Biblioteca Digital de Catalunya (BDC) Consorci de Biblioteques Universitàries de Catalunya (CBUC) Barcelona, SPAIN http://www.cbuc.es Contact: Núria Comellas, Librarian-Projects Assistant, ncomellas@cbuc.es, and Lluís Anglada, Director, langlada@cbuc.es

A. Collection Planning (e.g., goal setting and identification of users, technology/personnel choices)

The Biblioteca Digital de Catalunya (BDC) (in English: Catalan Digital Library) is a shared, central e-library collection the fifteen public university library members of the Consorci de Biblioteques Universitàries de Catalunya (CBUC) (in English: Consortium of Catalan University Libraries). CBUC was formed in 1996 with an agreement between the eight Catalan academic libraries and the National Library of Catalonia to build a union catalog. As the union catalog plan was implemented, CBUC studied and demonstrated the potential benefits of purchasing equipment and central database licensing negotiation for the member libraries. In 1998, CBUC received initial funding from the Catalan government to begin building the BDC.

The BDC is designed so that each member library can either access shared resources from the CBUC page or link directly from the member library Web site to any of the shared resources. It is not designed for library access but rather for the member libraries to incorporate shared resources into their individual e-library Web sites. The goals of the BDC project are:

"to provide a core set of multidisciplinary e-resources (with some advantages in price and access conditions) to all of our consortium members, the Catalan university libraries. The result should be that any university student or faculty in any CBUC member library has the same amount of "basic" e-information to do their work/research. From the repositories side, the goal is to collect all the intellectual production from Catalan universities, along with the dissemination of open access publications in Catalan or published in Catalonia. The first design and licensing negotiations for commercial e-resources took place in 1997-8, and first deals started in January 1999 (Academic Press e-journals, Aranzadi (Spanish law database), Econlit+ERIC+Medline from Ovid, MathSciNet from AMS)...From 2000 onwards, BDC licensing program has expanded by adding several open access digital repositories built to collect CBUC members' publications like theses, working papers, OA journals, etc."

The direct users of the BDC are the Catalan university libraries and librarians, but ultimately their library users – faculty and students – are the main beneficiaries of the BDC. Those ultimate library users are not usually aware of the role played by the CBUC in maintaining the collaboration.

The CBUC members (including associated members) are:

Universitat de Barcelona (http://www.bib.ub.es/bub/bub.htm or http://www.ub.es)

Universitat Autònoma de Barcelona (http://www.bib.uab.es/ or http://www.uab.es)

Universitat Politècnica de Catalunya (http://bibliotecnica.upc.es/ or http://www.upc.es)

Universitat Pompeu Fabra (http://www.upf.es/bib/index.htm or http://www.upf.es)

Universitat de Girona (http://biblioteca.udg.es/ or http://www.udg.es) Universitat de Lleida (http://www2.bib.udl.es/ or http://www.udl.es) Universitat Rovira i Virgili (http://www.urv.es/biblioteca/marcos.htm or

http://www.urv.es)

Universitat Oberta de Catalunya (http://xina.uoc.es/cat/inici.html or http://www.uoc.edu/web/cat/index.html)

Biblioteca de Catalunya (http://www.gencat.es/bc/)

Universitat Jaume I (http://www.uji.es/CA/cd/ or http://www.uji.es/)

Universitat de Vic (http://www.uvic.cat/biblioteca/ca/inici.html or

http://www.uvic.cat)

Universitat d'Andorra

(http://www.uda.ad/index.php?option=com_content&task=view&id=75&Itemi d=163 or http://www.uda.ad)

Universitat de les Illes Balears (http://www.uib.es/servei/biblioteca/ or http://www.uib.es)

Universitat Ramon Llull (http://www.url.edu/cont/url/biblioteques.php or http://www.url.edu)

Universitat Internacional de Catalunya (http://www.uic.es/ca/biblioteca or http://www.uic.es)

Most of the licensed e-resources are available to remote authorized users at each member library, so any distance learners are supported.

"One of our members (Universitat Oberta de Catalunya) is a distance learning university, therefore BDC is also open to its users (home-schoolers and faculty, mainly). Besides, most of our e-resources vendors allow the remote access from home (via authorized IP ranges) for any CBUC member."

The CBUC created a flexible collection plan that is designed to change and grow as the member libraries needs, the technologies and e-resources change and grow. The current policy is online at

http://www.cbuc.es/cbuc_en/programes_i_serveis/bdc/qu_s.

"In the first years, we thought the main part of BDC licensing would be bibliographic databases, but soon we discovered that full text and specially e-journals were the backbone of the digital library. In the last 3 or 4 years the "all for all" model (a"must" for many years) seems to be coming to its end, and we already tried some opt-in deals to allow some CBUC members (maybe those with bigger budgets) to upgrade their e-collection with resources that might not be affordable or interesting for all but are for some members."

B. Collection Strategies (e.g., selection criteria, identification of resources, licensing, and related user information needs)

The overall goal of the BDC is to build a strong collection of critical scientific content from the most authoritative sources. The priority is to collect and make available the highest level scientific information for faculty and research library users. User studies (Borrego et al., 2007, Urbano et al. 2004) reveal a strong preference for full-text rather than merely bibliographic databases. Some attention is being given to acquiring additional undergraduate level e-resources as well, including image databases. A recently completed and ongoing collection analysis reassures CBUC that they have been very successful in meeting their goal for the BDC core content.

"We provide fee-based access to thirty-something databases, many of them including full-text articles (Business Source Elite, Factiva, etc.). However, the main part of our licensing deals are on e-journals (more than 10.000 titles from the main academic publishers). A list of licensed resources is available at the left hand side of the web page

http://www.cbuc.cat/cbuc en/programes i serveis/bdc/acc s per t tols."

Member libraries pay the main costs for the licensed databases, e-books, and e-journals, with some costs being covered by the Catalonian government. Wherever possible licensing agreements must include remote access for authorized users of each member library. Archiving arrangements are also made in the licenses, and include arrangements such as: fee-based access to vendor's server to paid information in case of termination, etc.

"We currently have 7 licenses for e-books at a consortium level: nearly 8.000 titles in total. The main part comes from Springer (including Lecture Notes in Computer Science), followed by netLibrary, Safari Tech Books Online, Oxford Reference Online (ORO), Gale Virtual Reference Library and Harrison's Online. Usage level is very important in reference and textbooks like Safari or ORO. Besides, over 900 Spanish law e-books are included in our subscription to a Spanish law database called VLEX. We're considering some more e-book packages to be subscribed/purchased in the future."

CBUC catalogs all e-resources into their union catalog (http://www.cbuc.cat/cbuc_en/programes_i_serveis/ccuc).

"Individual CBUC libraries can copy the record in their local catalogs. In 2007, nearly 70% of all the volumes (not just electronic) were copied from external services or among CBUC members. We can track use of the records by the copy cataloguing statistics."

Digital library collections and scholarly repositories are ongoing projects with the CBUC consortia and for many of the individual member libraries. The BDC serves as a central access point for the individual library projects and other academic Web sites, digital libraries, and scholarly repository projects created by Catalan organizations. "BDC can be a"shop window" for many CBUC members' open access activities. There was a common interest early in 2000 to build cooperative repositories to gather, disseminate and preserve CBUC members' academic output. Nowadays we have 4 repositories: TDX (theses), Recercat (working papers), RACO (current Catalan full text journals) and MDC (Catalan ancient journals, photographs, maps, posters, ex-libris, etc.). There is another one in process for learning objects, to be called MDX. More information on the left frame of http://www.cbuc.cat/cbuc_en/programes_i_serveis."

Inter-library loan and document delivery have been a part of CBUC's services among member libraries since 1997, and have been very successful. Future projects to create library user initiatied inter-library loan options are underway (http://www.cbuc.cat/cbuc_en/programes_i_serveis/pica).

CBUC member libraries have begun to develop a consortium-wide virtual reference service using Questionpoint software. Member libraries have created a common policies document and some member libraries have begun their virtual reference service.

"The next stage will be to evaluate/improve the performance of the local services and also to move to a cooperative knowledge base of answers/questions."

C. Collection Organization (e.g., content management systems, Web server choices, personnel responsibilities, etc.)

The BDC currently consists of individual maintained Web pages with resource descriptions and access links to the licensed and other e-resources. They do not yet use an ERMS, but are considering Millenium for e-resource management. The site uses SFXlink resolver to manage e-serials access, and MetaLib software as a meta-search tool. All maintenance is done directly by the CBUC staff members. The digital libraries and repositories within the BDC site are managed using several different CMS options and an a technology partner:

"Digitized e-resources (repositories) are managed using mainly open source software (DSpace, OJS, NDLTD) and also a commercial one (CONTENTdm). We have a technological partner (CESCA) to help us maintaining hardware/software. Each CBUC member library uploads its files from the repositories' administrative Web access; this work can be done from the library of from other departments such as the university press offices. CBUC librarians coordinate the projects, making use of periodic meetings with CBUC members' representatives to keep up-to-date information on new developments or common problems. Individual documents in the repositories are also catalogued in the union and local catalogs, and can be searched through CBUC's MetaLib."

Three full time librarians, two part time librarians, and one computer staff person support the CBUC BDC project. 1.5 FTE librarians support licensing, and 1.5 FTE librarians support repositories.

"The first person hired for BDC in 1997 immediately began working on consortial licensing of fee-based e-resources. Later on, this position incorporated the set-up and maintenance of repositories. In 2004 an existing CBUC librarian was designated to be responsible for repositories only. In 2005 an assistant librarian was incorporated to help the two BDC librarians. We also have two paid library school students who work part-time. "

The CBUC Board of Directors, along with working groups formed by member library librarians for specific areas make collection strategy decisions.

"Collectors meet 3-4 times a year to evaluate new (and also already subscribed) information resources. Repositories are added to almost daily, each time a theses is submitted or a working paper is delivered at the university. Each CBUC member library is responsible for uploading files regularly, following CBUC guidelines."

Newly acquired BDC e-resources are catalogued in the union catalog and also activated in the CBUC SFX/MetaLib software. Individual CBUC member libraries are then responsible for adding the links through their own e-library Web pages.

Collectors use a variety of collection development tools in making e-resource acquisition decisions. Professional library or subject area journals, reviews from professional colleagues in discussion lists, as well as other consortia e-library recommendations are all used in evaluating potential e-resources.

D. Collection Maintenance (e.g., link checking, ongoing weeding and growth of the e-library collection)

Maintenance of fee-based e-resources is done monthly.

"..we're using SFX link resolver, which has been a huge management improvement since we installed it a couple of years ago. The repository links are quite stable, although some of them are provided by third-parties. For instance, the Recercat repository is built on DSpace, and permanent links are provided by Handle.net. Checking is not done on a periodical basis, but very few links are lost."

User feedback is gathered continuously through meetings and formal surveys.

"In our case "users" means member libraries. Our job as a consortium is to do what our libraries tell us to do, if the proposals fit in the BDC objectives (and if funds and resources are available)."

The BDC information architecture is reviewed at the beginning of each year to document the current status of each project and any new ideas to be developed.

"Annual reviews are conducted by our consortium director (with the acquiescence of individual library directors) and presented to our consortium

Government Board. Responsibilities for upgrades, etc., are then undertaken by the pertinent librarians in the CBUC."

Future plans for the BDC, improved cross-database searching, Web 2.0 functionalities for users, etc. are under development.

"Regarding cross-database search tools we are currently using MetaLib, though we think we still have quite a long way to go before we got real advantages of it. We also just finished the implementation of a new ILS (Millennium) for our union catalog and local catalogs, which will allow us to implement some web 2.0 facilities (book covers, comments from users, etc.) and also interact better with databases and e-journals we have in the BDC."

CBUC has done several user and collection analysis studies on the BDC. They frequently collaborate with the University of Barcelona's Library School. Two of the most recently published (in English) are:

Borrego, Ángel, Lluís M. Anglada i de Ferrer, Maite Barrios, and Núria Comellas. 2007. "Use and users of electronic journals at Catalan universities: the results of a survey". *The Journal of Academic Librarianship* 33, no. 1 (January): 67-75. preprint at http://hdl.handle.net/2072/3692.

Urbano, Cristóbal, Lluís M. Anglada i de Ferrer, Ángel Borrego, Carme Cantos, Antonio Cosculluela, and Núria Comellas. 2004."The Use of Consortially Purchased Electronic Journals by the CBUC (2000-2003)". D-Lib Magazine, 10, no. 6: http://www.dlib.org/dlib/june04/anglada/06anglada.html.

"We also did an article about our open access (repositories) activities for a Spanish journal:"

Actividades open access de los consorcios del SELL y del CBUC Published in El profesional de la información, julio-agosto 2005, vol.14, núm.4, p. 280-285

http://www.elprofesionaldelainformacion.com/contenidos/2005/julio/280.pdf

"In 2009, we're preparing new reports on ten years of usage (BDC is celebrating its 10th anniversary!) and users (we'd like to have "real" feedback from individual users, to know what are their feelings and suggestions for a better collection in the future). "