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NEED-BASED INFORMATION SERVICE IN BARC,

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The organisation pattern of the Library and Information Services of the Bhabha Atomic Research Centre suitable for rendering effective need-based information service is explained. The method followed for assessing the information needs of the scientists is described. The various custom-built documentation services offered to meet the specific requirements of the clientele are given in detail. It has been suggested that plans formulated should be periodically reviewed and necessary modifications be done with a view to get the best out of the system concerned.

O BHABHA ATOMIC RESEARCH CENTRE

The Bhabha Atomic Research Centre (BARC), formally inaugurated in 1957 at Trombay, is the national centre for research in, and development of, atomic energy for peaceful purposes and is the largest of its kind in the country. The basic and applied research in almost all disciplines of nuclear science and technology is carried out in the Centre. Of the total staff of 10,000, the scientific and technical personnel number over 6,500 who are the potential users of library and information services.

1 PLANNING OF THE LIBRARY & INFORMATION SERVICES (L & IS)

The philosophy which governed the planning of the Library & Information Services is that it should be a

completely integrated service under a single administrative control to ensure its smooth and effective working to fulfil its basic functions. It should also be equipped with at least the minimum of the facilities needed and meet fully the information needs of the BARC scientists and engineers., Consequently, L & IS has been organised to conform to this philosophy as illustrated in the organisation chart at Appendix I. Presently, there are 110 persons working in L&IS, of which 12' scientific and technical persons are deployed in documentation and information work.

2 INFORMATION RESOURCES

As illustrated in the organisation chart, the L & IS are closely integrated. In fact, the Technical Information Unit (TIU) draws upon the resources of the library. The Central library. Depository library and Divisional Libraries have large collections of comprehensive information resources, At present, the library has some 48,000 books, 23,000 bound volumes of periodicals and receives 1,500 scientific and technical periodicals. The Depository library has over 225,000 technical reports to which some 20,000 new reports are added every year. This vast collection of information sources, by any standard, can be considered as an authoritative source in the field of nuclear science and technology-

3 SCOPE OF PAPER

In this paper, an attempt is made to emphasise the need for periodical evaluation of the services rendered, with the objective of improving them or planning new services based on the users requirements.

4 ASSESSMENT OF THE USER'S NEED

As the primary objective of L & IS is to render effective information service based on actual needs of the scientists and researchers, a study was undertaken to understand the extent of the demand for information in different fields of activity in BARC , One of the advantages of doing information work in *en* environment wherein actual research work is carried out is that, the information staff is constantly exposed to the information needs of the individual research worker. Another point to note is that L &. IS is also responsible for editing and publishing the technical information generated by the scientists in the form of technical reports. Consequently, the information flow channels are so well organised that keeping abreast of the latest developments in any field of activity in BARC is rendered easy. The data thus collected have provided the following important clues for formulating a general policy towards rendering an effective information service to the scientists of BARC :

(a) Considerable research and development work is in progress in designing power reactors for producing electricity economically. Hence, increasing need is being felt for published literature on the design and construction of power reactors and the economics of power generation.

(b) Developments in the field of electronics in India have been spectacular during the last few years. Consequently; information regarding electronics instruments and gadgets published in trade literature, product news, technical notes, etc is in great demand.

fc) Information about national and international conferences/symposia/meetings/seminars is always

sought by the scientific community.

(d) Review articles and newspaper reports on topics of general interest supplement other information sources.

(e) Current information on applied aspects of nuclear science and technology (radiation chemistry, radiation biology, radioisotope applications, nuclear medicine, etc) are published in a variety of information sources,

(f) Due to the vastness of the Centre, intercommunication between the various groups/divisions is not facile. Hence there is a feeling amongst the scientists to bridge this gap to keep themselves aware of the related activities going on in other divisions.

5 DOCUMENTATION SERVICES

Based on the above clues regarding the information requirements of the scientists, the Technical Information Unit (*TITS*) of the X & IS has designed about eight custom-built information services. The following sections describe a few such documentation services being operated at present and the ones planned for the future.

51 Current Awareness Service on Reactors and Nuclear and Neutron Physics

This is published monthly to provide current information on reactor engineering and related fields, including nuclear and neutron physics. The bulletin contains a list of reference's selected after scanning regularly more than 100 journals for the purpose. The entries are arranged according to conveniently chosen subject headings and contain, important keywords and topical headings selected from the text of the paper.

The keywords and the topical headings help to replace the need for an abstract of the paper; further these terms could be used for retrieval purposes. The keywords, along with the topical headings themselves, describe the subject content of the paper. The bulletin also contains author index and list of journals referred.

As a supplement to the above bulletin, whenever any important conference/symposium/meeting, organised by the Department of Atomic Energy is held, a special bulletin entitled "Current Programme" is issued containing a list of papers to be presented therein primarily for the benefit of scientists not participating in the seminar.

52 Current Titles in Nuclear Science and Technology

This current awareness service, introduced recently, is issued bimonthly. The compilation is based on the reference cards received from the Eidgenössische Technische Hochschule, Zurich, Switzerland. From these cards, references falling within the scope of nuclear science and technology (excluding reactor science and engineering) are selected for inclusion. These cards are used directly for xerox-cum-offset printing to save time on typing and corrections. The references thus cited in the bulletin are readily available in the Library for use. The service is gaining popularity among the users.

53 Nuclear Information Bulletin

This is a comprehensive service catering to a variety of clientele and is the most sought after service in BARC and is issued quarterly with the twin objectives of highlighting the research and development

activities carried out in various divisions of BARC and to focus on the significant developments taking place all over the world in the field of atomic energy. In order to achieve these objectives, the bulletin contains the following chapters tailored to suit the convenience of the users:

- 1 Bhabha Atomic Research Centre
- 2 Information from abroad
- 3 Technical notes
- 4 Instrumentation
- 5 Seminars and symposia
- 6 Abstracts of scientific papers published in Indian journals -
- 7 Abstracts of BARC technical reports under publication
- 8 Documentation list of scientific articles published in various Indian and foreign newspapers.

The information for this bulletin is collected from various sources such as the annual report of DAE, project reports brought out by various divisions of BARC, journals, newsletters, news releases and annual reports issued by other organisations, trade literature, pamphlets, etc.

The uniqueness of this bulletin is that it is not just another documentation list giving a list of references. Each chapter is designed to serve a specific purpose. For instance, chapter 3. Technical notes, purports to give advance information about the development work in progress, alerting the scientists to expect more information on the subject in future issues.

54 Seminar Bulletin

This is a weekly publication intended for announcing seminars/colloquia/lectures organised by the various divisions of the Centre in Trombay. This bulletin helps to give wide publicity to such activities and ensures better participation.

55 Bibliography of Current Report (BCR)

This is a monthly publication. The purpose of this service is to bring to the notice of the readers the latest additions of scientific and technical reports to the Depository Library. The reports are received from various atomic energy organisations in the world on bilateral publications exchange arrangements. This bibliography is produced on computer. The entries are arranged under broad subject headings. Keywords chosen from INIS thesaurus are also given for each entry. The data are cumulated and updated on a master magnetic tape which can be used for retrieval as and when required.

56 INIS Atomindex

This is one of the by-products of the International Nuclear Information System (INS), published by the International Atomic Energy Agency (IAEA), Vienna. INS is a computer-based nuclear information system sponsored by the IAEA and jointly operated by its Member States. Atomindex contains bibliographic details of merged input items submitted by the participating nations and organisations in the project. This publication is issued twice a month. Also, the data is made available on computer tapes for those

who want to use the same for providing local information services, India is one of the participating countries in the project and the L & IS is solely responsible for discharging all the obligations accruing in this regard. BARC being the national research centre in the field of atomic energy, it is obligated to extend its information services and resources to other research organisations, national laboratories, universities, institutes, etc in this country. Hence, as a part of this obligation, besides distributing various information products,, Atomindex received from the IAEA is reproduced through Jerox-cum-offset process and distributed to various organisations in the country, particularly those interested in nuclear science and technology.

57 Ready Information Service

Often, repeated queries are received on current topics and important events. In such cases, in order to avoid repeated searches involving considerable time and labour, ready information service has been introduced. The basis of this service is that in anticipation of a query, topical interest profiles are prepared containing comprehensive data on the subject in response to a specific need. For example, at present the following important topical files are maintained;

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|---|--------------------------------------|
| (a) Nuclear power generation in the world | (d) Nuclear power programme in India |
| (b) Power reactors in different countries | (e) Fusion by laser |
| (c) Peaceful uses of atomic energy | (f) Health safety and pollution |

- (g) Nuclear waste management
- (h) Breeder reactors
- (i) Magnetohydro dynamics

58 Selective Dissemination of Information (SDI)

At present, a manual SSI service is being operated. A user's profile, giving the name of the person, his address and the field of his interest is maintained. Immediately on receipt of the publications, they are scanned by qualified documentalists for their contents and matched for the subject interest ... defined in the user's profile and relevant ones are sent to the user for his immediate use.

The L & IS is in the process of expanding its documentation activities and has future plans to make its services one of the best organised and useful in the world.

6 CONCLUSION

As the primary aim of any Information System is to render effective information service to the scientists and researchers based on their actual needs, a periodical evaluation of the service given by the system is essential. Most often, this aspect is neglected or not taken care of in the planning process. This results in a situation wherein the system concerned is unable to achieve its objectives, in spite of the formulation of good plans at the initial stage. It is therefore suggested that plans formulated should be periodically reviewed and necessary modifications done with a view to get the best out of the system concerned.

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8 BIBLIOGRAPHICAL REFERENCES

- 1 KAMATH (V A), Nuclear libraries and services, including small centres in developing countries: The Indian nuclear library and information service. (Presented at the 'Symposium on Handling of Nuclear Information', 16-20 Feb. 1970; Vienna) .
- 2 RAGHAVENDRA (M K) and KAMATH (V A). Dissemination of current scientific and technical information in the BARC, (Presented at the INSDOC Seminar on Work-flow in Special Libraries, University Libraries and Government Libraries, 21-24 Nov 1966; New Delhi) .

ORGANISATIONAL CHART OF BARC

DEPARTMENT OF ATOMIC ENERGY
 BHABHA ATOMIC RESEARCH CENTRE
 LIBRARY & TECHNICAL INFORMATION CENTRE

