

3 WORKING DEFINITIONS

Working definitions of the following terms are provided to help users understand the text of the handbooks, and as a general reference source. No claim is made that these definitions are universally accepted or authoritative.

Application Software fulfilling a specific function on a computer, or an equivalent manual procedure. Can be general-purpose (e.g. a word-processor) or custom-built to undertake specific tasks.

Attribute Properties of an entity (e.g. 'name' and 'area' might be attributes of the 'Protected Areas' entity).

Audience The target user (user group) for an information product.

Benchmark A measure of performance against a specific target value or values.

Best-practice Voluntary methods of working which are widely recognised as ethical, sustainable and otherwise sound.

Biodiversity The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems. The term is used interchangeably with biological diversity.

Biological resources Includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity.

Bulletin board An area set aside in an electronic communications network where messages can be posted and read by a restricted group of members. Also known as a 'newsgroup'.

CD-ROM (Compact Disc-Read Only Memory) Optical technology which enables large amounts of data to be stored digitally on an optical disk in read-only format.

Client-server A computing architecture which offers the advantages of both stand-alone and fully networked architectures. Computing tasks are shared efficiently between a high-powered server computer and individual user's workstations.

Computer network A group of computers which can communicate with each other.

Continuous improvement A management paradigm in which long-term goals are achieved through a succession of small, individually contributing steps, with frequent review.

Data Facts that result from measurements or observations of a phenomenon.

Data development The process of building from scratch or upgrading a dataset.

Data dictionary A repository of information about the definition and structure of a database.

Data-flow diagram A diagram illustrating how information and data flow in a process (e.g. in an organisation). Special symbols depict different types of flow.

Data management The organisation, storage, retrieval and maintenance of data in a controlled environment (see information management).

Data quality A statement of the quality of the data from which, a datasets fitness for use for a specific purpose may be assessed.

Data standards A standard set of terms. Documented norms, rules, conventions and guidelines concerning the data — includes data collection methodologies, definitions, coding and classification rules, representation conventions (units of measure, scale, precision . . .), allowable values and ranges.

Database A logically structured and consistent set of data, usually managed as computerised files in one or more locations.

Database application A collection of tools which facilitates use of a database.

Database Management System (DBMS) A software package for data management that organises data in a defined structure that is independent of the application programs, and allows multiple users to share common data. DBMS software will normally include a data definition language, and data manipulation language.

Dataset A collection of data and accompanying documentation which relate to a specific theme.

DBF format The file format originally used by the dBASE product and now commonly used by other applications for data exchange.

Decision-maker An individual or group responsible for making decisions (which impact on the well being or management of biological resources).

Decision-making The process of arriving at decisions, which may be very complex and involve many organisations and individuals.

Digitising table A device for inputting map features into a computer.

Electronic mail (email) A network (including Internet) service allowing messages and files to be exchanged between users.

Entity Physical objects or phenomena that possess attributes or properties (quantitative or qualitative) and may be considered to have relationships to other entities. For example: protected area, soil unit, species, manager, ecosystem and river.

Entity-Relationship (E-R) diagram A graphic representation following a mathematical formalism that defines the inter-relationship between entities in a database.

Essential dataset A dataset which underpins the development of multiple information products for multiple users. Examples include the national boundary, vegetation coverage and human population statistics.

Field A column in a database table containing data values from a consistent data collection or interpretation process.

File An organised collection of related records.

File Transfer Protocol (FTP) A standard by which a user can access and transfer a file from one host (e.g. computer) to another using an FTP application.

File server A specialist computer designed to manage access to shared data storage and management facilities.

Flat-file database A simple type of database containing only one table of data ('flat-file').

Geographic Information System (GIS) A software package that enables users to store and analyse spatial data, such as digital maps and remotely sensed imagery.

Global Positioning System (GPS) A device which uses satellite signals to calculate the absolute or relative location of a point on the Earth's surface. Used in aircraft, ships and, increasingly, by biological survey teams, for instance to locate sampling or specimen collection points.

Hard copy Data or information that is printed on paper.

Hardware The physical components of an information system, such as computers, printers, scanners, plotters, and other peripheral devices.

Hyperlink The connections between pages in a hypertext document.

Hypertext Documents which are structured into electronic 'pages' connected to one another by means of hyperlinks.

Hyper Text Markup Language (HTML) A standard language used to create hypertext documents, for instance to format pages displayed using web browsers.

Indicator Highly refined information product which quantifies or simplifies complex phenomena, for example a numeric value representing the relative greenhouse gas emissions from different countries.

Information Information is derived from the assembly, analysis or summarising of data into a meaningful form. Note: In some common usage there is often no clear distinction made between 'data' and 'information'. In information systems terminology it is common to use 'data' for the input to any process and call the output 'information' — which may then subsequently be the 'data' that is input into the next process.

Information management The transformation of data into information, often through a set of processes involving people, equipment and procedures (see data management).

Information network A group of partners/stakeholders collaborating with each other for the purposes of generating and exchanging information.

Information product One or more items of information designed for a specific audience for a specific purpose (includes reports, graphs, documents, maps, multimedia presentations, for example).

Information production The process of developing, packaging and communicating information products.

Information professional Person involved with information production, for example a researcher, data manager, librarian, statistician, analyst, designer, publisher or communicator.

Information service A facility offering a range of information products in support of a particular topic (e.g. forestry).

Information system An organised set of people, processes, data and tools for transforming data into information and providing and disseminating information products.

Internet A network of computers around the world which communicate using a set of agreed protocols (communication standards). The Internet provides useful services such as email, World Wide Web (WWW), Gopher and File Transfer Protocol (FTP).

Living resources See biological resources.

Listserver An Internet service based on simple email technology, which enables defined groups of users to be reached with a single email message. Primarily used for discussion of a specific topic (similar to bulletin boards).

Local Area Network (LAN) A computer network usually operating within a single site or institution.

Logical database design The conceptual design of a database which is independent of implementation issues.

Mainframe A powerful multi-user computer designed to meet the demands of large organisations. Mainframes have been increasingly displaced in recent years by personal computers, workstations and communications networks.

Metadata Literally, data about data (e.g. its location, source, content and quality) Also known as co-data.

Metadatabase A database designed to manage metadata.

Modem A device used to link computers over telephone lines. The term is a contraction of modulator-demodulator.

Multimedia The integration of many types of data in a single application, including text, sound, graphics, and video.

Multitasking A computing environment that enables several programs to be run concurrently.

Natural resources Naturally occurring commodities used by human beings, for example minerals, soil, water and living resources such as forests, domesticated plants and animals, and wildlife. Renewable natural resources are a subset which regenerate under the right conditions.

Normalisation The process of achieving an optimum structure for a relational database.

On-line database An information service that can be accessed from computers dialling up over public communication networks.

Operating system Software controlling access to the resources of a computer, including supervision of other program. Examples of operating systems are Microsoft Windows and UNIX.

Personal Computer (PC) A computing platform, intended for use by one person at any time. Can be used either as a stand-alone computer or linked into networks. Major types include IBM-PC Compatible and Macintosh.

Physical database A database which has been implemented in a particular hardware or software configuration.

Policy A principle adopted or pursued by an individual, government, party or business.

Process An activity, function or procedure applied to a resource to create some outcome (e.g. an arithmetic procedure applied to data, or a critical step in a business operation).

Prototyping An information system development methodology which develops a partial or 'mock-up' version of an information system for user evaluation. Prototypes may be discarded or subsequently developed into an operational version.

Public domain Information (e.g. software, databases, methods, standards) which can be used without restriction of copyright, licence and the like is said to be 'in the public domain'.

Query A request to a database to select and extract data.

Record A collection of related data about a specific topic, treated as a single unit for purposes of data management or analysis.

Relational database A database in which data is organised following the 'relational model', that is, data items are organised in a set of formally-described tables linked by common key data items.

Relational Database Management System (RDBMS) A DBMS which uses a relational data model as its basis.

Relationship Describes how two or more entities are related to one another (e.g. ‘species’ may be related to ‘genera’ by a ‘belongs to’ relationship).

Server A computer or program that provides a service to other programs or users. A network server, for example, enables users to access network resources from linked computers or terminals.

Software The programs that are run on a computer.

Spatial data Data which are associated with specific locations on the Earth’s surface. Also known as geo-referenced data.

Spreadsheet Software which allows users to manipulate and analyse data in tabular format, including the use of formulae to derive values in “cells”.

Stakeholder Individuals or groups having an interest in the well-being or management of a resource, for example, national and local government agencies, non-governmental organisations, community-based organisations, the private sector, industry, the general public, politicians, individuals and the international community.

Structured Query Language (SQL) Widespread database querying language used in many relational database packages.

Sustainable use Means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.

Table A physical entity in a relational database in which data are laid out in rows (records) and columns (fields).

Theme A broad data area which may be subdivided into datasets.

Wide Area Information Server (WAIS) A text-based search facility designed for retrieving information from computer networks.

Wide Area Network (WAN) A computer network consisting of geographically dispersed computers communicating via media such as telephone, radio and satellite.

Workstation High-performance desktop computer designed for intensive technical applications.

World Wide Web (WWW) An Internet service enabling users to access information via a graphical, hypertext, interface.

Universal Resource Locator (URL) A unique address describing the location of an information source on the Internet.

xBASE Data management applications which trace their origins to the dBASE package.