Chapter 5

Approach to Resource Sharing in BTISNet Centres
5.1 Introduction

Librarians and experts as the realistic means of meeting the multifarious demands of the users almost universally accept the concept of resource sharing and networking. It is found that all the evidence indicate that resources sharing and networking in libraries hold the future hopes of fulfilling user needs. A close look at the literature indicates that easy access to information and physical availability of required information has become the main concern of the librarians, worldwide. The age-old informal inter-relationship among a few local libraries is securing the shape of a large, comprehensive, sophisticated and formal system of cooperation; breaking geographical barriers.

The focus now is on providing library users with ready access to library resources available anywhere. The emphasis is shifting from a number of library holdings to access and delivery of library materials rather than attempting for self-sufficiency. Dreaming for self-sufficiency is an enduring impossibility for any library in the world, how so ever resourceful it may be. However, the importance of strategically developed collection in a library cannot be underestimated and it constitutes the important component of the main shareable resource.

5.2 Document Resource Development

The effectiveness and efficiency of any library and satisfaction of its users are directly dependent on quality and strength of collection and information sources available with the library. The information resource is the main item, which is shareable and without having the collection of appropriate materials, the resource sharing is inconceivable. The principal information resource for the scientific and research libraries consists of books including society publications, journals, standards, patents, reprints, trade literature, maps and non-print forms such as audio-visuals, online and CD-databases etc. A library is required to continuously endeavor to enrich its collection, best suited to fulfill the information needs of its users in meeting the institutional goals and objectives. It is equally essential to create the database of information sources in electronic form to facilitate easy access of information about the documents available in the holding of a library. Also, the
database in machine-readable form is an essential pre-requisite for resource sharing and networking among libraries. Various steps involved in document resource development and creation of database and related issues are discussed as under:

5.3 Collection Development

“Collection development covers a broad range of activities related to the policies and procedures of selection, assessing user’s needs, and evaluation. Collection development is a continuous process in all types of libraries worldwide. Any library failing in adding latest materials of the present collection, weeding out and storing part of the collection and planning for resource sharing”\(^1\), its collection will have the poor rating by the users. As stated by Evans, collection development “is a universal process in the library world whereby the library staff brings together a variety of materials to meet patron’s demands.”\(^2\) In view of the documents and tremendous developments in the field of IT, the total concept of library collection and services has completely changed.

5.4 Collection Development Policy

Collection development of libraries should be based on proper planning in consideration with advancements in IT and the availability of information in digital format and through the internet along with plenty of documents in printed form. Their organization and maintenance are more challenging and it requires a regular recurring cost. Decision-making about procurement of documents in the variety of forms gives rise to many more variables and decision based on personal perception may not be judicious. Therefore, the collection of a library should necessarily be based on well-defined policies and norms ensuring the consistent and balanced growth of the collection.

“A collection development policy statement is an orderly expression of those priorities as they relate to the development of the library resources”\(^3\) Osburn \(^4\) states five functions of collection development policy, viz. shaping the collection, training the selector, planning, rationalizing the budget, and interpreting needs and
operations. Besides these, the policy supports in justifying the selections and minimizes personal bias on the part of individual selectors adding efficiency in routine decisions related to the collection. A collection development policy should include “balancing ownership and access, cooperative efforts and evaluation.”

It is pertinent that a collection development policy of a subject specific library network like BTISNet should emerge out of the broader perceptions of goals, objectives and social mission of all the participating institutions. All the member libraries should evolve a policy in this regard. “In an IT-based environment, the entire approach and philosophy of collection development needs to be changed, as simply duplicating the collection practices responsive to current needs or capabilities”. It is observed that most of the libraries, under study, have traditional collection and are engaged in the same practice.

It is notable that IMTECH library has started subscribing 45 journals in electronic form along with print media and a digitised database of 6500 grey literature has also been created. The obvious challenge to all the libraries is the problem of how to integrate and manage both types of resources It is, therefore, necessary for all the participating Bioinformatics centers under proposed Public to evolve a collection development policy governing acquisition both electronic resources and development of specialized collection by each library in assigned subject fields. Seetharama mentions, “balancing ownership and access; cooperative efforts; and evaluation,” as key issues for redefining a collection development policy.

5.5 Development of Specialized Collection

It has been observed that many of the institutions under study are assigned the responsibility to carry out research related with specific problems of the regions of their location. Though all the institutions are primarily involved in a like research, training and education in Bioinformatics, they may be designed to concentrate and develop rich, sound and specialised collection in their areas.
5.6 Development of Core Collection

There are basic documents are reading materials, which we essential for having general comprehensive and understanding about a branch of knowledge. All such documents are commonly called as a core collection for that subject area. While considering for networking in BTISNet libraries that each library must attempt to build a collection of such materials, which serve the basic information needs of general users. The literature concerning resource sharing indicates that the libraries should not depend on other libraries for every requirement and information. It is suggested that all the participating libraries of BTISNet should have important Information resources in the field of Bioinformatics and related discipline, which are commonly required to fulfil the general information needs. The common and cheaper reference books and journals, which are frequently demanded and consulted by the users, are also included in the core collection.

5.7 Collection of Journals

Journals are the indispensable source of information and are unavoidable for any scientific and research library. Being an important component for scientific research and communication, periodicals require judicious selection in view of the unprecedented growth of periodical literature. Periodicals are more important than books for researchers and specialists. The majority of scientific and research libraries are forced to spend a big chunk of their annual budget for a subscription to journals.

Even if it is decided to subscribe to two copies of these journals, there will be a saving of been taken into account. This provides a solid ground for rationalization in subscription to journals by these libraries and the resources thus saved may be utilized judiciously for further strengthening and enriching journal collection for achieving enhanced readers satisfaction and mutual benefits without any additional expenditure.
5.8 Electronic Journals

Electronic journals are those journals, which are available in the electronic or digital form, with or without their print version. The electronic publishing has open new vistas in the field of information storage, dissemination and resource sharing. Electronic publication is the product of amalgamation of electronic technology, computer technology, and communication availability of e-journals and other documents on the internet puts tremendous pressure on library professionals, while deciding what is to acquire and what is not to acquire. Abdus Sattar Chaudhry says “availability of individual article supply service like UNCOVER, BIDS (Both Information and Data services) and OCLC’s article first and availability of electronic journals on network are promoting libraries to replace subscriptions with lease arrangements, where libraries pay only for those articles which are required by the users.”

Michael Killer says that “main concern is that the paradigm of access instead of ownership leads ultimately to an environment where all is meta-information.” It is feared that having information about the existence of information, with dependent resource base, may lead to user dissatisfaction at times and free flow of information may be affected in adverse political, economic and global situations.

Considering the prevalent and emerging technologies, Nisonger says that “a library will frequently have four options for providing its patrons access to a particular journal title: (1) subscription to a print version (2) subscription to an electronic version; (3) subscription to both print and electronic versions; and (4) no subscription, but access through commercial document delivery.” Another option seems to be the acquisition of full-text databases consisting of the collection of back volumes through vendors.

5.9 Collection of Electronic Databases

Library and Information centers have always been dependent on the development in the publishing industry and in scholarly research and communication. Changes in publication process have a direct impact on the information systems and services. It is observed that by and large information field
has been flooded with an attractive electronic form of publication along with continued production of traditional sources of information. Electronic publications including the CD-ROM databases are increasingly becoming popular, Amudhavalli says “an electronic collection can be more flexible and dynamic leaving wider variety (world’s information resources) and choice of selecting only that part of the document (a page or an article) that is relevant and the whole source need not be acquired.”

5.10 CD-ROM Databases

The libraries have been facing serious problems in collection, organization, storage, retrieval and dissemination of information. The problems of storage, maintenance and retrieval have come acute, especially in developing countries. It has been observed that “the print and other media are becoming obsolete and incompatible to meet the demands of storage and retrieval of this huge bulk of literature produced.” The CD-ROM and DVD-ROM have emerged as a versatile and robust medium with optical storage devices having less or no maintenance cost and speedy access of information. Its advantages include “broad user base, user friendliness, convenience of use, relevance affordability, portability, durability, exposure to automated information, retrieval skills for the first time, space saving, suitability or resource sharing and image raising.”

The CD-ROMs (Compact Disc- Read Only Memory) were first used in the form of bibliographic databases consisting of large indexes and abstracting services. The CDs, besides texts, can store still images, photographs, drawings, audio, view, animations etc. The encyclopaedia’s, dictionaries and other references sources are available on CD in the form of multimedia. Outlining the strengths of CD-ROM from librarian’s point of view, Hanson mentions these as “(i) fixed known cost; (ii) easy interfaces; (iii) convenience and power and (iv) portability.” Besides above durability, low price, long life, damage resistance, data security etc. are the other characteristics of CD-ROM. Digital Versatile Disc/ Digital Technology. “DVD Technology uses double layer packing of data of both sides of the disc providing 6-7
times greater storage capacity than CD having same aerial space.”

Main characteristics of DVD-ROM are high storage capacity with increased multimedia capacity, higher audio and video quality, faster data access, cost effectiveness, easy for networking eliminating Jukeboxes, etc. For the purpose of discussion in dissertation both CD and DVD may be known as CD-ROM.

It is found that in recent years, the large number of databases including full-text databases encyclopaedias, dictionaries and other reference sources are available on CD-ROM. The cost of CD-ROM production has come down very drastically. It has been observed that the Bioinformatics centers libraries in India have also started adding CD-ROM databases to their collection but in a humble way. In this regards, Wegner rightly states “While en route from automated to truly electronic libraries, this is a transitional period with much ambiguity and uncertainty. Information scientists are technologically capable of creating the largely digital research library in the very new future, but a complex a fiscal, psychological and even sociological barriers present them from doing so anytime soon.”

It has been noticed that CD-ROM databases are still very costly, especially the full-text databases, and at times their acquisition seems to the budgetary provisions of many libraries. Considering its usefulness and efficiency in information dissemination to the researchers and scientists, it is advisable that such databases are acquired through cooperative acquisition or some of other system and made available to the member libraries through network (host) by devising some formal system for use. The EBSCO information Services, USA offers sound solutions to complex information needs of libraries with a collection of specially designed, comprehensive full-text database available online via EBSCO host and via CD-ROM for each type of library setting.” The experiences show that it is promising to go in for networking of CD-ROM database. Tedd says, “networking CD-ROMs provides advantage such as easier access to a range of CD-ROMs, access from the user’s own workstation, simultaneous access by several users to the same databases and better security.”
5.11 Online Databases

The databases, which are accessed instantly from the web or local network, are named as online databases. The internet offers a powerful new way to communicate and gain access to information of all types. The internet has emerged as a growing technological phenomenon as a source of electronic information resource and effective medium of communication. The whole process from generation of information, dissemination, absorption and feedback has become instantaneous with the internet.\(^\text{19}\)

It is found that their use to be variation in software and hardware used by bibliographical databases and it is difficult for professionals to be aware of the specific features of each system. In order to overcome the problems of database search with many search languages and to share the biographical information electronically, a standard namely ANSI/ISO Z39.50 has been developed. Being an open communication protocol, Z39.50 is platform independent allowing “uniform access to a large number of diverse and heterogeneous information resources”.\(^\text{20}\) Its latest version 3 was accepted in 1995. While searching through Internet or www databases, Z39.50 protocol is essentially needed.

“Internet was totally reshaped by the world wide web (WWW) software,”\(^\text{21}\) allowing access to the internet through it. Information sources on the internet are all stored as computer files of some kind or other. These files contain varied materials. Much of the sources available on internet are of reference type in nature, which include “electronic journal, preprints, technical reports, numerical and graphical data, software, campus-wide information systems, databases, library catalogues, educational materials, company profiles, patents, standards information on societies, institutions, associations, etc.”\(^\text{22}\)

In view of the above, the Libraries under BTISNet may be required to review their collection development policy. A lot of information is available on the internet and many a times it may be duplicate or irrelevant. In such a situation, it is very difficult, time-consuming and cost intensive exercise to search all the sources on Internet and select the useful sources or information for downloading. The duration of available information is also not certain. The information may be completely removed or changed from time to time and much of this information is less
permanent in nature. Rao states “In these circumstances it is very difficult for Information scientist / librarian to decide:

- What should be acquired (by downloading, stored and organized)?
- Who should do it (most of such information is accessed directly by users, without bringing into the knowledge of librarians)?
- What standards to be followed?
- Users locate and access the information; information is not usually structured; no rules or codes are followed and no one controls the information that is made available.”

Rao further adds, “The data or information may be of different types. To organize the data or information, we require cataloguing practice and it calls for an appropriate data model for organizing data with the standard front. Specialized technologies are needed for compressing as well as for organizing information. It is essential that effective techniques are developed for storing and searching downloaded data from the internet.” In view of the existing fluid situation and non-perfection of technology, organization, processing and storage of information available through Internet, it is advisable for BTISNet to wait for some time before taking concrete steps and going for heavy investments.

5.12 Software

Software requirement for a network can be grouped as follows:

i. System software
ii. Application software
iii. Networking software

System software is usually a part of the hardware and is offered along with the hardware by the vendor. Windows, Ms Dos are good application software for database creation in the library, but SCO Unix or Red Hat Linux are essential for networking providing security to the database. So far the application software is concerned, now Koha, NEWGENLIB, SLIM21, WINISIS, LIBSYS, SOUL
(INFLIBNET), DELPLUS (DELNET) etc. are available for use in Indian libraries. It is found that most of the Bioinformatics centre libraries having and using CDS/ISIS software. The performance of LIBSYS is satisfactory as it is being used by IITs, IIMs and other important institutions, but it is very costly and its Annual Maintenance Charges (AMC) charge is exorbitant. However, the Bioinformatics centre libraries, under study, may continue to use other software such as Open source Koha software without any problem.

To discuss in details about library software and its qualities is out of the purview of this study. However while selecting the library software it should be ensured that protects data from unauthorized access by providing a password and other security measures.

1. Data can be export/ import through MARC or ISO format
2. Supports TCP/IP for communication and networking.
3. ANSI Z39.50 compliant Search engine (The Information Retrieval protocol accepted worldwide)
4. Web OPAC to enable access of Bibliographic Databases through Internet and Intranet
5. Options for MARC 21 Implementation
6. Images and Multi-media interface with Search Engine (Various formats include Bitmap, TIFF, Wave, Midi, Audiovisual interface, etc.)
7. Flexibility in choosing operating platforms. It supports Linux, UNIX, and Windows in Client-Server environment using TCP/IP protocol.

### 5.13 Networking Software

Networking software refers to the clustering of programmes on computer’s hard disc that enables the PC or Server to communicate on a network. As done in the cause of UNIX-Based and Microsoft’s Windows, the networking programmes may be integrated into the operating system. The networking software is generally referred as Network Operating System and it differs from a desktop operating system in that it allows for greater scale and resource utilization.
5.14 Communication Infrastructure

It is found that almost all the BTISNet libraries have Internet connectivity, email facility and LAN. The dedicated telephone lines or satellite links are the appropriate channels of communication. In a satellite-based network, reliability and higher transmission speed are main characteristics with economical access to remote locations. However, all the institutions are having Internet connectivity either through ISDN (or) Dedicated Leased lines and have the same facility has been made available to libraries also. It is presumed that with the up gradation of main communication facility with the institution, the libraries will simultaneously have the improved communication facilities and linkages.

There has been an enormous advancement in the field of IT resulting into multiple and incredible facilities for information transfer. The technologies used for document transfer are email, File transfer Protocol (FTP), Point to Point Protocol (PPP) from Bharat Sanchar Nigam Limited (BSNL), ERNET – Education and Research Network, and NKN- National Knowledge Network Connectivity.

5.15 Database Creation

Proper organization of documents and other reading materials is the key component for efficient and effective service to the users, especially in physical location and accessing the documents. The system of description and indexing in the information retrieval model involve the process of identifying the subject content of the documents and then representing it in a way, which matches the search approach of users. This requires systems of classification and cataloguing that help us to describe precisely the subject content of an item in a consistent and user-friendly way. It is essential to develop records of documents in electronic form, as these are an essential resource for resource sharing and networking.
5.16 Classification System

The main purpose of classification in the library is to assign a unique identification number to each document – to fix its location and place in the storage area facilitating a mechanical system for their placement and location. Studies have revealed that physical arrangement of materials based on subject grouping by assigning artificial notation is the most helpful arrangement. It also brings together all the related documents at one place, providing an opportunity to users to browse and select the suitable documents from the collection serving his/her needs. In past, a lot of emphases was placed on depth classification because of the manual arrangement of catalogue cards making permutation and combination very difficult, while searching. Now in the age of IT application and availability of electronic records, where a high degree of permutation and combination is possible during the search, the need for depth classification is lessening. Prem Singh says, ”with the introduction of IT, depth classification would become redundant resulting in a saving of a lot of time.”

It is observed that three schemes of classification are used in BTINet libraries. These are DDC, UDC, and LCC. Ideally, it is better if all the BTISNet libraries of a network use uniform scheme of classification. But it would not possible to change over to one classification scheme in all participating libraries at this juncture. Otherwise, also it may not be worth attempting at this stage. However, it is observed that DDC is used by as many as five libraries, UDC is used by as many as four libraries, and LCC is used by as many as one library.

5.17 Cataloguing System

Catalogues are prepared to satisfy different approaches of users and they function as retrieval tools that support the physical arrangement of documents by providing alternative access points in different sequences. They act as a tool, which reveal the documents by an author and title and documents on a subject. In fact that catalogue removes the artificiality of classification numbers and facilitates the search in alphabetical order through approach words or subject terms.
The work of creation of bibliographic records can be divided into two parts namely. Descriptive cataloguing and Subject cataloguing. Descriptive cataloguing is the phase of creating a bibliographic record, which describes an item accurately as per its title, author edition, physical description etc. There are two prevalent cataloguing codes i.e. Anglo-American Cataloguing Rules II (AACR II) and Classified Catalogue Code (CCC). It is revealed that the AACR II is being used all over the world because of its international acceptance and provisions for both print and non-print materials. The AACRII is found to be in use by the entire BTISNet libraries, under study. It is essential that the libraries follow same rules and procedures with similar variations if any. This will facilitate uniformity in cataloguing procedure and display of information in a similar fashion.

Classification determines the location of the item on shelves in the form of artificial notation to achieve mechanical arrangement and subject cataloguing eliminates artificiality of class numbers and interprets the same in common subject terms matching the user’s choice. There are several methods of deriving subject headings used the controlled vocabulary. “The Library of Congress Subject Headings (LCSH) is an up-to-date tool being widely used in Libraries for deriving subject descriptors. The LCSH is “the oldest controlled vocabulary which is still in use all over the world.” It is found that many of the BTISNet libraries, under study, are using LCSH for assigning subject headings and some are using Sear’s List of subject heading or thesaurus. Looking to wide use and up-to-date-ness of LCSH, it would be appropriate that the BTISNet libraries under BTISNet make use of it.

5.18 Retrospective Conversion

It has been observed that very few BTISNET libraries have achieved full automation of their operations. Even database creation, having bibliographical details of the collection, has not been either taken up or completed in many BTISNET libraries. The database creation of documents available in stock of library has completed in BI, IARI, JNU, MKU, and SPPU library, whereas in the rest of libraries it is under way. In AU, BU, PU, TNAU, and UC, this could not be taken up
because of non-availability of library software and personnel. Retrospective conversion of card catalogue or creation of fresh records into machine-readable form involves handling of the tremendous amount of data with many technical activities.

### 5.19 Bibliographic Standards

While cataloguing the use of uniform bibliographic standards in the process of machine readable or electronic record creation, thus has been the concern of the specialists and professionals working in this field. Standards are the “Instructions for doing uniformly.” Standardization in the creation of bibliographic records is very significant in this age of growing libraries with growing budget cuts and ever growing demands. Murthy says, “Standardization helps promote predictability of retrieval as opposed to guessing work, promoting serendipity in retrieval and promoting depth of access to books.”

Resource sharing and shared collection development relies heavily on standard bibliographic formats. The conception of resource sharing is impossible without bibliographic access, which in turn is dependent on the use of standards. It means no reliable retrieval is possible if the union catalogues of libraries or bibliographical utilities do not follow a standard format. Describing the advantage of standardization of bibliographic records, Murthy states “it facilitates copy cataloguing, which is a recognized way of economical cataloguing. A library can make use of the work already done by another library by copying the bibliographic record and make a few changes to the record if needed.”

A cataloguing standard ensure uniformity of identity and means of access points such as author, title, subject terms, etc. Standards help in identifying and communicating a library’s holding and exchange data online in an integrated BTISNet. The use of different standards may work as an obstruction in identification of material and interchanging the records in electronic form. Many standards have
been developed in due course of time viz. MARC, UKMARC, USMARC, UNIMARC, for encoding the bibliographical details of documents in the database.

5.20 Formats

“A format is a method for coding information regarding bibliographical details of holdings and location to enable computers to process information for storage, exchange and retrieval.” Number of formats mentioned earlier are in use by different libraries. Among India networks, the CALIBNET is using MARC format with compatibility to the ISO-2709, the DELNET till recently used CCF format and has switched on to MARC format. It has been observed that most of the BTISNet libraries are using WINISIS. “The MARC formats are standards for the representation and communication of bibliographic and related information in machine-readable form.”

5.21 MARC 21

A new, revised and updated version of MARC has been developed and is termed as MARC 21. “The MARC 21 formats are widely used for the representation and exchange of authority, bibliographic, classification, community information and holdings data in machine-readable form.” A MARC 21 formats is a set of codes and contents designators defined for encoding machine-readable records. Formats are defined for five types of data: bibliographic, holdings, authority, classification and community information.” “The MARC 21 formats are communication formats primarily designed to provide specifications for the exchange of bibliographic and related information between systems.” Its compatibility with UNIMARC and UKMARC has been preserved. Standardized bibliographic data input, utilizing MARC formats, ensures the integrity of the online public catalogue in storage and retrieval of information. Without good, accurate MARC records; patrons cannot find the great resources in the library.
5.22 Standards for Electronic Resources

As discussed earlier, the full-text electronic databases and the various other databases available on the internet will also be the part of the collection of libraries under BTISNet. A vast quantity of data with text, graphics, sound, audio, animated videos etc, available at the internet can be downloaded easily for use. As is known the internet or networked information is fluid and interactive and is updated frequently. In order to gain effective access to electronic resources, it is essential to provide an index of available items for saving users’ time and reducing network overload. This index or catalogue should narrate the date of updating, frequency, format and accuracy of electronic resources.

The data or record about the digital sources across the network is known as metadata. Chidambaram states “In general, metadata is data about data. Specifically it is information about information.”35 “Metadata acts as a surrogate for a larger work. It characterises the original work sufficiently covering its purpose, source and condition of use. Metadata serves many important purposes including data browsing, data transfer and data documentation.” In metadata “The local information is held within the record in such a way to allow direct document delivery from appropriate application software.”36 For a creation of metadata in a uniform way, a standard metadata format is used, which is known as DUBLIN CORE. Which does the Dublin core Metadata Initiative (DCMI)? The standard metadata provides the easy format to access, retrieving and indexing the electronic resources in the proper way. It needs the standard formats, which can be used by the end user from any field to store interested website.

5.23 Stages of Networking of BTISNET libraries

It has been observed and discussed that the libraries, under study, are at different stages of automation and database creation of their holdings. In view of this, it is suggested that networking of bioinformatics centers Libraries should be taken up in three phases:
Phase I

Networking among libraries having completed their database creation viz. BI, IARI, JNU, MKU, and SP.PU, should be initiated by convening a meeting of their librarians followed by a meeting of Head of Institutions for arriving at formal consensus and agreement in this regard. The list of journals should be exchanged and rationalization of periodicals should be decided after having a preliminary discussion. The union list of holding of periodicals is exchanged between all the libraries along with the other forestry libraries of prospective institutions. The database of the library holding including books and another type of documents should be transferred to UP library being the central host for the creation of union catalogue to be made available online to the member libraries. Regular exchange of content pages of periodicals, a list of the new addition of documents, an index of articles etc. should be done. Also, ILL service and document delivery service by email should be provided ensuring maximum sincerity and consistency. Once the resource sharing and networking among the libraries become operational and librarians and user experience the benefits, the person-to-person publicity will motivate many BTISNet libraries to appreciate and join the network.

Phase II

In second phase the libraries left out in first phase along with other institutions like AU, Chennai; BU, Bhopal; PU, Pondicherry; TNAU, Coimbatore; and UC, Kolkatta; creation of union catalogue to be made available online to the member libraries. Regular exchange of content pages of periodicals, a list of the new addition of documents, an index of articles etc. should be done. Also, ILL service and document delivery service by email should be provided ensuring maximum sincerity and consistency.

Phase III

In third phase all the remaining BTISNet libraries of central and state governments and along with universities, private industries and non-governmental organizations (NGOs) working in biotechnology and interested in bioinformatics information may be included as active members of BTISNet.
It is presumed that the completion of the above phases will take about 5-6 years. It is believed that by the year 2020, the networking and resource sharing will be so common, that BTISNet libraries themselves will approach for membership and services.

5.24 Services of BTISNet

The service aspects of the network have already been discussed in chapter 4. The BTISNet, including other services as per requirements and changing needs, should provide the services mentioned therein. A mechanism needs to be devised for inclusion of changing the additional services other than usual network services.

5.25 Membership

The membership of BTISNet should be provided to any bioinformatics centre against admission fee and annual membership fee after MOU devised for the purpose. The membership fee, admission fee, terms and conditions for membership and MOU should be finalized. The leadership role may be assigned to SP. Pune University of, as it is the most developed centre.

5.26 Training facility for Library Personnel

The rapid changes, changing user needs and advancements in IT have put an assertive demand for skilled manpower to carry out the modern responsibilities and also to transform the existing libraries into electronic one. The necessity of advanced training is consistently being felt in the libraries making use of modern Information Technology (IT). It is felt that the candidates completing traditional professional courses run by various universities, generally, lack exposure and knowledge to work in IT environment. The report of working group of Planning Commission on Libraries and Informatics for the Ninth Five Year Plan, 1997-2002, clarifies, that “the content and quality of professional education imparted by these institutions is at
variance and in view of the technological developments and the need for their application in libraries and information centres need an urgent fresh look.”

In view of the existing position of manpower and present demand for IT application in libraries, the BTISNet must plan for providing regular in-service training for professionals managing these libraries. Training programmes related with database creation, assigning subject headings, maintenance of standards and qualitative services etc. should be organized. Along with technical and IT components, the motivational, ethical and psychological aspects of personnel should also be include in training programmes.

References

6. Ibid.
7. Ibid.
15. Yogendra Singh and Meera, op.cit.15.p.142.
34. Chidambaram.op.cit.32.