

TERMINOLOGY OF TRADE INFORMATION SYSTEMS

Preliminary Unedited Version

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I. INTRODUCTION

The managers, operators and users of trade information services are often confronted with the difficulty to understand clearly the meaning of various terms and acronyms used by specialists through professional contacts or publications. The activities of collection, processing and dissemination of trade information, using fast-moving computer and telecommunication technologies require the introduction of an increasing number of technical terms. The present document does not duplicate the numerous glossaries published on EDP terms. It contains a selection of specialized terms which are most widely used in the development of trade information systems using modern technologies, including various acronyms and expressions related to specific information sources, codes and software used by ITC and its partner organizations.

The preparation of this report has been facilitated by the valuable work made over several years by the ACCIS Secretariat regarding specialized terminologies, in cooperation with various international organisations and through an extensive analysis of specialized publications. (See notably the "Glossary for electronic archives and records management", a report published in June 1991 by the ACCIS Technical Panel on Electronic Records Management).

With the cooperation of various ITC officers and consultants, a selection of terms has been made with regard to their use in trade information services with possible adaptations of definitions and examples of applications. The precise sources of the definitions are indicated under brackets at the end of each of each item (See index to the sources in Annex).

As this preliminary unedited version may be incomplete in scope and precision, and necessarily require thorough revision by a larger number of trade information specialists and users, comments will be greatly appreciated. Please send your proposals to:

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II. GLOSSARY

A

ACOUSTIC COUPLER

A type of modem used for transmitting data down a telephone line that makes its connection with the telephone system by transmitting sound between two "cups" and the normal telephone handset, without any electrical links between the telephone and the modem. (OTC)

ALPHANUMERIC

A combination of alphabetic and numerical characters. (1)

ANSI

Abbreviation for American National Standards Institute.

Note: When customizing a communications software, the ANSI acronym usually refers to one of the possible options for selecting a terminal emulation. When using a microcomputer, "ANSI.SYS" is the name of one of the DOS sub-programs. (ITC)

APPLICATION

An application is any specific use of the computer. For example, payroll, inventory and accounts receivable are typical business applications. Word processing, spreadsheets and business graphics are also called applications. The term is often used synonymously with program. Contrasts with operating system. (5)

ASCII (AMERICAN STANDARD CODE FOR INFORMATION INTERCHANGE)

A seven-bit plus parity code established by the American National Standards Institute to achieve compatibility between data services. ASCII consists of 96 displayed characters and 32 non-displayed control characters. (2)

Note: ASCII is almost interchangeable with the International Alphabet Code No.5 in Appendix H defined by CCITT. (OTC)

ASYNCHRONOUS TRANSMISSION

A mode of data communications transmission in which time intervals between transmitted characters may be of unequal length. Transmission is independently controlled by start and stop elements at the beginning and end of each character. Also called start-stop transmission. (2)

AUTOMATIC INDEXING

The selection by computer of keywords from a document in order to develop index entries. (1)

B

BACK-UP COPY

A copy of a record kept for reference in case the original is lost or destroyed. (1)

Note: when using microcomputers, programs and files should be saved on diskettes (back-ups) to prevent possible loss of data. The DOS utilities include "back-up" programs (BACKUP and RESTORE) to automatically copy and save all files, programs, and directory structures from a hard disk to floppy disks. (ITC)

BATCH PROCESSING

The processing of data or the accomplishment of jobs, accumulated in advance, in such a manner that the user cannot further influence its processing while it is in progress. (10)

BAUD RATE

The transmission rate, which is in effect synonymous with signal events (usually bits) per second. It is used as a measure of serial data flow between computers and/or communication equipment or devices. (14)

See also BPS (BITS PER SECOND)

BBS

Bulletin Board System. See ELECTRONIC BULLETIN BOARD

BIBLIOGRAPHIC DATABASE

Databases in this category provide references to publications, and contain text. They are sometimes opposed to factual databases, or data banks. (ITC)

See DATA BASE

BINARY NOTATION

A system in data processing in which numbers are represented by the two digits 0 and 1. (8)

BIT

In binary notation, one of the two digits 0 and 1. An abbreviation of bi(nary digi)t. (8)

Note: The bit is the elementary information unit. A combination of eight "0" or "1", or bits, is necessary to form a character, or byte. Example :

"e" is coded by 8 bits as : 01100101 (ITC)

See BYTE, KILOBYTE, MEGABYTE

BLUE SHEET

Short paper describing the technical characteristics of a given data base file, in particular the FILE STRUCTURE, FIELD labels and characteristics, and various standard output FORMATS available to display the information. Hints are usually added on how to search efficiently the concerned data base. DATA-STAR and DIALOG, among other on-line systems, provide detailed technical descriptions for each database loaded on the system. (ITC)

BOOLEAN ALGEBRA

A mathematical system relating logical functions instead of

numbers. Boolean operatives such as "AND," "OR," and "NOR" are used to compare one expression to another. In computers, logical operators utilizing Boolean Algebra result in conditions serving as input into branching functions in programs. (26)

BOOT

To start an operating system. (ITC)

BPI

Bits per inch. See DENSITY

BPS

Bits per second. The usual measure of the rate at which data flows through a communications system. The term "baud" is interchangeable with bits per second with most low-speed modems, but not at the higher data rates. Then the term "BPS" is preferrable. (OTC)

See also BAUD

BTN

Brussels Tariff Nomenclature. Previous name for the Customs Co-operation Council Nomenclature, CCCN. The BTN is a customs nomenclature for products, in which articles are grouped according to the nature of the material of which they are made. The BTN has 1,312 four digit individual positions (ITC)

See also CCCN, SITC, HS.

BUFFER

A temporary store for information in transfer, e.g. for holding a text until a printer has completed the printout, thus releasing the processor for other

tasks. (DEESON)

BUG

Error in a computer program. "Debugging" refers to the action of locating and correcting program errors. (ITC)

BUS

A circuit over which data or power is transmitted. Often one which acts as a common connection among a number of locations. Synonymous with trunk. (14)

BYTE

A group of adjacent bits, such as 4, 6 or 8 bits, operating as a unit. For example, a 6-bit byte may be used to specify a letter of the alphabet, and an 8-bit byte may be used to specify an instruction or an address. Normally shorter than a word. Unless otherwise indicated a byte is normally assumed to be 8 bits long. (23)

C

CARRIER

Often used as a synonym to NETWORK, in particular in the USA. (ITC)

Note: when using a communications software, the prompt "no carrier" usually indicates that connection with the (packet switching) network has not been achieved. Examples of carriers are INFONET, TYMNET, TELENET, TELEPAC, TRANSPAC, ... (ITC)

CCITT

The acronym for the title in French of the International Consultative Committee on Telephone and Telegraph services. (OTC).

CCCN

See CUSTOMS CO-OPERATION COUNCIL NOMENCLATURE (ITC)

CD/ROM (COMPACT DISC AS READ-ONLY MEMORY)

A 4.7 inch (120 mm) read-only optical disk based upon the Philips/Sony World Standard that stores up to 600 megabytes of computer data and audio. (DB)

See also: OPTICAL DIGITAL DISK

CENTRAL PROCESSING UNIT (CPU)

A unit of a computer that includes circuits controlling the interpretation and execution of instructions. (10)

See also synonyms : "PROCESSOR" and "MICROPROCESSOR"

CGA

Acronym for Colour Graphics Adapter, which defines a standard category of VIDEO DISPLAY UNIT (VDU). Best-known other categories are EGA and VGA. (ITC)

CITATION COSTS

Cost of retrieving specific documents, usually according to the requested format of the retrieved documents. See also CONNECT TIME, the other component of the bill when searching ON-LINE. (ITC)

CLONE

Technically, a clone is an identical copy of some device. With regard to personal computers, a clone is a compatible computer that is capable of running the same software as the original machine. (5)

COMBINED NOMENCLATURE (CN)

8-digit foreign trade commodity classification of the EEC, based on the 6-digit HS, which replaces the previous NIMEXE classification based on the Customs Co-operation Council Nomenclature, CCCN. (ITC)

See HS, CCCN, NIMEXE, SITC

COMMON COMMUNICATIONS FORMAT (CCF)

A format for the transfer of bibliographic cataloguing and abstracting information used largely by the UNESCO General Information Program for transferring data between computer systems in the United Nations system. (30)

COMMUNICATIONS PROGRAM

Special program for computers which handle the

communications process, effectively providing terminal emulation on a computer. (OTC)

Note: one of the four major program categories used for handling trade information, along with text processing, data base management and spreadsheet. Used mainly to access on-line data bases. Examples of commercially available communications software : Crosstalk, Procomm

Plus,

Mirror, Kermit, FTTERM, ICC Workstation Program etc...(ITC)

COMPATIBILITY

The ability of two units to work in harmony, usually software and hardware. In most cases, computer compatibility refers to software compatibility, in which case application software programs share common conventions and rules so they can be utilised together, or the software can be run on different computers without modification (26)

COMPILER

A software that can translate all or part of a program expressed in a high-level language into a computer program expressed in an intermediate language, an assembly language, or a machine language. (AFNOR/ISO)

COMPUTER AIDED DESIGN (CAD)

The application of computer technology to the design of a product, or the design itself. A computer-aided design uses as inputs both the appropriate technical knowledge of individuals who enter design criteria, edit results, and otherwise test and modify the design, and also accumulated information from libraries of standards for components, element sizes, regulations, etc. (24)

COMPUTER PROGRAM

- . A set of instructions arranged in proper sequence for directing the computer in performing a desired operation, such as the solution of a mathematical problem or the sorting of data. (25)
2. To prepare a set of ordered instructions for automatic computer operation, a program includes plans for the transcription of data, coding for the computer, and plans for the absorption of results into the system. Programming consists of analysis of the problem, preparation of flow

diagrams, preparation of subroutines, allocation of storage locations, specification of input/output formats, and all computer integration tasks. (25)

COMREG

- . Acronym for COMpany REGister, the Standard Company Data Base Structure adopted and recommended by ITC for building computerized company registers for trade promotion. (ITC)
2. Name of the software developed by ITC to process and retrieve company information under the COMREG format on a microcomputer. (ITC)

CONFIGURATION

- . The arrangement of a computer system or network as defined by the nature, number, and the chief characteristics of its functional units. More specifically, the configuration may refer to a hardware configuration or a software configuration. (26)
2. The devices and programs that make up a system, subsystem, or network. (26)

CONFIGURATION FILE

See SCRIPT FILE (Synonym)

CONNECT TIME

The actual time during which on-line connection occurs, and according to which the on-line user is going to be charged for the information retrieved (by the host organization), and for the cost of the telecommunication,

(by the local telecommunication authority). (ITC)

Note : Most on-line systems charge according to connect time, the other component of the bill being a cost per citation/document retrieved. With increasing speeds of transmission, citation costs tend to become a more significant fraction of the revenue of on-line systems. (ITC)

CONTROLLED VOCABULARY

A regularized or standardized list of indexing terms used to increase uniformity in the expression of indexable matter. (1)

See also: THESAURUS, KEYWORD

COUNTRY CODES

Various country codes are used to codify or exchange country information with other systems. The more important ones are:

- The 5-digit numerical codes used by the United Nations
- The 2- and 3-digit alphabetical codes , and 3-digit numerical codes by ISO.
- The 3-digit numerical GEONOMENCLATURE codes (EEC)

Some examples:

Country	UN	ISO-2	ISO-3	ISO-NUM	EEC
USA	21840	US	USA	840	400
JAPAN	41392	JP	JPN	392	732
GERMANY	53280	DE	DEU	280	004
INDIA	45356	IN	IND	356	664
CHINA	48156	CN	CHN	56	720
NIGERIA	6566	NG	NGA	566	288
COTE D'IVOIRE	16384	CI	CIV	384	272
BRAZIL	33076	BR	BRA	076	508

Note: the United Nations system also uses "allotment account codes", mainly for administrative purpose, for instance for the designation of country projects :
 IVC/82/005 for an Ivory Coast project started in 1982
 ALG/86/015 for an Algeria project started in 1986,...

CPU

See CENTRAL PROCESSING UNIT

CRT (CATHODE RAY TUBE)

Abbreviation for cathode-ray tube, often used in the video display unit of a computer system. (MGH)
 In this device, a narrow controlled beam of high energy electrons puts a visible picture of some kind on its screen. Monitors, TV sets and radar displays are based on the CRT. (DEESON)

CUSTOMS CO-OPERATION COUNCIL NOMENCLATURE, CCCN

A detailed nomenclature of goods based on the "Geneva Nomenclature" prepared before the second world war, which came into force on 11 Sept 1959. Initially known as the "Brussels (Tariff) Nomenclature" (BTN), it was renamed the CCCN in 1974 to avoid any confusion as to the international organization responsible. The CCCN takes the form of a systematic list of goods comprising 1,011 Headings divided among 99 Chapters themselves arranged in

21 Sections. It is supported by "Explanatory Notes" which constitute the official interpretation of the Nomenclature as approved by the Customs Co-operation Council. Most countries in the world have now shifted to the Harmonised System. (ITC)

See also BTN, HS, SITC

D

DATA BANK

A set of data related to a given subject and organized in such a way that it can be consulted by users (AFNOR/ISO)

Note: data bank is sometimes opposed to data base. For supporters of the distinction, a data base contains references to primary material, whereas the data bank contains the primary information itself (figures, prices, formulas, full-text of publications/ regulations/ market reports...). (ITC)

See also DATA BASE

DATA BASE (or DATABASE)

- . Data organized and stored so that it can be manipulated or extracted. (1)
2. A continuously updated file of information, abstracts, or references on a particular subject or subjects. (14)

DATA BASE HOST (ORGANIZATION)

In addition to the computer itself where the data bases have been loaded (See HOST), the expression "data base host" often refers to the organization which owns the computer and acts as a genuine information wholesaler. Host organizations are active in selling the information provided by the databases loaded on their computers. In addition to registering and charging system users, they provide documentation, technical assistance and training, usually against a fee. These organisations are also referred to as ON-LINE SYSTEMS or DATA BASE VENDORS (in the USA). Major data base hosts marketing trade information are : DIALOG, DATASTAR, PROFILE, EUROPEENNE

DE DONNEES, EUROBASES, GBI, OAS/SICE, CERVED. etc... (ITC)

See also HOST

DATA BASE MANAGEMENT SYSTEM (DBMS)

A software product that controls a data structure containing interrelated data stored so as to optimize accessibility, control redundancy, and offer multiple views of the data to multiple application programs. (14)

DATA BASE MANAGEMENT SOFTWARE

One of the four major categories of software used to handle trade information, along with word processing, spreadsheet, and communications software. Used in particular to process company information, bibliographic references, trade statistics, Some of the best-known commercially available software in this category are DBase III (and IV), PARADOX, CDS/ISIS (by UNESCO), SAS and SPSS (for statistics). (ITC)

DATA BASE VENDOR

Synonym to DATA BASE HOST ORGANIZATION

DATA COMPRESSION or DATA COMPACTION

A series of techniques used for the reduction of space, bandwidth, cost, transmission, generating time, and the storage of data. These techniques are designed for the elimination of repetition, removal of irrelevancies, and employment of special coding techniques. (14)

DATA ENTRY

The writing, reading, or posting to a coding form or to a terminal or processing medium, of information or instructions. (14)

DNIC

Acronym for Data Network Identification Code : the first four digits in a NETWORK USER ADDRESS (NUA). The DNIC

indicates the country, and the network through which a computer system is accessible, for instance : (ITC)

DNIC Country, Network	Full NUA of...	Network User
2284 Switzerland, Telepac	228468115010	UN-ICC, Geneva
2284 Switzerland, Telepac	22846431007014	Data-Star,
2222 Italy, Itapac	22224110004	Cerved, Italy
2080 France, Transpac	208093130084	E.D., Paris
3110 USA, Telenet	31104150004811	Dialog, USA
3101 USA, Western Union	310111440000001	Easylink, USA

Bern

See also NUA, PACKET SWITCHING NETWORK

DCE

Data Communications Equipment. An abbreviation used to distinguish terminal equipment (DTEs) from communications equipment (DCEs). The distinction is less apparent now than it was a decade or so ago. In practice, the term DCE is now almost exclusively applied to modems.(OTC)

DECODING

1. Internal hardware operations by which the computer determines the meaning of the operation code of an instruction; also sometimes applied to addresses. (26)
2. In internal routines, some subroutines, and elsewhere, an operation by which a routine determines the meaning of parameters. (26)

Note: for example, the translation by the computer of country codes into (more explicit) country names. (ITC)

DELIMITED ASCII SEQUENTIAL FILES

An output format for data files in which the data is encoded in ASCII with special characters, called delimiters, marking the fields in the record structure. (DB)

Note: this format allows conversion between files prepared under various software, such as Lotus123, DBaseIII, etc... (ITC)

DENSITY

The number of bits or characters that can be stored per unit of dimension of a medium. In the case of magnetic tape, this is expressed as BITS PER INCH, BPI. (18)

DESKTOP PUBLISHING SOFTWARE (DTP)

A category of word processing software with sophisticated graphic capacities allowing the production of professionally laid-out text and graphics ready for printing. (ITC)

DIRECT ACCESS

The facility to obtain data from a storage device or to enter data into a storage device in such a way that the process depends only on the location of that data and not on a reference to data previously accessed. (10)

DISK

A circular metal plate with magnetic material on both sides, continuously rotated for reading or writing by means of one or more read/write heads mounted on movable or fixed arms. (14)

See also HARD DISK

DISK DRIVE

- . The entire equipment required to record or retrieve digital data from a magnetic disk, diskette, minidisk, floppy disk, etc., including the housing, rotation mechanism, read/write head, and electronics. (27)
2. The rotation mechanism for a disk-drive assembly. (27)

DISKETTE

A magnetic information storage medium consisting of a circular polyester substrate coated on both sides with magnetic oxide and enclosed within a stiff envelope. (24)

DOCUMENT CONTENT ARCHITECTURE (DCA)

An IBM text format containing information that allows documents to be interchanged among dissimilar systems. DCA/RFT is IBM Document Content Architecture "Revisable-Form-Text". DAC/FFT is IBM's Document Content Architecture "Final-Form-Text". Documents in DCA/FFT are not meant to be edited, but used for final presentation or printing. (BYTE).

Note: DCA formats are used as intermediary formats for the conversion of text files prepared under various word processing software. Conversion programs are sometimes referred to as "bridges". (ITC)

DOCUMENT FILING AND RETRIEVAL (DFR)

A standard in preparation (ISO/TC97/SC 18 N1264) which is part of the application layer in the OSI reference model. DFR enables a user to communicate with a remote document filing and retrieval server in order to access a remote document store. The standard provides the capability for multiple users in a distributed office system to access a large, non-volatile document store such as disks on a mainframe. In DFR, documents have assigned attributes that support management and retrieval. (30)

DOS

Disk Operating System. DOS is the name of a family of software produced by the Microsoft company that have become the world standard for IBM-compatible micro-computers. DOS-5 is the latest version available. (ITC)

See OPERATING SYSTEM.

DOWNLOAD

The transmission of a program or data from one computer to another. Usually, a host computer is the sender and a satellite computer or terminal is the receiver. (2)

DPI

Dots Per Inch. A unit by which the screen resolution of a video display unit (monitor) can be measured, providing an indication on the quality of the images displayed on the screen. (ITC)

See also RESOLUTION (SCREEN -)

DTE

Data Terminal Equipment. Abbreviation used to distinguish terminal equipment (DTEs) from communications equipment (DCEs). Term applies generally to equipment such as computers, visual display units (VDU), teleprinters and printer-terminals. (OTC)

DUMB TERMINAL

A terminal with no independent processing ability of its own which can only carry out operations when connected to a computer. (26)

DUPLEX

See FULL DUPLEX and HALF DUPLEX

E

EBCDIC (EXTENDED BINARY CODED DECIMAL INTERCHANGE CODE)

One of the two common ways of setting out all of the available characters in a particular order in a computer. It is similar to ASCII, but the order of the characters is different and there are 256 characters instead of 128. (19)

EDIFACT

Electronic Data Interchange for Administration, Commerce and Transport. EDIFACT is an ISO standard, and also a standard of the European Committee for Standardization, which defines the technical and formatting parameters for the electronic transmission of administrative and commercial documents. (ITC)

See also ELECTRONIC DATA INTERCHANGE (EDI)

EGA

Acronym for Enhanced Graphic Adapter, a standard type of VIDEO DISPLAY UNIT (VDU). Other widespread categories of VDU are CGA and VGA. (ITC)

ELECTRONIC BULLETIN BOARD

Electronic Bulletin Boards are computer systems that function as centralized information sources and message switching systems for a particular interest group. Users dial up the bulletin board, review and leave messages for other users as well as communicate to other users attached to the system at the same time. (5)

Note: also called BULLETIN BOARD SYSTEM, or BBS

ELECTRONIC DATA INTERCHANGE (EDI)

The computer-to-computer transmission of business data in a standard format. For pure EDI, "computer-to-computer" means "original-application-program to processing-application-program." To the purist, EDI consists only of business data, not verbiage or free-form messages. Purists may also contend that a "standard" format is one that has been approved by a national or international standards organization, as distinguished from formats developed by industry groups or individual companies. (28)

ELECTRONIC MAIL

A general term covering the electronic transmission, or distribution, of messages. Electronic mail can be distinguished from most areas of telecommunications by its capability for "non-real time" use. Unlike a telephone conversation, messages can be transmitted at one time, for reception or reading at a later time. (23)

Note: individual electronic mail messages are sent on-line to a central computer system, which stores them until

the

addressee in turn gets connected to the system in order to retrieve and read his mail. Messages are not distributed to the addressee, but only made accessible to him. (ITC)

EMULATION

The imitation of all or part of one system by another, primarily by hardware, so that the imitating system accepts the same data, executes the same programs, and achieves the same results as the imitated system. (AFNOR/ISO)

Note: a specific terminal emulation usually needs to be defined when customizing a communication software, so that computer systems operating with different communication protocols can however communicate. (ITC)

EOF

Acronym for End Of File label, an internal label (in a computer program) that indicates the end of a file and that may contain data for use in file control. (AFNOR/ISO)

EXPERT SYSTEMS

One of the major categories of artificial intelligence. They contain a base of knowledge about an area of expertise and are used to assist in performing such tasks as medical diagnosis, equipment repair, scheduling and financial planning. (5)

Note: the CORE (COmpany Readiness to Export) software developed by ITC can be considered as a simple expert system. (ITC)

FACSIMILE TRANSMISSION

The transmission of data as two-dimensional images (text; photographs) over narrow band (non-video) communication links. It consists of scanning the original with a light beam and sensor that converts transmitted or reflected light into a voltage. (22)

FACSIMILE TRANSMISSION STANDARDS

Standards for electronically transmitting the exact image of a document to another location (CCITT Group 3 and Group

4, standards T.4 and T.6). The image to be transmitted is usually text, but may contain graphics or anything that can be represented by bits. The standards include compression routines to reduce transmission costs and, if used as a storage standard, the costs of storing facsimiles. Group 3 facsimile is primarily used for transmission over public data networks. (30)

FACTUAL DATABASE

Database containing the data itself (facts, figures, full-text,...) as opposed to reference database, where the information is usually abstracted, and only referred to. (ITC)

FAX

See: FACSIMILE TRANSMISSION

FIBRE OPTICS

The technology of guiding and projecting light for use as a communications medium. Hair-thin glass fibres which allow light beams to be bent and reflected with low levels of loss and interferences are known as "glass optical wave guides" or simply as "optical fibres." (26)

FIELD

- . In a machine-readable record or form, a position (column) set aside for a specific type of information.(1)
2. In databases, a specific item in a document, such as title, source, publication date, author, descriptors (in bibliographic data bases); or company name, product name, address, activity, etc... (in company data bases). "Field" and "paragraph" are used as synonyms. (ITC)

See paragraph searching in PARAGRAPH.

FILE

A collection of records which all deal with the same sort of data. (19)

An organized unit of documents grouped together either for current use or in the process of archival arrangement. (8)

Note: File and data base are often used as synonyms (ITC)

FILE MAINTENANCE

The activity of keeping a file up to date by adding, changing, or deleting data. (10)

The systematic inspection of files for the purpose of replacing worn file folders, mending torn documents, removing duplicate copies, locating possible misfiles and ensuring proper sequence of contents. (1)

FILE SERVER

A computer in a local area network that stores the programs and data files shared by the users connected to the network. A file server acts like a remote disk drive to the users in the network. A file server is also called a network server. (5)

Note: Server and Host are sometimes used as synonyms. (ITC)

FILE STRUCTURE

The way in which a particular file is organized. When the record layout consists of one record per entry, then the file structure is rectangular. When the record layout consists of several records per entry, the file structure is hierarchical. (18)

FLOPPY DISK (DISKETTE)

A magnetic information storage medium consisting of a circular polyester substrate coated on both sides with magnetic oxide and enclosed within a stiff envelope. (24)

FONT

A character set in a particular style and size of type, including all alpha characters, numerics, punctuation marks, and special symbols. (2)

FORM

A document, printed or otherwise produced, with pre-designated spaces for the recording of specified information. (8)

FORMAT

A predetermined arrangement of characters, fields, lines, punctuation, page numbers, etc. (14)

Note: When searching on-line, two types of formats need to be known to efficiently retrieve information from a given data base, namely the standard format (or structure) of the abstracted documents, in particular field labels, and the standard output formats that are available for displaying the retrieved information. Technical

descriptions ("blue sheets") usually made available by host organizations provide valuable hints to individual data base formats. (ITC)

See also FIELD, PARAGRAPH, BLUE SHEET

FORMATTED DOCUMENT

A term generally used to describe documents whose layout specifications are embedded in the document itself. (CD)

Note: on the other hand, "unformatted" documents are those saved without layout specifications, or with minimum layout specifications, such as documents in "ASCII" format. Most word processing software offer the possibility to convert created documents into an ASCII format for further processing or for conversion into other word processing formats. (ITC)

FORMATTING

Planning the order of information to or output from a computer or peripheral, such as a printer or crt, usually to assist or ease the human receiver's interpretation of information. Also, preparation of various types of magnetic media to accept data structures. Floppy disks, for example, require before use that formatting regarding track and sector information be set for the controller. After it is formatted, the disk can be used for normal in/out and retrieval operations. (14)

FREE-TEXT SEARCHING

This expression refers to the possibility to search into into a database using free text expressions, i.e. without having to use predefined keywords or codes in order to locate relevant information. (ITC)

See also FULL-TEXT SEARCHABLE

FRONT-END

- . The pre-processing of data prior to the main task of a program that has commenced. (26)
 2. A processor that can relieve a host computer of certain processing tasks, such as line control, message handling, code conversion, error control, and application functions. (26)

FULL DUPLEX TRANSMISSION

- . Data transmission in both directions at the same time. (AFNOR/ISO).
 2. A form of communications where two-way simultaneous flow of data is allowed over the same lines. The user can send data to the host at the same time as the host sends control signals or characters back to the user's terminal. Full Duplex is usually coupled with the use of echo. (OTC)

See HALF DUPLEX TRANSMISSION

FULL-TEXT SEARCHABLE (FULL TEXT RETRIEVAL)

A form of information retrieval in which the full text of a document is stored, and retrieval is achieved by searching for occurrences of a given string in the text. This technique can be compared with the alternative of retrieving information by matching one of a set of predetermined keywords. (24)

FUNCTION CODES

ITC's International Trade classification includes also function codes, defined in its "Thesaurus of International Trade Terms", and based on the OECD macrothesaurus. Function codes can be 2, 4 or 6 digit-codes which define functional subjects, including certain trade related organizations. (ITC) Some examples:

06.03	Marketing research
07.01	Trade barriers
08.01	Export promotion
09.01.02	Import licences
01.05.01	FAO

Note: other subject classifications used by business information systems include "Event Codes" by Predicasts. These codes are wider in scope and more detailed than ITC's. (ITC)

GATEWAY

. The connection bridging two data-communications networks, permitting users on one network to exchange messages with users on the other. (26)

2. A computer having access to two networks with a capability of passing traffic between them. (26)

Note: more and more on-line systems add "gateway" facilities to their own data bases. In this way, they offer their customers a direct access to other on-line services that would otherwise require distinct contracts, passwords and searching techniques. "Easylink" is a typical gateway system. (ITC)

GENERAL DISSEMINATION OF INFORMATION

General dissemination of information consists of transmitting information to all potential users, whereas SELECTIVE DISSEMINATION (SDI) targets on selected users of the specific information transmitted. (ITC)

See SDI

GEONOMENCLATURE

The Country Nomenclature for the external trade statistics of the European Economic Community and for statistics of trade between Member States. The geonomenclature, sometimes abbreviated GEONOM,

contains 3-digit numerical codes. (ITC)

See COUNTRY CODES

HALF DUPLEX TRANSMISSION

- . Data transmission in either direction, one direction at a time (AFNOR/ISO)
2. A form of communications where only a one-way flow of data is allowed on the same lines at any one time. The receiving computer must wait until the sender has finished before sending signals in return. If you are to see your output on the terminal screen, therefore, you must set echo off with half-duplex so that it takes its characters directly from the keyboard. (OTC)

See also FULL DUPLEX TRANSMISSION

HARD COPY

- . Printed copy of machine output in a visually readable form, e.g., printed reports, listings, documents, summaries, etc. (14)
2. A document or copy, usually on paper, as opposed to a microform or machine-readable record. (8)

HARD DISK

A fixed magnetic disk. The usual memory capacity of current hard disks on most personal micro-computers is 20 or 40 megabytes, but higher capacity hard disks (80 megas) become increasingly popular in the professional environment, as their price is sinking. (ITC)

HARD INFORMATION

This expression is sometimes used by trade information people to describe information that keeps a value for a relatively long period of time, whereas ephemeral data may be referred to as "soft information". (ITC)

See SOFT INFORMATION

HARDWARE

Physical equipment used in data processing, as opposed to computer programs, procedures, rules and associated documentation, which are known as software. (10)

See also: FIRMWARE

HARMONISED SYSTEM (HS)

Short name for Harmonized Commodity Description and Coding System. The 6-digit HS was conceived under the auspices of the Customs Co-Operation Council between 1970 and 1983, and has since be adopted by more than 60 countries as a basis for tariff classification as well as for statistical purposes.

Note: the HS has 5,019 six-digit sub-headings. Further digits are added by individual countries or country groups, such as the 8-digit Combined Nomenclature (CN) of the EEC, or the 10-digit US-HTS. Correlation tables exist between the HS, the CCCN and the SITC. (ITC)

See BTN, CCCN, CN, NIMEXE, SITC

HIERARCHICAL DATABASE

A database where the items are arranged hierarchically, i.e., each entry may have only one directly superior entry, and any number of inferior entries; there is only a single relationship between any two entries. (20)

HIGH-LEVEL LANGUAGE

A language in which each instruction or statement corresponds to several machine code instructions. High-level languages allow users to write in a notation in which they are familiar, e.g. Fortran, Cobol, Basic, Pascal, Ada. High-level languages are problem oriented, whereas low-level languages are machine oriented. (PENGUIN)

Note: opposite to low-level language or machine language, which contain instructions written in machine code that can be immediately obeyed by a computer without translation. (PENGUIN)

HOST

The central or controlling computer in a timesharing or distributed processing environment. (5)

See also DATABASE HOST

HYPERMEDIA

Hypermedia refers to the use of data, text, graphics, video and voice as elements in a Hypertext system. All the various forms of information are linked together so that a user can easily move from one to another. (5)

See also ISDN, INTEGRATED SERVICE DIGITAL NETWORK

HYPertext

Hypertext is a technique that links information together. Words are invisibly linked to other words or explanations. For example, by pointing to a keyword in a sentence and selecting it, the linkage is activated and the associated information is revealed. (5)

I

IMPORT TABULATION SYSTEM (ITS)

The Import Tabulation System is a database covering imports into major world markets, with five year time-series and

systematic trend and market share analyses. The raw data is retrieved on-line by ITC from the COMTRADE database of UNSO, the United Nations Statistical Office in Geneva. (ITC)

INDEX

A list of the contents of a file or of a document, together with keys or references for locating the contents. (10)

A list of persons, places and/or subjects referred to in a document or finding aid with location of references thereto, usually in alphabetical order. (8)

INFORMATICS

The field of investigation that takes as its subject matter the variety of ways in which information flows and the manner in which information is processed, utilized, affects productivity and efficiency, is used for monitoring and control purposes and finally influences socio-economic development and society itself. Also, the analysis and formulation of national and international strategies and policies for informatization. (29)

INFORMATION RETRIEVAL

Actions, methods and procedures for recovering stored data to provide information on a given subject. (AFNOR/ISO)

INPUT

When referring to computer operation, "input" is the transfer of data or text to be processed via a keyboard or external device to an internal storage device. Also, the data or text to be processed. (2)

See also DATA ENTRY

INPUT DEVICE

Any hardware, such as a CRT, keyboard, OCR scanner, etc., that converts data into electronic signals for processing on a computer system. (2)

INTEGRATED SERVICES DIGITAL NETWORK (ISDN)

An international telecommunications standard that allows a communications channel to simultaneously carry voice, video and data. (5)

INTEGRATED SOFTWARE PACKAGE

A category of commercially available software that cumulates the functions of several specialised software, such as text processing, data base management, spreadsheet, graphic and communications software. Some examples : Framework, Works, Symphony.... (ITC)

INTELLIGENT NETWORKS

"The Intelligent Networks" is a phrase which has come into use to describe the facilities which are expected to evolve with these networks. (ASLIB)

See also VALUE-ADDED NETWORKS

INTERACTIVE PROCESSING

A mode of operation of a computer system in which a sequence of alternating entries and responses between a user and the system takes place in a manner similar to a dialogue between two persons. (10)

See also: BATCH PROCESSING

INTERACTIVE VIDEOTEX

See VIDEOTEX

INTERFACE

- . A common boundary between automatic data-processing systems or parts of a single system. In communications and

data systems, it may involve code, format, speed, or other changes as required. (14)

2. The software facilities through which a user interacts with an on-line computer system, sometimes called the "user interface". (DB)

INTERNATIONAL STANDARDS ORGANIZATION (ISO)

An organization established to promote the development of standards to facilitate the international exchange of goods and services, and to develop mutual cooperation in areas of intellectual, scientific, technological and economic activity. (13)

ISDN

See: INTEGRATED SERVICES DIGITAL NETWORK

ITS/FOCUS

A series of statistical tables on diskettes produced by ITC on the basis of the Import Tabulation System (ITS), accompanied by a software aimed at selecting records (trade flows) and at converting them to compatible formats for further processing. Coverage of the 985-89 series : 33 markets; 2,000 items of the SITC(2) product classification. Export data of individual developing countries can be estimated through the import statistics of their partner markets, using the "mirror" approach. (ITC)

See also IMPORT TABULATION SYSTEM, ITS

K

KEYWORD

A word or group of words taken from the title or text of a

document characterizing its content and facilitating its retrieval. (8)

L

LANDSCAPE ORIENTATION

Printing orientation where the data is printed across the wider side of the form. (5)

LASER PRINTER

A printer that uses the electro-photographic method used in copy machines to print a page at a time. A laser is used to "paint" the dots of light onto a photographic drum or belt. The toner is applied to the drum or belt and then transferred onto the paper. (5)

LCD

See LIQUID CRYSTAL DISPLAY

LIQUID CRYSTAL DISPLAY (LCD)

Type of screen display, use in particular with laptop computers. Liquid crystals do not give out light, but can switch from opaque to transparent, providing quite a legible display in suitable lighting conditions. LCDs need little power. They are used mainly in calculators and watches. (DEESON)

LOCAL AREA NETWORK (LAN)

A system of multiple interconnected devices which exhibits the following characteristics: it is usually intra-company, privately owned, and user administrated. It is structured so that multiple devices are interconnected by a continuous medium such that equipment and applications (data/word processors, electronic mail..) can operate over a single set of cabling. It is operable within a limited geographic area. (2)

See also: WIDE AREA NETWORK

LOG IN/LOG OUT (LOG ON/LOG OFF)

The process by which a user identifies himself to a system. The terms are also used as verbs: log in, log on, or sign on; log off, log out, or sign off. A system with many registered users will require each user to log in, and to produce some form of authentication (such as a password) before allowing the user access to system resources. The log in activity will also open an accounting file for the session. By logging out, the user ensures that all the system resources that have been used during the session are accounted for, and any temporary files created during the session are deleted. (24)

M

MACHINE LANGUAGE

A computer instruction or program expressed directly in a binary code that the machine understands. All other programming languages such as assembly (symbolic or mnemonic) language and the high-level languages (BASIC, FORTRAN, PL/I, etc.) must be translated into the binary machine code before being entered into the CPU. (27)

See: HIGH-LEVEL LANGUAGE. (ITC)

MACHINE-READABLE

Information in a form that can only be processed directly by an electronic device or computer, usually in the form of magnetic or electronic impulses. (7)

MAINFRAME

May refer to a computer's central processing unit or, more frequently, to any large computer. (DB)

MEMORY

A functional computer-based storage unit into which data can be placed, in which they can be retained, and from

which they can be retrieved. (10)

MENU

A list of alternative operator actions, supplied by the system for operator selection. In some cases, the system will require that the operator access some or all functions through the appropriate menu. Some systems provide for bypassing the menus by experienced operators. (2)

MENU-DRIVEN SOFTWARE

A software (program) is said to be menu-driven if the user selects actions from a list of choices displayed on the screen. Menus may be nested, which means that making one choice may present the user with a new list of choices. (IWP)

Note: with command-driven software, the user must key in commands for every task, and the user is not restricted to choices in a menu.

See also COMMAND-DRIVEN SOFTWARE

MICROFORM

A generic term for any medium containing microimages (for example microfiches, microfilm,...). (1)

MICROGRAPHICS

The technology by which information can be photographically reduced to a microform medium, stored and retrieved for reference and re-use. (DB)

MICROPROCESSOR

The semiconductor central processing unit (CPU), one of the

principal components of the microcomputer. The elements of the microprocessor are frequently contained on a single chip or within the same package, but sometimes they are distributed over several separate chips. (14)

Note: microprocessors successively introduced on the market by the INTEL company are the following ones: 8088 and 8086 (for 8 bits XTs); 80286 (16 bits ATs); 80386 and 80486 (for 32 bits ATs). V20 and V30 microprocessors are manufactured by the NEC company. (ITC)

See also PROCESSOR, CPU

MINICOMPUTER

A computer that does not need the closely controlled environment of mainframe computers, and has a richer instruction set than that of a microcomputer. (26)

MINITEL

Name given to the small videotex terminals provided by the "France Telecom" company to more than six million households and offices (1991) in France, to encourage easy access the electronic telephone directory, and also the use of many other on-line services through the Teletel videotex network. (ITC)

MODEM

Contraction of MODulator-DEModulator. A device which modulates and demodulates signals transmitted over communications facilities; that is, a device used to convert digital signals into analog (voice-like) signals for transmission over a telephone line. (2)

MOUSE

A hand held locator operated by moving it on a surface, A mouse generally contains a control ball or pair of wheels. (AFNOR/ISO)

Note: a mouse provides a faster alternative to typing commands on a keyboard, especially for those software using menus, icons, and graphic representation in general. (ITC)

MULTIPLYING

In data transmission, a function that permits two or more data sources to share a common transmission medium such that each data source has its own channel. (AFNOR/ISO)

NATURAL LANGUAGE

Ordinary spoken or written language. It is to be contrasted with a programming or machine language. (23)

NETWORK

The assembly of equipment through which connections are made between data stations. (26)

NETWORK ARCHITECTURE

A set of design principles, including the organization of functions and the description of data formats and procedures, used as the basis for design and implementation of a user-application network. (26)

NIMEXE

6-digit EEC foreign trade classification based on the 4-digit Customs Co-operation Council Nomenclature (CCCN) . Replaced since 1988 by the 8-digit Combined Nomenclature (CN) adopted by all EEC member States. (ITC)

See CCCN, CN, HS, NIMEXE, SITC

NODE

. In a network, a point where one or more functional units

interconnect transmission lines. The term node derives from graph theory, in which a node is a junction point of links, areas, or edges. (26)

2. A term applied to a dedicated computer used in packet-switching networks to concentrate and switch the data from many users and many hosts. It is the signal-box and shunting yard of the packet-switching system. (OTC)

NUA

Network User Address. The address code of the remote host computer called by an on-line user. The first four digits, called the DNIC, identify a packet switching network (e.g. 2284 for Telepac, Switzerland; or 2342 for PSS, UK). The NUA must be preceded with a "0" when calling from abroad. The full code can be up to 14 digits. (ITC)

Some examples of NUA (also called X.121 ADDRESS):

Dialog (USA) via Telenet	31104150004811
Datastar (Switzerland)	22846431007014
ICC Geneva (UN, Switzerland)	228468115010
Profile (UK)	234213300124
Europeenne de Donnees (France)	208093130084

See also DNIC, PACKET SWITCHING NETWORK

NUI

Network User Identifier. This is usually a 6 character (alphanumeric) password provided to dial-up users of on-line services to identify them to the local packet switching network authority for the purposes of billing. (OTC)

OFFICE AUTOMATION (OA)

The integration of all information functions in the office, which include word processing, data processing, electronic mail, graphics and desktop publishing. (5)

OFF-LINE

Pertaining to the operation of a functional unit when not under the direct control of the computer. (10)

ON-LINE

Pertaining to the operation of a functional unit when under the direct control of the computer. (10)

ON-LINE RETRIEVAL

See RETRIEVAL

ON-LINE SYSTEM

Organization providing on-line information, or the

information system set-up by this organisation, such as, for example, DIALOG, DATA-STAR, PROFILE, GBI, EUROBASES, E.D., MEAD, ESA/IRS, ORBIT, etc...

Note: when referring to organisations, ON-LINE SYSTEM, HOST, DATA BASE HOST or DATA BASE VENDOR are used as synonyms. (ITC)

OPEN SYSTEM

- . A system allowing a variety of computers and terminal to interact together. (26)
2. A system to which access is publicly available. (26)
3. A system adhering to open systems architecture (OSA), a model that represents a network as a hierarchical structure of layers of functions; each layer provides a set of functions that can be accessed and that can be used by the layer above it. (26)

OPEN SYSTEM INTERCONNECTION (OSI)

See OPEN SYSTEM 3.

OPERATING SYSTEM (OS)

A group of software and/or firmware utility programs that bring a computer to life and implement its many functions. It may have any or all of the following: bootstrap loader, I/O drivers, assembler, compiler, linker/loader, queue

handler, task scheduler, editor/debugger, interpreter, interrupt handler, data-base manager, librarian. Also, pertaining to a computer system that is up and running.(27)

OPTICAL CHARACTER RECOGNITION (OCR) SOFTWARE

Character recognition that uses optical means to identify graphic characters. (AFNOR/ISO)

Note: An OCR software is required to convert and interpret data captured by an optical scanner (ITC). See OPTICAL SCANNER.

OPTICAL SCANNER

A device that senses the light reflectivity or transmission of a pattern (or of a printed character) on a sequence of spaced "scan lines." (22)

OUTPUT

In computer technology, the machine-readable or human-readable data produced by a computer. (1)

See also OUTPUT

OUTPUT DEVICE

Any device that converts the electrical signals representing information within a computer into a form that can exist or be sensed outside the computer. Printers and visual displays are the most common type of output device for interfacing to people. (24)

P

PABX

See PRIVATE AUTOMATIC BRANCH EXCHANGE

PACKET

A packet is a sequence of binary digits including data and call control signals that is switched as a composite whole. The data, call control signals, and possible error control information are arranged in a specific format. A message broken up into smaller segments or packets for transmission to the line in a packet-switching network is packetized. (26)

PACKET SWITCHING (or SWITCHED) NETWORK (PSN)

Network using packet switching facilities. Packet switching is the process of routing and transferring data by means of addressed packets so that a channel is occupied only during the transmission of a packet; upon completion of the transmission, the channel is made available for the transfer of other packets [by other users]. (AFNOR/ISO)

Note: by concentrating data into packets (containing up to 128 characters or bytes), and sharing the transmission with many other users, PSN succeed in providing a cheap international data communications service, as compared to the use of normal telephone transmission. (ITC)

Examples of networks offering packet switching facilities:

- Transpac (France)
- Telepac (Switzerland)
- IPSS (UK)
- Telenet, Tymnet, Infonet,...(USA)
- SKDP (Indonesia)
- Sytranpac (Côte d'Ivoire)
- Djipac (Djibouti), etc.....

See also DNIC, NUA

PAD

Packet Assembler/Disassembler. A PAD is a functional unit that enables data terminal equipments not equipped for packet switching to access a packet switched network. (AFNOR/ISO)

Note: each time a message is sent on-line, it enters the computer of the local PSN authority via a "port" (hardware) and then makes contact with the PAD (software) set-up by this authority. The PAD controls the assembly and disassembly of data moving both ways between the user's terminal and the network. The user can alter the fixed parameters of its PAD for special applications (modification of PAD parameters). (OTC, ITC)

PARAGRAPH (SEARCHING)

Synonym to "field", when referring to the structure of on-line databases. "Paragraph searching" means searching an expression exclusively within paragraphs that are specified by the user, such as title, descriptors, source, country name, product name, abstract, etc... of a record. (ITC)

Examples of paragraph searching:

- a) On Data-Star: _: cassava.ti.
 = to locate the word "cassava" in the title paragraph
- b) On Dialog: ? seafood/ti,de
 = to locate the word "seafood" in title or descriptors

PARALLEL

A mode of data transmission in which several signals are transmitted at the same time over as many separate wires. With personal computers, this usually refers to transmitting all 8 bits of a byte simultaneously. The opposite of SERIAL. (CALINGAERT)

PARITY BIT

A binary digit appended to a group of binary digits to make the sum of all the digits, including the appended binary digit, either odd or even as predetermined. (AFNOR/ISO)

Note: the use of a parity bit provides a check for data corruption during transmission of data between computers. Usually parity is set to Odd, Even, or None. The choice must be compatible with that used by the other party to the communications. (ITC , OTC)

PASSWORD

The unique set of digits or characters assigned to a user as part of his identification number in communicating with a computer. (14)

Note: passwords are usually introduced in order to restrict

the use of an information system (or part of it) to holders of valid passwords, either because the information is considered confidential, or as an attempt to prevent misuse of expensive information by non-authorized users. On most on-line systems, the user must key in an identification number (USER-ID) and a password, in order to access the information. (ITC)

PDN

See PUBLIC DATA NETWORK

PERIPHERAL

In a data processing system, any equipment, distinct from the central processing unit, which may provide the system with outside communication or additional facilities. (10)

PIXEL

PIX (picture) ELe ment, the smallest display element on a video display screen. (5)

PLOTTER

An output unit that directly produces a hard copy record of data in the form of a two-dimensional graphic representation. (AFNOR/ISO)

PORTRAIT ORIENTATION

A printing orientation in which the data is printed across the narrow side of the form, as in a standard page or letter (as opposed to "landscape orientation") (5)

POSTSCRIPT

Computer language used to monitor printers, plotters and other output devices with high graphic capabilities. (ITC, BYTE)

PRESTEL

The name of the public videotex system set up by British Telecom in the United Kingdom. (ITC)

See VIDEOTEX

PREVIEW

The process of displaying text on a CRT screen as it will be printed. This allows for formatting prior to actual printing. (IWP)

PRINTOUT

In computer technology, the printed output of a computer. (26)

See also OUTPUT

PRIVATE AUTOMATIC BRANCH EXCHANGE (PABX)

A device which switches calls between the public telephone network and inside extensions. Private Branch Exchange (PBX) is, loosely, a switchboard with a human operator. (IWP)

PROCESSOR

The part of a computer that actually does the arithmetic and makes the decisions, sometimes called the central processing unit (CPU). In a microcomputer, it is often a microprocessor. (DEESON)

See also: CENTRAL PROCESSING UNIT, MICROPROCESSOR.

PROGRAM

A series of instructions which cause a data processing system to take a sequence of steps and perform particular tasks. Also, the act of creating the instructions. (1)

PROGRAMMING LANGUAGE

Sets of rules or conventions that govern the manner and sequence in which instructions are written or specified for execution by computer. (1)

PROTOCOL

A formal set of conventions governing the orderly exchange of information between communicating devices by defining such things as connection establishment, security provision, data sequencing, error control, etc. Protocols achieve efficient line utilization by reducing the amount of information transferred by distinguishing between device control information and data. (2)

Note: Communication protocols are formal and elaborate, and are set by international bodies, such as CCITT, ISO. (PENGUIN).

PSPDN or PSDN or PSN: PACKET SWITCHED (PUBLIC) (DATA) NETWORK

A network using packet switching facilities and complying with the X.25 standard. (ITC)

See PACKET SWITCHING NETWORK (PSN), with examples.

PSTN

Public Switched Telephone Network. The ordinary telephone system, which can be used to transmit data as well as speech using a dial-up connection and charged as for an ordinary telephone call. (DEESON)

PUBLIC DATA NETWORK (PDN)

A database facility provided by a common carrier. (2)

R

RAM

See: RANDOM ACCESS MEMORY (RAM)

RANDOM ACCESS MEMORY (RAM)

A semi-conductor read-write memory device in which the basic element consists of a single cell that is capable of storing one bit of information in such a way that the access time taken to retrieve an item of data is independent of the item's location on the storage medium on which it is held. (34, 31)

READ ONLY MEMORY (ROM)

A storage device whose contents can be read, but cannot normally be written to. This ensures that the data held by such a device retains its integrity. (21)

RECORD

1. A set of related data or words, treated as a unit. (10)
2. Recorded information, regardless of form or medium created, received and maintained by an agency, institution, organization or individual in pursuance of its legal obligations or in the transaction of business. (8)

Note: in a bibliographic data base, record is synonym to "document", or "item of information". A record is usually broken down in fields (or paragraphs); and, in turn, a data base consists of an organised set of records. (ITC)

RECORDS MANAGEMENT

That area of general administrative management concerned with achieving economy and efficiency in the creation, maintenance, use and disposal of records, i.e., during their entire life cycle. (8)

REFORMAT

To change the record layout of a file or database. (5)

REGISTER

A storage device having a specified storage capacity such as a bit, a byte, or a computer word and usually intended for a special purpose. (10)

A list of events, letters sent and received, actions taken, etc., usually in simple sequence, as by date or number, and often serving as a finding aid to the records, such as a register of letters sent or a register of visitors. (7)

RELATIONAL DATA BASE

A method of organizing a data base to permit association of information contained in separate records by placing data associated with each key in separate tables. (2)

REPROGRAPHY

All copying processes including micrographics, using any form of radiant energy and all duplication and office printing processes, including operations connected with such processes. (8)

RESOLUTION (SCREEN -)

The number of individually addressable and variable picture elements (pixels) available in a graphic display. (PENGUIN)

RETRIEVAL

. The process of locating and withdrawing a document or information from a collection of records. (12)

2. The action of recovering information on a given matter from stored data. (10)

Note: "on-line retrieval" refers to locating and displaying specific information from on-line data bases. (ITC)

See also SEARCH STRATEGY

ROUTINE

A program, call by another program, that may have some general or frequent use. (AFNOR/ISO)

RS-232

Specification set down by the US Electronic Industries Association (EIA) in 1969, and later incorporated into the international CCITT standards for modem connection. Nearly all terminals, modems, data switchers and computer ports provide RS-232 as an interface standard. The physical design of the RS-232 connector itself was not a part of the EIA standard, but a convention has grown over the years to use the 25-pin connector known as DB-25. As only some of the pins are usually

connected, a cable suitable for a printer might not work for a modem even though it conforms to the standard. The minimum connection between terminals and modems is three wires : Pin 2 (transmit data), Pin 3 (received data, Pin 7 (Signal ground). (OTC)

SCANNER

See: OPTICAL SCANNER

SCANNING

Used to designate a technique whereby material is sifted quickly, without actually being read, with regard to detect, at high speed, data and information relevant within a defined interest scope of a Trade Information Service. (ITC)

Note: the scanning officer merely runs his eye quickly over each page, noting any key words which indicate that the material is relevant for the TIS collection.

SCRIPT FILE

Program written by the user of a telecommunication software in order to customize access to a specific host computer / on-line system. The use of special commands (specific to the software) is requested in order to define correct telecommunication settings and achieve automatic connection to the host concerned. (ITC)

Note: "configuration file" is sometimes used as a synonym to script file.

SDI

See SELECTIVE DISSEMINATION OF INFORMATION

SEARCH STRATEGY

The way in which an on-line search is prepared and conducted in order to achieve maximum efficiency. (ITC)

See also RETRIEVAL

SEGMENT

Unit of data volume used in particular for billing on-line transmission of data. Segments are up to 64 characters (half a packet) and represent about one line of

characters on a screen. Tariffs are usually quoted on a kilo-segment basis (1,000 segments). (OTC)

SELECTIVE DISSEMINATION OF INFORMATION (SDI)

Transmission of specific information to selected users only, as opposed to general dissemination aimed at all potential users. (ITC)

See also GENERAL DISSEMINATION

SEQUENTIAL ACCESS

An access mode in which records are obtained from, or placed into, a file in such a way that each successive access to the file refers to the next record in the file. The order of the records is established by the programmer when creating the file. (26)

SERIAL

. Periodical publication

2. A mode of data transmission in which signals are transmitted one after the other over a single wire. With personal computers, this usually refers to transmitting the 8 bits of a byte one at a time. The opposite of PARALLEL. (CALINGAERT)

SIC (STANDARD INDUSTRIAL CLASSIFICATION)

Classification for products, activities, functions and institutions used primarily in the USA, but also in other countries, either in its original form, or with variations in the codes (Canadian SIC, UK SIC, German SIC, for example). (ITC)

Note: the SIC coding system dates back to 1972 when it was used to standardize the collection of economic and industrial data by the United States Government. Minor changes were made in a 1977 supplement. The long awaited

revisions to the original 1972 codes were announced in the Federal Register on 1st October 1986. Following that announcement, many database producers have updated their products with the newer 1987 codes. Unfortunately for the online searcher, not all of these electronic information publishers have reloaded their business databases with the new revisions. The online searcher must therefore enquire about the proper SIC version (US or foreign? 1972 or 1987 ?) prior to using codes. A majority of online data bases use 4-digit SIC codes, but some others use up to 7 digits. Dun and Bradstreet has recently introduced an 8-digit coding scheme, which is expected to be followed by more and more data base producers, as it offers considerable additional detail (more than 15,000 items, instead of approx. 1,000). (ITC)

SITC (STANDARD INTERNATIONAL TRADE CLASSIFICATION)

Product classification first drawn up in 1950 by the United Nations Secretariat as a revision of the League of Nations' Minimum List. By 1960 governments of a large number of countries were compiling trade-by-commodity data according to this original SITC, as a basis for the reporting of trade statistics. Some countries and territories of the British Commonwealth, and also in Latin America, also used the original SITC as the basis of their customs nomenclature. Many others used the BTN for this purpose.

SITC, Revised, was later prepared (1961) in order to

combine the original SITC and BTN, achieving a reciprocal one-to-one correspondance between both classifications. SITC, Rev.1 has 1,312 five-digit positions.

SITC, Revision 2 was adopted in May 1975 by a resolution of the Economic and Social Council, which recommended it for international use. Many items were added to the SITC, Revised. SITC, Rev.2 has 1,832 five-digit positions.

SITC, Revision 3 was prepared and adopted in May 1985 by the Economic and Social Council with a view to ensure compatibility with the Harmonized System started in 1973, published by the CCCN in 1985, and now adopted by a majority of countries. Convertibility indexes have also been established between SITC Revision 3 and the Standard Foreign Trade Classification (SFTC) previously used by States members of the Council for Mutual Economic Assistance (CAEM). There are 3,118 basic headings in SITC Revision 3. (ITC)

SOFT INFORMATION

An expression sometimes used to describe categories of trade information of which the value is short-lived, such as, for example, prices, business opportunities, trade contacts, or similar market intelligence data. (ITC)

See also HARD INFORMATION.

SOFTWARE

Computer programs, procedures, rules, and any associated documentation concerned with the operation of a data processing system. (10)

Note: software is used as a synonym to computer program, in particular programs that are commercially available.

See also: HARDWARE

SOURCE PROGRAM

Instructions written in a programming language before they have been translated by a compiler into an object program for a processor to obey. (DEESON)

See COMPILER

SPREADSHEET

A software program that simulates a paper spreadsheet, or worksheet, in which columns of numbers are summed for budgets and plans. (5)

Note: One of the four major categories of

software used to handle trade information, with text processing-, file management- and communications software. Spreadsheet software are useful to process trade statistics. Examples of commercially available spreadsheet software: Lotus, Quattro, Excel, etc... (ITC)

STANDARD FOREIGN TRADE CLASSIFICATION (SFTC)

Trade classification used by States members of the Council for Mutual Economic Assistance (CAEM). (ITC)

See SITC

SYNCHRONOUS TRANSMISSION

A mode of data communications by which the bit stream and character stream are slaved to accurately synchronized clocks at the receiving and transmitting stations. Start and stop pulses are not required within each character. (2)

TELEMATICS

The convergence of telecommunications and information processing. (5)

TELETEL

The name given by the PTT in France to its public videotex system. In 1991, more than 6 million Minutels (videotex terminals) were already installed by the telecommunication authorities in households and offices throughout the country. (PENGUIN, ITC)

See VIDEOTEX

TELETEX

The international standard system for transfer of text and data between terminals using the public telephone network, thought likely to supersede telex. (DEESON)

TELETEXT

Information broadcast as part of a television signal, received on special TV sets with teletext decoders. (DEESON)

Note: teletext provides a cheap mass-communication system in which user interaction is limited, whereas videotex provides for user interaction with large databases at any time with uniform access time. (PENGUIN)

See VIDEOTEX(T)

TELEX

An acronym for TEletypewriter EXchange Service of Western Union, but now used more generally to signify a low

bandwidth network interconnecting teleprinters. (20)

TERMINAL

A hardware device in a system or communication network at which data can either enter or leave the system. (1)

TEXT

Text is words, sentences and paragraphs. The contents of a word processing document is called text. Contrast with data, which is a precisely defined unit of information, such as name and address. (5)

TEXT PROCESSING

Using a terminal connected to a computer to create, alter, and yield text, that often needs revision and numerous copies. (26)

See WORD PROCESSING

THESAURUS

A compilation of words and phrases showing synonymous, hierarchical and other relationships and dependencies, the function of which is to provide a standardized vocabulary for information storage and retrieval. (1)

See also: CONTROLLED VOCABULARY

TIME-SHARED SYSTEM

A system in which available central-computer time is shared among several jobs as directed by a scheduling plan or formula. (14)

TRANSBORDER DATA FLOW

The flow of data (numerical, bibliographical, factual) across national boundaries. A term mainly used in connection with the problems of data protection, copyright, etc. (23)

TRUNCATION

The deletion or omission of a leading or of a trailing portion of a string (of characters) in accordance with specified criteria. (ISO Handbook)

Note: the use of truncation is essential when searching on-line. On-line systems use different signs for truncating search terms, for instance "?" on Dialog and Eurobases; "\$" on Data-Star, GBI, Europeenne de Donnees.

Truncation must be used with caution. For instance "import\$" will retrieve all terms starting with "import", such as importer, imports, importing, ...but also important ! (ITC).

TTY (TELETYPE)

Type of terminal, or emulation setting of a terminal, where text only can be displayed. (ITC)

UNIX

A popular and sophisticated operating system for 6-bit micro-computers that allows multi-users and multi-tasking. (DEESON)

See: OPERATING SYSTEM, DOS

UPDATE

To modify a master file with current information according to a specified procedure. (26)

UPLOAD

Transfer of data or programs from a microcomputer to a mainframe. (23)

See DOWNLOAD

USER FRIENDLY

A term used to describe hardware or software which does

not require extensive computer knowledge or experience to successfully use. (MGH)

Note: menu-driven software is usually considered more "user friendly" than command-driven software. (ITC)

USER INTERFACE

The portion of an interactive computer program that issues messages to and receives commands from a terminal user (26)

See also INTERFACE

US-HTS

United States Harmonized Tariff Schedule, a 10-digit product classification based on the 6-digit Harmonized System, used by the US Customs for external trade statistics since 1989.

See HARMONIZED SYSTEM, HS

UTILITY PROGRAMS/ UTILITIES/ ROUTINES

A computer program in general support of the processes of a computer; for instance, a program for sorting data, copying disks, or recovering deleted files.... (10)

VALUE ADDED NETWORK (VAN)

Network providing subscription services like electronic mail and videotex in addition to basic telecommunications facilities. (DEESON)

VAN

See VALUE ADDED NETWORK

VGA

Acronym for Video Graphics Array , a standard category of VIDEO DISPLAY UNIT (VDU). Major other categories of VDUs are CGA and EGA. (ITC)

VIDEO DISPLAY UNIT (VDU)

Any type of input/output equipment with a special feature of displaying information on a screen. (14)

VIDEOTEX

The generic name given to an information system which allows for the collection and retrieval of information through terminals (adapted TV sets; special terminals like Minitels; or PC monitors with videotex adapters), and are able to interact with data bases stored in central computers, using the public switched telephone network (PSTN) as the basic communication medium. (PENGUIN)

Note: Teletext is often referred to as one-way or broadcast videotex, using broadcasting signals, and videotex (or viewdata in the UK) as two-way or interactive videotex, using telephone lines. Videotext is an alternative spelling sometimes used in the US. (DEESON, ITC)

See also MINITEL, PSTN, TELETEXT.

VIDEOTEXT

See VIDEOTEX

VIEWDATA

See VIDEOTEX

VIRUS

A computer virus is a program that can alter, without the user's knowledge, the way a computer operates, or modify the programs and data files stored on a computer. The virus copies itself onto other executable programs by adding to or overwriting the existing program code and thereby damaging the program. Antivirus programs detect, identify and remove the intruders. (BYTE)

Note: commercially available antivirus software include Tntvirus, Viruscan, Virex PC, VirusCure, Vi-Spy, Dr Solomon Anti-Virus Toolkit, etc...(ITC)

WAN

See WIDE AREA NETWORK

WIDE AREA NETWORK (WAN)

A communication network distinguished from a local area network (of which it may contain one or more) because of its longer distance communications, which may or may not be provided by a common carrier or PTT. The term is sometimes used as another name for the public packet network of a particular country or region. (24)

See also: LOCAL AREA NETWORK, PACKET SWITCHING NETWORK

WOOD

Write Once Optical Disk. A type of video disc on which the user can record, but from which information cannot be erased. (DEESON)

WORD PROCESSING SOFTWARE (WP)

A program for editing, storing and rearranging text so that it can be perfected before being finally printed out. (DEESON)

Note: one of the four major categories of software used to handle trade information, along with database management-, spreadsheet- and communications software. Examples of commercially available word processing software: Wordperfect, Wordstar, Word, Displaywrite..(ITC)

WORK STATION

A terminal that combines various elements (keyboard, display, printer, etc.) (2)

WORM (Write Once Read Many)

A storage device, such as an optical disk, that can be written (recorded) once. Although it can be erased by writing 1 bits onto the data, it cannot be rewritten.(5)

See also: OPTICAL DIGITAL DISK

WP

See WORD PROCESSING SOFTWARE

WYSIWYG

"What you see is what you get" describes a word processing system whose display of text is somewhat like a printout would be. (DEESON)

X.121 ADDRESS

X.121 is a CCITT recommendation defining the format of addressing in use over the packet switching network. This recommendation defines the first 3 digits of each country code, part of the 4-digit DNIC. (OTC)

Note: An X.121 address is the numerical call number of a computer that can be accessed on-line. It is used as a synonym to NUA, NETWORK USER USER ADDRESS. (ITC)

See also NUA, DNIC.

X.25

The protocol standard defined by CCITT and used by packet-switching networks. It is a synchronous high-speed standard. (ITC)

X.400

Series of CCITT standards aiming at facilitating interconnection between electronic mail services. (ITC)

X.500

Series of CCITT standards aiming at facilitating, inter allia, the production of users' directories of electronic mail services complying to X.400 technical standards. (ITC).

ANNEX

SOURCES OF TERM DEFINITIONS

(ITC) = Definitions prepared by the ITC.
(1) to (32), (CD), (DB) = Definitions taken from ACCIS glossary
(OTC), (DEESON), etc.. = Definitions taken from other sources

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