

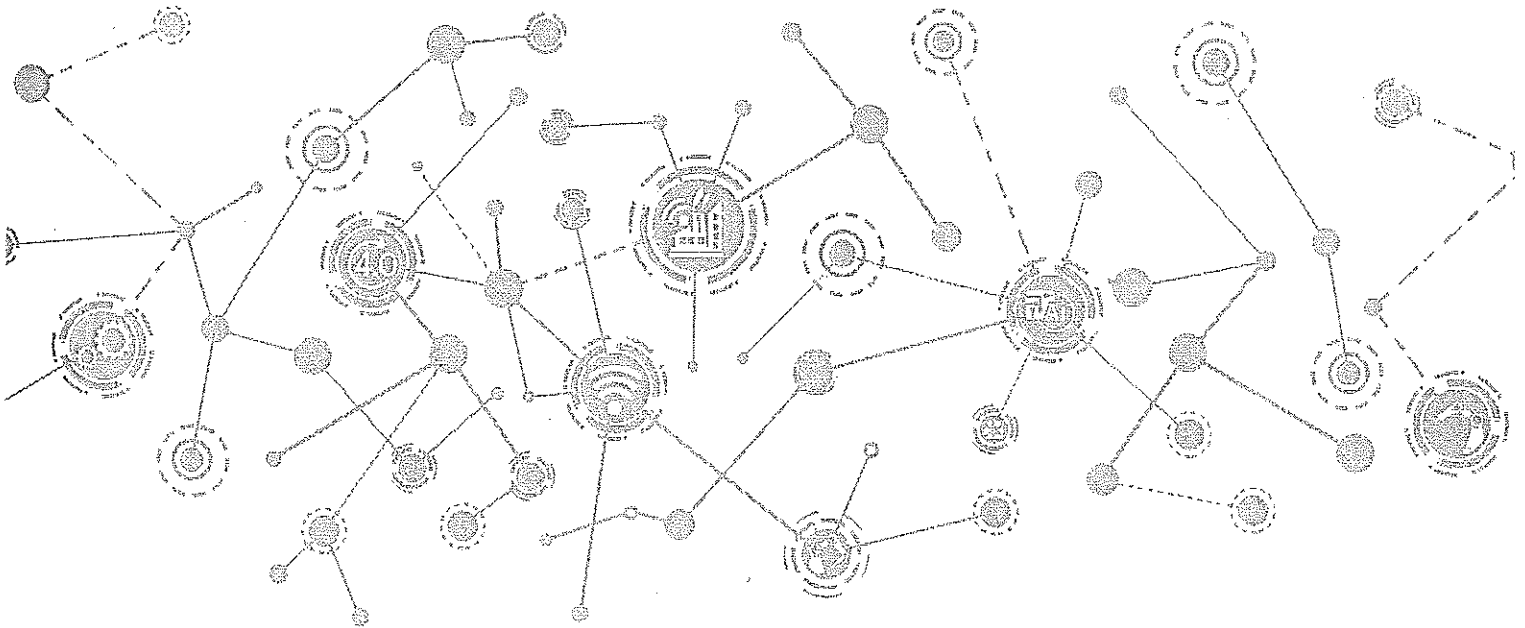
ICDL 2019

International Conference on Digital Landscape
Digital Transformation for an Agile Environment

November 6-8, 2019 | New Delhi

CONFERENCE PAPERS

ORAL PRESENTATION



Partners



Knowledge Partners



© The Energy and Resources Institute, 2019

No part of this publication can be reproduced in any form or by any means without the prior permission of the publisher.

Note

The papers included in this publication have been directly reproduced, with minimum editorial intervention, from the files sent by the respective authors. This publication includes papers received by the organizers up to November 2019.

ISBN : 978-81-7993-698-6



Published by

TERI
Darbari Seth Block
IHC Complex, Lodhi Road
New Delhi – 110 003
India

For copies, please contact

TERI Press
The Energy and Resources Institute
Darbari Seth Block
IHC Complex, Lodhi Road
New Delhi – 110 003
India

Tel. 2468 2100 or 2468 2111
E-mail teripress@teri.res.in
Fax 2468 2144 or 2468 2145
Web www.teriin.org
India +91 • Delhi (0) 11

Printed in India

CONTENTS IN DETAIL

Foreword ...xvii

Nitin Desai

Message from Director General ...xix

Ajay Mathur

Preface ...xxi

P K Bhattacharya and Shantanu Ganguly

ICDL 2019 Conference Committee ...xxiii

Keynote Speech...3

Nikhil Seth

Invited Papers

Smart Machines...11

Prakash Ambwani

Facilitating FAIR data sharing in Dataverse Repositories....12

Sonia Barbosa

Evolving Roles of Libraries and Librarians to meet the 21st Century Challenges...13

Dilara Begum

Open Data Behind Bars – Does the Unfamiliarity with Data Protection Regulations Prevent the Publication of Research Data?...14

Katarzyna Biernacka

Libraries Unlimited Supporting the SDG's in Bangladesh ...18

Kristy Crawford

GDPR Readiness: The TCS Information Resource Centre (IRC) Approach and Experience...20

Dhanashree Date

Libraries in Disaster Management of Bangladesh: A role model for reducing vulnerabilities....21

Md. Nasiruddin Dean

2. Digital Library Standards and Policy

Open Standards and Protocols for Sustainable Digitization, Preservation and Retrieval...247

Akhilak Ahmad and Swadesh Sharma

Design and development of Digital archives for bio-bibliographic Representation...256

Meera B M and Vani Hiremath

3. Information Retrieval

Digital Content Research and Migration: a case study with biggest reality company of India (DLF)...269

Pravin Kr Choudhary and Mahesh Mathur, Rupesh Mane

An analytical study of level of awareness of patrons of information services provided via information communication technology in university library and information centres of Delhi and NCR...276

Rajni Jindal, Javed Khan and Projes Roy

E-Resource Selection Process at Libraries in Bangladesh: A Study...304

Mitul Nasiruddin, Md. Nazmul Islam and Sugoto Chakma

4. Digital Library Services and Case Studies

Implementation and Application of Six Sigma in Libraries...319

Purbi Dey Kanungo

✓ **Global Challenges for Library Consortium: An Analytical View with DeLCON Consortium...331**

D. D. Lal

Perception of users and library staff towards effective library service quality: A survey...348

Priya Vaidya, Azra Aftab and P. M. Naushad Ali

A Study on student utilization of Silent and Independent Library study space in Ansal University Gurugram...357

Upasana Yadav

5. Ontology, Interoperability and Semantic Web

Research data management services in Technical University libraries of Odisha: a study...375

Sanghamitra Dalbehera

Study on Design of Ontology Approach for Improving Record Keeping Systems in a Document Management System...392

Alok Nikhil Jha and Pravin Kumar Choudhary

Global challenges for library consortium: An analytical view with DeLCON Consortium

D. D. Lal

DeLCON Coordinator, DBT's Electronic Library Consortium (DeLCON), Department of Biotechnology, Ministry of Science & Technology, Govt. of India, National Brain Research Centre, NBRC, NH-08, Manesar, Dist- Gurgaon, Haryana. Pin- 122050,
(E) ddlal.delcon@nic.in; ddlal.g@gmail.com

In current scenario, it has been very difficult for the libraries to procure, subscribed & provide all the resources required by their users due to the funds lacking and costly information & resources. The immediately resolution to the above problem is library consortium exclusively in relevant to the electronic resources. Several initiatives steps have been taken in India for the setup of library consortia. Various library consortia in India are doing quite well and many libraries are benefited and at the same time library consortiums are having various issues & problems. Problems & issues for consortium such as interruption of online access, perpetual access to back issues, pricing, licensing, copyright and archival solutions etc. are identified and need to be deliberately undertaken and well addressed to get the best out of the Library consortia.

The paper describes about the problems, challenges & issues of the DBT's Electronic Resources Consortium (DeLCON).

Keywords

Consortia; Resource Sharing; Networking, Electronic Journals; Problems, Challenges, Issues, Library Cooperation & Cooperation; DeLCON

Introduction

The consortia is an association among various libraries to accomplish a common objective, i.e. to improve services and facilities for the users. The definition of Consortia is given in the Cambridge Dictionary as "Consortia" meaning several libraries/special libraries joining hands together to achieve their objectives and goals. The consortium are a group of libraries joining hands together to achieve a common objective & goal of information services.

The information explosion through print; non-print and special resources gain much responsibility through the rising world literature, to store organized generate and broadcast massive amount of information is a current challenge to the libraries and information centres. The libraries cannot equip with the latest sources of information due to the irregular mounting print and non-print materials. The traditionally library services, and facilities Increased user needs; Low library budget provisions, and Increase spiral of library costs.

Never get the user satisfaction, and can't equip with latest sources of information. Previous studies print out that the growth of average academic library collections, increasing in size, and its total expenditures have been also increased more than doubled.

The efficiency and the existence of libraries are completely depending upon their capability to combat rising costs and to provide increased services. This implies that resource sharing and cooperation is important.

The resource sharing in new ways now made possible by advances in computer and communication technologies. But substantial cost saving from resource sharing requires also the communication between libraries that computer networks provide. The advances in networking technology has the potential to offer lower unit costs and strengthen services, with the cooperative efforts of a group of libraries.

Benefits have also been resulted from the introduction of technology into individual libraries. And it is only when collaboration is combined with technology as in the case of computer networks, and the total outcome, expectable may be significant.

The technology and the art of networking are current developments in computer networking must be acknowledged as an important step in the cooperation and resource sharing. The resource sharing and networking is an actual substitute to be given serious consideration.

Library consortium is a network (a steady) of at least two libraries which have formally consented to work together, synchronize, compose, participate or unite certain capacities to accomplish joint targets. As per Oxford Dictionary, consortium implies transitory relationship of various nations, foundations, associations, organizations, banks and so forth for a typical reason. The term is currently utilized perhaps too extensively, and incorporates everything from formal lawful items, (for example, consolidated or administrative organizations) to casual gatherings that meet up only to accomplish better estimating for obtaining electronic data.

Regardless of definitions and implications, the hidden motivation continues as before: the sharing of progressively costly library assets in the most financially savvy way for common advantage and general cost reserve funds. There are several library consortia around the globe arranged along a wide range of lines.

Joint effort between foundations for sharing their library assets is being polished for a considerable length of time. Customarily, the basic role of establishing a consortium is to share physical assets including diaries/periodicals and books among individuals. Nonetheless, the method of collaboration has under run a change with implantation of new data innovation from customary (print-based) condition to advanced condition. The presence of Internet, especially, the World Wide Web (WWW) as another media of data conveyance activated proliferation of Web-based full-content online assets. Expanding number of distributors are utilizing the Internet as a worldwide method to offer their productions to the universal network of researchers. The innovation gives an unparalleled media to conveyance of data with more prominent speed and

economy. The libraries and data focuses, as overwhelming buyers of electronic diaries and online databases, remain to profit extraordinarily from this innovation driven insurgency.

Joint membership or consortia-based membership to electronic assets through the consortia of libraries, on one hand, licenses fruitful arrangement and work area access to electronic assets at profoundly limited rates of membership and then again, it meets with the expanding weights of reducing spending plan, expanded client's interest and expanding cost of diaries. The library consortia, based on absolute quality of the quantity of foundations, offer sound business development chances to the electronic distributors and along these lines draw in the most ideal cost and terms of assentions.

Benefits of Consortium for Libraries

There are various advantages of consortium for libraries, for example, Resources Sharing – Access to non-bought in diaries, plausibility for electronic documents positively for future, accessibility of utilizations measurements, better discount on account of joint-subscriptions, reduced storage costs, ability to develop joint resource databases, effective document delivery systems via single inter face, enhanced search facilities, scope for union catalogue preparation and benefits arising out of larger scale of process.

Growth and Future of Library Consortia

The huge data upset and expansion have achieved extraordinary changes to the capacity and administration in a wide range of libraries in India amid most recent two decades. Numerous libraries in India till today are not in a situation to stand to gain all records and buy in to basic diaries in real trains. Following are Scenario for the Library consortia development in India for e-Journals subscription.

In India, the biggest academic library consortium was the UGC-INFONET with a membership of 142 Universities. The largest science, engineering & technology consórtium in the country was the INDEST (Indian National Digital Library in Engineering Sciences and Technology), which was funded and fueled by the Ministry of Human Resource Development (MHRD), Government of India. INDEST was had 120 Institutions participating members in it. There were Indian Institute of Management (IIMs) Consortium, Indian Institute of Science Education & Research (IISERs) Consortium, which were also funded by MHRD, Govt. of India.

By and by, the most recent and biggest Library Consortium is 'e-Shodh Sindhu', which was molded by Ministry of Human Resources and Development (MHRD) with converging of these significant library consortia, to be specific UGC-INFONET Digital Library Consortium, NLIST, ISSERs, NITs, IISCs, IIMs and INDEST-AICTE Consortium. The 'e-Shodh Sindhu' is giving current just as recorded access to in excess of 15,000 center and companion evaluated diaries and various bibliographic, reference and truthful databases in various controls from an extensive number of distributors and aggregators to its part organizations including unified supported specialized foundations, colleges and universities that are secured under 12(B) and 2(f) Sections of the UGC Act.

The 'eSS consortium' currently providing access to current and archival 15,000 e-journals and databases and extending the benefit to 139 – State universities, 40 - central universities, 22 – deemed universities, 15 - law universities, 6 of IUCs of UGC, 72 – AICITE funded colleges, 4000 colleges and IITs, IIMs, IISc etc. Available in the e-Shodh Sindhu Collection 1,35,000 e-Books, 40 Resources, 16 databases and 15000+ electronic resources.

At present, there are many other Library Consortium working at national level (e.g. NKRC-CSIR (National Knowledge Research Consortia) Consortium, DAE (Department of Atomic Engineering) Consortium, DRDO Consortium, DeLCON Consortium, HELINET (Health Sciences Library and Information Network) Consortium, FORSA Consortium for the Astronomy & Astrophysics Library, MCIT (Ministry of Communication and Information Technology) Library Consortium, ISRO (Indian Space Research Organization) Consortium, ERMED Consortium, CeRA Consortium, Rajiv Gandhi University of Health Sciences and the ICICI etc.). A number of regionally focused (some as in metropolitan areas e.g. ADINET in Ahmedabad, and PUNENET in Pune) and city level consortia are also scheduled to occur, having been convinced of the success rates of the ongoing library consortia in the Country.

There are a limited consortia in India being operated by different organizations. Some of them are as given below:

- e-ShodhSindhu Consortium : Consortium for Higher Education (Website: <https://www.inflibnet.ac.in/ess/>)
- UGC-INFONET Consortium [Website ://www.inflibnet.ac.in] (Now merged with eSS)
- INDEST Consortium (Indian National Digital Library in Science and Technology) [Website://paniit.iitd.ac.in/indest/] (Now merged with eSS)
- DRDO Consortium (Defence Research and Development Organization) [Website : <http://dsl.drdo.gov.in/ejournals/index.htm>]
- DeLCON Consortium (DBT's Electronic Library Consortium) [Website : <http://delcon.gov.in>]
- NKRC Consortium (National Knowledge Resource Centre) / CSIR e-Journal Consortia, [Website : <http://nkrc.niscair.res.in/>]
- FORSA Consortium (Forum for Resource Sharing in Astronomy) [Website : <http://www.iiap.res.in/library/forsa.html>]
- IIM Library Consortium [Website : <http://www.iimb.ernet.in/>]
- ICICI Knowledge Park Consortium [Website : <http://www.iciciknowlwdgepark.com>]
- DAE Library Consortium [Website : <http://www.tifr.res.in/~libws/>]
- ICMR Library Consortium [Website : <http://www.jccc-icmr.informindia.co.in/about/about.asp>]
- HELINET Consortium (Rajiv Gandhi University of Health Sciences, Karnataka) [Website : <http://www.rguhs.ac.in/>]

Establishment of DeLCON

The setting up of a different Department of Biotechnology (DBT), under the Ministry of Science and Technology in 1986 gave another impulse to the improvement of the field of present day science and biotechnology in India. In excess of a period of its survival, the division has advanced and quickened the pace of improvement of biotechnology in the nation. Through a few R&D activities, showings and making of infrastructural offices a reasonable unmistakable effect of this field has been seen. The division has made significant accomplishments in the development and utilization of biotechnology in the wide territories of farming, medicinal services, creature sciences, condition, and industry.

To meet the developing R&D data prerequisites of the DBT Institutes, the DBT's Electronic Library Consortium (DeLCON), a noteworthy task of the Department of Biotechnology (DBT) to acquire subjective modification its examination foundations was propelled in January 2009. It is a national activity for giving access to academic electronic assets including full-content and bibliographic databases in all the existence science subject controls to DBT organizations in the nation to enhance instruction through educating, learning and research.

The entrance to all real e-Resources was given to 10 DBT Institutions in the start of the year 2009. It was reached out to 17 more DBT Institutions in the second stage in the year 2010 and another 7 individuals were included the third stage the year 2011. The DeLCON gives current just as chronicled access to in excess of 917 center and friend checked on diaries in various controls from 20 distributors and some of aggregators and one bibliographic database (SCOPUS).

The resources, researchers, analysts, understudies and task aides of foundations secured under DeLCON are the essential recipients. DBT supports the whole costs for DBT associations for giving e-diaries access through DeLCON. The 34 part foundations of DeLCON is given in Table1.

The DeLCON Consortium currently contains the following 34 Institutions in Table- :

Table 1 : Covered Members of the DeLCON Consortium

Name of Institutions	Place / City	State	Country
National Brain Research Centre	Manesar	Haryana	India
Department of Biotechnology	New Delhi	Delhi	India
National Institute of Plant Genome Research	New Delhi	Delhi	India
National Institute of Immunology	New Delhi	Delhi	India
National Centre for Cell Science	Pune	Maharashtra	India
Institute of Life Sciences	Bhubaneswar	Orissa	India
Institute of Bioresources and Sustainable Development	Imphal	Manipur	India
Centre for DNA Fingerprinting and Diagnostics	Hyderabad	Telangana	India

Rajiv Gandhi Centre for Biotechnology	Thiruvananthapuram	Kerala	India
International Centre for Genetics and Engineering Biotechnology	New Delhi	Delhi	India
Biotechnology Industry Research Assistance Council	New Delhi	Delhi	India
National Agri-Food Biotechnology Institute	Mohali	Punjab	India
National Institute of Biomedical Genomics	Kalyani, Kolkata	West Bengal	India
National Institute of Animal Biotechnology	Hyderabad	Telangana	India
Dibrugarh University	Dibrugarh	Assam	India
Assam University	Silchar	Assam	India
North Eastern Regional Institute of Science & Technology	Nirjuri	Arunachal Pradesh	India
North East Institute of Science & Technology	Jorhat	Assam	India
Mizoram University	Aizawl	Mizoram	India
D. M. College of Science	Imphal	Manipur	India
Sikkim University	Sikkim	Gangtok	India
College of Veterinary Science Assam Agricultural University	Khanapara, Guwahati	Assam	India
St. Anthony's College	Shillong	Meghalaya	India
Gauhati University	Guwahati	Assam	India
Manipur University	Imphal	Manipur	India
College of Veterinary Science & Animal Husbandry Central Agricultural University	Aizawl	Mizoram	India
Rajiv Gandhi University	Doimukh	Arunachal Pradesh	India
Nagaland University	Lumani	Nagaland	India
North-Eastern Hill University	Shillong	Meghalaya	India
Indian Institute of Technology Guwahati	Guwahati	Assam	India
Regional Centre for Biotechnology	Gurgaon	Haryana	India
Tezpur University	Tezpur, Sonitpur	Assam	India
Transnational Health Science & Technology Institute	Gurgaon	Haryana	India
Sikkim State Council of Science and Technology	Gangtok	Sikkim	India

As far as number of clientele, the DBT's Electronic Library Consortium (DeLCON) is the biggest Consortium in India in the term of Life Sciences and Biotechnology Subject zone with a

dream and plan to connect with all DBT Institutions offices, Research Institutions, Universities, and their schools subsidiary to the DBT, over some undefined time-frame.

Need of DeLCON Consortium

Prickly issues like contracting spending plans, developing supporter requests, increasing expenses of books and periodicals prompted the crystallization of such an idea for the Library and Information Systems. The main role of Library Consortium is to share data assets, which implies the Books, Periodical, e-diary, digital books so, etc. Advances in Computer, data and media transmission advances have changed the manner by which data is obtained, put away, got to and exchanged. Sharing electronic assets has quickly turned into another critical objective for library consortia.

Clients of Library and Information Services Systems of Biotechnology are generally spread all through India and situated in various areas. Various innovative work works are going on routinely and the clients require every day refreshes. Howsoever, they get the data after a major hole of time in the printed version frame.

Objectives of DeLCON Consortium

The primary goal of the DBT's e-library Consortium (DeLCON) is to give access to subjective electronic assets including full-content and bibliographic databases to DBT foundations at lower rates of membership. The significant points and destinations of the DBT's e-Library Consortium (DeLCON) are as per the following:

- To give access to high caliber and academic electronic assets to an expansive number of DBT foundations including research organizations, colleges and schools at considerably bring down rates of membership and at most good terms and conditions;
- To advance correspondence and between library collaboration among the taking an interest DeLCON individuals;
- To assess the utilization of the bought in assets and to recognize new assets that are required to be bought in under DeLCON;
- To acquire subjective change instructing, learning and research with an expect to address the consistently developing difficulties of globalization of advanced education;
- To increment the exploration productivity of the establishments both as far as quality and amount of distributions.
- To advance expedient and effective access to insightful substance to the clients and to make and advance utilization of DeLCON in instructing and learning in research associations, colleges, and schools in India;

- To stretch out the benefit of Consortium to its partner individuals;
- To bestow preparing to the clients, custodians, look into researchers and employees of the organizations being used of electronic assets with an intend to upgrade their use; and
- To advance utilization of e-Resources with steady decline in print membership;

Highlights of DeLCON

The consortia-based membership to e-Resources is a doable answer for rising the entrance to electronic assets crosswise over DBT establishments at a lower rate of membership. Significant advantages of DeLCON are as per the following:

- The DeLCON goes about as a solitary window benefit for countless Institutions with their different research and scholastic intrigue;
- The DeLCON, with its aggregate quality of taking an interest organizations, pulls in exceedingly limited rates of membership with most great terms of assention for a more extensive scope of e-Resources. The majority of the e-distributers have reacted decidedly to the call of the Consortium. The rates offered to the consortium are bring down by 60% to 99% contingent on the classification of DBT organizations;
- The DeLCON is relied upon to trigger stunning increment in sharing of electronic assets among taking an interest DeLCON individuals;
- The inquire about effectiveness of DBT establishments is relied upon to advance with expanded access to global full-content assets (diaries and databases);
- Users have quick access to material prior not bought in to, at no gradual expense for getting to back documents;
- It enhances the current library benefits and decreased the membership cost;
- The DeLCON has been opened-up to include more DBT organizations through its next period of augmentation and other DBT establishments can likewise join the DeLCON and get the advantage of very limited rates of membership as well as the good terms and conditions;
- The DeLCON is offered better terms of understanding for use, chronicled access and preservation of bought in electronic assets, which would not have been workable for any single establishments;
- Members of the DeLCON have the advantage of top on the yearly increment in the rates of membership. While the typical increment in cost of e-Resources differ from 15 % to 20%, yet the DeLCON individuals have the top on increment in cost extending from 5% to 7%; and

- Since the bought in assets is open online in electronic organization, the DBT foundations have less weight on space necessity for putting away and overseeing print-based library assets. In addition, all issues related with print media, for example, their mileage, area, racking, official, sorting out, and so forth are not an issue for electronic assets.

e-Resources under DeLCON Consortium

The DeLCON buys in to e-Resources covering most critical life science and biotechnology subject controls being educated in the DBT explore organizations, colleges and schools. It incorporates wide assortment of materials for example e-diaries, bibliographic databases, surveys distributed by insightful social orders, college presses, institutional and business distributors. Right now the DeLCON acquires in to 1172 full-content e-resources and 01 bibliographic database from 22 famous International distributors and some of aggregators. The part foundations are given differential access to these assets dependent on their requirements and movement profile according to the suggestion of the National DeLCON Steering Committee. The complete list of full-text resources (e-Journals) and bibliographic databases subscribed under the DeLCON is given in Table 2.

Table 2 : Covered Journals under DeLCON Consortium

Sl.	Name of Publishers / Journals	Hyperlink of the publishers Website	Covered Journals
1	American Association for Advancement of Science	http://www.sciencemag.org	(3 Journals)
2	American Association for Cancer Research	http://www.aacr.org	(9 Journals)
3	American Chemical Society	http://pubs.acs.org	(47 Journals)
4	Annual Reviews	http://www.annualreviews.org	(23 Journals)
5	American Society for Biochemistry and Molecular Biology	http://www.jbc.org	(2 Journals)
6	American Society For Microbiology	http://www.asm.org/	(17 Journals)
7	Cold Spring Harbour Laboratory Press	http://www.cshl.edu	(4 Journals)
8	Informa Healthcare / Taylor & Francis	http://www.informaworld.com	(40 Journals)
9	Lippincott William & Wilkins/ Wolter Kluwer	http://ovidsp.ovid.com	(11 Journals)
10	Marry ANN Liebert	http://www.liebertonline.com	(92 Journals)
11	Nature Publications	http://www.nature.com	(36 Journals)
12	Oxford University Press	http://www.oxfordjournals.org	(22 Journals)
13	Springer	http://www.springerlink.com	(339 Journals)
14	Society for General Microbiology	http://mic.sgmjournals.org	(3 Journals)
15	American Society for Hematology	http://bloodjournals.hematologylibrary.org	(1 Journal)
16	Wiley-Blackwell	http://www3.interscience.wiley.com/cgi-bin/home	(84 Journals)
17	Elsevier Science	http://www.sciencedirect.com	(432 Journals)
18	American Society of Plant Biologist	http://www.aspb.org/	(2 Journals)

19	American Association of Immunologist	http://www.aai.org/	(1 Journals)
20	Scopus Database	http://www.scopus.com	(1 Database)
21	The New England Journal of Medicine	http://www.nejm.org	(1 Journal)
22	Proceedings of National Academy of Sciences	http://www.pnas.org	(1 Journal)

Table 2. explain about the List of Publishers, Link of their website and covered number of Journals

Selection processes of resources under DeLCON

So as to comprehend the assemblage base in DBT part organizations, gatherings of DBT Directors and DeLCON Nodal Officers were held in various parts of the nation and their perspectives and inputs were acquired. The print and online gathering base accessible in DBT examine establishments libraries and their needs were overviewed with an expect to perceive and decide e-Resources to be bought in under the DeLCON. In view of the inputs got from DBT individuals, e-Resources of different distributors were perceived and assessed before arranging permitting courses of action. Keeping in view the variety of research programs sought after by DBT organizations, each endeavor was made to buy in to e-Resources that are multidisciplinary in nature with wide extension and inclusion.

All e-Resources were assessed for their i) subjective and quantitative substance; ii) inclusion; iii) their accessibility on various stages and their relative focal points/disservices; and iv) rates pertinent for these assets to singular foundations just as to other consortia.

The electronic assets proposed for consortia-put together membership were chosen based with respect to the accompanying real criteria:

- Resources from academic social orders, college presses and not-revenue driven ventures were favored over business distributors;
- Well-set up multi-disciplinary assets with wide inclusion were favored over exceedingly concentrated sources focused for authorities;
- Electronic assets as of now on membership in the DBT inquire about Institutions were favored over those which are not being utilized in any of them;
- Resources that are 'electronic-just' were favored over those that are print-based;
- Resources that are imperative yet exceedingly cost-escalated were favored over those which are less critical or less-utilized yet minimal effort;
- Resources where electronic forms are made accessible free on membership to their print renditions were kept away from beyond what many would consider possible; and
- Selections were made on utilization/reasonableness of e-Resources to DBT Institutions.

Subject inclusion under DeLCON

The DeLCON secured all the branches of knowledge falling under life-sciences, microbiology, physiology, brain science, biotechnology, bioinformatics, natural chemistry, chemical biology, computational science, cell science, cell biology, immunology, neuroscience, plant genome, plant science, physiotherapy, psychotherapy, gene, genome, genetics, mathematics, material science, radiology, medicines, computational neuroscience, system neuroscience and so on.

Procurement Process of e-Resources under DeLCON

The electronic assets got ready for membership are perceived, recommendations welcomed from the distributors of e-Resources/their approved delegates. The distributors and their delegates are likewise welcomed for formal arrangements on their items and administrations. In the developmental long stretches of the DeLCON, the 'DeLCON Steering Committee' arranged the most reduced rates of membership and good terms of understanding.

Transaction for membership to e-Resources perform by a Negotiation Committee which established by the Department of Biotechnology (DBT) according to the buy arrangements and the guidelines.

While the DeLCON Steering Committee takes arrangement choice concerning consideration of part establishments, e-resources, and so forth the Negotiation Committee is responsible for arranging rates of membership to e-Resources with different distributors for all DBT Institutions. When e-resources and members from DeLCON are settled, the DeLCON submitted the request for membership for e-Resources to the distributors according to the purchase rules. The DeLCON is likewise responsible for consenting to permit arrangement in the interest of the quantity of DBT Institutions secured under the DeLCON. The DeLCON underpins the hierarchical administration of Consortium from National Brain Research Center, Manesar.

Operational Execution of DeLCON Consortium

The DBT Institutions have been completely financed by DBT for availability under DeLCON and will have organize network. Singular Institutions will at that point have special static IP address through which get to is given by the distributors for which memberships made. Anyway whole program will be regulated, checked and kept up by 'DeLCON Nodal Center (NBRC)' and 'DeLCON National Steering Committee'..

Website of 'DeLCON Consortium': <http://delcon.gov.in>



Issues & Challenges of DeLCON Consortium

The following Issues & Challenges occurred during the constitution of DeLCON Consortium and the DeLCON Consortium dispensed with these problems:

- Funding and Budget issues
- Cost / Pricing issues
- Payments related issues
- Access Issues
- Perpetual Issues
- Archival right issues
- Resources identification
- Print-Independent Subscription
- Licensing and copyright issues
- Limitation for Price Increase / Annual Cap Limitations
- Usages and usability issues
- Sustainability issues
- Technology infrastructure
- Training & Awareness Issues
- Egos & Attitudes
- Synchronization among partners
- Efficient staffs availability
- Overcoming with the political objections

Major Challenges

Budget & Funding Issues

Establishing the DeLCON Consortium which required enough budgets that can be devoted to cover the total operation costs among the cooperating libraries, this include funds to purchase new reading materials, library software's, training of library staff and the users, cost relating to the maintenance of the equipment such as computers, scanners, printers, and subscription funds to enable users and staff of the member libraries to have access to various e-journals published all over the world. This has been the serious challenge towards the formation of DeLCON Consortium among the DBT member Libraries.

Pricing Issues

There are no standard practices or strategies being trailed by larger piece of the distributors of scholarly composition and subsequently this is a foggy territory all together. The distributors have distinctive arrangement of activity and assessing for their advantages. Distributers are invited for courses of action and asked for to offer their best expenses to the consortia. Different methods for esteeming are sought after, anyway what is basic is that finally the expense offered by the distributor should be financially appropriate for the sharing libraries. In addition, it should similarly ensure consistent and unending access to the e-assets.

Subscription Payment issues

The distributors continually requesting the installments ahead of time of membership, which ought to be examined and consulted by the distributors according to the Consortium strategy.

Access related issues

There are different access strategies given by the distributors towards getting to their online assets and it fluctuates upon case to case. Access confirmation could be User ID/Password based or IP based which are well known among them. Continuous and bother free access to the academic substance is a definitive target of the consortium.

Perpetual Access Issues

In the event of end of the assentment or on the expiry of the understanding, licensor ought to stretch out ceaseless access to e-assets for the paid time of membership alongside their back records offered amid the membership time frame.

Archival Issues

This is a zone which required extraordinary consideration and sadly this is yet to be taken care of by the different consortium in India. Long haul safeguarding of the in important abundance of data being gathered by the consortium is to be documented and protected for family. As the innovation is quick creating and furthermore getting obsolete nearly at a similar pace, ample opportunity has already past that these exorbitant data assets are cautiously chronicled and protected on a long haul premise.

Resources Identification

Recognizing the most reasonable item which is settled upon by every one of the individuals from the consortium individuals are pretty much a troublesome recommendation. This is for the most part on the grounds that every single part will have their very own craving rundown of data items and administrations, however the cover between the items will be on the higher side on account of a perfect homogeneous gathering.

Print-Independent Subscription

Subscription to e-assets must be print-free and no print is necessary. Discontinuation of print subscription which is available through consortium should not be binding to member Institutes.

Licensing and copyright issues

Consortia permitting is a lawful procedure of securing use privileges of the licensed innovation represented by the copyright laws for a network of individuals. There are different focuses that must be considered and consolidated in permitting concurrence with the distributors. The standard permit understanding must be tended to the accompanying focuses :

- Authorized clients
- Restriction of business use
- Course packs
- Electronic holds

- Fees, Members, secure system, membership period, use rights, ILL and different terms and conditions and so forth.

Limitation of Price Increase / Annual Cap

There should be limitation for annual increase of the price. Annual increment or Annual cap of the price should be restricted or limited to less than 2%-3%.

Use and Usability Issues

The ROI (Return on Investment) of the consortium is estimated regarding the expanded utilization, convenience of the exorbitant data items which is at last reflected in the logical yield of the host foundations. It is the genuine endeavors of the consortium, the administration, the scientists and personnel and the curators which decide the achievement or generally of any consortium.

Sustainability issues

Structuring and starting a library consortium is maybe the simpler part when contrasted with its long haul sustenance and life span. The administration and the individuals from the consortium need to endeavor hard in planning and setting up strong models towards accomplishing the above objectives.

Technology Infrastructure

Long range arranging and sourcing of the fitting IT and Communication foundation helpful for legitimate conveyance of data assets is essential for each partaking part library.

Training and Awareness

Training to the clients is another issue that one needs to give appropriate pondering. Generally the clients are well-known to deal with the conventional assets of data. They are hesitant to sudden change in the treatment of data. In this way, the library needs to prepare the clients to confront the new media, feature the advantages through introduction and preparing programs.

Ego and Attitudes

Egos and frames of mind of people, experts, officers or associations can bigly affect the achievement or disappointment of a consortium.

Conclusion

The DeLCON was established by DBT as the libraries of DBT organizations were confronting difficulties in giving data to meet the clients. Since 2009, the consortium has developed as far as the quantity of assets and clients. The consortium is set to become further in the coming years and conceives taking into account all the biotechnology and life science organizations in the nation. The DeLCON consortia is truly helping the understudies, specialists, resources to recover the data and spare their time. It benefits the part libraries to acquire increasingly electronic assets in the library with spending plan and this is the thing that the part libraries require in the present situation. Development of the DeLCON Consortium and aggregate and sensible arrangement with the distributors to get the most extreme required assets at the base cost is a path by which part libraries can improve the utilization of secured assets. There are different issues required with DeLCON consortia, however these issues have been handled by embracing right methodology and right techniques with the planned methodology of the individuals and models standards setup by the Department of Biotechnology, Govt. of India.

References

1. Arora J, Managing electronic resources through consortia: an overview. In: Library and Information Networking – NAELIN – 2005: Proceedings of the National Convention on Library Information networking, held at PES Institute of Technology, Bangalore, 22 – 25 August 2005, Edited by Kaul, H.K and Sen, Gayathri. New Delhi: DELNET, pp.145-170.
2. Alexander A, Why do we do it? *The Journal of Electronic Publishing*, 3 (3) (1998)
<http://www.press.umich.edu/jep/03-03/index.html>
3. Birdie C, New acquisitions with new partners. Are we ready for it? IATUL Proceedings (New Series), Vol.12, Kansas City, USA, 2-6 June 2002, Available at: <http://www.iatul.org/conference/proceedings/vol12/>
4. Bawdekar N, FORSA: A historical review and future possibilities in resource sharing: Paper presented during the workshop on Forging Collaborative Partnerships: Consortium of Libraries and Department of Atomic Energy Institutions and FORSA Libraries meet organized by TIFR, Mumbai during 28-30 July 2003.
5. Consortium for e-Resources in Agriculture-2008. IARI, New Delhi, 2008. pp.1-2. <http://cera.iari.res.in/>
6. Lal, D. D, Consortia Based Electronic Information Resource Sharing in Department of Biotechnology Institutes in India. *Annals of Library and Information Studies*. 59, (2012) 181-186.
7. Lal, D.D., Use of e-Resources of DeLCON Consortium : Its Impact on DBT Libraries in Delhi-NCR Region” in the “Library Technologies, Services & Resources : Current Global Trends”, 2017; pp. : 404-412 at Management Library Network & Jaipuria Institute of Management, at Noida on 15-16 Sep. 2017.
8. Lal, D.D., Consortia Based Resource Sharing for DBT Institutions In India : A Developmental Perspectives of ‘DeLCON Consortium’ in the 2nd International Conference of Asian Libraries (ICAL-2017) which was jointly organized by “Asian Library Association” and “Dr. Zakir Husain Library, Jamia Millia Islamia”, New Delhi on 26th – 28th Oct. 2017.

9. Lal, D.D., A National Biotechnology Consortium of 'Department of Biotechnology (DBT)' : A Historical Perspectives about the 'DeLCON Consortium'" in the "63rd Annual Conference of Indian Library Association (ILS) i.e. International Conference (ICSIDL-2017) on "Sustainable Development of Library and Information Science Profession" jointly organized by Indian Library Association (ILA) and Babasaheb Bhimrao Ambedkar University, Lucknow at Babasaheb Bhimrao Ambedkar University, Lucknow on 23rd – 25th Nov. 2017, pp 823-837.
10. Lal, D.D., Planning, Development and Management of a Digital Library : An Experience From Special Scientific Library" in the "National Conference on "Changing Digital Landscape in SMART Environment" (NCCDLSE-2018)" jointly organized by United Nations Information Centre for India & Bhutan and Ansal University, at Ansal University, Gurgaon, Haryana, on 8th – 9th, Feb. 2018. pp 174-190.
11. Lal, D.D., DBT's Electronic Library Consortium (DeLCON) : A Role Model & Smooth Functioning Consortium in India. National Seminar on Access & Availability of Medical Literature in Electronic Environment (AMLEE-2018). pp. 41-50. (17th April 2018). Dr. B.B. Dikshit Central Library, AIIMS, New Delhi.
12. Murthy, G. Narasimha., Consortia For PG College Libraries In Andhra Pradesh: A Proposal. National Seminar on Library Consortia. 2004. pp. 279-284. (Hyderabad. 22-23 March, 2004) : Indian Library Association & Osmania University, Hyderabad.
13. Murthy, T.A.V.. UGC – INFONET : e-Journals Consortium in Nutshell. INFLIBNET Newsletter; January-APRIL 2006, 13(1): 11-13.
14. Das, Adwaita Kumar, Das, Keya & Das, Amit. Access in the future tense: problem and prospects of consortia initiatives of e-journals in India. In: Bandyopadhyay SS, Sutradhar B, Pathak SK, editors. Proceedings of the National Conference on Information Management in Digital Libraries (NCIMDiL), 2-4 August 2006. Indian Institute of Technology, Khagapur. Kolkata: Radical Impression, 2006:443-46.
15. Gaur R C, Reengineering library and information services: process, people and technology. Mumbai: Allied Publishers, 2003, pp. 112-114.
16. Goudar I R N, E Journals: Breaking the pricing barrier. Paper presented at the Round Table on Consortia Models in India, held at Bangalore, 2002.
17. Goudar IRN and Narayana P, Emerging pricing models for E-Journals Consortia and Indian Initiatives' Proceedings of the International Conference on Digital Libraries, (ICDL 2004). New Delhi. 24-27 February 2004, 333-341.
18. Hiremath U, Electronic consortia: resource sharing in the digital age, *Collection Building*, 20 (2) (2001) 80 – 88.
19. Janakiraman S, Thoughts on Library Consortium, Proceedings of the Round Table on Sharing of E-journals through Consortia in Indian Libraries, Bangalore. 28-29 November 2002, 23-35.
20. Jalloh B, A plan for the establishment of a library network or consortium for Swaziland: Preliminary Investigations and Formulations. *Library Consortium Management: An International Journal*, 2(8) (2000) 165-176.
21. Louis C and Vagiswari A, PAM-APF (Physics, Astronomy and Mathematics - Asia/Pacific Forum): Network for Resources sharing and Consortium formation. Proceedings of conference on Recent Advances in Information Technology, held at Kalpakkam, India, 1999, 182-194.

22. Murthy T A V, Kembhavi A and Cholin V S. Access to scholarly journal and databases : UGC-Infonet: E-Journals Consortium, *University News*, 42 (34) (2004) 1-5,8.
23. Mahajan P, Academic libraries in India: a present-day scenario, *Library Philosophy and Practice*, 8(1) (2005) 1-4.
24. Moghaddam G G and Talawar V G, Library consortia in developing countries: an overview, *Program: electronic library and information systems*, 43 (1) (2009) pp.94 – 104
25. Nfila R B and Darko-Ampem. K, Developments in academic library consortia from 1960 to 2000: a review of literature, *Library Management*, 23(4/5) (2000) 203-212.
26. Patil Y M, Birdie C, Bawdekar N, Barve S and Anilkumar N, Indian consortia models: FORSA libraries experiences. Paper presented at the LISA V Conference: Common challenges, unknown solutions. Cambridge, Massachusetts, U.S.A., 18-21 June 2006.
27. Patil Y M, Consortia efforts: an experience with FORSA Libraries. In: Workshop on – Forging collaborative partnerships – consortium of libraries of DAE Institutions, 28 – 30 July 2003, Mumbai, TIFR.
28. Patil Y M, Resource sharing through consortia: an experience with FORSA Libraries. In: Proceedings of the Symposium on consortium approach to resource sharing: issue and policies, ed. By Madalli, Devika,P. Bangalore: DRTC, Paper N pp.14, 2004.
29. Patil Y M, Managing change: consortia efforts in IT environment. In: Dr. P. S. G. Kumar Festschrift – Library and Information profession in India, Vol.1 (Part II): Reflections and redemptions, ed by Vashishth, C. P. And M.P.Satija. New Delhi: B.R.Publications, 2004, pp. 465 – 486.
30. Satyanarayana N V, Krishnan S and Arora J, Library consortia and resource sharing initiatives in India: A White Paper. Bangalore, Rajiv Gandhi University of Health Sciences, 2004, pp.54.
31. Srivastava JP, Verma VK. Library Consortia: Issues and Challenges with Special Reference to INDEST-AICTE. 9th Convention Planner, Dibrugarh University, Assam, INFLIBNET, pp. 103-112. 25-27 Sep. 2014.
32. Sreekumar M G and Sunitha T, Library capacity building through E-Journal Consortia'. 7th MANLIBNET 'Digital Libraries in Knowledge Management : Indian Institute of Management Kozhikode, 5-7 May 2005.
33. Sinha, Manoj Kumar., Murthy, T.A.V., & K, Manoj Kumar. (2006). Developing E-Journals Consortium In India : A New Approach For Resource Sharing In Digital And Network Environment. 4th International Convention CALIBER-2006. pp. 350-363. (Gulbarga. 2-4 February, 2006) : INFLIBNET Centre, Ahmedabad
34. Veenapani S; Singh, Khomdon & Devi, Rebika., Use of E-Resources and UGC-Infonet Consortium by the Teachers and Research Scholars in Manipur University. International CALIBER-2008. 6th International CALIBER-2008. pp. 563-568. University of Allahabad. (Allahabad. February 28-29 & March 1, 2008) : INFLIBNET Centre, Ahmedabad.
35. Xenidou-Dervou C, Consortia journal licensing: experiences of Greek academic libraries, *Interlending & Document Supply*, 29 (2001) 120-125.