, *Document imaging applications*. Additionally, it provides information to users related to technical reports, guidelines, and standards developed for technologies commonly available in document management systems.

The term electronic document management used throughout this document is intended as an "all-encompassing" term referring to inputting technologies (scanning, indexing, Optical Character Recognition (OCR), forms, digital creation, etc.), management technologies (document services, workflow, and other work management tools), and storage (primarily optical/magnetic) technologies.

### Terms and definitions

#### 1

##### **aberration**

defect in the formation of an optical image

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##### EXAMPLES

astigmatism, chromatic aberration, curvature of field

#### 2

##### **ablative**

deformation created by a high-powered laser during write operation that burns or melts the surface

NOTE 1 Also known as a pit.

NOTE 2 During read operations the laser is used at low power; the laser light is reflected differently from the unrecorded area and from the pit. The change in reflection provides the information.

#### 3

##### **addressability**

number of discrete pixels that can be addressed using a co-ordinate system on a display or in the devices supporting a display

EXAMPLE 1,600 x 1,200

NOTE The triads in a cathode ray tube display are normally much smaller than the addressable pixel. The addressable pixel is often smaller than individually distinguished by the human eye.

#### 4

##### **analogue monitor**

device that uses an analogue signal

NOTE 1 The voltage that determines the brightness of each colour component varies continuously.

NOTE 2 Capable in theory of displaying an infinite number of shades of the primary colours.

**5**

**analogue transmission**

<document management> transmission of electronic signals analogous to tonal variations constituting the content of a document page or any form of original graphics

**6**

**analogue transmission**

<imaging> representation of visual tonal variations at the input of a scanning system by proportional variations in strength or frequency of a transmitted electrical current

**7**

**analogue/digital**

A/D (abbreviation)

process of converting a continuous electrical current or signal into a discrete digital form

**8**

**antiglare filter**

coating on the face of a cathode ray tube (CRT) that contains anti-glare material

NOTE Usually takes the form of an anti-glare screen placed in front of the face of the display tube or an etched glass surface that reduces glare.

**9**

**aperture card scanner**

device for scanning microimages in aperture cards

NOTE Some scanners can also read information on the card.

**10**

**aspect ratio**

ratio of the height to width of a rectangle

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NOTE When an image is displayed on different screens or on paper or microform, the aspect ratio must be kept the same. Otherwise, the image will be "stretched" either vertically or horizontally.

**11**

**automatic document feeder**

mechanical device used to feed document pages sequentially into a camera or scanner transport system for capture

NOTE It may also position the document.

**12**

**automatic feed mechanism**

powered mechanical device used to advance documents, film, or paper from a stack into the transport of the system

**13**

**auxiliary operation**

supplementary activity to the primary operations of an information and image management system

EXAMPLES film cleaning, splicing, mounting, packaging, loading, coding

**14**

**backfile**

document and file related to prior transactions that are retained in an archive

**15**

**backfile conversion**

process of scanning, indexing, and inspecting a large existing collection of documents

**16****backup**

means of protecting valuable information and data

NOTE Backup may take the form of:

- 1) duplicating tapes or disks on which information is stored;
- 2) providing a system with an alternate power source to protect data in volatile memory in the event of a power failure; and/or
- 3) providing a redundant system.

**17****bar code**

a visual representation of numbers, characters, and other symbols using a sequence of vertical bars and spaces

NOTE There are several bar codes (called symbologies) serving different uses, industries, or geographic needs.

**18****bar code scanner**

device used to read bar codes by means of reflected light

**19****bar-code symbol**

machine-generated and readable representation of data (usually numeric) in the form of a printed series of contrasting parallel bars of various widths, spacing, and/or heights

**20****batch processing**

technique in which a number of similar data or transactions are collected over a period of time and aggregated (batched) for sequential processing as a group during a machine run

**21****bit-mapped image**

image derived from a bit-map

**22****bitonal**

having pixels that are only 1 bit

NOTE A bitonal image has two intensity values (0 and 1), corresponding to black and white.

**23****black-and-white scanner**

scanner that generates black or white output

NOTE Additional software allows generation of levels of grey.

**24****bleed-through**

undesired appearance of information from the back of a document when its front is photographed or scanned

**25****blocking**

<database management> intentional grouping of multiple logical data records into a larger physical record for more efficient input and output

**26****blocking**

<imaging> unintentional adhesion of adjacent sheets of film or paper

27

**browsing**

system's ability to find an undefined feature or set of features in a database or in a document in a collection

28

**cache**

small high-speed memory used for temporary storage of frequently used data

NOTE 1 Reduces the time it would take to access data, since it no longer has to be retrieved from slower media.

NOTE 2 Often used between processor and memory, or between memory and disk.

29

**cache storage**

temporary storage, usually magnetic, which provides rapid access to data or instructions

30

**CD-ROM mastering process**

creation of the first recording (the master) in the compact disc-read only memory replication process

31

**character recognition**

identification of graphic characters by automatic means

32

**charge coupled device scanner**

CCD scanner (abbreviation)

scanner that incorporates a light sensitive semiconductor device that can collect, store, and move electric charges in packets

33

**clipped pixel array**

actual pixel array to be imaged as determined by taking account of all clipping parameters

34

**clipping**

<graphics> determining the sub-region of the entire **pixel** array, as described by the content portion, which is to be considered by the content layout and imaging processes

NOTE It consists of two co-ordinate pairs. The first pair specifies the first pixel that is part of the selected array. The second pair specifies the last pixel that is part of the selected array.

35

**clipping**

<imaging> thresholding of a signal usually due to limited dynamic range of a sensor

NOTE Signals that fall on the Dmin or Dmax portion of film are clipped because the film's input dynamic range is not large enough.

36

**colour, continuous tone**

ability to display or print a range of colours or varying shades of the same colour

NOTE The colour range is dependent on the number of bits assigned to each primary colour. For example, if each of the three primary colours (red, green, blue) was represented by 8 bits, thus capable of 256 levels of colour for each of the primary colours, the display would be capable of producing 16 million colours. If more than 15 bits are used to describe the colour, most people cannot distinguish between similar colours, thus providing the appearance of continuous tone.

37

**compact disk-read only memory**

CD-ROM (abbreviation)

optical disc, conforming to compact disc specifications, created by a mastering process and used for distributing read-only information



**38****compact disk recordable**

CD-R (abbreviation)

optical disc, conforming to compact disc specifications, on which data can be recorded by the user once and read many times

**39****compound document**

document that contains information in several formats

EXAMPLE Text, graphics, and images in a single document.

**40****compression ratio**

relationship of the total bits used to represent the original to the total number of encoded bits

**41****computer output laser disk**

COLD (abbreviation)

technology used to store computer generated reports in a computer based accessible format through the use of virtual printers or other technology that captures the report as it is generated/printed

NOTE This term has been updated to be Enterprise Report Management (63).

**42****continuous-tone**

photographic copy that contains a varying gradation of grey densities between black and white

**43****contrast**

ratio of on pixel brightness to off pixel brightness

NOTE The off pixel brightness is not zero but rather the reflection of the ambient light by the background of the display. The greater the ambient light, the greater the contrast must be to result in the perceived contrast ratio.

**44****data input device**

tool used to import or enter data into a database

EXAMPLES keyboard, scanner, fax, OCR

**45****data output device**

tool used to communicate information that is created from the system

EXAMPLES monitors, printers, fax machines, e-mail

**46****digitisation**

use of a scanner to convert documents (on paper or microforms) to digitally coded electronic images suitable for electronic storage

**47****digitise**

use of a scanner to convert documents to digitally coded electronic images

**48**

**digitiser**

device for the digitisation of a document

[ISO/IEC 2382-13]

NOTE This term is often used, by extension, to refer to a device that allows both the scanning and the actual digitisation of the document

**49**

**digitising**

conversion of an image or signal into binary code

**50**

**dithering**

method of simulating shades of grey using different patterns of black and white pixels within a cell or simulating colours by using patterns of other (often-primary) colours

[ISO/IEC 2382-13]

**51**

**document preparation**

steps to ready documents for filming or scanning

EXAMPLES removing paper clips, staples, and bindings and sorting by categories

**52**

**document scanner**

optical reader that scans and converts images into digital form

**53**

**document service**

component, module, or application supporting and/or providing authoring, check-in/check-out, and version control capabilities along with other features necessary to create, manage, update, and secure document based information in an automated fashion

**54**

**document profile**

set of attributes which specifies the characteristics of a document as a whole

[ISO/IEC 2382-23]

**55**

**dots per inch**

dpi (abbreviation)

measure of output device resolution and quality

EXAMPLE number of **pixels** per inch on display device

NOTE Measures the number of dots horizontally and vertically.

**56**

**dropout ink**

ink that cannot be detected by a scanner

NOTE 1 A scanner's light source (used to illuminate a form) may be blind to a specific colour, or the ink colour may be filtered out of the light source.

NOTE 2 For best results the dropout ink colour must be closely matched to the equipment that will scan the document using the ink, so it must be selected in collaboration with the imaging equipment manufacturer.

57

**edge enhancement**

technique for sharpening the appearance of line edges on an electronic image

58

**Electronic Document Management System**

EDMS (abbreviation)

system utilizing and/or integrating the core underlying technologies including: document imaging, document services, workflow, Enterprise Report Management (ERM), forms management, and Optical Character Recognition (OCR)/Intelligent Character Recognition (ICR)

59

**electronic image**

digital representation of a document

60

**electronic image grey scaling**

production of an electronic image representing the image contents in shades of grey converting continuous-tone images into a limited number of grey shades

61

**electronic imaging**

electronic image management

conversion of analogue information into digital format and subsequent storage in a fashion facilitating computer based retrieval based on specified index information

62

**enhancement**

technique for processing an image so that the result is visually clearer than the original image

63

**Enterprise Content Management**

ECM (abbreviation)

the technologies used to capture, manage, store, preserve, and deliver content and documents related to organizational processes

64

**Enterprise Report Management**

ERM (abbreviation)

technology used to store computer generated reports in a computer based accessible format through the use of virtual printers or other technology to capture the report as it is generated/printed

65

**expunge**

completely remove a document/image/file and its indexing from a computer system, leaving no evidence of it ever appearing on the system

66

**extended-term storage conditions**

storage conditions suitable for the preservation of recorded information having permanent value

67

**flat-bed scanner**

device for scanning that has a flat surface for input material

NOTE Generally used for scanning bound, damaged material, slick type paper or small pieces of paper.