

Techno Consortia enhancing Edu-Research with N-List taking College Libraries to new heights: a case study of DAV College, Sctor-10, Chandigarh

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Abstract

This Paper throws light on the concept of Consortia and the factors which led to the development of 'Consortia Based subscriptions'. It discusses various existing Consortia like UGC-INFONET, INDEST Consortium, Consortia for e-resources in Agriculture (CeRA), FORSA Library Consortia and Health Sciences Library and Information Science Network (HELINET). It also explores various initiatives of INFLIBNET, an independent, Inter-University Centre of UGC with special reference to the details of N-LIST Programme as conciliated in DAV College, Sector-10, Chandigarh. The paper concludes with the provisions of facilities and services of N-LIST to the faculty and the students of DAV College, Chandigarh.

Key Words: N-List, Consortia, INFLIBNET, UGC-Infonet, INDEST

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Introduction:

Academic libraries have been facing challenges of increase in the cost of library resources and services on one side and budget curtailments on the other side. Moreover information and Communication Technologies have resulted in the explosion of e-publishing across the world which has brought in flood of number of academic and research online resources for reaching out tech savvy users expeditiously and extensively. These sea changes in the publishing industry have moved the standalone libraries to Library Consortia. Consortia have now become the global concept which has traversed time and distance. Apart from various hurdles coming in the way of functioning of consortia, they have emerged in every domain of Knowledge connecting Institutions of higher education and taking in their fold Colleges also.

Definition of Consortium:

The Harrods Librarians' Glossary has defined consortium as 'Resource sharing organizations formed by libraries'¹. Services covered may vary, but often comprise co-operative collection development, education and training, preservation, centralized services, and network alliances featuring library

automation services, systems support, consultation, and administrative support needed for cataloguing and inter-library lending. Discounts may be arranged with information suppliers. Consortia members may include any type of library, and may be regionally-based, or subject-based over a large area.

Amjad Ali defines Consortium as “an association of independent libraries and/or library systems established by formal agreement, usually for the purpose of resource sharing. Membership may be restricted to a specific geographic region, type of library, or subject specialization.”²

According to EPIC Governance Group, consortium is “a grouping of mostly libraries formed to negotiate with suppliers. The consortium provides suppliers with a wider customer base, including organisations that would not normally be able to afford their product, in exchange for a lower pricing arrangement for individual customers.”³

Pros and Cons of Consortia:

Consortia have proved to be a boon in the current age of Knowledge and Information especially for the smaller libraries. It provides cost effective subscription to large number of electronic resources. Besides ensuring fuller utilization of funds, facilitates to build up digital libraries. Library services like CAS & SDI are provided in a better way. Consortia enjoy better terms of license for use, archival access and preservation of subscribed e-resources. The Consortia has some disadvantages also like there is an absence of printed copy of Journals, staff has to be well-trained in handling e-documents. Heavy investment is needed in licenses and Communication Technology; sometimes there might be technical snag and low bandwidth. There is lack of back files also. For accessing the resources online we need to have a separate user-id as well as we have to deal with the copyright issues.⁴

Various existing Consortia:

1-UGC-INFONET initiative:

The UGC-Infonet Digital Library Consortium was formally launched in December, 2003 by Honourable Dr. A.P.J Abdul Kalam, the then President of India, soon after providing the Internet connectivity to the universities in 2003. It is an innovative project launched by UGC to facilitate scholarly e-journals to Indian academics through a joint partnership of UGC, INFLIBNET and ERNET. It was launched to bring about a qualitative change in the academic infrastructure, especially for higher education. Under this initiative, UGC is modernizing the university campuses with state of the art Campus Wide Networks and has set up its own nation-wide communication network named UGC-Infonet.

Objectives: The major aims and objectives of the UGC-Infonet Digital Library Consortium are as follows:

- To subscribe electronic resources for the universities at a highly discounted rates of subscription and at the best terms and conditions;
- To extend the benefit of consortium-based subscription to all Indian universities and colleges;
- To extend the benefit of consortium to associate members of this Consortium;
- To impart training to the users, librarians, research scholars and faculty members of the institutions on the electronic resources with an aim to optimize their usage;
- To have increased interaction amongst the member libraries;
- To increase the research productivity of the institutions both in terms of quality and quantity of publications;
- To evaluate the usage of the resources subscribed; and
- To identify new resources that are required to be subscribed under the programme based on the availability of resources and funds.

This includes interlinking universities and colleges throughout the country electronically with a view of achieve maximum efficiency through the Internet enabled teaching, learning and governing. UGC Infonet is dependent on the ERNET infrastructure in a manner so as to provide assured quality of service and optimal utilization of bandwidth resources.⁵

This consortium covers almost all subject disciplines including arts, humanities, social sciences, physical sciences, chemical Sciences, life sciences, computer sciences, mathematics and statistics, etc. The Consortium provides current as well as archival access to more than 7000 core and peer-reviewed journals and ten bibliographic databases from 26 publishers and aggregators in different disciplines. So far, 160 Universities in India, out of 181 that come under the purview of UGC, have been provided differential access to subscribed e-resources.⁶

2- INDEST-Consortium:

The Ministry of Human Resource Development (MHRD) set up the “Indian National Digital Library in Engineering Science and Technology (INDEST) Consortium” in 2003. The Ministry provides funds for access to electronic resources subscribed for the consortium to the 57 core members through the consortia headquarters setup at the IIT, Delhi. The members includes 8 IITs and IISc, 22 NITs , ISM, SLIET and NERIST, 13 IISERs and New IITs, 14 IIMs, IIIT, IIITM and NITIE. AICTE provides funds for access to e-resources to (60) Government engineering colleges or technical institutions. 1233 engineering colleges and institutions have already joined the consortium on their own. Recently, 13 engineering colleges and institutions joined under self support- new scheme with financial support from the AICTE. It subscribes to over 12000 e-journals from a number of publishers and aggregators. The INDEST consortium is the most ambitious initiative taken so far in India.⁷

Objectives: The INDEST Consortium has the following objectives:

- to subscribe to electronic journals (resources) for the members of the consortium at highly discounted rates of subscription and at the best of terms and conditions;
- to extend the benefit of consortia based subscription beyond the core members to other engineering and technological institutions;
- to impart training to the users and librarians of the member institutions on subscribed electronic resources with an aim to optimise the usage of electronic resources;
- to find more avenues of cooperation and interaction among member libraries;
- to increase interactions among member institutions;
- to increase scientific productivity of member institutions in terms of quality and quantity of publications.⁸

The INDEST Consortium, as an open-ended proposition, welcomes other institutions to join it on their own for sharing benefits it offers in terms of highly discounted rates of subscription and better terms of agreement with the publishers. All electronic resources being subscribed are available from the publisher's website. The consortium has an active mailing list and a website hosted. All IITs can access to major full text databases from different suppliers whereas some other institutions can access to only four full text databases. It offers access to multiple electronic resources from different reputed publishers. The resources subscribed under this consortium can be divided into two categories, Full text databases and Bibliographic databases.⁹

3-Consortium for e-Resources in Agriculture (CeRA):

The National Agricultural Innovation Programme (NAIP) has established the Consortium for e-Resources in Agriculture (CeRA) with the support of Indian council of Agriculture Research (ICAR) at the Indian Agricultural Research Institute (IARI), New Delhi. The establishment of CeRA under NAIP is a part of the ongoing activities of the unit of simulation and informatics (USI) set up in November 2003 by merging the unit of Applications System Simulation (UASS), the Bioinformatics Centre and Internet Facilities. The work plan of CeRA comprises the establishment of a Co-ordination cell, appointment of project personnel, installation and commissioning of a dedicated server for the Consortium, enhancing the bandwidth of Internet leased line, etc., installation and development of networking, development/adoption of a suitable software, identification of e-journals/publishers/ vendors, organization of workshops and trainings, monitoring, and impact analysis of CeRA functioning. Currently CeRA-Consortium has 126 members. CeRA-Consortium provides access to 3535 journals (electronic and Print) from several publishers.¹⁰

It covers six major subject fields including Agricultural & Biological Science; Arts & Humanities; Basic Sciences; Biomedical Sciences; Engineering & Technology (JET); Social & Management Sciences.

Objectives of CeRA

- To develop the existing R & D information resource base of ICAR institutes/universities, etc., comparable to that existing in world leading institutions/organizations.
- To create an e-access culture among scientists/teachers in ICAR institutes/agricultural universities.
- To develop a Science Citation Index (SCI) facility at IARI for evaluation of scientific publications.
- To assess the impact of CeRA on the level of research publications measured through SCI.¹¹

4- CSIR Consortia:

National Institute of Science Communication and Information Resources (NISCAIR), New Delhi along with other laboratories of CSIR formed a consortium called "Consortium for CSIR Laboratories for Accessing E-journals". The consortium started working in June 2002 after an agreement with the Elsevier Science for a period of four years for 1200 journals. CSIR has taken the major initiative in 10th five-year plan to form E-journal Consortium. The objectives behind this consortium are to strengthen the pooling, sharing and electronically accessing the CSIR library resources, to provide access to world S&T literature to CSIR laboratories and to nucleate the culture of electronic access resulting into evolution of digital libraries. Its activities range from creation to monitoring the accessibility of scientific periodicals published by the leading international institutions.¹² NISCAIR, that has been entrusted the implementation of this project, aims at providing access to 4500 world class e-journals to all S & T personnel of CSIR through pooling and sharing resources.

NKRC, facilitating access to 5000+ world-class e-journals; Patent databases such as Derwent Innovation Index, Delphion; Web of Science Bibliographic database, Indian standards and ASTM to all CSIR S&T staff. ¹³

5- FORSA Libraries Consortia:

Forum for Resource sharing in Astronomy and Astrophysics (FORSA) was established in 1981. Members of FORSA include Indian Institute of Astrophysics, Inter University Centre for Astronomy and Astrophysics, National Center for Radio Astrophysics, Physical Research Laboratory (PRL), Raman Research Institute, etc. It was formed for sharing of resources in areas common to R&D activities. In 2004, this group has extended its membership to Physics and Maths libraries in the country who have common interests to carry forward the aim of FORSA and its activities. During the year 2005 FORSA has twelve special libraries as its members and it works towards the goals and services which the founder members have started.¹⁴

6-Health Sciences Library and Information Science Network Consortium (HELINET):

In 2001, the library of Rajiv Gandhi University of Health Sciences realized that the resources like journals and books are expensive and building a comprehensive collection in every medical college is unaffordable. Thus, the birth of HELINET took place with the motto to network all the libraries under RGUHS for minimizing the cost of acquisition and maintenance of learning resources and maximizing their utilization among the faculty, students and researchers in the colleges and institutions affiliated to the university. About 600 scholarly international biomedical journals from 24 leading publishers, at about one-third price of their print subscription, have been procured online and are provided to all medical colleges in Karnataka. Moreover, the member colleges can get all time access to the current journals as well as archives, i.e., the back-volumes of journals for a period of seven to 10 years. The university has spent about two crore rupees for establishing the consortium on a cooperative e-access model and is subscribing to Elsevier's Science Direct, Ovid Biomedical Collection, Annual Reviews Biomedical Suite, J-Gate Custom Content for Consortia and J-Gate.¹⁵

Besides, many consortia are being run successfully in India by different organizations. These include:

IIM LIBRARY Consortia-<http://www.iimb.erner.in/>

ICICI Knowlegde Park-<http://www.iciciknowledgepark.com>

DAE Library Consortium -<http://www.rifr.res.in/~libws/>

ICMR Library Consortia-<http://www.jccc-icmr.informiindia.co.in/about/about.sap>

Inflibnet and various initiatives:

Information and Library Network Centre (INFLIBNET) is an Inter University Centre of University Grants Commission (UGC), located at Ahmedabad, Gujarat. This centre is playing an important role in development of library system in general and in particular libraries of higher academic institutes of the country. INFLIBNET has initiated various quality services, activities and programmes to support teaching and learning in higher education. Some of the services and activities are discussed below:

UGC-INFONET Digital Library Consortium: Under the egis of UGC, INFLIBNET Centre launched UGC-Infonet Digital Library consortium in 2004 for supporting higher educational system of the country.

Document Delivery through JCCC: INLIBNET has initiated interlibrary loans and document delivery services from the comprehensive collection of subscribed journals under JCCC@UGC- INFONET. INFLIBNET has designated 22 libraries to fulfill Inter Library Loan (ILL) request from the users, affiliated to 149 universities covered under UGC. The ILL libraries together subscribe for 2000 plus journals that is not available through

consortia. Universities can request for articles from the journal holdings of those libraries wherever they find useful articles in JCCC search, that are not available in that library. ¹⁶

Bibliographics Union Databases: Creation of databases is one of the major activities of INFLIBNET. These are grouped under following two categories.

1. **Bibliographic Databases**

- Serials Holdings
- Current Serials
- Secondary Serials Catalogue
- Theses
- Books

2. **Non-bibliographic Databases**

- Research Projects
- Database in Science and Technology (EDST)
- Online Profile of Academic Community of Indian Universities

The bibliographic databases represent the holdings of university libraries, for which the data is contributed by participating libraries. These databases provide an access to large pool of information available besides, serving as tool for resource sharing. Non bibliographic databases are created to promote the communication among the scholars.

SOUL Software: The [SOUL Software](#) developed by the Centre is one of the most popular Library Management Software having maximum number of installations in the libraries of academic and research institutions across the country. The advanced feature of software attracts for increasing demand of the software. SOUL has been installed in more than 2000 libraries in country.

Shodhganga: As per the UGC Regulation on M.Phil/Ph.D, the responsibility of hosting, maintaining and making the digital repository of Indian Electronic Theses and Dissertation accessible to all institutions and universities is assigned to the INFLIBNET Centre. The repository has the ability to capture, index, store, disseminate and preserve ETDs submitted by the researchers.

Bibliographic Standards: To maintain consistency and quality in databases created by the participating libraries, each participating library follows the standards adopted by INFLIBNET, which is an effort of the task force comprising experts in this area. The Document "*INFLIBNET Standards and Guidelines for Data Capturing*" is made available to all the libraries.¹⁷

Open Journal System @ INFLIBNET Centre: With the help of centralized funds of Public Knowledge Project, Open Journal Systems (OJS) is developed to expand and improve access to research. The INFLIBNET Centre has

installed and configured Open Journal System on server at INFLIBNET to facilitate hosting of electronic version of journals into open access mode with all processes of submission, peer-reviewing, editing, layout designing and publishing built into it.

University Information System: To fulfil the demand of academic information, INFLIBNET is engaged in providing information about universities. This information relates to courses conducted, eligibility, fee structures, facilities available etc.

IR@INFLIBNET: The centre has established an institutional repository called IR@INFLIBNET using DSpace software. The papers included in the proceedings of the CALIBER and PLANNER, are presented through this repository in PDF format. It also includes the course materials, newspaper clippings, etc. the repository has approx. 1,146 full text articles.

Access management: The INFLIBNET providing access of e-resources to the universities and colleges with the help of Shibboleth, a standard-based open source middleware software that provides web based single sign-on (SSO) access to subscribed e-resources across and within institutional boundaries so as to enable users to access e-resources from anywhere irrespective of his/her physical location.

InfoPort: The INFLIBNET Centre promotes open access to Indian scholarly content through the InfoPort: A Subject Gateway for Indian Electronic-Resources. ¹⁸

Apart from the above mentioned initiatives, the Centre launched the Project entitled '**National Library and Information Services Infrastructure for Scholarly Content**' on May 4th, 2010 under its National Mission on Education through ICT. NLIST, a resource sharing Network of INFLIBNET Centre, is a boon for students, researchers and faculty from colleges and other beneficiary Institutions. This Project has been conferred the Best Project Jury Award 'e India 2010' in the Category Digital Learning through ICT in Higher Education Institute. In addition to this N LIST has also been bestowed with the Manthan South Asia Award 2010 under e-learning category and Skoch Digital Inclusion Award 2011 in the Category 'Technology in Education'.

N-LIST:

A joint venture of UGC-INFONET Digital Library Consortium, INFLIBNET Centre and INDEST-AICTE Consortium, IIT Delhi, the Project entitled N-LIST (National Library and Information Services Infrastructure for Scholarly Content) provides cross-subscription to e-resources, subscribed by the two Consortia i.e., UGC-INFONET for Technical Institutions and INDEST-AICTE resources for Indian Universities.

INFLIBNET Centre act as a monitoring Agency for subscribing and providing access to selected e-resources to 6000 Govt./Govt. Aided Colleges and

evaluate, promote, impart training and monitor all activities. The users can access e-resources and download articles from the publishers' website once they become member of the same.

Institutions enjoying the Services of INFLIBNET:

- Indian Universities
- Technical Institutions like IITs, IISc., IISers. and selected NITs.
- 6000 Govt./ Govt. Aided Colleges covered under 12B Act of UGC.
- Colleges not covered under 12B Act of UGC as its Associate

ORGANISATIONAL SETUP:

N-LIST is being jointly executed by the UGC-INFONET Digital Library Consortium and INDEST-AICTE Consortium. Decisions on policy matters are taken in the Joint meeting of the National Steering Committees of two Consortia under the overall policy direction of National Mission on Education through ICT. Joint Committees of NSC takes up the responsibility of decision of e-resources to be subscribed from various publishers and their accessibility to beneficiary Institutions.

One Joint Negotiation Committee has also been constituted with members from both the Consortia for negotiating rates of subscription of e-resources with publishers.

N LIST Registration:

Colleges who want to avail this facility can register themselves with N-LIST programme either online or offline by filling up the prescribed Performa with the details of the concerned institutions. After registration we've to get the Login id and passwords for all authorized users of the Institution. Each individual gets his exclusive login id and password for accessing the e-resources.

E-resources offered under N LIST Programme are:

Full Text e-Journals accessible through the Project:

1	American Institute of Physics	http://journals.aip.org/
2	American Physical Society	http://publish.aps.org/browse.html
3	Annual Reviews	http://arjournals.annualreviews.org/
4	Cambridge University Press	http://journals.cambridge.org/
5	Institute of Physics	http://www.iop.org/EJ/
6	Oxford	http://www.oxfordjournals.org

	University Press	
7	Royal Society of Chemistry	http://www.rsc.org/Publishing/Journals/
8	Economic and Political Weekly	http://www.epw.in/
9	Indian Journals	http://www.indianjournals.com/
10	EBSCOHOST(H W Wilson)	http://vnweb.hwwilsonweb.com/hww/jumpstart.jhtml

e-books:

1	Cambridge Books Online	http://ebooks.cambridge.org
2	Oxford Scholarship-ebooks	http://www.oxfordscholarship.com/
3	NetLibrary-EBSCOhost	http://www.netlibrary.com/
4	MyiLibrary-McGraw Hill-ebooks	http://lib.myilibrary.com/
5	Hindustan Books Agency -ebooks	http://hindustan.igpublish.com
6	Institute of South East Asian Studies(ISEAS) Books	http://iseas.igpublish.com
7	Springer eBooks	http://link.springer.com .
8	Taylor and Francis -ebooks	http://inflibnet.etailer.dpsl.net .
9	Ebrary-ebooks	http://site.ebrary.com/lib/inflibnet

Apart from the full text journals and e-books, the member Institutions can access **MathSciNet (Bibliographic Database)**, **Web of Science(e-resources for University Libraries)**, **Annual Review**, **Project Muse**, **Nature (e-resources for Technical Institutions)**

N-LIST website offers multiple features and facilities for delving into the ocean of Electronic books and Journals:

- As per the requirement one can search for books and journals from the huge collection of 3000+ e-journals and 75000+ e-books with the help of navigation bar of the web-site.
- User interfaces have been provided to the users which facilitates browsing of books and journals through table of contents. One can download articles available in different formats like PDF, HTML, Postscript formats by searching through subject terms, words in title, authors etc.
- All e-journals provide tools to navigate within a Journal, from one Journal to another Journal, from one volume to another Volume and

from one issue to another issue. Various navigation icons like Homepage, Online Help, Recent issues and archives are available on each page.

- Electronic browsing features offered by most of the Journals are more convenient than conventional print Journals. Table of Contents is provided in HTML Format for their Current as well as Old issues.
- For getting the quick and prompt results the users are provided with numerous search techniques which varies from simple search to advanced search. For searching the particular term in certain field like Abstract, Journal Title, Keyword, Article Title, Authors, References, Publication Year, Volume Number etc. one can take the help of advanced search. Various search techniques like Boolean Searching Wildcard, Truncation Symbols have also been provided.
- Not only the Search Techniques it also provides other features and facilities like E-mail alerts such as Table of Contents Alerts, New Issue Alerts, Citation Alerts, Publication Alerts, Search Alerts and so on. RSS Feeds have also been provided which help the users to keep themselves updated.¹⁹

N-LIST Services availed by DAV College, Chandigarh

About The College:

DAV College, Chandigarh is one of the institutions being run by DAVCMC, New Delhi. Established in 1958, it has been widening its horizons since then. It enjoys enviable positions in the field of academics, sports and extra-curricular activities. With the strength of more than 5000 students, our College is offering large number of courses from Under-Graduate to Post-Graduate Level. Various Diploma Courses have also been offered. It is our endeavor to provide easy access to the students through proper infrastructure like well equipped labs, well stocked library, IT Centre and other sports facilities.

Complete Address: DAV College, Sector-10-D, Chandigarh-160011

University Affiliated to: Panjab University, Chandigarh

Status: Comes under 2F/12B of the UGC Act

No. of Deptts.: 21

No. of Faculty Members: 135 86 on Ad-hoc basis

No. of Students:

Session:	Courses offered	No. of students
2012-2013		
Under-Graduate	11	4562
Post-Graduate	13	964
PG Diploma	4	71
Total	28	5597

NAAC Accreditation:	A+
Network Connectivity;	All the Departments, Centres, Labs., and Library are well connected. Campus Network is connected with Broadband Connection with speed 1mbps.
No. of Pcs in Library:	9+1 Server
Total no. of Internet Enabled PCs in the Institution:	150 Approx.
Software being used In the Library:	SOUL (Network Version)

FACILITIES PROVIDED:

Our College Library became the member of NLIST Programme in April 2011. Under this programme the faculty members were provided with Login ids and Passwords for accessing the e-resources through NLIST. However it has been observed that the response was not very encouraging. The reasons are many:

- The faculty being the member of Panjab University is enjoying the bigger ocean of e-resources through UGC-Infonet Programme.
- There are some loopholes in the Technical infrastructure such as Research Labs. etc. which have to be overcome.
- Lack of proper skills and training is there. It would be our endeavour to conduct User Awareness Programme for generating Awareness and imparting training in the use of e-resources through NLIST.

Plans for current Academic Session 2012-2013:

Undergraduate students visit the College Library for reading Newspapers and consulting books on their respective curriculum. Post Graduate students however consult reference books, Journals and e-journals for their Research/Project Work as per the User Survey Conducted in 2010 (Published in June & Dec.2011 in JLIS, New Delhi).²⁰ Earlier the Post-Graduates used to consult E-resources available in Public Domain through our Library HomePage (www.davchd.com/library.html). With the introduction of NLIST, they would be the highest beneficiaries. With this aim in view we have just taken a step to extend this service to the PG Students in the Academic Session 2012-2013. We are working in the direction of providing access to Undergraduates of our College.

Conclusion

Various problems and issues being faced by the Library Professionals like stagnating/ shrinking budgets, increased prices, inflation, increasing user demands and the technological breakthrough have challenged the Libraries to envision a new role. The tremendous growth and diversity of explicit Knowledge on one side and inability of the individual libraries to satisfy the demands of the users by itself on the other side have resulted in 'shared subscription' especially for e-journals procurement. In this direction

INFLIBNET has taken new and remarkable initiatives to serve the Higher Education Community in India. N-LIST Programme of INFLIBNET has been successfully and effectively serving the information requirement of Govt. and Govt. aided Colleges and other beneficiary institutions. We at DAV College, Chandigarh are trying to publicize the facilities and services provided by N-LIST Programme. Initially the faculty members of the College were provided this service in 2011 but the response was not very encouraging as mentioned above. However in the current academic session PG Students are also becoming beneficiaries of this service. We are trying to widen its reach by organizing User Awareness Programme, enhancing the technical infrastructure, and also extending this facility to all the bonafide students of the College.

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