



Organising Local Documentation Services for the Water and Sanitation Sector: guidelines

Second Edition

IRC International Water and Sanitation Centre

IRC facilitates the creation, sharing, and use of knowledge so that sector staff and organisations can better support poor men, women and children in developing countries to obtain water and sanitation services they will use and can sustain. It does this by improving the information and knowledge base of the sector and by strengthening sector resource centres in the South.

As a gateway to quality information, the IRC maintains a Documentation Unit and a web site with a weekly news service, and produces publications in English, French, Spanish and Portuguese both in print and electronically. It also offers training and experience-based learning activities, advisory and evaluation services, applied research and learning projects in Asia, Africa and Latin America; and conducts advocacy activities for the sector as a whole. Topics include community management, gender and equity, institutional development, integrated water resources management, school sanitation, and hygiene promotion.

IRC staff work as facilitators in helping people make their own decisions; are equal partners with sector professionals from the South; stimulate dialogue among all parties to create trust and promote change; and create a learning environment to develop better alternatives.

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Second Edition

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Introduction

Meeting the need for information on water supply and sanitation

Millions of people lack the safe drinking water and basic sanitation which are essential to human health and wellbeing; yet water and sanitation specialists and many local communities have considerable experience in setting up and maintaining low-cost water supply and sanitation systems. If others are to benefit from this experience, information about these technologies, and their application in different situations, needs to be made available.

To help ensure that such information is collected and made available to those who need it, the IRC International Water and Sanitation Centre, in collaboration with its partners in the South and with the support of the Netherlands Government, is working to build the capacity of water and sanitation resource centres in developing countries through its Resource Centre Development Programme. These guidelines are published as a contribution to that Programme.

Second edition

The first edition of these guidelines was published in 1993. Like the first edition, these revised guidelines concentrate on the basic tasks needed to set up and operate a small documentation centre at the local level. The first edition was 'based on the assumption that, in most cases, such a centre will not have access to a computer'; it therefore concentrated mainly on manual techniques and processes.

This second edition has been revised to take account of the developments in information and communication technologies (ICTs) which have revolutionised information provision during the past ten years. The revised guidelines continue to cover manual systems, but also include more detailed guidance on computer applications and access to the Internet.

A documentation service which does not have a computer and access to the Internet will not be able to benefit from many of the sources of information and advice referred to in these guidelines.

Target audience

These guidelines are addressed to:

- managers of local water supply and sanitation units who have decided to set up or improve a local documentation centre
- professional or technical staff members acting as the supervisor of such a centre
- clerical or secretarial staff members responsible for the operation of such a centre

The guidelines aim to help these three kinds of people to understand how to organise collections of documents in their institutions in such a way as to be able to find information quickly and easily, without the help of a professional librarian or documentalist.

Box 1: Key sources

Healthlink Worldwide Resource Centre Manual

<http://www.healthlink.org.uk>

Resource Centre Manual: How to set up and manage a resource centre. Revised edition. London, Healthlink Worldwide, 2003. 266 pages. Free.

This manual is specifically recommended as a companion to the present volume. It provides more detailed guidance on several aspects of documentation service, including information technology applications, and is particularly suitable for documentation centres in the water and sanitation sector because it is designed for organisations working in the field of public health in developing countries.

The manual is available free of charge from the publishers, Healthlink Worldwide, Cityside, 40 Adler Street, London E1 1EE, UK (E-mail: info@healthlink.org.uk) and may also be downloaded in PDF format from the website address given above.

UNESCO Libraries Portal

<http://portal.unesco.org/ci/>

A useful online source of general information on many aspects of information and documentation, not confined to any specific sector. The Libraries Portal provides links to information on libraries, professional groups, training, preservation and access initiatives, reference sources, conferences and meetings, and librarianship in general.

ItrainOnline

<http://www.itrainonline.org/>

This very useful online source aims to meet the need for a single source on the web containing a selection of the best and most relevant computer and Internet training resources for development and social change. ItrainOnline provides materials and annotated links to high-quality resources in English, Spanish, French and other languages, on topics ranging from computer and Internet basics to highly technical areas and the ways that civil society and development organisations can increase their impact using these tools. The information and annotations on the site are free, and can be reproduced, translated, and disseminated without restriction. Most of the material described in the collection is also free. Further details of specific sections of the website are provided at appropriate points in the text.

Further information and advice are also available from Documentation Unit, IRC International Water and Sanitation Centre, PO Box 2869, 2601CW Delft, The Netherlands. Tel. +31-15-219 29 39. Fax: +31-15-219 09 55. E-mail: library@irc.nl

International Federation of Library Associations and Institutions (IFLA)

<http://www.ifla.org/>

IFLA is the leading international body representing the interests of library and information services and their users. It has numerous divisions, sections and special activities on different aspects of library and documentation work, maintains regional offices in Africa, Asia and Latin America, has an extensive publications programme and organises the annual World Library and Information Congress. Further information: IFLA Headquarters, POB 95312, 2509 CH The Hague, Netherlands. Tel. +31 (70) 3140884. Fax: +31 (70) 3834827. E-mail: ifla@ifla.org.

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Organisation of the guidelines

The guidelines are divided into 9 chapters and 4 appendices:

Chapter 1 introduces the **Basic concepts** of information management and documentation services and their application in the water and sanitation sector, and provides an overview of the main functions of a local documentation centre.

Chapter 2 deals with **Management issues**. It considers key aspects of managing a local documentation centre, including, diagnosing the existing situation, formulating policy, planning the development of the service, establishing an organisational structure and cooperating with other institutions.

Chapter 3 is concerned with **Staff and training**. It deal with the kinds of staff required; staff duties; and staff training needs and resources.

Chapter 4 is concerned with **Finance and budgeting**, including recurrent costs, capital costs and sources of income.

Chapter 5 deals with **Physical facilities**, including the location and layout of the service; the accommodation needed for documents, users, staff and equipment, furniture, equipment and supplies (including computer hardware and software) and the need to ensure security and safety.

Chapter 6 deals with **Information resources**. It describes how to find out about information resources, how to deal with the existing document collections, and how to develop information resources, including identifying, selecting and acquiring resources and withdrawing documents from the collections.

Chapter 7, Organising information resources, describes the main sections of the collections likely to be needed, and the tasks involved in classifying documents by subject, preparing subject indexes, cataloguing the document collections, and the physical processing and repair of documents.

Chapter 8 describes the kinds of **Information products and services** which should be provided to meet users' information needs. It deals with current awareness products and services, literature searching, the supply of documents, and answering enquiries.

Chapter 9 deals with **Promoting the documentation service**, including aims and methods of promotion and how to develop a website.

Appendix A provides advice on how to carry out **Information surveys**.

Appendix B provides detailed guidance on **Resource requirements**, including details of space requirements and lists of furniture, equipment and supplies.

Appendix C provides selected lists of useful **Sources of water and sanitation information** and other **Manuals on library and documentation techniques**.

Appendix D provides a detailed description of the **Elements of a document supply system**.

What they will achieve

These guidelines cannot answer all the questions which may arise when the establishment of a local documentation service is being contemplated. Nevertheless, it is hoped that they will provide useful basic guidance to managers of local water and sanitation units and supervisors of local water and sanitation documentation services as to why such a service may be needed and what is involved in setting one up and maintaining it.

1. Basic Concepts

Documentation services are one of the basic services which should be provided by resource centres in the water and sanitation sector. They reflect the complexity of the sector in terms of the subjects covered, the kinds of institutions in which they may be established, and the professional interests and needs of their users. They may be provided either by a single documentation service or by a co-ordinated network of services serving one or more institutions.

Documentation services and resource centres

The IRC Resource Centre Development Programme defines a resource centre as:

an organisation or a network of organisations that provide support services to the water and sanitation sector, geared to making knowledge available to various target groups in a format they can use and tailored to specific information needs.

These support services may include:

- documentation services
- collection and analysis of local and international field practices and experiences
- packaging and dissemination of information
- publication of a newsletter and technical papers
- training and capacity building
- thematic research
- advocacy for sector development
- advisory and consultancy services
- acting as a facilitating forum for knowledge sharing and information exchange.

Some of these support services are concerned with the development of personal knowledge and skills rather than only with the transfer of information. Resource centres are thus concerned, not only with information management, but also with knowledge management; that is,

creating an organisation in which everyone is stimulated to handle his personal knowledge with care and to share it with others¹.

Information management is an important component of knowledge management, dealing with explicit knowledge which is recorded or communicated using a variety of different media.

¹ Keuks, W. (2003) Knowledge value chain: Introducing a methodology for incorporating knowledge management into organisational processes. [6th WIS, 12 September 2003.]

Note that the IRC definition of a resource centre is broader than that used in the Healthlink Worldwide Resource Centre Manual, where the functions of a resource centre are similar to those of a local documentation service as described in these guidelines.

Essentials of information management

Information management is concerned with the management of recorded communications, or documents. Information management is complex because it involves dealing with large numbers of:

- different producers of documents
- different documents from each producer
- different users of each document
- different occasions on which each document may be consulted and used.

Box 2A: Some subjects or disciplines in the water and sanitation sector

Community participation	Land survey
Computer science	Land use
Construction of water and sanitation schemes	Management of water schemes
Dam construction	Media design
Drilling	Operation and maintenance
Education	Planning and design
Food and agriculture	Plantation
Groundwater	Pollution control
Health	Project design and documentation
Housing	Remote sensing
Hydraulics	Sewerage
Hydrogeology	Social services
Hydrology	Social welfare
Implementation of water schemes	Soil mechanics
Industry	Surface water
Irrigation	Water quality examination

Box 2B: Some types of institution in the water and sanitation sector

Colleges	Non-governmental organisations
Community organisations	Private firms
Donors	Professional associations
Government ministries and departments	Universities

Box 2C: Some professions and occupations in the water and sanitation sector

Administrators	Librarians
Accountants	Managers
Automobile engineers	Meteorologists
Builders	Planners
Chemists	Plumbers
Drivers	Policy makers
Electrical engineers	Researchers
Hydraulic engineers	Social scientists
Hydrologists	Students
Lecturers	Trainers

All the above were identified by participants in an IRC information management course.

Information management essentially comprises:

- three basic elements
- information producers (individuals or institutions)
- information media (such as documents, maps or electronic media) by which information is recorded and transmitted)
- information users
- two basic mechanisms
 - production of information media
 - provision of access to information media (e.g. through databanks, documentation services, etc.)

Information management in the water and sanitation sector

Information like water

For water sector workers, many characteristics of information should be familiar. In many ways, information is like water, because:

- it comes from many different sources
- it may be easy to obtain, or difficult
- before it can be used, it has to be
 - collected
 - processed
 - stored
 - distributed
- it may be used for many different purposes
- it may be 'polluted' through distortion or inaccuracy
- it may be lost through 'leakages'
- it flows and, as with water, the flow has to be managed if it is to reach those who need it, when they need it

Just as there is a hydrological cycle, so there is an information cycle, which operates as follows:

- data are used to produce information
- this information is recorded in various ways
- the recorded information is collected
- collected information is processed (e.g. through indexing, physical formatting, etc.) to prepare it for storage and retrieval
- information can be retrieved on demand
- information can be disseminated to meet anticipated demand
- the information is used for various purposes, including
 - adding to knowledge
 - making decisions
 - producing more information.

Information unlike water

Information is also different from water (and from other resources), because

- it may be transferred without being lost to the original owner
- it may be used without being consumed

Information as a resource may be used to create new information, which in turn may be used to create still more new information. Since none of the information is actually consumed, its volume continues to grow – hence the 'information explosion'.

A key resource for development

Information is the key to exploiting other resources, including water resources. Society cannot use resources it knows nothing about, nor make effective use of those about which it knows too little. The effective use of resources is crucial to development. Information is therefore a basic resource for development.

What water sector managers need to know

Managers in the water and sanitation sector need to know about information for the same reasons that members of community management organisations need to know about water supply and sanitation. They need to know:

- what range of possibilities and choice of technologies or methods exist
- how to identify those most appropriate to the needs of their own organisation
- what resources are needed to ensure sustainability
- how to maintain supplies of the required quality and quantity
- how to determine the nature and level of demand and measure consumption

In the water and sanitation sector, a multiplicity of subject areas, institutions and professions leads to problems of:

- identifying sources of information
- selecting appropriate media
- identifying target groups of users

Some key characteristics of the sector are outlined in boxes, specifically:

- subject fields and disciplines (Box 2A)
- institutions active in these fields (Box 2B)
- professions and occupations represented in these institutions (Box 2C)

Organising information

One approach to organising information in the water and sanitation sector recognises four main categories of information:

Project and sector information

This kind of information is used mainly by planners and policy-makers, in institutions within a country and in external support agencies, international organisations and research institutions in other countries. It relates to the water supply and sanitation sector in a country as a whole, as well as to completed, ongoing and proposed projects in the sector at all levels.

Management information

Project and sector information must be linked to efficient management information systems in individual institutions. Management information consists mainly of internally-generated information and data for use in the planning, administration, day-to-day operation, management, performance and evaluation of specific institutions, organisations, programmes and projects. These systems may be concerned with:

- Operational information related to the management of the resource; including hydro geological, meteorological and hydrological data, service coverage data, records of consumption, cost recovery data, health impact data, borehole records, well records, design and construction records, operation and maintenance data and water quality data.
- Administrative Information related to the management of the institution; including records relating to personnel, equipment, stores and finance.

Technical information

Technical information is related to technical and managerial problems and solutions, methods and techniques, the results of research and field studies, sources of equipment, expertise and materials, best practices, and so on.

Advocacy information

Advocacy information aims to develop awareness, improve motivation and change behaviour in relation to water supply and sanitation, rather than provide information for use in carrying out technical or managerial activities.

These four categories of information are not mutually exclusive. For example:

- project and sector information may be partly derived from the output of management information systems

- performance indicators and growth forecasts produced by a project and sector information system may serve as inputs to management information systems for planning purposes
- data derived from a management information system may be made available in a report or periodical article as an item of technical information
- a report or periodical article may provide the basis for a radio broadcast, a brochure or a poster for use as advocacy information

The same source of information may thus be used in different ways and for different purposes.

Information management and documentation services

Documentation services are only one of a number of resource centre activities concerned with the collection, organisation and dissemination of information and the transfer and development of knowledge. Other support services need access to information contained in documents as a basis for their own activities, and produce documents of various kinds as a result of those activities. Documentation services are therefore:

- a source of information for other support services
- an outlet for information produced by other support services

Many water and sanitation institutions already have collections of documents of various kinds, often located in different departments and held in isolation from each other. Collections of documents tend to accumulate gradually, in an unplanned way, often in the offices of individual staff members.

A lack of overall co-ordination and the absence of a central record of these documents means that the information they contain – which may have cost a lot of money to produce or obtain – is, for all practical purposes, lost. Time and money are wasted in repeating expensive studies and proposals.

To avoid this problem, it is necessary to:

- merge individual document collections into a single documentation service, or
- establish a coordinating mechanism and a central record of these collections

As part of the services of a resource centre, documentation services may, like the resource centre itself, be provided by:

- a single organisation, or
- a network of organisations

Such a network may comprise:

- different documentation units within a single institution, or
- units serving different institutions which themselves form part of a resource centre network

The term 'documentation service' will be used in these guidelines to refer both to single organisations and to networks as described above.

Documentation services in the water and sanitation sector are often concerned mainly with technical information. However, both project and sector information and management information may also be issued in the form of reports and statistical publications, while public information campaigns may use documents such as posters, leaflets, videos and slide shows to disseminate information to communities. A local documentation service may collect and make available all these kinds of documents.

Functions of a local documentation service

The main functions of a local documentation service are to:

- identify the potential users of the service and find out what kinds of information they need
- identify the main sources from which these kinds of information may be obtained
- to provide users with access to these sources by:
 - selecting the best information sources for specific target groups
 - establishing, developing and maintaining well-organised collections of documents containing the kinds of information needed
 - establishing facilities for users to access appropriate external sources of information through electronic channels, including the Internet
- provide users with information about the document collections and appropriate external sources by producing lists of new acquisitions, catalogues, indexes, lists of useful web sites, etc.
- provide users with access to the service and its document collections by:
 - opening the service at convenient times
 - making arrangements for users to be allowed to use it
 - providing facilities for users to consult, borrow and make copies of documents in the collections
- maintain the accommodation, equipment and document collections in good physical condition
- find out which other libraries and documentation services have collections of documents relevant to the needs of users
- make co-operative arrangements with other libraries and documentation services to help users to obtain documents
- form or participate in library consortia to get discounts on subscriptions to information media and information management software
- provide information on other activities in the water and sanitation sector likely to be of interest to users of the service
- advise on the quality and usefulness of information sources for specific target groups
- promote the effective use of the service and its information resources

See also the Checklist 'What a resource centre can do' in Box 2D.

Effective performance

To perform these functions effectively, a local documentation service needs to

- be effectively managed in terms of:
 - diagnosing the existing situation
 - formulating policy
 - planning the development of the service
 - establishing an organisational structure
 - co-operating with other institutions
- be provided with adequate resources of:
 - trained staff
 - physical facilities
 - finance
- develop and maintain its information resources through:
 - identifying, selecting and acquiring documents and other information sources
- organise its information resources for use by:
 - cataloguing, classifying and indexing documents and other information sources
 - processing and repairing documents
- use its information resources to provide users with information products and services, including:
 - current awareness
 - literature searching
 - document delivery
 - query answering
 - information repackaging

Box 2D: Healthlink Worldwide Resource Centre Manual

Checklist: What a resource centre can do

A resource centre can:

1. Make information accessible
 - collect and organise materials
 - provide access to materials that are up-to-date and relevant to users
 - provide a pleasant environment for learning and training
2. Encourage the use of information
 - assist users to find relevant information and suggest how they can use it in their work
 - provide materials to support training and health promotion
 - provide information to those responsible for planning, managing and implementing health programmes, including district health management teams and community groups
 - produce information packs and resource lists
 - organise participatory workshops that use materials as tools for problem-solving work with teachers and trainers to identify resource materials for training activities
 - offer an information and enquiry service
 - develop ways to reach potential users
3. Produce materials
 - work with health teams and community groups to document their experience
 - adapt, translate and produce health learning materials
4. Strengthen links with other organisations
 - list local, national, regional and international organisations working in health and related fields
 - develop contacts between organisations working in similar fields, such as the Ministry of Education, Ministry of Water and Sanitation, nongovernmental organisations (NGOs) and community organisations
 - identify other sources of information.

2. Management Issues

Introduction

Even a small local documentation service needs to be well managed to meet the needs of its users. This involves decisions and actions with regard to:

- diagnosing the existing situation
- formulating policy
- planning the development of the service
- establishing an organisational structure
- co-operating with other institutions

Policies and plans may determine the nature of any new organisational structure, but they will need to be formulated within the existing organisational structure. The policy and planning process will therefore need to be initiated by the existing management, preferably in consultation with representatives of other stakeholders (including information users and documentation service staff). An interim planning committee should be formed. This can later be replaced by a permanent advisory committee (See 2.6).

Diagnosing the existing situation

Advice to planners from one economic development planner:

..survey things as they are, observe what needs to be done, study the means you have to do it with, and then work out practical ways of going about it.

M.G. Ionides, quoted in: Waterston, Albert. Development planning: lessons of experience. London, OUP, 1966. p. 6.

'Survey things as they are' implies that the starting point for successful planning is a careful diagnosis of the existing situation. The diagnosis should be done before policy statements and plans are finalised. At the same time, the decision to undertake diagnosis is itself a policy decision which needs to be taken by the existing management in consultation with the interim planning committee.

Diagnosis involves:

- observing the existing situation
- identifying problems or weaknesses
- assessing the potential for improvement

The ability of a local documentation service to meet the information needs of its users will depend very much on the extent to which its information resources are relevant to their needs. The service's success in developing relevant information resources will in turn depend to a large extent on how successful it is in identifying potential users and their

information needs. The diagnosis should begin with a consideration of the two essential preconditions for the effective operation of such a service:

- existing and potential information users, and their information needs
- the kinds of information sources available to meet those needs

The diagnosis should go on to examine:

- existing policies, aims and objectives, plans and proposals for the creation or improvement of documentation services
- the existing organisational structure
- existing administrative regulations and procedures of the parent organisation
- existing arrangements for planning, monitoring and evaluation
- the nature and extent of existing document collections
- existing arrangements for access to external sources of information
- existing resources of staff, accommodation and equipment, finance
- existing technical operations
- existing information products and services
- existing arrangements for co-operation with other institutions

Identifying information users and their needs

Documentation service staff need to know how many people are likely to use the service and what kinds of information they need, so that they can develop useful document collections, information products and services to meet their needs. It is essential to:

- identify the people who already use, or are likely to want to use the service
- find out what kinds of information they need

The potential users of the service might include people from any or all of the professions or occupations listed in Box 2C.

Although all members of such groups in the locality may need or want to use the documentation service, it may not be either practical or desirable to allow all of them to do so. For example, local schools or colleges may want to use the service for study projects on water and sanitation, but visits to the service by large numbers of students may need to be organised or rationed to avoid disturbing other users or overwhelming services. However, the long term benefits of introducing young people to this material and to the documentation service should also be considered.

Whatever groups of users the documentation service intends to serve, the staff of the service need to collect information about the numbers of people in the different groups and, if appropriate, the different institutions to which they belong. This information may be used to:

- provide a basis for selecting a sample of potential information users, whose information needs and ways of using information may be studied in more detail in a needs assessment (see below)

- find out where most potential users in different groups are located, to help in planning the future development of the service and deciding on the kinds of information services it should provide

Information needs assessments

The information needs of potential users may be identified in general terms by studying documents produced by the organisations to which they belong, such as

- annual reports
- development plans
- mission statements
- newsletters
- publicity brochures, etc.

It will be necessary to carry out an assessment of information needs and information use to discover:

- the kinds of information potential users need
- how they try to find this information
- where they normally obtain it from
- how they use it

A needs assessment can be carried out through:

- individual interviews
- focus group discussions
- a formal questionnaire survey

Interviews and focus group discussions provide better opportunities for open-ended discussion of people's information needs. Advice on how to conduct a questionnaire survey is provided in Appendix A.

See also: Healthlink Worldwide Resource Centre Manual

- 1.1 Assessing information needs
- 1.4 Interviewing tips and sample questionnaires
 - 1.4.1 Information needs assessment questionnaire (example)
 - 1.4.2 Questionnaire for other organisations that provide information

Having obtained a clear idea of the kinds of people who will use the service and the kinds of information they need, it will be necessary to:

- identify the main sources from which this information may be obtained
- find out how to obtain it
- take steps to obtain the information

These activities are dealt with in Chapters 6 and 7.

Formulating policy

Policy statement

Based on the results of the diagnosis, the interim planning committee, in co-operation with the management and staff of the documentation service, should formulate a preliminary policy statement for the development and operation of the service. This statement should be reviewed by any permanent advisory committee which may be established.

The policy statement should define:

- the aims and objectives of the service
- its organisational structure
- the kinds of users it should serve
- the kinds of information resources to which it should provide access, including
 - documents
 - external information sources and services
- the kinds of information products and services it should provide
- the conditions under which users may use the service, including:
 - opening hours of the service
 - rules for lending or photocopying documents
 - arrangements for access to external information sources and services
 - charges for the use of the service

One of the first steps in setting up a local documentation service should be to decide whether or not it will serve users from other organisations or only those belonging to its parent institution.

Policy proposals may be constrained by existing policies at higher levels – for example, within the parent organisation or in the government as a whole – or in other fields – for example, national information policy.

Regulations

The work of even a small documentation service will be made much easier, and possible conflicts and misunderstandings about its role and functions avoided, if its aims, objectives and principal functions are set down in writing and officially endorsed by the management of its parent institution.

If the service aims to serve many users from outside the parent institution, it should prepare written regulations for the use of its facilities based on the policy statement. Internal regulations for the administration of the service, e.g. for maintaining records of the receipt and withdrawal of documents, will need to be formulated in accordance with the existing administrative regulations and procedures of the parent organisation.

Ongoing policy formulation

The advisory committee should also participate in policy formulation on an ongoing basis, in terms of:

- planning the development of the service
- implementing the service's aims and objectives
- setting budgets
- selecting new information resources
- selecting staff
- monitoring and evaluating the service
- generally ensuring that the needs of the service and its users are met

Planning the development of the service

'To plan is to choose' – Julius Nyerere

Planning is a means of attaining objectives within a certain period of time. Policy determines WHY we are going to create or improve a documentation service. It may also indicate or dictate

- WHAT we intend to do - acceptable objectives
- WHEN we intend to do it - duration of the plan period
- HOW we are going to do it - viable strategies for achieving the objectives.

The establishment of valid planning objectives depends upon the accuracy of the diagnosis of the existing situation. All planning should take place within a framework of policy which, in turn, may be shaped by the requirements or results of planning.

Planning process in outline

1. Establish objectives
Objectives should be as precise and explicit as possible; where appropriate, they should be expressed in terms of quantitative targets.
2. Assess available resources in relation to the objectives
Can the objectives be achieved within available resources (physical facilities, staff, finance, etc.)? A possible planning objective could be to increase the available resources, or to make better use of those which are already available.
3. Examine possible alternative courses of action and select the most suitable
Develop a strategy for attaining each of the objectives.
4. Set out the actions needed to implement the strategy in logical sequence, indicating the resources required at each stage
Develop a programme or action plan, including specific project proposals where appropriate.

See also: Healthlink Worldwide Resource Centre Manual

- 1.2 Strategic planning
 - 1.2.1 How to develop a strategic plan
 - 1.2.2 Key questions for planning a resource centre
- 1.3 Developing an action plan
 - 1.3.1 How to develop an action plan
- 9 Monitoring and evaluation
 - 9.1 Why monitor and evaluate?
 - 9.2 Monitoring
 - 9.2.1 What to monitor
 - 9.2.2 Sample monitoring form
 - 9.3 Evaluation
 - 9.3.1 Collecting qualitative data
 - 9.3.2 Using the data
 - 9.3.3 Using the results of an evaluation

Approval, acceptance and adoption

Plans must be:

- approved by those who will be affected by them
- accepted by those who will have to implement them
- adopted by those responsible for financing and authorising them

Implementation

Effective implementation of plans depends upon:

- approval, acceptance and adoption
- establishment of priorities within the programme
- realistic budgeting, adequate financing and effective budgetary control
- adequate performance checks and procedures for monitoring and evaluation
- adequate administrative support
- translation of objectives into specific projects

Flexibility

Plans must be flexible enough to take account of changes in the situation without having to be abandoned. It must be possible to substitute new or modified objectives without having to write off the effort already expended.

Establishing an organisational structure

Even if a local documentation service is small in size and serves a limited number of users, it is worth taking the trouble to ensure that it is located in the best possible place within its parent organisation and that basic policies for the operation of the service -- particularly with regard to co-operation with other institutions -- are defined at the outset. This will help

to ensure the effectiveness of the service. These are not activities to be carried out only when the service is being set up; they should form part of a continuous process which must be maintained throughout the life of the documentation service.

A single documentation unit

If a new documentation service is a single unit, its internal organisational structure can be very simple. In most cases it will be supervised on a part-time basis by a member of the managerial or technical staff of the institution, and operated -- again, often on a part-time basis -- by a member of the clerical or secretarial staff. In such cases, the internal organisational structure simply reflects these relationships and its establishment presents no problems.

Choosing the right place for the service in the organisational structure of its parent institution is sometimes difficult. There is no one place which is best for all documentation services in all situations. It is particularly important to make the right choice if the service is going to serve users from other local institutions. In general, it is better to attach the service either:

- to the office of the director of the parent institution, or
- to a department or section whose staff are likely to make good use of it and so to support its development

In an organisation with both a research and a field operations function, for example, it may be advisable to attach the documentation service to the research unit, since research workers are often more familiar with the use of documentary sources of information, and rely on them more in their daily work, than field workers.

Several units in the same institution

If a new documentation service will comprise a number of existing documentation units within the same parent institution, these individual units will already have their own internal organisational structures and form part of the organisational structures of their parent departments, which control their budgets and employ their staff. The development of the various units needs to be co-ordinated.

Several units in different institutions

If a new documentation service will comprise a number of existing documentation units in different parent institutions, they will need to be brought together in a co-operative network. Management aspects of co-operating with other institutions are discussed below.

Advisory committee

A permanent advisory committee, representing the interests of the main groups of users and the management, should be established to advise on the development of the documentation service. This committee should replace the interim planning committee

referred to in the introduction above. The appointment of such a committee is particularly important in cases where the service comprises a number of separate documentation units, and where it plans to serve other institutions. In such cases, the committee should include users of these other units or representatives of these other institutions.

See also: Healthlink Worldwide Resource Centre Manual

2.2 Advisory committees

2.2.1 Sample responsibilities of a resource centre advisory committee

Staff co-ordinating team

Where the documentation service comprises a number of separate units, either within the same institution or in different institutions, a co-ordinating team comprising members of staff of the various units will be needed to ensure the effective implementation of the policies and plans developed on the advice of the advisory committee and approved by the management.

The membership of such a team may change from time to time in accordance with the needs of the moment; more than one team may be established to deal with different issues, e.g. co-operative collection policy, staff training, standardisation of cataloguing procedures, establishment of databases, etc.

Co-operating with other institutions

No documentation service can meet all the information needs of all its users all the time from its own resources. Services with access to the Internet can now obtain large amounts of information from many different sources around the world, but still need to co-operate with other services and other institutions at the local, national and international levels in order to

- meet the information needs of their own users
- help other documentation services meet the needs of their users.

Co-operation may be

- informal, with services exchanging documents and information on an ad hoc basis
- formal, through participation in an information network

Co-operation with other libraries and services

A documentation service should co-operate with other libraries and documentation services at the local, national and international levels in such activities as:

- identifying and acquiring locally-produced documents
- developing document collections
- exchanging information and documents
- providing information products and services to each other's users

- forming consortia to get discounts on subscriptions to information media and information management software
- benchmarking – comparing and learning from best practices, comparing information service costs, etc.
- organising training courses for staff and users
- building online communities (see Box 3A).

Box 3A ItrainOnline: building online communities

Whether the goal is an online meeting or the creation of a global network, the resources collected here will help groups to choose appropriate collaboration tools, develop facilitation techniques, and plan a strategy for working together online.

- Introduction
- Building virtual communities
- Collaborative workspace tools
- Fax and telephone
- Chat and instant messaging
- Blogging
- Multilingual online communities
- General

<http://www.itrainonline.org/itrainonline/english/communication.shtml>

Local, national and international co-operation

In most places, there are many institutions involved in water supply and sanitation, all of whom need information on water supply and sanitation. Many of these institutions will already have collections of documents relevant to the needs of their own users and of potential interest to people working in other institutions in the locality, or to members of the community. In addition to the co-operative activities mentioned above, the documentation service may:

- develop a central document collection to serve several water and sanitation institutions in the local area
- create a central catalogue or database of documents held by these institutions
- co-operate in the creation and maintenance of a co-operative catalogue or database of such documents

The possibilities of co-operation at local level are limited only by the willingness of those involved to co-operate fully. For example, a central catalogue of several local documentation services will be useful only if these services are willing to allow users from other institutions to use the documents in their collections.

Documentation services can also co-operate with other services in other parts of the country. The local service will often be able to identify locally-produced documents which

are not known to these other services, but which they would like to add to their collections. The local service may be able to enter into agreements with other services whereby it collects such documents on their behalf and receives useful information materials, products and services from them in return.

Similar arrangements may be possible with international and regional information services. These services can also offer assistance and advice to both national and local documentation services in such areas as

- the production of newsletters
- the provision of abstracting services
- training of staff and users
- translations
- development of guides to information sources

Information networks

There are many existing local, national and international information networks in the water and sanitation sector. The management of a local documentation service may decide to

- participate in one or more existing networks
- establish a new network – normally at the local level

In either case, to obtain the benefits of participating in a network, the service must also contribute to network activities. Participating in more than one network, each of which may use different procedures and have different requirements, can place a heavy burden on the staff of the documentation service.

See also: Healthlink Worldwide Resource Centre Manual

- 8.3 Networks and networking
- 8.3.1 Developing a network
- 8.3.2 Successful networking

In establishing a new network, clear and consistent policies regarding participation are critical to its efficient operation and development. An organisational structure should be created which defines the responsibilities, obligations and rights of each member in

- providing and disseminating information
- collaborating in the management and administration of the network

Information Management in the Water and Sanitation Sector: lessons learned from field assignments in Africa and Asia, by J. Stephen Parker (The Hague: IRC, 1993. Occasional Paper 19).

A detailed analysis and evaluation of the functioning of a number of national and regional information networks in the water and sanitation sector is provided in this IRC publication.

Box 3B: Some existing information networks in the water and sanitation sector

GARNET: Global Applied Research Network

<http://www.lboro.ac.uk/departments/cv/wedc/garnet/index.html>

WEDC, Loughborough University, Leicestershire LE11 3TU, UK.

E-mail: wedc@lboro.ac.uk.

Tel. + 44 (0) 1509 222885. Fax: + 44 (0) 1509 211079. <http://www.lboro.ac.uk/wedc/>

GWA: Gender and Water Alliance

<http://www.genderandwateralliance.org/>

GWA Secretariat, c/o IRC International Water and Sanitation Centre,

PO Box 2869, 2601 CW Delft, The Netherlands. Tel. +31-15-219 2943.

Fax: +31-15-219 0955. E-mail: arce@irc.nl

EURASLIC: European Association of Aquatic Sciences Libraries and Information Centres

<http://193.191.129.135/>

Snejina Bacheva, EURASLIC Executive Secretary, Institute of Oceanology,

PO Box 152, 9000 Varna, Bulgaria. Tel. +359 52 37 04 84.

Fax: +359 52 37 04 83. E-mail: library@io-bas.bg

GLOBWINET: Global Water Information Network

<http://www.globwinet.org/default.asp>

SAWINET: Southern African Water Information Network

<http://www.globwinet.org/sawinet.asp>

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH,

Dag-Hammarskjöld-Weg 1-5, 65760 Eschborn, Germany. Phone: +39 6196 79-0.

Fax: +39 6196 79-1115.

E-mail: globwinet@globwinet.org. E-mail: sawinet@gwpsatac.org.zw

IAMSLIC: International Association of Aquatic and Marine Science Libraries and Information Centers

<http://www.iamslic.org/index.html>

Kristen L. Metzger, Librarian Harbor Branch Oceanographic Institution, 5600 US 1

North Ft. Pierce, 34946 Florida, USA. Tel. +1 561 46 52 400. Fax: +1 561 46 52 446.

E-mail: metzger@hboi.edu

Inter-American Water Resources Network (IWRN)

<http://www.iwrn.net/>

Unit of Sustainable Development and Environment, Organisation of American States

1889 F St. NW, DC 20006 Washington, USA. Tel. +1 202 458 3556

Fax: +1 202 458 3560. E-mail: iwrn@oas.org

REPIDISCA: Red Panamericana de Información en Salud Ambiental

<http://www.cepis.ops-oms.org/bvsair/e/home.htm>

Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente, CEPIS, Los Pinos 259, Urbanización Camacho, La Molina, Lima 12, Casilla Postal: 4337, Lima 100, Peru. Tel. +51 (1) 437-1077. Fax: +51 (1) 437-8289.

E-mail: cepis@cepis.ops-oms.org

STREAMS: Streams of Knowledge

<http://www.streamsofknowledge.net/>

Streams Secretariat, Philippine Centre for Water and Sanitation, The ITN Foundation, P3 Minnesota Mansion, 267 Ermin Garcia Street, Cubao, Quezon City, Philippines 1109. Tel. +632 912-0531 or +632 421-9470. Fax: +632 911-5783.

E-mail: itnphil@compass.com.ph

UWASNET: Uganda Water and Sanitation NGO Network

PO Box 33396, Kampala, Uganda. Tel: +256-41-222922/256-77-617710.

Fax: +256-41-220893.

E-mail: ngocoord@uwasnet.org

Water News Services Yahoo Group

<http://groups.yahoo.com/group/waterNewsServices/> [Internet only]

Waterweb Consortium

<http://www.waterweb.org> [Internet only]

3. Staff and Training

Introduction

Good staff are the key to successful performance in any local documentation centre. Even though they may be working only part-time in the centre, they should be carefully selected and properly trained to carry out the tasks expected of them. It is important to choose the staff carefully and to give them every encouragement to improve their knowledge and skills in the field of documentation through:

- training
- participating in conferences and meetings on documentation
- reading books and journals on documentation

What kinds of staff?

Small documentation centres serving single water and sanitation units may be staffed by a part-time supervisor and a part-time assistant, neither of whom may have had any training or experience in documentation work.

Larger centres, particularly those participating in information networks, will need a full-time supervisor and one or more full-time or part-time assistants. The supervisor should preferably be a professionally qualified librarian, documentalists or information scientist, while the assistant(s) should, if possible, have library technician training.

If it is not possible to employ a qualified professional as the supervisor, professional advice and assistance may be obtained, on a part-time or consultancy basis, from:

- qualified staff in other local libraries or documentation centres
- the library and information science department of a local university
- a national or local library association

See also: Healthlink Worldwide Resource Centre Manual

2.1 Staffing

2.1.1 Job descriptions

2.1.2 Sample job description of a resource centre officer

If part-time staff have other duties in the parent institution, these should be reorganised to ensure that they can give proper attention to their work in the documentation centre. If the task of setting up and running the centre is simply added to their existing workload, they are likely to resent it and will not approach it with enthusiasm.

A job description and person specification should be prepared for each staff position. Every documentation service will have its own needs, and will need to formulate job descriptions and person specifications for its own staff in accordance with these needs.

Staff training

It will be necessary, at an early stage and, if possible, before the centre opens, to organise suitable training for staff. Apart from giving them the technical knowledge necessary to carry out their tasks, this should enhance their self-confidence in relation to documentation work and so make them better able to provide good services to users, as well as increasing their motivation. The kinds of training required include:

- practical training in library and documentation work, including the use of computers
- training leading to technical or professional qualifications in library and information work
- training in the identification and use of water-related information sources
- training in management methods
- training in interpersonal skills

Training may be provided through

- on-the-job training by existing staff members
- practical attachments in other local libraries or documentation centres
- short courses
- formal education and training programmes at academic institutions
- distance education programmes
- online self-education programmes.

See also: Healthlink Worldwide Resource Centre Manual

6.9.3 On-line training

Training programmes are organised at various levels – local, national, regional and international – by:

- associations of librarians or documentalists
- library and information science departments in academic institutions
- library and information networks and consortia
- individual libraries and documentation centres
- development agencies

A wide range of staff training opportunities at different levels is available in most countries and online via the Internet. There are at present, however, very few training courses concerned specifically with information in the water supply and sanitation sector. Those seeking training with a specific orientation to water and sanitation information will therefore, in most cases, have to be satisfied with practical attachments to other libraries and documentation centres in the sector.

Information on training opportunities at the local and national level may be obtained from the organisations which provide them, as listed above. Three useful international sources on the Internet are described in Box 4A.

Box 4A: Internet sources of information on staff training

UNESCO Webworld: Libraries Portal

<http://portal.unesco.org/ci/>

The training section of this site provides brief descriptions and links to further information on numerous Fellowships, Institutions – in Africa, the Arab States, Asia and the Pacific, the Caribbean, Europe, Latin America and North America - online courses and workshops.

ItrainOnline

<http://www.itrainonline.org/>

ItrainOnline focuses on information technology applications and provides self-study materials and annotated links to online resources in English, Spanish, French and other languages.

Main Site Contents

- Basic skills
- Web development
- Technical
- Resources for women
- Strategic use
- Multimedia
- Resources for trainers
- Glossary of terms

Resources for Trainers

A collection of resources for trainers which focus on Internet and ICTs training in NGOs and community organisations. It comprises three subsections:

Effective Training

Resources to help you to become a more effective trainer and develop training strategies for your organisation.

Multimedia Training Kit

The Multimedia Training Kit is a series of modular training materials for use in workshops developed by ItrainOnline partners and others. The materials share a common easy-to-use format, and are freely available for non-commercial use.

Topic-Specific Resources

Annotated links to resources on specific topics, from Internet basics to advanced technical skills. All resources listed include materials specifically for trainers, such as handouts, slide shows, and workshop outlines.

More information on other sections of the ItrainOnline web site is provided in the appropriate sections of these guidelines.

World List of Departments and Schools of Information Studies, Information Management, Information Systems, etc.

<http://informationr.net/wl/>

This site provides unannotated links to academic departments, schools and courses in the information sector around the world.

Conferences and meetings

Many of the organisations which organise training programmes also hold conferences and meetings dealing with various aspects of information work. Information management issues are often discussed at conferences and meetings on water supply and sanitation. Staff of the documentation centre should be encouraged and assisted to participate in such meetings at local, national or international level, as appropriate.

Books and journals

Documentation centre staff needs to keep abreast of developments in documentation work and of new sources of information likely to be of interest to users. The document collections should therefore include technical books, reports, journals, newsletters, etc. on documentation and information science. A selection of useful source materials on documentation and information science is provided at Appendix C.

4. Finance and Budgeting

Introduction

Establishing, improving, developing and maintaining a local documentation service costs money. The amount of money needed to set up and run a small local documentation service is not large, but adequate amounts must be provided on a regular basis, for the service to achieve its aims. This money may come from:

- the parent institution
- the users of the service
- external sources

Overall responsibility for the service's finances normally rests with the service's parent institution, which should take steps to:

- create a separate budget item for the service in its overall budget estimates
- make adequate budgetary provision for both capital and recurrent expenditure on the service, including, where necessary, a foreign exchange component for buying documents, equipment and supplies from other countries
- support the advisory committee and staff of the service in preparing plans and proposals for the development of the service
- incorporate such plans and proposals in the overall plans of the institution and in any requests for funding

The amounts of money required will vary, depending on such factors as:

- objectives of the service
- geographical location
- the size of document collections and the expected growth rate
- the relative proportions of local and foreign documents in the collections
- how much the service is used
- what kinds of information products and services it provides
- the number and qualifications of staff

See also: Healthlink Worldwide Resource Centre Manual

- 2.3 Financial planning
- 2.3.1 How to establish financial needs
- 2.3.2 How to identify sources of income
- 2.3.3 How to draw up a budget

Budgeting

Proper estimates of revenue and expenditure should be prepared for the documentation service. This helps to ensure that the development and operation of the service is properly controlled and provides a basis for evaluating its activities in terms of their cost-effectiveness. The budget estimates should cover:

- recurrent costs
- capital costs (including the costs of any special projects)
- projected income

Recurrent costs

Recurrent costs may include:

- staff salaries and associated costs (pensions, health insurance, etc.)
- costs of purchasing and subscribing to documents and information services, including an adequate foreign exchange component
- costs of producing and distributing information products and services
- costs of publicising the service
- costs of maintaining and upgrading equipment
- costs of supplies, including stationery, cleaning materials, etc.
- running costs, including electricity, water, telephone and postal charges
- general maintenance and upkeep of the service

Capital costs

Capital costs may include:

- preparation, repair and renovation of accommodation
- initial charges for service connections (electricity, water, telephone, etc.)
- purchase and installation of furniture and equipment
- replacement of worn-out, damaged or obsolete furniture and equipment
- purchase and processing of documents to create or develop the initial collection
- specific costs associated with special projects, e.g. organising a training course for local documentation workers

Projected income

Sources of income may include:

- budget allocations made by the parent institution
- charges to users
- external contributions
- special fundraising activities

See also: Healthlink Worldwide Resource Centre Manual

- 2.4 Fundraising and income generation
- 2.4.1 Generating funds
- 2.4.2 Applying for grants
- 2.4.3 How to find out about funders
- 2.4.4 How to apply for grants
- 2.4.5 How to prepare a funding proposal

User charges, external contributions and fundraising will never be enough to cover the costs of developing and maintaining the service. The main source of income will always be budget allocations from the parent institution.

User charges

In many developing countries, individual users of a local documentation service will not be able to afford to pay an economic price for information products and services. Charging an economic rate may discourage people from using the service and so defeat its objective. However, if information products and services are provided free of charge, users may abuse them, for example, by asking for more resources than they need or can use.

One way of dealing with these problems is to allow users to use documents inside the service free of charge, but to make a nominal charge for borrowing them and increasingly higher charges for increasingly higher levels of service. For example, the subscription to a regular list of documents newly acquired by the service, which is relatively easy to prepare, could be lower than that for a newsletter, which takes more time to compile. The cost of a newsletter could in turn be lower than that of a selective dissemination of information service, which requires much more time and effort. Another approach is to provide products and services free to regular users, but to ask external users to pay for them.

The service should always charge for making photocopies of documents in response to users' requests. Such charges might be designed to recover only the costs of the paper and toner, rather than the full costs including electricity, staff time and photocopier depreciation.

Decisions about charging for the use of the service and its information products and services should be made by the management of its parent institution in consultation with the staff and the advisory committee. This applies also to

- the question of whether or not to impose fines and other penalties for the misuse of the service (for example, payments to be made for lost or damaged documents)
- what kinds of contributions, if any, other local institutions should make to the service in return for any services they may receive from it

Income from external contributions

- Apart from income from sales of information products and services to external users, income from external sources may come in the form of:
- contributions from other institutions which co-operate with the service
- grants from national or international donor agencies
- other donations.

Institutions which co-operate with the service, for example, in an information network, may be invited to make one-off contributions, e.g. to the cost of acquiring specialised database software for the network, or regular contributions, e.g. to the costs of maintaining the database.

Income from donor agencies may come either:

- indirectly, within the framework of grants for the development of the parent institution as a whole
- directly, in the form of grants aimed specifically at the development of the documentation service

Donors often impose specific conditions on how their grants should be spent and accounted for, and require grant applications to be made in specific formats.

Other donations, e.g. from local charities or individuals, may be in kind as well as in cash; e.g. in the form of items of furniture and equipment, or documents.

Fundraising activities

The documentation service may be able to raise small amounts of money through special fundraising activities such as the sale of pens and T-shirts, social events and entertainments, etc.

5. Physical Facilities

Introduction

A documentation service should provide adequate physical facilities to enable its staff to do their work properly and its users to make effective use of information sources and services. The service needs a minimum of furniture and equipment, including computers and associated equipment. These, together with the collections of information materials, the staff who maintain them and the users who consult them, need to be physically accommodated in suitable premises in a convenient location. Adequate arrangements need to be made to ensure the safety and security of collections, staff and users. In summary a local documentation service needs

- adequate space
- suitable furniture and equipment
- regular supplies of consumables

The service must also be located in an appropriate place in the parent institution, and arranged in such a way as to ensure that its operations can be carried out efficiently.

Location and layout

The service should

- be located in an area which is frequently visited by those who will use the service most
- be easily accessible to users, including people with disabilities
- be free from noise and offensive smells
- have room for expansion
- be easy to find.

The service should not have to share space with other activities. If this is not possible, it may be housed in a room used for meetings, or even in a general office, but should not be located in the office of a staff member.

An open rectangular space without internal load bearing walls is the most suitable for a documentation service. This will make it easy to arrange the furniture and equipment at the outset and to change the arrangement in future if required. Once the service grows beyond the basic initial level, it should be divided into a public area and a staff workroom area.

Space requirements

It is essential to provide enough space for:

- documents
- users
- staff
- office equipment

See also: Healthlink Worldwide Resource Centre Manual

- 3.1 Location, size and structure
 - 3.1.1 Choosing a location
 - 3.1.2 Working out the size
 - 3.1.3 Ensuring a secure structure
- 3.2 Planning the layout
 - 3.2.1 How to measure space for shelves
 - 3.2.2 Space for different uses

The amount of space needed will depend on many factors, including:

- the number of users who are expected to use the service
- the numbers of documents of different kinds which the service contains at the outset
- the rate at which the document collection is expected to grow
- the kinds of user services to be provided
- the numbers of staff to be employed
- the kinds of office equipment to be used

Some basic norms for use in calculating how much space is needed in particular situations are presented in Appendix B.

Accommodation for documents

Different types of storage accommodation need to be provided for documents of different kinds, including:

- atlases
- audiocassettes and reel-to-reel tapes
- books
- bound volumes of periodicals
- broadsheets
- brochures
- compact discs-read only memory (CD-ROMs)
- current periodicals
- digital video discs (DVDs)
- diskettes
- maps
- microfiche

- microfilms
- newspapers
- pamphlets
- photocopies
- photographs
- posters
- press cuttings
- reports
- slides (35mm transparencies)
- technical drawings
- video cassettes and discs

Accommodation for users

Users need space to:

- browse or search the document collections on the shelves, in storage cabinets, etc.
- consult the catalogue of the collections
- use the computer and search for information from online sources
- read various kinds of documents (including those for which equipment must be used, e.g. microfilms, slides, etc.)
- consult the staff
- return and borrow materials.

Users doing serious study and research often prefer individual tables or study carrels (a table with screens on three sides to give privacy and avoid distractions). Other users may prefer to use communal tables with several seats. Not more than four seats should be provided at one table.

Casual seating, in easy chairs or sofas, may be provided for users wishing only to read newspapers or magazines.

Staff accommodation

Staff need space to:

- supervise the public area
- keep the document collections in order
- keep the public area tidy
- deal with correspondence and administrative tasks
- perform the technical operations needed to develop and maintain the information resources of the service
- create and provide information products and services to users.

The technical operations need more space than normal office work. Adequate space should be provided in the workroom area for operations such as unpacking, sorting, checking, and processing documents, and steps should be taken to ensure that the

documents are secure during this process. The workroom should be separate from the public area and be kept locked when not in use.

There should be one workspace for each staff member. At least one workspace should be located in the public area with a good view of users' seats and document collections. This should function as a service counter and control desk. All staff workspaces need easy access to storage cupboards for stationery and supplies, and should have secretarial swivel chairs on castors.

Staff should have easy access to toilet and washing facilities.

Furniture,

The service will need some or all of the following types of furniture:

In the public area:

- bookshelves
- display units
- easy chairs
- noticeboard
- reading tables
- staff workspace (desk and chair or purpose-made service counter)
- storage cabinets for different kinds of documents (e.g. videos, maps, etc.)
- study carrels
- upright chairs

In the workroom area:

- bookshelves
- cupboards
- desks
- filing cabinets
- office chairs
- tables for unpacking, sorting etc.
- upright chairs

Equipment

In the initial stages, the documentation service may have to share some equipment with other offices in the parent institution. As soon as possible, however, it should be provided with its own photocopier and computer to enable staff to carry out technical operations and provide services to users without having to interfere with the work of other units. The service will need some or all of the following types of equipment:

In the public area:

- computer(s) with online connection
- display equipment

In the workroom area:

- audiovisual equipment
- computer with online connection
- document binder
- fax machine
- guillotine
- microfiche/microfilm reader/printer (if the collection contains microforms)
- photocopier
- printer
- scanner
- telephone connections (preferably more than one, for voice, fax, Internet connection)

Healthlink Worldwide Resource Centre Manual

3.3 Choosing furniture and equipment

3.3.1 Shelving

3.3.2 Display equipment

3.3.3 Other furniture and equipment

3.3.2 List of furniture and equipment

Computer equipment

Computer technology is today essential even in a small documentation service. This is to catalogue documents, store documents electronically and to access the Internet. As well as one or more computers, the documentation service will need to install software, including specialised library services, anti-virus programmes and a firewall, and other equipment allied to the computer, such as a printer and a scanner. Computers are used for:

- creating, maintaining and consulting the catalogue or database of the document collections
- providing access to information sources on CD-ROM and DVD
- providing access to information sources on the Internet
- exchanging information with other documentation services through information networks
- communicating via e-mail
- publishing information on the Internet
- preparing information products (newsletters, lists of new acquisitions, etc.)
- providing information services (enquiry and reference services, etc.)
- placing and progress-chasing of orders for new documents
- maintaining records of receipt for current periodicals
- maintaining accounting records
- preparing reports and correspondence
- preparing promotional materials and presentations.

Computers may be used by both staff and users. Whenever possible, one or more computers should be provided for staff and one or more for users. Providing extra computers is a good way of attracting users to the documentation service, or of transforming it into a telecentre or open learning centre.

Staff will need to use computers for the full range of activities listed above; users will need to use them for accessing and consulting both internal and external information sources. To be used effectively for these purposes, the computers need to be provided with suitable software.

See also Healthlink Worldwide Resource Centre Manual

- 6 Computers, electronic communication and databases
- 6.1 Advantages of computers

The ItrainOnline web site provides links to numerous useful resources on how to develop the basic skills needed to use computers effectively (see Box 5A).

Box 5A: ItrainOnline: basic skills

Tools and resources to help build the basic skills needed to make effective use of computers and the Internet.

Computer Basics

Resources on how computers work, how to maintain computers and use them safely, and how to protect computers from viruses.

Office Productivity Software

Links to articles and tutorials on using common office productivity software such as MS Word and Excel, and to information on Open Source alternatives to mainstream commercial software.

Internet and E-mail Basics

Resources on Internet and e-mail basics, ranging from general introductions to the Internet, to guidance on specific tools such as e-mail and web browsers.

Finding Information Online

Tools and resources on how to find information online and to evaluate the quality of that information.

http://www.itrainonline.org/itrainonline/english/basic_skills.shtml

The Computer Basics section of the ItrainOnline web site provides links to further sources of information on how a computer works, how to choose and maintain computers and use them safely, and how to protect computers from viruses (Box 5B).

Box 5B: ItrainOnline: computer basics

Resources to help you understand how computers work, how to maintain computers and use them safely, and how to protect them from viruses.

- General – including buying new and used computers, how to back up data
- Using computers safely (Ergonomics)
- Maintaining a PC
- Virus protection
- File formats
- Data compression tools

<http://www.itrainonline.org/itrainonline/english/computers.shtml>

Computer hardware

The hardware is the actual computer itself. The development of computers is still a rapidly changing world. Those responsible for computer services in the parent institution should be consulted before final decisions are made.

See also: Healthlink Worldwide Resource Centre Manual

- 6.2 Choosing a computer
- 6.2.1 How to plan for computers
- 6.3 Hardware and software

Computer software

The choice of operating system and office suite software for the service will be influenced by what is already being used by the parent institution. Although Microsoft Windows has become a default operating system except in specialised services, there are alternatives and an increasing range of open source software which provide a wide range of software, including office productivity software, bibliographical software and library management software, available free or at low cost and which may usually be downloaded directly via the Internet. 'Open source' means that they are open to further development by a worldwide community of users on a co-operative basis.

It essential to ensure that computer system and software chosen for the documentation service is compatible with other software in the organisation or with collaborating organisations. It is also essential to ensure that the computer system is properly protected from viruses and from illicit hackers when connected to the Internet.

Further information on open source software and links to other sources are provided in the Open Source section of the ItrainOnline web site and through the UNESCO Free Software Portal (see Box 5C).

Box 5C: Internet sources of information on open source software

ItrainOnline: open source

<http://www.itrainonline.org/itrainonline/english/opensource.shtml>

- Introduction – including the advantages of open source software
- General resources
- Tips for migrating (to open source software from commercial software)
- Open source for development/NGOs
- Open source for education
- Open source for libraries
- Linux-related
- Case studies and examples
- Office productivity and project management
- Content management
- Where to find open source software
- Open content

UNESCO free software portal

http://portal.unesco.org/ci/ev.php?URL_ID=12034&URL_DO=DO_TOPIC&URL_SECTION=201

This section of the UNESCO Communication and Information Sector web site gives access to documents and web sites which are references for the Free Software/Open Source Technology movement. It is also a gateway to resources related to Free Software.

Free Software Technology Resources

- General Information: Associations / Initiatives / Web sites / Articles/ Reports
- Developer Documentation: Developer Collections / Developer Books / Security
- Software: Communication / Courseware Tools / Development Tools / Digital Library / Operating System / Productivity Tools / Science and Education / Virtual Laboratory

Free Software Technology Movement

- Free Software History / Free Software Licenses / Free Software Development Process / Free Software and Business / Case Studies / Online Bibliography
-
- Other sources
- Chawner, Brenda, Open Source Software and Libraries Bibliography. Available online at: http://www2.vuw.ac.nz/staff/brenda_chawner/biblio.html.
- Includes announcements, journal articles, and web documents about open source software development in libraries, including descriptions of specific open source applications used in libraries, in particular Koha, Greenstone, and MyLibrary (Box 5F)

The Office Productivity Software section of the ItrainOnline web site provides links to sources of advice on choosing and using office software, including open source alternatives to Microsoft Office (see Box 5D).

Box 5D: ItrainOnline: office productivity software

Links to articles and tutorials on using common office productivity software such as MS Word and Excel, information on Open Source alternatives to mainstream commercial software, and links to software sites.

- Open Source office productivity tools
- Microsoft office productivity software
- PDF [Portable Document Format]
- General – including online tutorials
-
- <http://www.itrainonline.org/itrainonline/english/office.shtml>

Information retrieval and library management software

Special software will be needed to create and maintain the service's catalogue or database and to exchange information with other services. These facilities are often included in general library management software covering cataloguing, acquisitions, document circulation and other facilities.

The choice of bibliographical software may be influenced by what is already being used by other information services, particularly the members of any networks in which the service plans to participate. It is much easier to exchange information – particularly bibliographical information, if all members of a network use the same software. More experienced users of the software can also provide valuable technical support to new users.

An advanced information storage and retrieval software package which is available free of charge from UNESCO and from some 90 official national distributors around the world is CDS/ISIS (Computerised Documentation Service/Integrated Set of Information Systems). This software may possibly be considered to be too advanced for a small local documentation service without professionally-qualified staff, but it may be advisable if it is already used by other documentation services with which the service intends to exchange information and bibliographical data. A number of library management modules for CDS/ISIS have been developed under licence and are generally available free of charge. Official national CDS/ISIS distributors, and existing users of the software, are able to provide training, advice and technical support to new users (see Box 5E)

Box 5E: UNESCO's CDS/ISIS software

CDS/ISIS is an advanced non-numerical information storage and retrieval software developed by UNESCO since 1985 to satisfy the need expressed by many institutions, especially in developing countries, to be able to streamline their information processing activities by using modern (and relatively inexpensive) technologies.

Contents of the CDS/ISIS web site

- CDS/ISIS and XML
- CDS/ISIS for Windows
- the main CDS/ISIS software; available for downloading from the web site
- GenISIS
- open source software for search interfaces for CDS/ISIS databases
- Information Processing Tools
- IsisASCII
- a tool for importing ASCII delimited and tagged files into CDS/ISIS databases
- IsisMARC
- data entry interface for CDS/ISIS data bases
- JavISIS
- News

CDS/ISIS Manual

The CDS/ISIS for Windows Reference Manual is available in English, French, Spanish and other languages.

CDS/ISIS national distributors

A worldwide distribution network has been a key factor in the widespread success CDS/ISIS, with national distributors in some 90 countries who can supply information on local services, training opportunities and software solutions in local languages. Lists of national distributors are available on the web site.

http://www.unesco.org/cgi-bin/webworld/cds_isis_db/

Box 5F: Open source library software

Selected items from the UNESCO Free Software Portal

http://www.unesco.org/cgi-bin/webworld/portal_freesoftware/cgi/page.cgi?g=Software/Digital_Library/

Greenstone:

<http://sourceforge.net/projects/greenstone/>

Greenstone is a suite of software for building and distributing digital library collections. It provides a new way of organising information and publishing it on the Internet or on CD-ROM. Greenstone is produced by the New Zealand Digital Library project at the University of Waikato, and distributed in co-operation with UNESCO and the Humanity Libraries Project. It is open-source software, available under the terms of the GNU General Public License.

Avanti Circulation System:

<http://www.nsls.info/~schlumpf/avanti/>

The Avanti circulation system is a simple, scalable, networkable, client/server circulation system that can be deployed in small to medium scale libraries. The end product will be modular: consisting of a system core, circulation module, minimal OPAC, and network and user interfaces. The entire system is written in Java. Avanti 0.3.1 was developed using the Blackdown JDK v1.1.7 on a Linux system with the servlet classes being developed using the Apache Jserv servlet engine.

GNUTECA:

<http://gnuteca.codigolivre.org.br/>

GNUTECA is a free, open source software for library automation, including a Loan System, Catalog Collaboration, MARC Editing among others. It has a Web and GTK (graphic) interface.

Koha Open Source Library System: <http://www.koha.org/>

Made in New Zealand by the Horowhenua Library Trust and Katipo Communications Ltd the Koha system is a full catalogue, OPAC, circulation and acquisitions system.

LearningAccess ILS:

<http://www.learningaccess.org>

The LearningAccess ILS is a full-feature open source library automation system developed for use by public and school libraries throughout world. The Institute will make this system available free to libraries that, because of cost, have been unable to achieve the benefits of automation. The system fully supports MARC21, Z39.50, Unicode and other critical library standards as identified by IFLA.

The Open Source Digital Library System Project (PYTHEAS):

<http://osdls.library.arizona.edu/index.html>

PYTHEAS1 (Powerful Yet Tactfully Helpful Electronic Arranger of Sources) is designed to be a multi-tier ILS (Integrated Library System). The two major building blocks for providing server-based metadata and information retrieval capabilities in PYTHEAS are MARC (MACHine Readable Cataloguing) and RDF (the Resource Description Framework), standards that define a format for describing objects and can package highly structured metadata for describing content and content relationships in physical and digital objects. The client environment for PYTHEAS can best be described as "web-centric". The objective is to provide a platform and language neutral environment for accessing and manipulating the information in PYTHEAS.

The Digital Library section of the UNESCO Free Software web site provides annotated links to a number of open source library management software packages (Box 5F).

Connecting to the Internet

- A local documentation service will need to establish an Internet connection in order to use its computer to:
- provide access to information sources on the Internet (including the sources of free and open source software and of technical advice and support referred to above)
- exchange information and bibliographical data with other documentation services
- communicate via e-mail
- publish information on the Internet

For computers that are connected to the Internet or used for e-mail a firewall should be installed (hardware or software) and anti virus programmes kept up to date daily. Without such protection, 'life expectancy' of going onto the Internet without protection is only a few minutes before the computer is attacked or a virus is transmitted. The information technology or computer staff of the service's parent institution, and officials of the local telecommunications authority, should be consulted at what facilities are available in the institution or the locality, under what conditions. (Box 5G).

Box 5G: ItrainOnline: Internet and e-mail basics

- Introduction to the Internet
- Getting connected
- Web browsers
- Using web-to-e-mail services
- Downloading information
- E-mail
- Mailing lists, newsgroups, and other discussion forums
- Spam and scams
- General – including resources for learning and teaching Internet skills.

See also: Healthlink Worldwide Resource Centre Manual

6.5 The Internet

6.6 E-mail services

6.7 The World Wide Web

6.7.5 How to access the World Wide Web via e-mail

<http://www.itrainonline.org/itrainonline/english/computers.shtml>

Printers

If the service has computers, it will also need one or more printers. Laser printers and inkjet printers are both suitable for use in a documentation service: Both can produce high quality output on plain paper, photographic paper, overhead transparencies, etc.

Laser printers can produce very high quality output and are generally faster and more expensive than inkjet printers; however, the cheaper models cannot print in colour, while colour laser printers are several times as expensive.

Inkjet printers can also produce high quality output, in both colour and black-and-white, and are generally cheaper than laser printers, although they are also slower. Many now can print photographs straight from the digital card used in a digital camera.

A drawback to both types of printer is the cost of the toner or ink cartridges used respectively by laser printers and inkjet printers, though again, inkjets are cheaper in this respect. The cost of these supplies should be taken into account when deciding which printer to acquire. See Box 5H for further information on printers.

Scanners

Scanners are used to translate text or illustrations from printed documents into electronic formats that can be used by the computer. There are various types of scanner, from small and inexpensive flatbed models suitable for home use to large and expensive machines used in graphics studios and print shops.

The choice of scanner for a local documentation service will depend on the amount of scanning it is expected to do and the kinds of documents involved. For occasional scanning of ordinary documents, a small flatbed scanner should be adequate; if it is intended to scan large quantities of photographic or other images a more sophisticated machine will be needed. Some scanners can scan multiple pages without intervention. Others can also scan from slides or photographic negatives. Alternatively this work may be contracted out to an outside organisation. See Box 5H for further information on scanners.

Box 5H: Internet information on printers and scanners

TechSoup: the technology place for non-profit organisations

Printer Primer

Advice on choosing and using inkjet and laser printers, with links to other sources.

<http://www.techsoup.org/howto/articlepage.cfm?ArticleId=44&topicid=1>

What to Look For in a Scanner

Advice on choosing and using sheet-fed and flatbed scanners, with links to other sources.

<http://www.techsoup.org/howto/articlepage.cfm?articleid=138&topicid=1>

Photocopiers

A photocopier will be needed for

- general office copying
- making copies of documents for users
- producing newsletters, circulars, etc.

The types of copier available range from small desktop machines suitable for low-volume copying to large standalone machines capable of producing large quantities of copies at high speed, collating and sorting documents, etc. Copiers are available which can produce full colour copies, but these are expensive. The cost of toner and paper can be high for photocopiers and these costs should be factored into the running costs.

Fax machines

A fax machine sends and receives copies of documents over the telephone line. Fax machines work either by scanning a paper copy of a document or by transmitting a copy direct from a computer.

Fax machines have been replaced to a large extent by e-mail and other electronic methods of transferring documents. They can still be very useful where it is necessary to transfer an exact copy of a document which is not in the computer system, e.g. one containing handwritten text or images.

A fax machine equipped with a telephone handset may be used for sending faxes or as a normal telephone, but not for both at the same time.

Multifunction devices

A small documentation service may be unable to afford to buy all these items of equipment – printer, scanner, fax machine and photocopier – or may not have enough space for so many machines. A possible solution is to acquire a multifunction device which combines these functions in one machine. These machines have fallen in cost and the quality has improved so that they are virtually as good as each specialised machine. The main disadvantages to multifunction devices are:

- with only one machine there is more likely to be a bottleneck of people wanting to use different functions
- if the machine breaks down the documentation service will be without any of its functions until it is repaired
- multifunction devices are not suitable for long runs of lots of pages and should not therefore replace heavy duty photocopiers

Microfiche/microfilm reader/printer

Microfilming is a method of making microscopic copies of documents in order to save space or protect rare or fragile originals from damage. The copies may be made on rolls of film (microfilm) or on flat sheets of film (microfiche), collectively known as microforms. The creation and use of microforms has become less widespread in recent years due to the development of methods of creating digital copies of documents through the use of computers. However, users still need access to any existing collections of microforms (for example, of maps, technical drawings, reports and logs, etc.) and need special equipment, in the form of a microfilm or microfiche reader, or a dual-function reader, needed to be able read them.

Audiovisual equipment

If the documentation service maintains collections of audiovisual material – slides, filmstrips, overhead transparencies, videocassettes, digital video discs (DVDs), etc. - it will also need equipment for creating and viewing these materials, such as:

- DVD burner/player (now likely to be included as part of a modern computer)
- filmstrip viewer/projector
- overhead transparency projector
- slide viewer/projector
- video recorder/player.

Uninterruptible power supply (UPS)

In places where the mains electricity supply is unreliable, voltage fluctuations or complete loss of power can lead to loss of data during computer operations and even cause damage

to sensitive equipment. One or more UPS units should be installed to protect equipment from fluctuations and to allow a controlled close-down in the event of a power failure.

Supplies

The various items of equipment cannot operate without supplies of consumables such as paper, ink, toner, and so on. In addition, the documentation service will need various kinds of library and office stationery and supplies in order to carry out its routine functions. Lists of supplies are provided at Appendix B.

Security and Safety

An important aspect of the physical arrangements in a local documentation service is the need to ensure the security and safety of

- the document collections
- the records of the collections
- the furniture and equipment
- the premises
- the staff
- the users.

Protection against damage

The physical protection of documents (see 7.6 below) helps to protect them against normal wear and tear. However, documents also need to be protected against damage caused by:

- climate
- animal, insect or other pests
- users

Documents should not be exposed to excessive heat, light or damp, or to the risk of damage by insects, animals or small children. Eating and drinking on the premises should be discouraged, as scraps of food and drops of liquid attract pests.

In humid climates, documents are easily damaged by fungal growths and moulds. In dry climates, they may be damaged by dust or termites. Some kinds of documents, particularly audiovisual materials, are very easily damaged in this way, as are old and rare books and their bindings. Special storage will be needed for such materials if the climate is adverse. Air-conditioning is the most effective way of protecting documents against damage caused by climatic conditions. An air-conditioned service is also much more attractive to users. If other offices in the parent institution are air-conditioned, the documentation service should be too.

If not air-conditioned, the centre should be well ventilated (particularly in humid climates), with adequate protection against sunlight, dust and rain. Shelving units should have open

backs and be set slightly away from the walls to allow air to circulate, and the room and its contents should be thoroughly cleaned at frequent intervals.

Insecticides and pesticides should be used to deter and destroy pests. Documents which have already become infested with fungi or insect pests such as silverfish should be opened and exposed to fresh air or air-conditioning and cleaned as thoroughly as possible. Damage to documents by users can usually be prevented by educating them in the care of documents. If important documents are damaged, local conservation specialists should be asked to advise on how to treat them. Such specialists may usually be found at the national library, archive or documentation service, or in large academic libraries.

See also: Healthlink Worldwide Resource Centre Manual

3.4 Taking care of materials

Protection against theft

Deliberate and systematic theft of documents is not usually a serious problem in small local documentation services of the type discussed here, but computers and other expensive equipment such as overhead projectors, are vulnerable to theft. Such equipment can be clamped to tables. Windows and doors should be locked when the service is not in use and rare, valuable or sensitive materials should be kept in locked cupboards or bookcases.

In a small local documentation service, supervision is the only practical and effective method of preventing theft. The risk of theft during opening hours may be reduced by requiring users to leave bags and briefcases at the door or with the person in charge until they leave the service. It also helps not to use the service for other purposes, such as meetings, unless adequate supervision can be maintained.

Protection against disasters

Document collections are very vulnerable to damage or destruction by fire, flooding and other natural disasters. Rebuilding a document collection which has suffered in this way is a major task and often a very expensive one. The difficulty of rebuilding a collection will be greatly increased if the records of the contents of the collection -- especially the catalogue or database -- have also been destroyed. Such disasters may also pose a serious threat to the safety of the staff and users of the documentation service.

It is important to guard against such disasters as far as possible, and to make arrangements to protect the records of the document collections, the documents themselves, the staff and the users, if they do occur. As an added precaution, it is advisable to make back-up copies of the records of the collections and to store them in a separate place. All computer files should be backed up either to an on-line depository or to CD-ROM or other discs which are kept off the premises.

Local fire regulations should be complied with and fire extinguishers provided. The building in which the service is housed, and its immediate surroundings, should be well-maintained and designed to prevent flooding or the entry of rainwater. Staff should be trained in the actions to be taken in an emergency.

In some countries, the staff of libraries and documentation services are held personally responsible for any documents which are lost, stolen or damaged. To avoid this, the staff of such institutions often keep the documents under lock and key and make it very difficult for users to make use of them. This defeats the purpose of establishing a documentation service. Security is an organisational issue which demands team vigilance and good systems to be in place. Staff should not be held personally responsible for the service's collections in this way.

6. Information Resources

Introduction

The information resources of the documentation service are the basis for products and services that meet users' needs. The identification, selection, acquisition and withdrawal of documents have to be carried out systematically if the service is to develop effective collections. Management and staff need to invest time, effort and money in developing and maintaining resources, including physical documents and arrangements for access to external information sources.

Information resources policy

The development and maintenance of the service's information resources should be carried out in accordance with a written statement of policy with regard to the development and maintenance of the document collections and the provision of access to external information resources and services. This statement should be:

- prepared by staff in consultation with service users and staff from co-operating institutions
- endorsed by the advisory committee and the management of the parent institution
- evaluated and revised at intervals

The information resources policy should be based on:

- the general policies for the development and operation of the service, e.g. with regard to the kinds of users to be served
- the results of the process of sorting the existing collections

The policy statement should indicate the kinds of information resources which the service should aim to provide in terms of:

- subjects to be covered
- levels of treatment
- languages
- physical formats
- cost

The policy should also indicate:

- from where different kinds of documents should be obtained, and under what conditions (e.g. other local documentation services, local and foreign commercial publishers, online sources, etc.)
- how and where different kinds of documents should be stored or displayed (e.g. on open shelves, in secure storage, etc.)
- for how long the different kinds of documents should be retained before being considered for disposal

See also: Healthlink Worldwide Resource Centre Manual

- 4 Developing the collection
- 4.1 Developing a collection policy

Existing information resources

Before the service begins to identify and acquire more documents, existing collections will need to be sorted and recorded, discarding unsuitable, worn-out or obsolete materials. Any existing arrangements for access to external information sources should be reviewed and evaluated. It is better to do this after:

- potential users of the service have been identified and their information needs assessed
- some knowledge of existing information sources -- particularly those already available in the locality -- has been obtained
- This makes it easier to:
- identify gaps in the existing collection -- i.e. topics or types of material required by users but not at present available
- assess the extent to which the service should aim to complement or duplicate other local collections

Examination of the existing document collections forms part of the diagnosis of the existing situation which in turn provides the basis for the development of the information resources policy.

Sorting existing collections

Sorting existing document collections is the essential first step in establishing an effective local documentation service. It should be done before any attempt is made to begin acquiring numbers of new documents.

The main steps to be taken in sorting the documents in the existing collections are:

1. Sort the documents by physical format (books, reports, periodicals, etc.)
2. Set aside for discarding any documents which are:
 - obviously outside the scope of the collection (e.g. novels)
 - seriously out-of-date
 - in such bad physical condition (incomplete, badly torn, stained, dirty, etc.) that they cannot be repaired
3. Sort the remaining documents in each group in a simple but appropriate way, e.g.:
 - periodicals by title, volume and issue number
 - reports by issuing body and serial number
 - books by publisher and date, subject, etc.
 - maps by location, scale, etc.
4. Identify and set aside any unwanted duplicates. Do not keep duplicates just to fill up the shelves

5. Identify any gaps in the main sequences into which the various groups of document have been sorted, e.g.:
 - missing periodical issues
 - missing titles from report series, etc.
6. Make a note of the missing items so that attempts can be made to acquire them at a later stage

The documents which remain after this sorting process constitute the initial collection of the documentation service, and should be recorded and processed as described in Chapter 7, before collecting more documents.

Review access to external sources

Arrangements for access to external information sources, particularly any involving payment of any kind, should be reviewed to assess

- their relevance to the needs of users
- the amount of use which has been made of them so far
- their cost

Any such arrangements which do not provide relevant information, are little used or are expensive in relation to their relevance and use should be terminated.

After sorting

After sorting, it is useful to check how many documents of each type there are in the initial collection and make sure that there are enough shelves and other storage facilities to contain them. If not, steps should be taken to acquire suitable storage equipment so that the initial collection can be properly housed from the outset. Try to ensure that there is spare storage capacity to house documents which will be acquired in the future, although it may be difficult, at this stage, to foresee how quickly the collections of different types of documents are likely to grow.

Information about the different kinds of storage equipment needed for different kinds of documents is given in Appendix B.

When any existing collections and arrangements for access have been sorted and evaluated as described above, staff can begin to develop the information resources of the service further by identifying, selecting, acquiring or obtaining access to more documents and external information sources and services. This should be a continuing process, carried out in accordance with the service's information resources policy.

Discovering information resources

The main sources of information about relevant documents and external information sources and services are:

- individuals or institutions who create, produce or distribute documents
- bibliographical sources that list documents created, produced or distributed by individuals or institutions
- existing documents and document collections, including existing collections of the service itself and those of other libraries and documentation services
- members of the advisory committee
- other librarians and documentalists
- users and subject specialists
- the Internet

See also: Healthlink Worldwide Resource Centre Manual

4.3 Sources of materials

Information producers and distributors

The service needs to identify and establish contact with as many institutions as possible, whether local, national, international or foreign, which produce or distribute documents or provide information services likely to be relevant to the needs of its users.

These are some of the main kinds of producers and distributors:

- academic institutions
- commercial publishers
- consulting firms
- equipment manufacturers
- government departments
- individual specialists
- international agencies
- non-governmental organisations
- other libraries and documentation services
- professional associations
- research institutions
- subscription agents
- training institutions
- water supply and sanitation projects

Details of the main international and regional document producers and distributors in the water and sanitation sector are provided on the IRC web site (see Box 6A)

Box 6A: InterWATER organisations

The InterWATER section of the IRC web site offers information about more than 650 organisations and networks in the water supply and sanitation sector, in 85 countries worldwide. You can search for an organisation on name, acronym, location or description, or by selecting a region. Each organisation has a short description, contact details, e-mail and web site address, and related sites where applicable.

<http://www.irc.nl/content/view/full/126>

Sources can also be identified by studying the existing document collections of the service and those of other libraries and documentation services to see who published or distributed useful documents already in the collections.

When suitable document producers and distributors have been identified, their names and addresses should be recorded and a circular letter prepared and distributed asking for lists of the documents they produce. The service should also ask to be put on the mailing lists of such institutions to receive regular information about new materials.

These lists of documents can then be used, together with bibliographical sources, to identify individual documents or sets of documents to be acquired by the service.

See also: Healthlink Worldwide Resource Centre Manual

4.3.1 Producers and distributors

4.9 List of distributors

Bibliographical sources

Institutions which are active document producers and distributors often produce bibliographical sources listing their own publications and those of other institutions.

These are some of the main kinds of bibliographical sources:

- abstracts and indexes
- acquisitions bulletins
- bibliographies and bibliographical databases
- book reviews
- electronic document search and delivery services
- library catalogues
- lists of references in books and periodical articles
- publishers' catalogues

These are often available in printed or electronic format, or both. Many are available free of charge, and many are accessible online through the Internet.

Many of the organisations listed in the InterWATER section of the IRC web site (see Box 6A), including IRC itself, provide access through their web sites to extensive bibliographical databases on water supply and sanitation (see Box 6B for some examples).

Box 6B: Examples of online bibliographical sources

IRCDOC

IRC International Water and Sanitation Centre

<http://www.irc.nl/content/view/full/7342> [online search: <http://www.irc.nl/ircdoc/>]

The IRCDOC database is updated daily and 1,000 new references are added each year. It provides 16,000 references to documents, including books, reports, journal articles and conference papers, training manuals, reference works, videos and slide series, and links to documents and Web pages on the Internet.

Information can be retrieved by subject, author, title, publisher, date and type of publication. IRC can provide copies of non-copyright documents.

Virtual Library on Health and Environment

Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS)

<http://www.cepis.ops-oms.org/indexeng.html>

The Virtual Library on Health and Environment, (Biblioteca Virtual de Salud Ambiental: BVSA), provides a structured set of information sources on the evaluation and control of environmental risk factors affecting public health.

Through the bibliographic search service, access is offered to the database compiling 128,500 references, with abstracts, from REPIDISCA Co-operating Centers and CEPIS library. Links to 6,500 full texts are provided. Information is input daily.

The documentation service should aim to acquire or obtain access to as many relevant bibliographical sources as possible.

See also: Healthlink Worldwide Resource Centre Manual

4.3.2 Bibliographic sources

Local information sources

A local documentation service should pay special attention to identifying local sources of information, including:

- other departments of its own parent institution
- other document collections in the locality
- key local institutions and individuals
- local research and development activities and projects
- local training programmes and training material.

If there are a large number of local sources, it may be necessary to carry out a formal survey to obtain information about them. The information collected in such a survey could be published as a guide to local information sources which would help to promote the dissemination and use of information in the locality. Appendix A provides guidance on how to carry out an information survey.

See also: Healthlink Worldwide Resource Centre Manual

4.3.3 Local information sources

Finding information on the Internet

A vast amount of information on every conceivable subject is available through the Internet. To be able to find information which is relevant and reliable, the staff of the documentation service need to learn:

- how to use different kinds of search tools and techniques
- how to evaluate the information they find

These skills are needed for

- finding out about information resources
- finding and evaluating specific sources of information on the Internet
- providing information services to users of the documentation service

The ItrainOnline web site includes a section on finding information on the Internet with annotated links to a variety of sources to help develop such skills (Box 6C).

Box 6C: ItrainOnline: finding information on the Internet

Tools and resources to help you become familiar with the search tools and resources available, understand search strategies and language, and evaluate the quality of information you find online.

- Introduction
- Search engine basics
- NGO and subject-specific gateways
- Evaluating online materials
- General

<http://www.itrainonline.org/itrainonline/english/searching.shtml>

See also: Healthlink Worldwide Resource Centre Manual

4.3.4 The Internet

6.7 The World Wide Web

6.7.1 How to find information on the Web

Getting advice on information sources

The staff of the documentation service should also seek advice and suggestions as to suitable information sources from:

- members of the advisory committee
- other librarians and documentalists
- users and subject specialists

Users of the service and other subject specialists can be a useful source of information about documents which should be added to collections. They are often themselves involved in creating, producing and distributing documents, and often know of other important sources of relevant information, particularly local information.

Identifying suitable information resources

The identification of suitable information resources should be carried out systematically to ensure that document collections and external sources give the best possible service to users. Suitable resources may be identified by:

- examining the documents themselves
- consulting descriptions of them contained in bibliographical sources
- recommendations from users and subject specialists

To find out whether documents identified as potentially suitable for acquisition are already in stock, being prepared for the collection or on order, the service will need:

- an accurate, comprehensive and accessible catalogue, database or other record of its existing collections
- a similar record of documents which have already been ordered or have already been received and are being processed

Examining the documents

The best way of finding out whether or not a document is suitable is to examine a copy. It may be possible to do this:

- in a bookshop or on the premises of the publisher
- in another library or documentation service in the water and sanitation sector
- in the documentation service itself, through an approval scheme
- online, through the Internet

Staff and members of the advisory committee should visit bookshops, publishers and other libraries and documentation services to get to know what is available. Under an approval scheme, a bookseller or publisher sends copies of documents to the documentation service to allow staff and users to examine them before deciding whether to buy or subscribe to them. Approval schemes are usually confined to commercial publications, and are likely to be of limited usefulness in a small local documentation service with a limited acquisitions budget

Many documents may be consulted on the Internet, downloaded for storage on the service's computer or printed and delivered to the user.

Consulting bibliographical sources

Bibliographical sources listing documents, authors and publishers, are useful for identifying documents and for answering enquiries from users and compiling reading lists on request.

Computerised bibliographical databases may be accessible online, via the Internet, or be available on computer disk or CD-ROM. Training is needed to use these resources. Access to computerised databases may sometimes be available through the national documentation service or other institution, or from commercial organisations.

See also: Healthlink Worldwide Resource Centre Manual

6.4 CD-ROMs

6.7.3 Internet databases

The service should also try to develop a good collection of current periodicals and newsletters, which often include reviews or notices of new publications which may be suitable for acquisition. Users may also be asked to allow the staff of the documentation service to study the review columns of their personal periodicals.

Recommendations by users and specialists

Users and subject specialists are important sources of information on new documents which might be suitable for addition to the collections. Their suggestions and recommendations should be noted and acted upon, where appropriate.

Grey literature

Many of the documents in a local documentation service's collections are likely to fall into the category of 'grey literature' - technical reports and similar materials which are not commercially published, but are issued by government departments, academic institutions, non-governmental organisations, aid agencies, international organisations and similar bodies. Grey literature is often produced in small numbers for limited circulation and not generally included in regular lists of new publications.

It is difficult to find out what documents exist, yet they often contain important relevant information. This is often particularly true of documents produced in the locality or at local level elsewhere.

The best way to identify relevant grey literature is to ensure that major organisations in the sector inform the documentation service when they issue new documents of this kind or send a sample copy.

One way to identify local grey literature is to arrange for an appropriate senior official -- for example, the District Water Engineer -- to issue a memorandum requiring or requesting every local organisation concerned with water supply and sanitation to supply the documentation service with monthly lists of documents in specific categories (for example, annual reports or technical reports). Organisations may supply copies by adding the documentation service to their regular distribution lists.

Staff of the documentation service should check at regular intervals to ensure that the procedure is working properly, and report any problems to the official responsible for issuing the directive or request.

Donor agencies, consultants and contractors involved in local water supply and sanitation projects can be asked or required, through appropriate clauses in their contracts, to supply copies of suitable documents to the documentation service.

Members of the advisory committee can also help to identify and evaluate documents.

Selecting information resources

Many information resources may be identified as being of potential interest to users of the documentation service, but lack of time, money or storage space may make it impossible for them all to be acquired. The staff will therefore need to select those resources which are most relevant to the needs of the users of the service. The staff should therefore have a good knowledge of

- the needs of the actual and potential users of the service
- the subject fields in which the users are interested
- the available literature in these subject fields

It is important to maintain the document collection

- up-to-date
- in good physical condition
- relevant to the changing needs of users

Documents which do not meet these criteria should be discarded.

Even in a very small documentation service, the staff cannot be expected to know everything about users' needs and the available literature. It is therefore advisable to involve the advisory committee and other users in the process of selecting documents. The advice of the committee may be particularly helpful when the acquisition or discarding of expensive documents is being considered. Its decisions in such cases should be recorded as a means of providing support for the person in charge if the action is ever questioned in the future.

The most important criterion in selecting documents is the extent to which they meet the needs of users. Other criteria are the amount of storage space and kinds of storage equipment available, the price of the document, and the importance of maintaining a balance between the interests of individual users and the general objectives of the service, and among the various topics covered by the service.

See also: Healthlink Worldwide Resource Centre Manual

4.4 Selecting materials

4.4.1 How to select materials

Acquiring information resources

Documents are normally acquired by one of five methods:

- purchase
- gift
- exchange
- document delivery services
- downloading from the Internet

Documents received by the service may be divided into:

- those selected in advance and ordered or requested from suitable suppliers
- those received as gifts or in exchange without being requested

Both categories may include:

- monographs
 - individual items which are complete in themselves, such as books or reports (in one or more volumes)
- serials
 - items which appear in parts at regular intervals, such as current periodicals or newspapers
- monographic series
 - monographs which are complete in themselves but which appear at usually irregular intervals as parts of a larger series, such as hydrological or hydrogeological studies of different areas of a country

Even a small documentation service should establish a proper acquisitions system which will accommodate all these possibilities. The system should include proper accounting controls.

See also: Healthlink Worldwide Resource Centre Manual

- 4.5 Obtaining materials
- 4.5.1 How to obtain materials
- 4.5.2 Procedure for obtaining materials
- 4.5.3 How to place an order

Purchases

The system for acquiring documents by purchase should fit in with the financial and accounting regulations of the parent institution. The management and staff of the documentation service should co-operate with the accounting and audit authorities to devise a suitable system for local conditions. It should allow for the fact that purchasing documents is not the same as purchasing supplies such as stationery or vehicle spares, which may be bulk ordered. Documents are often ordered in single copies from publishers in many countries.

Gifts

Many of the documents needed by a local documentation service will be supplied free of charge, either on request or as unsolicited gifts from donor agencies, international organisations, NGOs, charities and private individuals. Gifts should be assessed in terms of their suitability for the collections in the same way as purchased items. It is important not to accept unsuitable materials simply in order to fill up the shelves. Unsuitable items should be rejected.

Exchanges

Exchanges of publications may sometimes be arranged with institutions which produce useful material but are unwilling to give it away. This method of acquisition is particularly useful for periodicals and for publications issued in series. Exchanges are only feasible if the documentation service or its parent institution itself produces material which other institutions are interested in receiving. Materials acquired by exchange should be assessed in the same way as purchases and gifts.

Document delivery services

Libraries and documentation services and some computerised information services may have document delivery services, including those for copies of documents which are no longer available in the original. These may include items of local interest, such as reports on local water and sanitation projects.

Document delivery services may provide

- original documents on interlibrary loan, which are not acquired permanently but must be returned to the lending institution after use
- photocopies or microform copies which may be retained by the service
- electronic copies on disk or CD-ROM, or via e-mail or on the Internet

Document delivery services may provide documents either free or for a fee.

There are many international programmes designed to provide access to scientific journals, including water journals, and other documents, either free of charge or at very low cost, to institutions in developing countries (see Box 6D).

Downloading from the Internet

In addition to obtaining documents through the Internet from formal document delivery services, the full texts of many other documents are available on the Internet and may be downloaded free of charge on to local computers. Annotated links to some sources of information on downloading are provided in the Internet and e-mail basics section of the ItrainOnline basic skills web site (Box 5G).

Box 6D: Free and low cost information online

Programme for the Enhancement of Research Information (PERI)

<http://www.inasp.info/peri/intro.html>

PERI is a programme of the International Network for the Availability of Scientific Publications (INASP) designed to support capacity building in the research sector in developing and transitional countries by strengthening the production, access and dissemination of information and knowledge.

Aims and objectives

- to provide researchers with access to international scholarly literature based on electronic delivery - unlimited access to journals, databases and articles across the widest range of disciplines
- to develop a network of libraries, national and international, to interface with researchers in developing and transitional countries to maximise access to and use of international scholarly literature

PERI already includes:

- over 7500 full text online journals
- many of the world's leading citation, bibliographic and reference databases
- document delivery from over 20,000 research journals
- CD-ROM (or DVD) format can be provided where they are available.

Further information: Sarah Durrant sdurrant@inasp.info. International Network for the Availability of Scientific Publications, PO Box 516, Oxford OX1 1WG, UK. Tel: +44 1865 249909. Fax: +44 1865 251060. E-mail: inasp@inasp.info. Web: www.inasp.info.

Health InterNetwork Access to Research Initiative (HINARI)

<http://www.healthinternetwork.net/>

Led by the World Health Organisation (WHO), HINARI is an initiative to provide free or nearly free access to the major journals in biomedical and related social sciences, to public institutions in developing countries. It provides access to some 2000 journals.

Further information: World Health Organisation (WHO) Avenue Appia 20, 211 Geneva 27, Switzerland. Telephone: (+ 41 22) 791 21 11. Facsimile (fax): (+ 41 22) 791 3111. Telex: 415 416. Telegraph: UNISANTE GENEVA.

Access to Global Online Research in Agriculture (AGORA)

<http://www.aginternetwork.org/>

AGORA is a new programme of the United Nations Food and Agriculture Organisation (FAO) which provides access to more than 400 key journals in food, nutrition, agriculture and related biological, environmental and social sciences, including a small number of water journals.

Contact: Pierre Antonios, FAO Media Relations Officer, pierre.antonios@fao.org. FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy. Telephone: (+39) 06 57051. Cable address: FOODAGRI ROME. Telex: 625852/610181 FAO I. Fax: (+39) 06 570 53152. E-mail: FAO-HQ@fao.org.

Elements of an acquisitions system

An acquisition system, whether manual or computerised, should include the following items of information:

- details of the document required
 - e.g. type of document (book, video, periodical, etc.); author, title, number of volumes, edition, publisher, price
- details of who requested the document or recommended that it be acquired
- the number of copies required
- the name and address of the supplier
 - e.g. a bookseller, document delivery service, other library
- date ordered or requested
- accounting information, if appropriate
 - e.g. budget code, date of payment, etc.
- progress-chasing information
 - e.g. dates of any reminders sent to supplier in cases of late delivery, etc.
- date of receipt of the item
- In the case of periodicals, a separate system is normally used for recording the receipt of subsequent issues, as described below.
- location information
 - The call number (see 7.3 for an explanation) or other indicator of where the item is to be located in the service; this information should be added to the acquisitions record after the document has been processed.

The detailed design will depend in part on local accounting and inventory regulations. Not all the elements listed above will need to be recorded for items acquired as gifts or on exchange. The system for purchasing documents must provide for:

- changes in the situation between the time when an order for a document is placed and the time when it is fulfilled
 - The document may be out of print or reprinting; the price may have been increased; not all the copies ordered may be supplied at the same time; some copies may be damaged or defective, etc.
- the need for payment to be made in advance in some cases, especially for current periodical subscriptions.

In some cases, donor agencies may ask the documentation service itself to select materials which the agencies will then acquire on its behalf. It is useful to maintain a list of wanted items (a desiderata list) for use on such occasions. Published lists of recommended publications may also be useful.

The various elements listed above should be recorded either in a ledger or on individual forms. If the service is acquiring many documents, individual forms will be more convenient, as they can be filed in sequence to provide an up-to-date record of items on order or recently received, but not yet included in the catalogue.

The acquisitions records and the catalogue of the collections should be checked before items are ordered or requested to make sure that they are not already in stock or on order. In some cases, even if a document is already in stock or on order, it may be decided to acquire additional copies.

See also: Healthlink Worldwide Resource Centre Manual

- 4.6 Receiving materials
- 4.6.1 How to receive materials
- 4.6.2 How to record books
- 4.6.3 How to record periodicals
- 4.8 Sample letters
- 4.8.1 Letter requesting free materials
- 4.8.2 Letter requesting exchange copy of periodical
- 4.8.3 Letter requesting sample copy of periodical
- 4.8.4 Order form for materials

Acquiring current periodicals

The receipt of the first issue of a current periodical may be recorded under the general acquisitions system for accounting purposes. The receipt of this and subsequent issues should also be recorded in a separate system designed to control the receipt of current issues, identify missing or delayed issues, and send any necessary reminders to the suppliers.

Withdrawing documents

The withdrawal of unsuitable documents from the collection is a function of equal importance with the acquisition of new ones, and the same care and attention should be applied to it. The effectiveness of a documentation service (and thus the amount of support it is likely to receive both from users and from the authorities) does not depend on how many documents it has in its collections, but in its relevance to users' needs, and how quickly it can supplying users with documents when they need them.

Unsuitable, irrelevant, out-of-date, worn-out, dirty or seriously damaged documents occupy valuable storage space and hinder the effective use of the collection and reduce the capacity of the service to meet its objectives. A small, highly relevant, well-cared for collection will always be better used than a larger, irrelevant and neglected one.

Documents which are to be withdrawn from the collections (including those which have been set aside for disposal at the time of sorting the initial collection), should be treated as follows:

- documents which are outside the scope of the collection or inappropriate to the needs of users
 - offer to other suitable libraries (e.g. local school libraries, the national documentation service, etc.) or offer for sale
- documents which are damaged beyond repair or out-of-date

- discard or sell as waste paper
- documents which are damaged or worn-out but still useful
 - replace through the normal acquisitions process, if still available

When documents are withdrawn from the collections, any catalogue entries relating to them should be deleted or amended accordingly, and the accessions register marked to indicate that the items have been withdrawn. Local accounting and audit regulations may also require compliance with other procedures.

See also: Healthlink Worldwide Resource Centre Manual

4.7 Updating the collection

4.7.1 How to review the collection

7. Organising Information Resources

Introduction

It is useful for even a small service to catalogue, classify and index its document collections in a simple way, to prepare documents properly for use, to take steps to protect documents against damage, theft and disasters, and to be able to repair damaged documents. Document collections will need to be arranged differently depending on:

- the kinds of documents they contain
- how users want to make use of them

In all cases, however, the chosen method of arranging the collections should have two basic aims:

- to bring together documents in similar physical formats or having other common characteristics which call for similar kinds of storage treatment
- to make it easier for users and staff to find the documents they require

Most documents need to be:

- classified by subject or other criteria
- recorded in a catalogue or database
- physically prepared for use and protected against damage

Not all of these treatments will be needed for all kinds of documents; in most small documentation services, for example:

- newspapers and current periodicals will not need to be classified by subject, but may be arranged and recorded alphabetically by title
- documents held in purely electronic formats and stored within a computer will not need physical processing
- ephemeral materials such as publicity brochures, announcements of forthcoming events or new publications, etc. will not need to be catalogued or classified, but simply be put on display until they become out of date.

Main sections of the collections

In most cases, the documents will need to be grouped into sections according to

- their physical format – e.g. separate sections for books, newspapers, audiovisual materials, etc.
- other characteristics – e.g. document series, date of publication
- the way in which they are meant to be used – e.g. available for loan or only to be used within the service

Physical format

Ordinary books, slides, maps, flimsy reports, brochures and microfiche cannot be kept together in one sequence without causing a great deal of inconvenience to users and possibly damage to some of the items. Even small documentation services will normally find it necessary to:

- separate books and reports from current periodicals and newspapers
- separate extra large documents from those of normal size
- provide separate storage for special types of document such as maps and plans, audiovisual materials, microfiche and computer media

Other characteristics

The introduction of sections based on characteristics of the documents other than their physical format (for example, sections for conference proceedings, special series of technical reports, survey records or project documents) will be dictated by the use of the documents rather than by the documents themselves. Users should be consulted as to the need for such sections and the best way of arranging documents within them.

Arrangement within the main sections

Within each of the main sections of the collection, the documents should be arranged in a way which will make it as easy as possible for users to find the ones they are looking for. Different groups of users may prefer different arrangements for similar types of document. For example:

- users in a project office may prefer to have all documents related to one project kept together and arranged by the document numbering system used for the project
- users in a district water engineer's office may prefer to have all documents relating to a particular place brought together, even if this means separating documents produced by the same project

Typical methods of arranging the main sections of a documentation service include:

- books and general reports
 - by size
 - by subject, according to the classification scheme in use
- current periodicals
 - alphabetically by title, with the issues of each title arranged by volume and issue number
- conference proceedings
 - alphabetically by the name of the organising body or of the conference itself, then by date; or first by date and then by name
- technical reports in series
 - by the name of the issuing body, then by series title and report number

- maps
 - by type of map (e.g. geological maps, land use maps, etc.)
 - by geographical coverage
 - by scale
- audiovisual materials
 - by format (e.g. slides, videocassettes, etc.), then by subject

Using identification symbols

Each type of document should be assigned a distinguishing symbol, e.g.

- LS for Large Size volumes
- PER for current periodicals
- CON for conference proceedings
- REP for reports
- MAP for maps
- AV for audiovisual materials, etc.

Materials intended to be used only inside the service (i.e. for reference only) may additionally be assigned the symbol REF. They may be kept in a separate section or in the appropriate main section. In such cases, they will need to be allocated more than one symbol, e.g. LS REF for a large size reference book, etc.

These symbols should be used

- to label the shelves, files and other locations where the documents are kept
- to label the documents themselves
- in the catalogue or database entries relating to the documents
- in other records relating to the documents, e.g. the accessions register

The symbols make it easier

- for users and staff to find the documents they require
- make it easier to replace documents in their correct locations after use

They should be

- designed to meet local needs, using local scripts and languages where appropriate
- carefully chosen so as to avoid confusion with other sets of symbols which may be used by the service or its parent institution for other purposes

See also: Healthlink Worldwide Resource Centre Manual

5.5 Shelving, displaying and filing materials

Flexible systems

Although the arrangement of the document collections may have been designed to be useful to most users for most of the time, there will always be occasions when users want

to locate related documents, for example, dealing with the same topic, which are kept in different sections of the collection.

Although an arrangement of project documents by project code number may be the most useful for the staff of a project office on most occasions, there may be times when a geographical approach is needed, such as when staff need to collect data on a particular locality before planning a new project.

Similarly, although a geographical arrangement may generally be most useful to the staff of a district office, there will be times when they need to identify and locate documents on a subject which may be of particular concern.

There is no way of arranging the documents which will meet all the needs of all the users all of the time. It is therefore necessary to create some other means of identifying related documents in different sections of the collection. This is achieved by creating a systematic record of the document collections in the form of a catalogue or database. The creation of such a record is dealt with in Chapter 9.

Classifying documents by subject

The purpose of classifying documents by their subjects is to help users and staff to find documents on specific subjects.

Classifying documents involves:

- analysing the subject content of documents
- representing the subject by symbols known as a classification number

The classification number assigned to a particular document is normally written:

- on the cover of the document
- inside the document
- in the accessions register
- in catalogue entries relating to the document.

Classification numbers are assigned to specific subjects by following a classification scheme.

Classification schemes

A classification scheme is a document which defines

- the meanings to be assigned to classification symbols in a particular subject field
- the rules for assigning and combining these symbols to represent the contents of documents in that subject field

The main types of classification scheme are

- general schemes aiming to cover all branches of knowledge
- specialised schemes designed to cover specific subject fields
- in-house schemes designed to cover specific document collections

General classification schemes like

- the Dewey Decimal Classification (<http://www.oclc.org/dewey/>)
- the Universal Decimal Classification (<http://www.udcc.org/>)
- the Library of Congress Classification (<http://classweb.loc.gov/>)

These have the advantage of being created and kept up to date by groups of information specialists and subject specialists working in well-established organisations. Their main disadvantage for small local documentation services dealing with water and sanitation is that they often do not cover the subjects of interest to local users in sufficient detail.

Two examples of specialised classification scheme designed for document collections in the water and sanitation sector and environmental health are the IRC Classification Scheme and the REPIDISCA Classification Scheme (see Box 7A).

In-house classification schemes are designed to reflect the unique characteristics of the collections of specific local documentation services in terms of their subject coverage, coverage of local geographical areas and administrative units, languages covered, etc. Such in-house classification scheme are designed and maintained by the staff of the service. However, the creation and maintenance of such schemes are demanding tasks which should not be undertaken lightly; it is almost always easier to use an existing scheme and, if necessary, adapt it to local conditions.

See also: Healthlink Worldwide Resource Centre Manual

- 5.1 Classifying materials
 - 5.1.1 Choosing a classification scheme
 - 5.1.2 How to classify materials
- 5.2 Developing a classification scheme
 - 5.2.1 How to develop a classification scheme
 - 5.2.2 How to extend the classification scheme

Box 7A: Classification schemes

The IRC Classification Scheme

The IRC Classification Scheme is widely used in water and sanitation documentation services in many parts of the world, and its use in a local documentation service will make it easier for the service to exchange information and documents with these other services and make use of the catalogues, indexes and other tools which they produce. The production of a revised version of this scheme was started in 1992 and is still distributed to interested parties. The main divisions are:

- 0 REFERENCE BOOKS
- 1 GENERAL
- 2 WATER SUPPLY
- 3 SANITATION
- 5 INFORMATION SCIENCE
- 7 CONFERENCE PROCEEDINGS
- 8 COUNTRIES

Divisions 4 and 6 were omitted in the last update.

Further information from:

Documentation Unit, IRC International Water and Sanitation Centre, PO Box 2869, 2601CW Delft, The Netherlands. Tel. +31-15-219 29 39. Fax: +31-15-219 09 55. E-mail: library@irc.nl. Web site: <http://www.irc.nl>.

The REPIDISCA classification scheme

The classification scheme used by the Pan American Environmental Health Information Network (Red Panamericana de Información en Salud Ambiental: (REPIDISCA) has ten main divisions:

- 0 ENVIRONMENTAL HEALTH
- 1 ENVIRONMENTAL ENGINEERING
- 2 APPLIED SCIENCES AND ENVIRONMENT
- 3 HYDRIC RESOURCES AND WATER POLLUTION
- 4 WATER SUPPLY
- 5 WASTEWATER
- 6 SOLID AND HAZARDOUS WASTE
- 7 SOIL POLLUTION
- 8 AIR POLLUTION
- 9 OCCUPATIONAL HEALTH

Further information from:

Pan American Center for Sanitary Engineering and Environmental Sciences, Los Pinos 259 Urbanización Camacho, Lima 12, Peru; Box 4337, Lima 100, Peru. Tel: +51 (1) 4371077. Fax: +51 (1) 4378289. E-mail: mbryce@cepis.ops-oms.org. Web site: <http://www.cepis.ops-oms.org>

Classifying: basic principles

The three main steps in classifying documents are:

1. Decide what the document is about
This is not always as easy as it sounds. The titles of documents are often vague, misleading or ambiguous, and it is often necessary to study the contents page and sometimes the preface or introduction, to determine the real subject of the work. Also, many documents deal with more than one subject, for example, with both water supply and sanitation. The basic rule is to classify the document either under the main subject, if there is one, or under the first subject in the document, if it is not obvious which is the main one.
2. Locate the chosen subject or subjects in the classification scheme
Again, this is not always as straightforward as it may seem. In the IRC scheme, for example, different aspects of the subject 'public standposts' may be found at several different locations in the scheme, depending on the approach to the subject, the main emphasis of the work, or the kind of document.
3. Assign the classification symbols
When the subjects with which the document deals have been found in the classification scheme, the classification symbols shown there are written in the document itself and in the accessions register and the catalogue entries relating to the document.

All documents on the same subject should have the same classification symbols assigned. This makes it easier to identify documents dealing with the same subject, no matter in which sections of the collection -- reference section, map collection, large size books section, etc. -- they may be located.

The documents are arranged by their classification numbers within the various sections, in order to bring documents on the same subject together in each section.

The symbols which indicate the section to which a document belongs (e.g. REF, LS, etc.), together with the classification number, comprise what is known as the 'call number' of the document. Most published classification schemes also include guidance on how to use them.

Subject indexing

Documents may deal with more than one subject but they can only be physically located in one place. Even documents which deal with one subject cannot always be kept together, because of differences in physical format and in the purposes for which they are intended. A videotape on pit latrines, for example, will probably be kept in a different place from a map showing the distribution of pit latrines in the locality.

Although classification numbers identify documents dealing with the same subject, and several numbers can be assigned to one document dealing with several subjects, users cannot be expected to know the classification numbers for every subject.

An alphabetical index to the classification numbers used in the catalogue enables users and staff to find out:

- the classification number for a particular subject
- what documents the service contains on a particular subject.

In a book or card catalogue, the index will normally refer the user to classification numbers rather than individual documents. When one document has been classified and its classification number indexed in this way, it will not be necessary to repeat the procedure for further documents on the same subject. This level of indexing should be adequate for most small local documentation services.

In a computerised catalogue, the index refers the user to entries for individual documents, and complex searches can be carried out by combining subject descriptors with other characteristics of the document such as the date of publication, author, language of the text, and so on.

As with cataloguing and classification, indexing can become a complex task which absorbs more staff time and effort than a small documentation service can afford. An index to the classification numbers used in the catalogue will usually be adequate. Only if the service is able to computerise its catalogue should more detailed subject indexing of individual documents be considered.

See also: Healthlink Worldwide Resource Centre Manual
5.3 Assigning keywords
5.3.1 Choosing a keywords list
5.3.2 How to assign keywords
5.3.3 How to produce a keywords list
5.3.4 Sample of Healthlink Worldwide Keywords List

Subject indexing terms

The terms used in the index to describe the subjects being indexed may be:

- used in the documents themselves
- used in the classification scheme
- listed in a standardised list known as a list of subject headings or a thesaurus.

The advantage of using terms taken from the documents themselves is that relatively little intellectual effort is required on the part of the indexer, who simply has to copy the terms from the document.

The disadvantage of using such terms is that the user may not use the same terms in his or her search, and may thus not find potentially important catalogue entries.

The terms used in the classification scheme to describe the subjects to which classification numbers are assigned may also be used for indexing, but a classification scheme does not

usually show the relationships between different terms or provide guidance on making cross references from similar terms.

Lists of subject headings and thesauri

These aids to subject indexing:

- provide lists of approved or standardised terms to be used for indexing in a specific field
- indicate the relationships between terms
- provide guidance on making cross references
- make indexing easier
- help users to find all the catalogue entries for documents of interest to them
- help to ensure that the same subject is always described by the same term, and not by a different but similar term

A thesaurus is a controlled and structured list of terms used in subject analysis and retrieval of documents, publications and information in specific subject fields.

A list of subject headings is also controlled list of terms, but without the structured hierarchical, associative or equivalence relationships which are shown in a thesaurus.

A general thesaurus which includes terms related to water supply and sanitation is the UNESCO Thesaurus (see Box 7B).

Box 7B: The UNESCO Thesaurus

The UNESCO Thesaurus allows subject terms to be expressed consistently, with increasing specificity, and in relation to other subjects. It can be used to facilitate subject indexing in libraries, archives and similar institutions. It contains 7,000 terms in English and 8,600 terms in both French and in Spanish.

The thesaurus covers several broad areas of knowledge within the fields of UNESCO's competence. Terms relating to water supply and sanitation are found in several parts of the thesaurus, mainly in the sections on:

- Environmental sciences and engineering
- Human settlements and land use
- Hydrology
- Meteorology.

<http://www.ulcc.ac.uk/unesco/>

Online searching

The thesaurus can be searched online at: <http://databases.unesco.org/thesaurus/>

Published versions

The second (1995) edition of the thesaurus can be downloaded as Portable Document Format (PDF) files in three language versions as follows:

- English: <http://www.ulcc.ac.uk/unesco/intro/introeng.pdf>
- French: <http://www.ulcc.ac.uk/unesco/intro/introfre.pdf>
- Spanish: <http://www.ulcc.ac.uk/unesco/intro/introspa.pdf>

It is available in print as:

UNESCO Thesaurus: A Structured List of Descriptors for Indexing and Retrieving Literature in the Fields of Education, Science, Social and Human Science, Culture, Communication and Information. Paris: UNESCO Publishing, 1995. ISBN 92-3-003100-3.

It is also available as part of a CD-ROM:

UNESCO Databases. (Paris: UNESCO, 2002), ISBN 92-3-003868-7. [The CD-ROM includes other UNESCO databases in addition to the UNESCO Thesaurus.]

Both can be ordered directly from:

UNESCO Publishing, UNESCO Headquarters, 7, place de Fontenoy, 75352 PARIS 07 SP, France. Tel. +33 1 45 68 1000. Fax: +33 1 45 67 16 90. Web site: <http://upo.unesco.org/>.

A multilingual thesaurus designed specifically for the water and sanitation sector is the InterWATER Thesaurus published by the IRC International Water and Sanitation Centre. This two-volume thesaurus in English, French, and Spanish, was originally published in 1987 and is still in use. An update is in progress and should be completed in 2005. When

completed this will also allow searches to be conducted on the IRC and related websites in English, Spanish and French.

Another multilingual thesaurus also designed specifically for the water and sanitation sector is the REPIDISCA Thesaurus published by the Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS) (see Box 7C).

Box 7C: The REPIDISCA Thesaurus

REPIDISCA Thesaurus of Sanitary and Environmental Engineering. 12a. Edition, February 2003. 200 p.
Document in PDF format accessible via: <http://www.cepis.ops-oms.org/indexeng.html>
This is the English version of the thesaurus. The database thesaurus contains French, German, Portuguese and Spanish versions.

Further information from:

Pan American Center for Sanitary Engineering and Environmental Sciences, Los Pinos 259 Urbanizacion Camacho, Lima 12, Peru; Box 4337, Lima 100, Peru. Tel: +51 (1) 4371077. Fax: +51 (1) 4378289. E-mail: mbryce@cepis.ops-oms.org. Web site: <http://www.cepis.ops-oms.org>

Subject index entries

Whether a thesaurus is used or not, the main steps in indexing are:

1. Decide what the document is about
This first step in indexing is identical to the first step in classifying. For this reason, it is usually better for classifying and indexing to be done by the same person at the same time.
2. Identify and note key terms used in the document to describe its subject and scope - including terms which describe more specific aspects than can be indicated by the classification scheme.
3. Review the key terms in relation to the known needs and interests of users of the service
Only include terms that are likely to be used in searching for documents.

If a thesaurus is not used, the terms which remain after the third step has been completed may be used as the index terms.

If a thesaurus is being used, these remaining terms should be translated into descriptors used in the thesaurus, and then used as the index terms.

Recording documents in a catalogue or database

To help users to find documents, the record of the collection should make it possible to identify documents by authors, titles and subjects. Such a list is usually known as the

catalogue or database of the documentation service. The most common types of catalogue in use today are:

- book catalogues
- card catalogues
- computer catalogues or databases.

Book catalogues and card catalogues are suitable for documentation services which do not have a computer. If the service has a computer, it should develop a computer catalogue or database.

Catalogues are still sometimes kept on microfilm or microfiche. Special equipment is needed to produce and to consult them, and it can be difficult to keep them up to date. These have generally been replaced by computerised catalogues.

Book catalogues

In a simple catalogue, details of each document in the collection are written or typed on loose-leaf sheets or in an exercise book or ledger. They can also be produced by photocopying card catalogues or printing out computerised catalogues.

Book catalogues may be suitable for very small documentation services, but keeping them up to date can become a big problem if the collection grows at even a modest rate. On the other hand, photocopies or additional printouts of the catalogue can be made quite easily for distribution to other locations to serve users working in widely scattered field offices or project sites. A print out of a computer catalogue can also meet most of these needs.

Card catalogues

Card catalogues, in which the details of documents are written or typed on index cards, which are then filed in drawers, are more flexible than book catalogues because new entries can easily be interfiled in their correct locations. Keeping the catalogue up-to-date is therefore much easier. Multiple copies of the cards can be produced to enable copies of the catalogue to be maintained at other locations.

The big drawback to the card catalogue is that the task of filing the cards correctly requires a certain amount of training and can become very time-consuming if new documents are added to the collection frequently or in large numbers. It is also easy to make mistakes in filing, each of which renders the catalogue progressively less useful as a guide to the contents of the collection.

Other drawbacks are that users need to visit the service to consult the catalogue, and that many users also find it difficult to learn to use a card catalogue properly.

See also: Healthlink Worldwide Resource Centre Manual

- 5.4 Cataloguing materials
- 5.4.1 Deciding what to catalogue
- 5.4.2 How to catalogue materials
- 5.4.3 Examples of catalogue cards
- 5.4.4 Filing catalogue cards

Computerised catalogues and databases

The computerised catalogue or database has many advantages over other forms of catalogue. Only one entry has to be prepared for each document, and more sophisticated searches are possible than with other types of catalogue; for example, it is possible to quickly identify all documents published before or after a particular date and on a particular combination of subjects, and so on.

Digital copies of such catalogues can be made easily, and the entire catalogue, selected sections of it, or individual entries can easily be printed out. Computerised catalogues can be easily updated and revised, and augmented with records transferred from other computerised systems.

The main drawbacks of the computerised catalogue or database are:

- the service needs access to a computer and ancillary equipment before it can create, maintain or use a catalogue
- staff need training beyond that required to acquire basic cataloguing skills
- some users may need training to use a computerised system
- If the catalogue is only accessible on one computer, only one user or staff member can consult the catalogue at a time

Box 7D: Databases

[From: Healthlink Worldwide Resource Centre Manual, Section 6.8 Databases]

A database is information stored on a computer in such a way that it can be:

- searched through to find certain details
- displayed on the computer screen or printed onto paper in various styles
- sorted so that it can be ordered in different ways, such as author, title, subject and date of publication

A database is made up of 'records', where all the information about an item such as a publication or organisation is stored. Records are equivalent to the cards in a card catalogue system. Each record is made up of 'fields', where information about different aspects of the item is stored – for example, the author or keyword, or the name of an organisation or its telephone number. Fields can be repeated to accommodate more than one author or keyword, or divided into 'subfields' to accommodate titles and subtitles, or the publisher and place of publication.

A database is faster and more flexible than a manual system. For example, searching a card catalogue is limited by the number cards that can be produced, and the way the information is presented can only be changed by re-writing or re-typing the cards. The types of database most often used in resource centres are bibliographic databases and mailing list or 'contacts' databases.

A bibliographic database is like an electronic card catalogue. Each record contains details of materials, similar to the cards in a catalogue. Each field contains information about one aspect of a material, such as the author or title.

A mailing list database is like an electronic address book. Each record contains information about individuals or organisations. Each field contains information about one aspect of the individual or organisation, such as their name, profession, organisation type, or address.

Subsections

- 6.8.1 Standard database structures
- 6.8.2 How to design a database
- 6.8.3 Data entry guidelines
- 6.8.4 Database management
- 6.8.5 How to choose database software

Further guidance on database applications and the choice of database software is provided on the ItrainOnline web site (see Box 7E).

Box 7E: ItrainOnline: databases

The resources listed in this section provide help in choosing a database system and planning a structure which meets the specific needs of an organisation.

- Introduction
- Database basics
- Choosing a database
- Building a database-driven web site
- General
- Content management systems
- Software

<http://www.itrainonline.org/itrainonline/english/databases.shtml>

Standardisation in cataloguing

Whatever physical format is chosen for the service's catalogue, it is necessary to apply standardised rules and procedures in preparing the catalogue entries (the formalised descriptions of documents). If standardised forms of name, layout and terminology are not used, it quickly becomes very difficult to find related entries or to carry out effective searches.

Several international codes of cataloguing rules have been developed to standardise cataloguing practice. These are essentially designed for use by professional cataloguers, and are too detailed and sophisticated for use in local documentation services.

In many countries, local library associations or library schools have produced national cataloguing codes, often in local languages and suitable for local conditions such as local usage, such as forms of surname, etc. These may be more suitable for use in local documentation services than the international rules.

The aim should be to apply a few basic rules which will ensure that the service's catalogue is organised on sound lines from the start and provide a firm basis for the catalogue to be expanded by professional staff if this becomes necessary in the future.

A list of the basic items which should be included in the catalogue entries for documents in a local documentation service is provided below.

How to prepare catalogue entries

It is important to remember that the catalogue is a means to an end -- locating documents in the collection -- and not an end in itself. In most local services, there is no need to catalogue documents in great detail. The basic elements to be recorded for each document are:

- the name of the author or authors
 - which may be an institution as well as an individual

- the title (and sub-title, if any)
- the edition (other than the first)
- the date of publication
- the name of the publisher
 - not necessary in the case of periodical articles
- the series or larger document to which the document belongs, if any
 - e.g. a volume of conference proceedings, an issue of a current periodical
- any identifying numbers
- e.g. the International Standard Book Number (ISBN), series number, report number, etc.
- an indication of the subject of the document
 - this may be in the form of a classification number or a set of standardised terms used to describe the subject, known as descriptors
- an indication of where the document is located in the documentation service
- the accession number
- the type of document
 - e.g. video tape, slide set, etc., if this is not clear from the rest of the description

Two elements normally included in catalogue entries may be omitted from a basic catalogue, namely the place of publication and details of the physical make-up of the document – number of pages, illustrations, tables, graphs, etc.— known as collation. The name of the series may be omitted in the case of complete works such as books and reports, but in the case of documents such as articles in current periodicals, or conference papers included in volumes of conference proceedings, details of the periodical issue or the complete volume must be included so that users will know where to find the item in the documentation service.

Many documents, particularly commercially-published books, include catalogue entries themselves, usually at the back of the title page. This information can be used as a guide for producing entries for the catalogue, saving time and effort.

Help with cataloguing

Advice and assistance on cataloguing can often be obtained from the professional staff of other libraries or documentation services in the country. When setting up the service and organising existing document collections it may be advisable to employ a qualified librarian or documentalist on contract for a few weeks to produce the first catalogue and prepare basic rules to guide staff in future.

Physical processing

After a document has been catalogued, classified and indexed, it will usually need to undergo a certain amount of physical processing to prepare it for use. The physical processing of documents may include:

- marking the document, usually with an ownership stamp, to show that it belongs to the documentation service
- marking the document with its call number to show where it should be kept
- marking the document with its accession number so that it can be accounted for, if necessary, in any stocktaking or auditing that may be required
- preparing the document for use by attaching any labels, pockets, cards, etc. -- for example, a date label on which to record the date when a loaned document is due to be returned to the service
- protecting the document against wear and tear, for example, by fitting a transparent plastic cover or reinforcing the spine with clear adhesive tape

The amount of processing will depend on what the document is to be used for and how often it is expected to be used, as well as on the amount of money available for buying materials and the amount of staff time available for the work.

There is no point in spending a lot of time and money on processing documents which have a short active life (e.g. brochures announcing forthcoming events, annual reports, current issues of newspapers and newsletters), which are not expected to be used very often, or which are meant to be used only inside the documentation service.

Repairing documents

The staff of the documentation service should know how to repair damaged documents, when they are still useful. Damaged documents which are no longer of use should be withdrawn from the collection and discarded.

Repairing and restoring rare and valuable documents is a skilled craft which requires specially trained personnel and special equipment. The staff of a local documentation service need to know only basic repair techniques for dealing with common types of damage such as torn pages and damaged covers.

Torn pages are best repaired with 'invisible' adhesive tape. Ordinary clear adhesive tape should be avoided as it tends to shrink with time and become dirty and sticky at the edges. Damaged covers can be repaired with 'invisible' tape, clear adhesive plastic film, or bookbinder's repair tape.

Documents with covers which are very badly damaged or worn out should be sent for rebinding by a trained bookbinder. National and university libraries often have their own binderies and are sometimes willing to rebind and repair documents for other institutions. Most countries have commercial bookbinding firms able to do this work.

8. Information Products and Services

Introduction

The ultimate objective of any documentation service should be to provide information products and services to help users and potential users to:

- keep abreast of new developments in the sector
- identify specific documents or sets of documents relating to their work or interests
- obtain copies of such documents
- obtain factual information on specific problems

It will do this by developing information products and services which meet their needs and are sustainable in terms of available resources. The relative importance of the various types of information products and services will vary according to the relative importance of these different kinds of user needs. Information products and services may be made available

- to all users
- only to some users
- free of charge
- in return for payment

For example, some services may be provided only to staff of the parent institution, or staff of the parent institution may receive them free of charge, while outsiders have to pay a fee or subscription.

A newly-established documentation service should begin offering information products and services to users, even on a limited scale, as soon as possible. This helps users to see what the service can do for them, and makes it easier to obtain support from the parent institution and other sources.

Teaching information skills

When the staff of the documentation service have themselves acquired a good knowledge of its information resources (including external resources) they will be able, not only to help users to find the documents or information they need, but also to teach users how to find information for themselves.

See also: Healthlink Worldwide Resource Centre Manual

7.3 Introductory sessions and information skills

Types of information products and services

Information products are documents produced by the documentation service and based on the information and documents it acquires or contains, or to which it has access.

Information services are ways of disseminating information products, and information in general, to users. The main groups of information products and services are:

- current awareness products and services
 - providing information on current developments in the sector, including new publications, ongoing research and development projects, forthcoming events, new products and services, and so on
- literature searching services
 - providing bibliographic details of specific documents or sets of documents required by users
- document supply services
 - providing the originals or copies of complete documents or parts of documents held by the documentation service or available from elsewhere; includes reading in and borrowing from libraries
- query answering services
 - providing answers to users' requests for information, ranging from quick reference services designed to provide immediate answers to simple enquiries, to research services designed to investigate complex problems
- information packs
 - collections of information materials on specific topics

These services are described in more detail below.

Electronic delivery

The development of the Internet, the World Wide Web, e-mail and other electronic methods of finding and obtaining information has had a major impact on the design, operation and use of information products and services in recent years. These methods may be used, alone or in combination, to deliver most of the information products and services described below. As noted in the introduction to these guidelines, a local documentation service which does not have a computer and access to the Internet will not be able to benefit from access to the wide variety of information products and services which are currently being made available in electronic format – many of which, in addition, are available free of charge or at low cost.

See also: Healthlink Worldwide Resource Centre Manual

- 6.9 Electronic resources [lists of]
- 6.9.1 Websites
- 6.9.2 Electronic journals and newsletters
- 6.9.3 On-line training
- 6.9.4 Electronic conferences
- 6.9.5 Databases and other resources on CD-ROM
- 6.9.6 Databases on the internet
- 6.9.7 Image collections on the internet

Current awareness products and services

Users of the documentation service need to be aware of current activities in their fields of interest in terms of new publications, new products and services, forthcoming events, new, ongoing and recently completed research, and general news.

- Before developing specific current awareness products and services, the documentation service should ensure that its users can keep up to date by providing
- an adequate collection of current periodicals, including newspapers, newsletters, abstracting bulletins, acquisitions lists, etc.
- access to external sources of current information, including online news services, e-mail alerting services, list servers, web sites, etc.
- displays of information about new information resources, notices of events, general news of new developments, etc.

Whenever possible, arrangements should be made for current awareness products and access to external sources to be provided directly to users at their workplaces.

A documentation service with access to a computer will be able to

- design and produce more attractive current awareness products
- distribute current awareness information more cheaply in digital formats – for example, via e-mail or a web site.

Providing good current awareness services makes considerable demands on staff time, but is usually much appreciated by users.

See also: Healthlink Worldwide Resource Centre Manual

7.9 Current awareness services

Newsletters and information bulletins

Many of the specific types of current awareness information described below may be combined in a general newsletter or information bulletin. Such a bulletin should provide information about the information resources, products and services of the documentation service itself, as well as disseminating general information of local interest. It might include, for example:

- information about new and forthcoming publications
- information about publications recently acquired by the service
- information about new products and services for the water and sanitation sector, especially information products and services
- photocopies of press cuttings
- news of forthcoming events, including training courses
- information about current research projects
- general news about the documentation service, its parent institution, other institutions in the water supply and sanitation sector in the country, and national and international developments relevant to local concerns

- examples of how information resources and knowledge management have helped people working in the field to achieve their objectives

An information bulletin should be given a clear and appropriate title and carry full details of the publisher, editorial staff, frequency of publication, subscription (if any) and so on. The current volume and issue number, and the date of publication, should also be clearly stated.

See also: Healthlink Worldwide Resource Centre Manual

6.7.4 Electronic journals and newsletters

7.13 Newsletters

An example of a comprehensive news service covering many of the topics mentioned above, in English, French and Spanish and with both online and paper output, is the Source Water and Sanitation News Service produced by IRC (Box 8A).

Accessions lists

An accessions list is a list of documents which have recently been acquired by the documentation service. If the service is co-operating with others in the locality, its accessions list may include documents acquired by all the co-operating services.

An accessions list may give details of

- all the documents which have been acquired by the service during a given period (e.g. the last three months)
- only those which the staff think will be most relevant to the needs of the service's users.

The list may be arranged by subject, or in some other convenient way (e.g. in main sections like those in which the collections are arranged). The list should give enough information about each document to help users to decide whether or not it is likely to interest them. It should therefore include details of the author, title, publisher, place and date of publication, series, and any other relevant information about the document.

This information is usually included also in the catalogue entry for the document, so that:

- if the service has a computerised catalogue, the accessions list can be produced very easily from the computerised records
- if the service has a card catalogue and a photocopier, the accessions list can be produced by photocopying the catalogue entries

An accessions list should include request forms on which users can enter the details of any of the listed documents they wish to see.

Box 8A: Source Water and Sanitation News Service

The Source Water and Sanitation News Service is provided by the IRC International Water and Sanitation Centre in co-operation with the Water Supply and Sanitation Collaborative Council (WSSCC) and local partners. The service comprises:

- Source Weekly, published 26 times a year by e-mail and online.
- Source Bulletin, published 6 times a year online and on paper.

Source Weekly

Source Weekly is available online at: <http://www.irc.nl/content/view/full/168>

Source Weekly sections:

- International
- Africa South of Sahara
- Asia & Pacific
- Central & Eastern Europe
- Names
- Vacancies
- Readers React
- Lessons Learned
- Funding
- New on the Net
- Quote of the week
- Middle East and North Africa
- Latin America and the Caribbean
- Western Europe & North America
- Projects
- Training
- Experts' Choice
- Technology Update
- Source - New Publications
- Conferences & Events

Source Bulletin

Source Bulletin is published online and on paper every two months. This gives more in-depth sector news, news from the WSSCC and IRC and is available for developing country readers and editors, training and educational institutions, and libraries and documentation centres in the north.

Source Bulletin is available online at: <http://www.irc.nl/content/view/full/10697>

Further information from:

Documentation Unit, IRC International Water and Sanitation Centre, PO Box 2869, 2601CW Delft, The Netherlands. Tel. +31-15-219 29 39. Fax: +31-15-219 09 55.

E-mail: library@irc.nl Web site: <http://www.irc.nl>.

Abstracts

An abstract of a document provides a summary of its contents as well as the basic information about its author, title, etc. included in an accessions list.

Abstracts may be

- included in an accessions list
- published in a separate abstract bulletin

An abstract bulletin may contain abstracts of documents which are not in the collections of the documentation service. Other institutions may supply abstracts of their recent

publications, or other documentation services may supply abstracts of documents recently added to their own collections.

Writing abstracts is a labour-intensive task which should be avoided by a small documentation service unless suitably-qualified staff professional and technical staff are available and willing to do it. As a rough guide, an abstractor working full time should be able to prepare about fifteen abstracts per day.

Many documents -- particularly periodical articles -- already include abstracts prepared by their authors, and these may be used instead of writing new abstracts. Similarly, abstracts of relevant documents may have already been published by existing abstracting services. If the service subscribes to any of these services, there is no need to prepare new abstracts of these documents. If the service subscribes to an online abstracting service, it may be able to download abstracts of interest to its own users and add them its own database or include them in its own abstracts bulletin.

An abstract bulletin should include request forms on which users can enter the details of any of the listed documents which they wish to see.

See also: Healthlink Worldwide Resource Centre Manual

7.10 Abstracts

7.10.1 Examples of abstracts

Current contents

An easier way of providing information about the contents of new documents than writing abstracts is to make photocopies of their contents pages and circulate them to users at regular intervals.

This kind of service is called a 'current contents service'. It is often restricted to the contents pages of periodicals, but there is no reason why the contents pages of books and reports should not be copied also. Circulating copies of the contents pages avoids the problems associated with circulating the original documents -- particularly current periodicals -- which are discussed below (Circulating current periodicals).

If there are not many documents and not many users, and if most of the users share common interests, all the contents pages which are copied at any one time may be combined into a general current contents bulletin for distribution to all users. Otherwise, the contents pages may be distributed to users selectively, in accordance with their interests. In this case, users will have to inform the staff of the documentation service about their interests. A user profile form can be devised similar to that formerly used by the Selective Dissemination of Information (SDI) service of the IRC Library and Documentation Centre. A current contents bulletin should include request forms on which users can enter the details of any of the listed documents which they wish to see.

Press cuttings

A press cuttings service supplies users with photocopies of news items or features of interest which have recently appeared in general newspapers or newsletters.

This kind of service can be important for policy makers, planners and managers who are concerned with the social, political and economic aspects of water supply and sanitation rather than with purely technical aspects.

The usefulness of a press cuttings service will depend on

- how many newspapers or general newsletters the documentation service receives
- how many of its users have direct access to the same sources.

If the service only receives newspapers which most of its users already see, there is little point in providing a press cuttings service, though it may be worth keeping cuttings of relevant items in a file for future reference. Cutting newspapers can be time consuming, but can be rewarding if relevant cuttings are put up on a display board and changed regularly. This will attract people into the documentation service centre.

Descriptions of research projects

A register of ongoing research projects can provide information about the research activities of the parent institution or other institutions. Such a register involves a great deal of time and effort to collect and edit descriptions of research projects and to maintain an up-to-date list. It may be easier to include informal news of local research projects in a general newsletter or to reproduce project descriptions already prepared for national or other research registers.

Calendar of forthcoming events

News of forthcoming events can be easily gathered from published sources (including online sources), or may be received direct by the documentation service or its parent institution. Information from various sources may be combined into a calendar of forthcoming events which may be distributed as a separate publication or published in a general newsletter. Information about education and training opportunities (courses, workshops, scholarships and awards, etc.) is often provided separately from information about other forthcoming events. Once such a calendar has been created, it is easy to keep it up to date by eliminating past events and adding new ones, particularly if the service has access to a computer.

Circulating current periodicals

Instead of distributing copies of the contents pages of current periodicals, the periodicals themselves may be circulated, to allow users to consult them at their workplaces. This service is usually much appreciated by users if it works well, but this is not always easy to achieve. It involves the following steps:

- deciding which users should receive the service

- it is advisable to restrict the service to specific groups of users -- for example, senior managers or research staff -- whose workplaces are not too far away from the documentation service
- finding out which periodicals each user would like to receive
 - if the service receives a lot of periodicals, or is staffed only on a part-time basis, it may be advisable to limit the number of titles which each user may receive
- preparing a circulation list for each title
 - this gives the names of the users who are to receive the title, in the order in which they should normally receive it
- distributing current issues of each title in accordance with the circulation list

A copy of the circulation list is attached to each issue of the title when it arrives in the documentation service. The issue is sent to the first person on the list, who is supposed to read it and pass it on to the next person within a certain period of time -- usually two or three days. The last person on the list is responsible for returning it to the documentation service.

Problems may arise when:

- there are too many people on the distribution list
- users do not pass on the issue within the time limit
- users are absent from their workplaces for any length of time

These slow down the circulation process and cause dissatisfaction among users near the end of the list, who may not receive periodicals until they are long out of date.

To avoid such problems, the documentation service should maintain strict control of circulation. The promptness with which users pass on the periodicals to the next on the list should be monitored, and persistent offenders removed from the list. People who are absent from their workplaces for long periods should be temporarily removed from the list, or by-passed until they return.

If there are more than about ten people on the circulation list for a particular title, a second subscription should be taken out. If this is not possible, either the title should be taken off the circulation list or the number of users on the list reduced.

Selective dissemination of information (SDI)

The term 'selective dissemination of information' (SDI) may be tailored to meet the specific needs of individuals. For example, different lists of new acquisitions, with or without abstracts, may be prepared, each containing details of documents considered likely to be of interest to specific individuals.

An SDI service may be provided most effectively using a computer, but can be provided on a limited scale by a documentation service which does not have a computer.

Organising an SDI service involves the following steps:

- deciding which groups of users can use the service
 - If computer facilities are not available, it may be advisable to restrict the service to specified groups such as top managers or researchers. If a computer is available, the service may be offered on a subscription basis. A subscription helps to restrict the service to people who benefit from it.

finding out the interests of potential users

- asking users to list the subjects in which they are interested on an SDI interest profile form similar to that shown in Appendix C, Figure 6.
 - It is advisable to restrict the number of topics which a user may include in his profile, particularly if the service is not to be computerised.
- creating a user profile for each user.
 - This may be done by assigning classification numbers to the listed subjects, using the same classification scheme as is used to classify documents. Another way is to translate the terms used in the list into matching descriptors taken from the thesaurus used in indexing.

If the SDI service is to be computerised, the user profile is entered in the computer. When new documents are added to the catalogue or database, they can be automatically compared with each user profile and individual lists of relevant documents printed out for each user.

If the documentation service does not have access to a computer, a limited SDI service can be organised manually. In this case, the subject interests of users should be recorded in a card index arranged by classification number. After newly-acquired documents have been catalogued and classified, they should be checked against the index to see if any of them match the needs of any of the users. Such documents may be set aside while a notice is sent to inform the user that they have been received.

Literature searching

Literature searching is the process of searching published and unpublished bibliographical sources (catalogues, lists, indexes, bibliographical databases, etc., in both print and electronic formats) to identify and locate

- specific documents
- sets of documents having common characteristics -- for example, documents on a particular topic, or by a particular author

Literature searches may be carried out:

- as part of the general process of identifying documents for acquisition by the service.
- at the request of, or on behalf of, a user or group of users
- by users themselves

Literature searches on behalf of users may be carried out as the result of a specific request for documents, or as part of a wider process of responding to a general request for information on a subject.

The first source for a literature search should be the documentation service's own catalogue. This is why it is important to maintain a comprehensive, accurate, up-to-date and well-organised catalogue to ensure that requests can be met from local resources whenever possible. This saves time, effort and money, raises the reputation of the documentation service amongst users and helps to ensure that the effort expended in building up a well-designed document collection is not wasted.

No documentation service can expect to have in its own collection every document required by users. Access to other bibliographical sources is essential if users are to be able to identify at least a reasonable proportion of the documents they may need. Many extended literature searches can be made via the Internet, using the search tools referred to in chapter 6 (See Boxes 6B and 6C).

See also: Healthlink Worldwide Resource Centre Manual

7.4.2 How to carry out a literature search

Specific documents

Searching for specific documents involves:

- checking that the available details (author's name, etc.) are sufficiently complete and accurate to be searched for in the service's catalogue
- checking the catalogue to see if the document is already in stock, and if so, where it is located in the service
- if not in stock, checking bibliographical sources to confirm and complete the bibliographical details, including, if possible, the price

Assuming that the user wants to see a document that is not in the collections, steps should be taken either to acquire the document for the collection, or to borrow a copy from another library or documentation service.

Sets of documents

Searching in order to identify a set of documents of a particular type involves:

- finding out precisely what the user wants
 - Staff should be familiar enough with subjects of interest to users so that they can help them to formulate precise requests which reflect their needs. It is important

to obtain as much information as possible from the user, and to check it, before beginning a search. Users often tend to formulate enquiries in broad terms, for example, 'rural water supply', when they really need something specific, such as 'shallow well construction in arid areas'.

- translating user requests into terms which facilitate the search
 - If a thesaurus has been used to index the catalogue, for example, the request should be translated into the terms used in the thesaurus. If the search extends into other sources, the search terms may need to be adapted to other indexing languages.
- identifying the bibliographical and other sources to be searched
- identifying relevant documents in these sources
- selecting specific documents from among those identified
- locating specific documents
 - Following the procedure for searching for specific documents described above.

It is worth keeping a record of all searches, particularly extensive ones, noting the subject, search strategy, sources used and results obtained, for possible future use in dealing with other similar requests.

Supplying documents to users

When users want to see documents they think may be useful the documents have to be located in the service's collections or elsewhere, and supplied, either in the original format or as a copy.

The simplest way of meeting requests is from documents in the collection, rather than having to obtain them from elsewhere. The collection should therefore be carefully selected to meet the needs of users and efficiently managed to ensure that documents can be located and supplied as quickly as possible. If the documents are not in the collection they may be:

- acquired for permanent retention, through the normal acquisitions process
- borrowed from another library or documentation service
- supplied in hard copy or electronic format by another library, documentation service or other external source
- downloaded in electronic format from an external source

If another library or service has the document but is not willing to lend it or supply a copy, the user may be able to visit the institution and consult the document, there.

Elements of a document supply system

A local documentation service needs to establish an effective document supply system capable of:

- recording users' requests
- maintaining accurate, comprehensive and up-to-date records of the documents which are:
 - on order
 - being processed
 - already in stock
- locating documents which are in stock but are:
 - on loan to other users
 - being repaired or rebound
- indicating that a document which is not immediately available has been requested by a user
- speeding up the supply of requested documents which are on order or being processed
- recalling requested documents which are being repaired or rebound or are on loan to other users
- obtaining copies of requested documents from other sources
- lending documents to users
- supplying users with copies of requested documents which are:
 - not available for loan, or
 - needed permanently by the user.

These functions are described in more detail in Appendix D.

See also: Healthlink Worldwide Resource Centre Manual

- 7.5 Lending
- 7.6 Photocopying
- 7.7 Document supply

Copyright

It is important to note that the production of photocopies is generally governed by the law of copyright. Copyright law in most countries allows for single photocopies of most documents for research and study purposes. An entire paper in a periodical may be copied; however, a complete book may not be copied without permission from the copyright holder, who usually the author or publisher.

Many documents in a local documentation service may be free of copyright, having been produced by international organisations, non-governmental organisations and others who allow free reproduction to achieve wider dissemination of information.

The Healthlink Worldwide Resource Centre Manual includes an example of a statement of permission for reproduction in section 7.6.

Enquiry services

Users of a local documentation service often seek answers to substantive or complex queries from colleagues rather than from the documentation service. However, the documentation service does have a role to play in complementing these informal channels by providing more systematic query answering services. The nature of the query answering service that can be provided will depend on:

- the kinds of information needed by users
- the capacity of the service to provide the required information, in terms of:
 - access to appropriate information sources
 - the availability of suitably qualified staff.

The main types of enquiry service are:

- quick reference service
 - designed to provide immediate answers to simple and specific enquiries, mainly based on sources such as directories, dictionaries and encyclopaedias, and generally offered by service staff themselves
- general reference service
 - designed to provide more extended answers to more complex enquiries, mainly based on the general document collections and offered by staff, who may, in appropriate cases, have some specialised knowledge
- referral services
 - designed to refer users to other, more appropriate sources of information, such as other documentation services, based on directories, lists and catalogues of such other sources and offered by the staff of the service
- Frequently Asked Questions (FAQ)
 - prepared questions and answers covering basic information and the most common areas of uncertainty for new users
- advisory services
 - to advise users on appropriate courses of action in respect of particular (e.g. technical or legal) problems, generally based on documentary sources and the professional knowledge of an advisor, usually a professional in the appropriate field
- research services
 - to investigate complex problems and present the results to users in appropriate forms, based on all types of information sources. Generally offered by staff in collaboration with subject specialists, or by other specialists on a consultancy basis.

The extent to which a local documentation service will be involved in providing these services will depend to a large extent on the activities of its parent organisation.

All documentation services should aim to provide quick reference service, general reference service and referral services. Documentation staff may not by themselves be able to provide advisory or research services, but may, if the parent institution is involved

in such activities, be associated with professional and technical staff in providing such services.

Manual for the management of question-and-answer services. Wageningen, The Netherlands: Technical Centre for Agricultural and Rural Co-operation ACP-EU (CTA), 2001. xi, 130 p. ISBN 9290812443.

This manual is available free of charge as a PDF file from:

<http://www.agricta.org/pubs/qandamanual/index.htm>

It has been written as a guide for managers involved in setting up a question and answer service, specifically those providing information on agriculture and related subjects.

Even a small documentation service can provide good enquiry services provided that:

- the document collection is carefully selected to meet the needs of users
- service staff have a good knowledge of the contents of the collection
- the collection is well-organised and properly catalogued, classified and indexed
- staff have a good knowledge of other sources of information likely to be helpful in answering users' enquiries
- staff can count on the support and help of other members of staff of the parent institution and other organisations in the locality.

There are few specific procedures to be followed in respect of enquiry services. As in the case of literature searches, be sure that full details of exactly what is required are obtained and guard against ambiguity and lack of precision in specifying the subject.

See also: Healthlink Worldwide Resource Centre Manual

- 7.4 Advisory services
- 7.4.1 Reference interviews
- 7.8 Referral services
- 7.11 Enquiries services

Information packs

This section is adapted from the Healthlink Worldwide Resource Centre Manual, section 7.12.

Information packs are an economical way of providing information about a particular subject area to users who cannot visit the resource centre, and for people who are visiting the parent organisation for a conference or other event.

Information packs usually take the form of folders (cardboard wallets) or envelopes containing a variety of materials, such as articles from newsletters and journals, photocopied pages from books, fact sheets, posters, leaflets, materials developed within

the organisation, or materials distributed free by other organisations working in the same subject area.

It is important to obtain permission from the publisher to include an item (text or illustrations) in a pack, unless the publisher has indicated that this is not necessary. The publisher will want to know the purpose of the pack and its target audience, the number of copies to be produced, and any charges to users (for example, to cover the cost of photocopying and distribution, or to make a profit to help the resource centre). If producing a single pack, it is not necessary to request permission from the publisher, provided copyright laws are followed.

It is important to select the right materials to go in information packs. This can be done by discussing the contents with members of the advisory committee and/or key users. It can be useful to include a short evaluation form in the pack for users to complete, to improve the contents of information packs.

Information packs should always include a contents list that provides details of the original source of each item (such as a book or periodical title, publisher and year published).

An information pack is not static. It will need to be updated with new materials, and some existing material may need to be replaced. It is important to keep a master photocopy of each piece of material, to ensure that each copy is of the same quality, and that time is not wasted looking for the original before a copy needs to be made. If the resource centre has a bibliographic database, codes could be added to records to indicate that materials are suitable for inclusion in information pack.

9. Promoting the Documentation Service

Introduction

Potential users must know that the documentation service exists, and what it can do for them, so that they can gain full benefit from its services. The management and staff should take steps to publicise and promote the service to encourage the user community to take advantage of its services and to justify the cost and effort.

See also: Healthlink Worldwide Resource Centre Manual

- 8 Making links and promoting the resource centre
- 8.1 Involving users
 - 8.1.1 Involving key people
 - 8.1.2 Ideas for involving individual users
- 8.2 Promoting the resource centre
 - 8.2.1 How to plan a promotion
 - 8.2.3 Promotional activities
- 8.3 Networks and networking

Promoting and marketing

The general aims of promoting the documentation service should be

- to encourage people to use it to meet their information needs
- to make users feel welcome and confident that the service exists to serve them

Promoting the service will help users to make better use of documents and information, but it cannot substitute for having adequate facilities and services. The management, financing, staffing and operation of the service should be properly organised before efforts are made to promote it.

When the management and staff are confident that the service is able to meet the needs of users, they should:

- study the various groups of users and potential users
- decide which methods of promotion are most appropriate for each group

The aim of promoting and publicising the service is to explain:

- the objectives of the service
- who it is designed to serve
- what kinds of information resources it can provide
- what kinds of information products and services are provided
- where the service is located
- what are the opening hours
- how to begin to use the service
- how to contact the service by mail, telephone, fax, e-mail or via the Internet

Information products and services described in Chapter 8 may all be used to promote the service. Other methods may include:

- brochures
- posters
- signposting the location of the service
- organising group visits to the service
- giving talks about the service to specific groups of users
- formal training in how to use the service and its facilities
- participation in local exhibitions, fairs, etc.

Developing a web site

A web site is one of the most important and effective means of disseminating information for a documentation service. If the service is not able to develop and maintain its own web site, it may be able to contribute to one maintained by its parent institution or by an information network or other co-operative group of which it is a member. Developing and maintaining a web site is a time-consuming task that requires:

- access to a computer
- access to the Internet
- staff with appropriate technical skills
- staff with time to maintain the contents of the web site

A wide variety of resources are available to help staff develop the necessary skills and generally to support the design, development and maintenance of web sites. Be aware, however, that it is easier to create a web site than to keep one up to date. An out of date site will reflect poorly on the service and may act as a disincentive to use it. It is important to identify the person who has the time and skills to keep the site up to date, and this is preferable to relying on outside consultants. More than one person should know how the system can be updated to cover periods when the site manager is away, or to take over if the manager leaves.

Box 9A: Advice on establishing a web site

The Web Site Management section of the ItrainOnline web site offers the following advice to those considering establishing a web site:

A web site is the product of the entire organisation and requires integrating the knowledge and skills of all staff - not just those in a communications or technology department. Therefore, a Web site can communicate effectively with the world outside your organisation only if you have good communication and co-ordination within your organisation.

Some important questions to ask yourself include:

- Why do I need a site?
- What do I know about my audience?
- What staff do I need to create and to maintain it?
- What equipment do I need to have access to?
- Where will content for the site come from?
- What organisational communications policies might facilitate work on the site?
- What resources have been set aside for ongoing tasks like marketing, evaluation, and maintenance?
- How can I ensure that search engines are able to find and index the site?

Source: <http://www.itrainonline.org/itrainonline/english/management.shtml>

The ItrainOnline web site includes annotated links to numerous online resources on web development (Box 9B).

Box 9B: ItrainOnline

Web development

http://www.itrainonline.org/itrainonline/english/web_development.shtml

These sections of the ItrainOnline web site offer resources on the basics of web design and management, as well as more advanced resources on web programming.

Web design

<http://www.itrainonline.org/itrainonline/english/design.shtml>

Resources to take you through the whole process of designing a web site:

- Introduction
- Authoring tool basics
- Working with type
- Online web design communities
- HTML basics
- Working with graphics
- Web site structure and navigation
- General

Web site usability and accessibility

<http://www.itrainonline.org/itrainonline/english/usability.shtml>

Resources to help you make your site easy-to-use and accessible to the widest possible range of users:

- Introduction
- Usability testing
- Validation and testing tools
- General
- Usability
- Accessibility
- Writing for the web

Web site management

<http://www.itrainonline.org/itrainonline/english/management.shtml>

Resources relating to the ongoing management and maintenance of web sites:

- | | |
|--|---|
| <ul style="list-style-type: none">• Introduction• Link checkers• Evaluation and site statistics• Content management systems• General | <ul style="list-style-type: none">• Hosting and publishing your site• Promoting your site• Database-driven sites• Legal issues |
|--|---|

Web programming

<http://www.itrainonline.org/itrainonline/english/programming.shtml>

Web programming allows you to add greater interactivity to the visitors of your site.

This section will take you to resources ranging from basic topics such as JavaScript and Cascading Style Sheets (CSS) to programming languages such as PHP and ASP.

The ItrainOnline section on Databases includes annotated links to online resources dealing with building database-driven web sites. See Box 7E.

The IRC International Water and Sanitation Centre makes the software package used to create and maintain the IRC web site available to partners (Box 9C).

Box 9C: IRC Portal Software and System

The IRC portal software and system as used on the IRC web site, together with technical support, are available for partners within various constructions:

- complete hosting
- structure for own use
- limited adaptation look and feel
- logo, pictures and basic colours
- courses on set up and maintenance for webmasters
- courses for contents managers
- backstopping and help desk support

The system design is set up generically in eZ publish, a powerful open source framework for content management, sharing and collaboration. eZ publish CMS is an Open Source Content Management system based on the flexible and powerful eZ publish Content Management Framework (CMF). eZ publish provides ready-made solutions as a starting point for users' web sites. Users can choose from the following solutions included in eZ publish: Webshop, Intranet, News site, Gallery, Corporate web site, Blog and Forum. eZ publish CMS solutions can be used free of charge under a General Public Licence.

Further information on the IRC Portal from:

Documentation Unit, IRC International Water and Sanitation Centre, PO Box 2869, 2601CW Delft, The Netherlands. Tel. +31-15-219 29 39. Fax: +31-15-219 09 55.

E-mail: library@irc.nl Web site: <http://www.irc.nl>.

Further information on eZ publish from: www.ez.no.

Appendices

Appendix A: How to conduct information surveys

Introduction

This appendix explains how to carry out surveys of:

- local institutions to be served by the documentation service or with which the service aims to cooperate
- the kinds of information needed by potential users of the service, the ways in which they try to find this information at present, where they normally obtain it from, and how they use it

Some basic methods which should be applied in carrying out any kind of survey are described.

Review of existing sources

A review of existing sources of information should be undertaken before deciding to carry out an original survey. Surveys using interviews or questionnaires are expensive, time-consuming and difficult to organise and carry out, and it is therefore important to make sure that the information they are designed to collect is not already available from existing sources.

Existing sources of information on the subject of the survey may include reports on previous surveys, directories of institutions, staff lists, population statistics, and so on. A review of such sources can be time consuming and unproductive unless they are accurate, reliable, relevant and up-to-date. Information and statistical data obtained from such sources must be carefully checked before being used as a basis for planning the activities of the documentation centre.

Basic survey techniques

The basic steps in planning and carrying out any kind of survey are:

- 1 Define the objectives and scope of the survey
- 2 Decide on the methods of data collection to be used
- 3 Decide what human and financial resources will be needed to carry out the survey, and make sure they are available
- 4 Prepare the design of the survey
- 5 Test the survey design
- 6 Carry out the survey
- 7 Collate the information and data obtained
- 8 Analyse the results
- 9 Report the results

The use of questionnaires as the sole method of collecting information is not recommended as it rarely produces satisfactory results. It is better to combine the use of questionnaires with more extended interviews.

Questionnaires should be distributed in advance, together with an explanatory covering letter, to forewarn respondents about the kinds of information which the survey is trying to obtain. This should be followed by interviews in which the questionnaires are completed by the interviewer and the respondent working together. If it is not possible to interview all persons to whom questionnaires have been sent, an attempt should be made to interview at least a representative sample.

Resources for planning and conducting surveys

Surveys must be carefully planned and the human, material and financial resources to ensure their completion must be provided if they are to produce useful results. Surveys can be very expensive and time-consuming, particularly if they involve a large number of institutions or users. Staff at the documentation centre should ask individuals or institutions with experience in survey techniques to advise them as to whether the proposed survey is feasible and, if so, to help them to plan and implement it.

Survey of local institutions

A survey should identify all institutions in the locality which are involved in water supply and sanitation, and obtain the following information about each one:

- name, address, telephone, fax numbers, e-mail address for inquiries and web site address
- type of institution
 - e.g. government department, non-governmental organisation, etc.
- internal organisation
 - principal departments, substations, etc.
- numbers and types of employees
 - including any library or documentation staff
- subject areas covered by the institution
- geographical area or localities covered by the institution
- main areas of activity of the institution
 - e.g. research, construction, operation and maintenance, training, information storage and retrieval, etc.
- specific activities related to information and communication
 - including whether or not the institution maintains a library or documentation centre, and if so, whether it provides services to people from outside the institution

One of the main difficulties in deciding on what institutions should be included is that many are only partly concerned with the water sector, and are also active in other areas. It will be necessary to organise the inventory to focus on the water sector.

The information from a survey of local institutions may be used to create a general profile of the potential user population which can form the basis for a more detailed survey of their information needs and the ways in which they use information.

Detailed information on the information needs and on information-seeking and information-using behaviour of users or potential users can be discovered through questionnaires, interviews, group techniques or a combination of any or all of these. The information needed by users may be assessed in terms of:

- its subject content
- the purpose for which it is needed
- its main orientation
 - theoretical or practical
- its intellectual level
 - elementary or advanced
- the language in which it is recorded
- how up-to-date it needs to be
- the physical formats in which it is presented

The design of the questionnaire to be used in specific situations should be done by the management and staff of the documentation centre, with advice, if necessary, from social scientists or other specialists with experience in questionnaire design.

See also: Healthlink Worldwide Resource Centre Manual

- 1.1 Assessing information needs
- 1.4 Interviewing tips and sample questionnaires
 - 1.4.1 Information needs assessment questionnaire (example)
 - 1.4.2 Questionnaire for other organisations that provide information

Appendix B: Furniture and space requirements

Storage for documents

Bound volumes

Documents in conventional book format and of normal size, including books, reports, bound volumes of periodicals, videocassettes and some other audiovisual items, are normally stored upright on ordinary bookshelves. These may be open-fronted for easy access, or glass-fronted for greater security and protection against dust.

Shelves should be able to be moved up and down to accommodate documents of different heights. If adjustable shelves cannot be provided, the vertical distance between shelves should be not less than 30cm (12in). If the collection contains numerous large-size books, this distance should be increased by an appropriate amount. It may be convenient to place large size books on the bottom shelves of several shelving units, with normal sized books above.

Suitable dimensions for storage shelves are: not more than 90cm (3ft) long, not less than 2.2 cm (7/8in) thick and between 23 and 30cm (9-12in) deep. Unless the centre is very short of space, shelving units should not be more than six shelves high. The bottom shelf of each unit should be at least 5cm (2in) from the floor, and there should a canopy shelf on the top of each unit to keep dust off the top row of books.

A shelving unit with six shelves of 90cm each will accommodate about 150 books of normal thickness and a substantially larger number of thinner documents such as reports.

Pamphlets

Documents of only a few pages, such as pamphlets and brochures, which are not rigid enough to stand by themselves on the shelves should be kept in pamphlet boxes. These may either be open-fronted and open-topped cases or enclosed boxes with lids. The latter offer more protection from dust, but are more expensive.

Loose sheets

Even thinner documents, such as photocopies of periodical articles, sheets of press cuttings, broadsheets and photographs, should be kept in suspended filing pockets housed in lateral or vertical file cabinets of the kind used in most offices.

Large volumes

Very large bound documents, such as atlases, volumes of drawings and the like, should be stored flat in special storage units which also provide a space for the documents to be opened and consulted.

Maps and drawings

Maps and engineering drawings may also be stored flat, in cabinets with shallow drawers and a flat top for consultation, or in vertical cabinets with hanging files. If the latter are used, it will be necessary to provide adequate table space for consulting the documents.

Current periodicals

There are various ways of storing current periodicals. If possible, they should be displayed on sloping shelves so that the whole of the front cover is visible. These may be hinged at the top so that they can be lifted to reveal a flat shelf behind on which recent back issues can be stored. Shelving units of this kind usually have five sloping shelves (with or without flat shelves behind) per unit. If the centre is short of space, periodicals may be stored flat in pigeonhole units.

Newspapers

If the centre receives only one or two newspapers, they may be simply folded and displayed on a table, a periodical display shelf or a wire newspaper rack. Otherwise, they may be attached to wooden rods and hung in special display racks.

Microforms

Microfilms are supplied in small cardboard boxes or tins which may be kept on shelves or in drawers. Individual microfiche are supplied in half-envelopes. Sets of fiche are often supplied in boxes. Both may be filed in drawers similar to those used for card catalogues.

Slides

Photographic slides (35mm transparencies) may be stored in special boxes or trays which in turn may be housed in special storage drawers or in an ordinary cupboard. Sets of slides may be supplied in plastic wallets which may be hung from rods in special storage cabinets. Audiocassettes and reel-to-reel tapes are supplied in boxes which may be stored on shelves or in drawers.

Multimedia

If the centre has only small quantities of audiovisual materials of different kinds, it may be advisable to try to acquire a multimedia storage cabinet which provides specially-designed storage for many different media.

Worktops for users

The worktop space to be provided for each user, in both carrels and communal tables, should be 90cm (3ft) wide by 60cm (2ft) deep.

Worktops for staff

Large desks are preferable to small ones; the main desk top should be at least 75cm (2ft 6in) by 150cm (5ft). An extra office table, 90cm x 180cm (3ft x 6ft) should be provided in the workroom area.

Norms for calculating space requirements

The total space needed for a local documentation centre will be different in each case, but may be calculated in accordance with the following norms:

Accommodation for collections

Space required for books and other documents in book format: 200 documents per sq. m (18.6 documents per sq. ft).

This includes the space needed for users to get access to the storage units. The storage capacity will be increased if many of the documents are flimsy reports of only a few pages. Space required to display current periodicals: 25 titles per sq. m (2.3 titles per sq. ft).

Accommodation for staff

Space required for each staff member: 9.3 sq. m (100 sq. ft).

Accommodation for users

One seat should be provided for every 25 potential users who have easy access to the centre (i.e. excluding those who are too far away to visit it regularly), with a minimum of 4 seats even if the number of potential users is less than 100.

Space required for each seated user: 2.3 sq. m (25 sq.ft).

Traffic and utility space

25 percent of the total of the above requirements.

Space for expansion

At least 10 percent of the total of the above.

This should be determined in accordance with the projected growth of the collections and any other growth factors such as an expected increase in the numbers of users.

See also: Healthlink Worldwide Resource Centre Manual

- 3.1 Location, size and structure
 - 3.1.1 Choosing a location
 - 3.1.2 Working out the size
 - 3.1.3 Ensuring a secure structure
- 3.2 Planning the layout
 - 3.2.1 How to measure space for shelves
 - 3.2.2 Space for different uses
- 3.3 Choosing furniture and equipment
 - 3.3.1 Shelving
 - 3.3.2 Display equipment
 - 3.3.3 Other furniture and equipment
 - 3.3.2 List of furniture and equipment

Appendix C: Further sources of information

Water supply and sanitation information

Selected Periodical Articles, 1994-2004

The articles listed below were identified from the Library and Information Science Abstracts (LISA) database maintained by Cambridge Scientific Abstracts (<http://www.csa1.co.uk/>). The list was formatted using the QuickBib automatic bibliography generator on the CSA website.

- Basaran, A. K. T. 1994. **Management information systems for water and sanitation agencies: a regional perspective.** *Information Development*, 10, (2) (Jun): 102-106.
- Byerley, G. P. 1994. **Keeping water professionals informed: the role of the American Water Works Association.** *Information Development*, 10, (2) (Jun): 120-123.
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Papers from the Sixth Water Information Summit

The following list gives the authors and titles of the papers presented at the Sixth Water Information Summit: Breaking The Barriers; Let Water Information Flow! organised by Waterweb Consortium and IRC International Water And Sanitation Centre, 9-12 September 2003, Delft, The Netherlands. Brief descriptions of the papers and links to their full texts in PDF format are given on the IRC website at <http://www.irc.nl/content/view/full/6316>.

Aquastat - Getting to grip with water information for agriculture. (Åse Eliasson, Jean-Marc Faurès, Karen Frenken, and Jippe Hoogeveen)

Arsenic information centre - an approach for raising awareness to grassroots communities of Nepal. (Arinita Maskey and Roshan Raj Shrestha)

Asian Development Bank (ADB) Water Awareness Program (WAP). (Paul Fisher)

Building NGOS/CBOS' capacity through information. (Caroline Batanda) *

Building partnerships: a strategy for bridging the water resources information and knowledge divide in the Caribbean. (Herold Gopaul) *

Can ICT effectively bridge the information and knowledge gap across geographical and social boundaries._(Francois Odendaal and Rodger Abels)

Climate and water data transfers via Internet: from vision to action. (Luc Vescovi, Lam Khanh Hung and Richard Laurence)

Closing the knowledge gap in support of the MDGs. (Jan Teun Visscher)

EauDoc: your international memory for water. (Catherine Juery)

Experiences with knowledge mobilization: the value of local learning and adaptation. (Edgar Quiroga Rubiano and Alberto Rodríguez)

Flood of gateways and portals on water drowning in ambition. (Dick de Jong, Cor Dietvorst, Jaap Pels and Viktor Markowski)

Grassroots participation and management for rural water related environmental problems in Nigeria. (Uwem Robert Out)

Implementing a decentralized water portal in the Euro-Mediterranean area - First lessons from EMWIS. (Eric Mino)

Information in Internet about the water sector in Chile. (Maria-Angelica Alegria and Tatiana Cuevas)

Information needs: learning in the resource centre development (RCD) programme in Nepal. (Ratan Budhatoki, Eveline Bolt and Umesh Pandey)

Knowledge management in strategic development of water services. (Osmo T. Seppälä)

Managing for Serendipity - or why we should lay off "best practice" in KM. (David J Snowden)

myNetWorks - a collaborative web environment for sustainable environmental technology. (Urs Karl Egger, Andreas Schönborn and Marcia Pereira)

Narrative patterns: the perils and possibilities of using story in organisations. (David J Snowden)

Networking to put knowledge into practice through effective communications: the Swedish water house case study. (Stephanie Blenckner and David Trouba)

NGO Forum: a nodal point for knowledge sharing and networking in Bangladesh. (Shirin Biswas)

Nile Basin capacity building network for river engineering. (Hesham A. Ghany)

Opportunities and constraints of ICT developments for regional capacity building programmes. (Dr. Jasveen Jairath)

Organization development guidebook - information resources for today's world.
(Nancy E. Barnes)

Organizing an E-conference: an introduction to the E-conference concept. (Desíree Vreke and Lin McDevitt-Pugh)

Pakistan water knowledge network. (Asad Uz Zaman) *

PHAST approach to support safe water and sanitation in peri-urban areas: case of Lusaka, Zambia. (Obed C. Kawanga and Shedrick Chakamisha)

Removing the barriers to collaboration: FreshWaterLife(TM) as an example of data sharing. (Kearon McNicol, Ian Pettman, Roger Sweeting)

Rio de la Plata and its maritime front environmental information system and portal: tools used and lessons learned. (Patricia Hilda Himschoot, Virginia Fernández, Juan Arciet, Viviana Goldsmit, and Jorge Fabricant) *

SANICON: an Internet portal for information. (Frank Odhiambo) *

SAWINET: Sharing of Integrated Water Resources Management (IWRM) information and experience in Southern Africa. (Andrew Takawira) *

Siagua, an operational Spanish-speaking network in the field of water knowledge in America. (Leticia Martinez Etayo)

The GLOBal Water Information NETwork (GLOBWINET) - Critical aspects of a net-based information system. (Andrew Takawira and Wolf-Ruger Winnege)

The impact of hydrological information services on integrated water resources management and development: Niger river. (Engr. I.A. Olomoda)

The important role of the press and media in promoting water information dissemination in Cameroon. (Rosemary Enie)

The potential and use of electronic conferencing - a study of women's involvement in a global context. (Julie Fisher) *

The role of education and capacity-building in water conservation/demand management. (Hayley Rodkin and Derek Weston)

The U.N. water virtual learning centre on integrated water resource management. (C.I. Mayfield, V.I. Grover, R. Daley, and M. Dengo)

Transboundary waters - strengthening sustainability bridges via distance learning. (Janot-Reine Mendler)

Using ICTs for information sharing and dissemination among women in Uganda. (Hadijah Namumbya)

Virtual library on health environment [VLEH]. (Marta Bryce)

Water portal of the Americas: a prototype for international cooperation. (Terry Dodge and Maria del Pilar Gonzalez Meyau)

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Further references on documents and organisations related to information management in developing countries can be found on the IRC website:
<http://www.irc.nl/content/view/full/7844/>

Appendix D: Elements of a document supply system

The request system

The request system should be designed to record users' requests, speed up the supply of requested documents, and obtain requested documents from other sources.

Recording Users' Requests

If a document required by a user is not available, the user should be invited to make a formal request for it, using a form designed for this purpose.

The request form should include:

- full bibliographical details of the document
- the name and address of the user requesting it
- the date on which the request is made
- details of actions taken to satisfy the request, such as
 - recalling the document from another user
 - ordering a copy from the publisher
 - requesting a copy from another library, etc.

When a request form has been completed, the staff have to find out:

- if the requested document is already in stock
- if so, whether it has been
 - borrowed by another user
 - removed from its normal place to be repaired or rebound

To do this, they have to check:

- the records of documents which have been received but are still being processed
- the catalogue
- the circulation control system

The records for documents which are on order, in processing or in stock, and which have been requested by users but are not immediately available, should be marked or flagged to indicate that they are on request. Coloured paper clips or tags made of metal or cardboard may be used to flag records in this way.

If the requested document is not already in stock, the staff have to find out if steps have already been taken to acquire it through purchase, gift or exchange, or from a document delivery service. To do this, they have to check the acquisitions records.

If the requested document is not in stock and not in process of being acquired, the staff have to decide whether it should be acquired, and if so, how and from what source.

Speeding up the supply of requested documents

When documents which are on order or in processing have been flagged as requests, steps should be taken to supply them to the user as quickly as possible.

In the case of documents on order, the supplier should be contacted and asked to supply the document quickly, if necessary in advance of any others which may have been ordered at the same time.

Documents which have already been received and are being processed should be given priority. If the processing cannot be accelerated sufficiently, the processing may be deferred until the user has finished with the document.

Requested documents which are being repaired in house should be given special treatment. Repair work should either be accelerated and completed as soon as possible, or temporarily suspended, to be completed when the user has finished with the document. In the case of requested documents which are being repaired or rebound elsewhere, those responsible for the work should be advised that the document has been requested by a user, and asked to complete the work as quickly as possible.

The system for recalling requested documents which are on loan to other users forms part of the circulation control system, described below.

Obtaining requested documents from other sources

Documents which have been requested by users but are not in stock and are either not available for acquisition or not considered suitable for permanent acquisition, may sometimes be obtained from other libraries or documentation services.

In some cases, the original document may be supplied on loan from the library to which it belongs; in others, the library may supply a photocopy or a microfiche copy of the document. These copies may usually be permanently retained by the service receiving them. In such cases, the staff, in consultation with the advisory committee, should decide if the user who requested the document should be allowed to keep it or return it to the service to be added to the collection. If added to the collection, the document should be treated as a normal acquisition and processed accordingly.

The supply of copies of documents for permanent retention is known as document delivery; the term is often also taken to include the supply of original documents on loan from other libraries or documentation services, also known as an interlibrary loan.

Possible sources of documents under either arrangement include:

- other libraries and documentation services in the immediate locality
- general or specialised libraries and documentation services in other parts of the country
- regional documentation and information services
- international specialised information services and services
- general international document delivery systems
 - e.g. the British Library Document Supply Centre

In some cases documents may be supplied free of charge. In others, payment may be required, often in prepaid coupons rather than cash. The staff and the advisory committee should decide whether or not such charges should be passed on to users.

Lending documents to users

The system for lending documents to users is known as the circulation control system. In a local documentation service, this system should be kept as simple as possible.

An effective circulation control system should enable the staff to find out quickly:

- what documents are on loan to which users at any particular time
- where the users can be contacted
- when the documents are due to be returned to the service
- which documents are overdue for return
- which of the documents on loan have been requested by other users

The system should also provide a means of recalling documents when required.

Some basic types of circulation control system are described below. Before deciding which system to use, the staff and the advisory committee should decide:

- which kinds of documents may be borrowed for use outside the service
- who is to be allowed to borrow them
- under what conditions they may be borrowed

Most documentation services contain documents such as encyclopaedias, dictionaries, maps, etc. which are not made available for loan, because they are either:

- consulted frequently for short periods of time, or
- are valuable, or
- risk being damaged if borrowed

The decision as to whether to make any documents available for loan, and if so, which, depends on:

- how much space there is for users to consult documents on the premises
- how easy it is to arrange for the service to be staffed during opening hours
- how valuable the documents in the collection are
- where most of the users of the service are located
- how easy it is for users to visit the service

If most users are located in the same building or compound, or nearby, it may not be necessary to allow materials to be borrowed, particularly if it is difficult to arrange for the service to be staffed at all times during opening hours. On the other hand, there is no point in requiring users to consult materials in a centre where there is not enough space or furniture to accommodate them.

If users are scattered in field offices and outstations, it is essential to make documents available for loan.

If the service cannot be staffed at all times during opening hours, it will be difficult either to supervise the use of documents in the service itself, or to administer a circulation system. In such circumstances, it is almost impossible to prevent users from 'borrowing' documents even if they are not supposed to do so. It is therefore highly desirable to staff the service at all times during opening hours, or at least to have staff nearby on call, if they have other duties to perform.

If the service cannot be staffed all the time, one of the 'self-service' circulation control systems referred to below may be suitable. However, it is difficult under any self-service system to control the number of documents borrowed by a user at any one time.

Restrictions on lending

It may be advisable, at least in the early stages of the development of the documentation service, to lend documents only to the staff of the parent institution, whether they are located at the local office or in the field.

Users from other organisations in the locality might be allowed to consult documents in the service, but not to borrow them to take elsewhere. This depends in part on whether adequate space and suitable furniture are provided in the service.

It is usual -- but not strictly essential -- to restrict the period of time for which materials may be borrowed, in order to make them available to other users and generally ensure that they still exist and are in good condition. On the other hand, there is no point in imposing strictly limited loan periods in respect of documents which are only likely to be used by one or two people -- for example, only by the district hydrologists or the accounts officer.

In such cases, documents may be issued on long loan or even 'permanent' loan. The conditions for lending materials should be as flexible as required by the local situation; the aim is to get documents into the hands of the users who need them, not to maintain shelves full of documents for their own sake.

Different loan periods may be allowed for different classes of user; for example, staff of the parent institution may have longer loan periods or more flexible loan conditions than outsiders. Where a fixed period is set, it should be possible to renew or extend the loan if no one else needs the document.

It is often considered necessary to restrict the number of documents which a user may have on loan at any one time. This is done in order to ensure that a good selection of documents are always available and to discourage users from building up personal collections in their own offices.

The staff and the advisory committee should decide whether such a restriction is necessary and if so, how many documents each user should be allowed to borrow at any one time. This will depend to some extent on the size of the collection.

Loan conditions should be set out in a user's guide or printed on a loan label inside the document.

Recovering overdue loans

Some documentation services fine to users who do not return documents on time. Before deciding on whether or not to do this, the staff and advisory committee should find out the usual practice in other services in the locality and what their experience has been in this respect.

The administrative cost of accounting for the money recovered in fines may be more than the amount recovered. A note to the offending user's superior officer may often be just as effective and require much less administrative work.

Circulation Systems

The book register system

If the number of loans is expected to be less than, say, ten items a day, loans may simply be recorded in a register in book form with separate columns for:

- date borrowed
- author
- title
- accession number
- name and location of borrower
- date returned

Staff can quickly scan this register to find documents which may be requested by other users, or to identify documents which should have been returned.

This method has the advantage of being

- simple
- cheap
- capable of being self-service without staff supervision.

It is less easy to control the number of documents on loan to any one person by this method, and it is not really suitable if external users are using the centre regularly.

The loan slip system

Instead of entering the above details in a register, they may be recorded on a slip of paper with spaces for the same information. This has the advantage that the slips can be interfiled so as to maintain one sequence of records.

If the slips are produced as multipart forms, i.e. with two or more copies of each slip being produced at the same time (preferably using carbon paper or no-carbon-required paper), several sequences can be maintained, for example, one arranged by borrower's name

(which facilitates control of the number of documents on loan to one person at a time) and one by author, accession number or call number, one by date, etc.

If the date of return is not stated or not considered very important, there will be no need for a date sequence. It is more important to be able to find out if a document required by another user is on loan, and if so, to whom. If there is no restriction on the number of documents per user, a user sequence is not necessary. If there are different rules for inhouse and external users, separate files may be needed for each group.

The loan slip system, although simple, is still used in many quite large academic libraries and specialised documentation services (usually as a multiple-copy system). It is effective, but like the register system, rather laborious for the user, who has to write out the details of every document borrowed on every occasion.

When documents are returned, the slips are removed from the files and destroyed, or used for statistical analysis of the use of the service.

The book card system

Several systems avoid the need for the user to write out details of every document borrowed. These systems use 'book cards' placed inside the documents. The basic details of the document are written on these cards, which are removed and filed every time the document is borrowed. One such system is described below.

Each document contains a removable book card with several spaces on it in which consecutive users sign their names and in which the date due for return can be recorded. The card is kept in a pocket inside the document. The pocket also has several spaces where the date of return can be recorded.

When the document is borrowed, the borrower signs his or her name on the book card and a staff member writes or stamps the date by which the book should be returned on both the book card and the pocket. The book card is removed from the document and filed in a box or tray at the control desk. The cards are arranged, first by date due, and secondly by call number. When the document is returned, the book card is replaced in the pocket inside the document. The main disadvantages of any book card system are:

- cards and pockets have to be purchased and may not be available in the country
- it takes staff time and effort to fix pockets to documents and to prepare basic identification data
- not all documents can have cards and pockets fitted easily (e.g. maps, slides)
- the system is not suitable for self-service

Supplying copies of documents

Users may frequently want copies of documents in the collections which are not available for loan, or which they wish to retain permanently for their own use. To be able to provide

an effective photocopying service, a local documentation service needs suitable photocopying equipment and adequate supplies of toner and paper.

The production of photocopies is generally governed by copyright. Copyright law in most countries allows for single photocopies of certain types of document for research and study. An entire paper in a periodical may be copied; however, a complete book may not be copied without permission from the copyright holder, usually the author or publisher. In most local documentation services, small budgets will make it essential to charge for photocopies. The charges should be set at a level which will at least cover all the costs involved, including overheads as well as paper, toner and any per-copy charges levied by the supplier. Add mailing costs where appropriate.

See also: Healthlink Worldwide Resource Centre Manual

- 7.2 Staffing and opening hours
- 7.2.1 Welcoming visitors
- 7.5 Lending
- 7.5.3 Sample membership form
- 7.5.4 Sample overdue books reminder
- 7.5.5 Reservation
- 7.5.6 Inter-library lending
- 7.6 Photocopying
- 7.7 Document supply