

ACNP: a real union catalogue and many virtual catalogues for DDS in Italy

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Introduction

ACNP is the Italian union catalogue of serials¹. It is located at <http://acnp.cib.unibo.it/cgi-ser/start/en/cnr/fp.html>. It contains the bibliographic descriptions of serials held by Italian libraries. The catalogue has been promoted and carried out by the Institute for Studies on the Research and Scientific Documentation (ISRDS) since the 1970s². At that time Italian libraries used to send print cards with serials titles and holdings to CNR, which was in charge of populating and updating data into the catalogue. CNR produced several print catalogues (union catalogue, single catalogues and local multi-library catalogues). An online catalogue was also available under WAIS, periodically updated with a batch procedure.

Since 1988, the Interlibrary Centre of the University of Bologna has agreed with CNR to make the catalogue available online using its Information Retrieval system. In 1995 ISRDS-CNRS and the Interlibrary Centre signed an agreement to carry out together the Italian Union catalogue of Serials. CIB was responsible for the applications and for librarian training. CNR was responsible for checking and carrying out the necessary amendments or enhancements to bibliographic descriptions proposed by libraries. Furthermore, it checks and validates new bibliographic descriptions (proposed by libraries) and titles captured from ISSN.

Some data

Today the catalogue is fed by 2,507 libraries of different kinds: academic, public, corporate, and special libraries, and has reached 743,500 holdings. Since 1993 the number of libraries participating in the catalogue has increased from 1804 to 2507.

¹ For the first paragraphs of this speech see Vincenzo Verniti, L'ACNP e le biblioteche ecclesiastiche paper presented at "Periodici nelle biblioteche ecclesiastiche" con il patrocinio della Regione Toscana e del Comune di Livorno, Livorno, Biblioteca Diocesana, 20-21 giugno 2006. For ACNP, its services and DDS, see Vincenzo Verniti, ACNP come servizio di cooperazione e document delivery. In Proceedings Document Delivery via Internet e cooperazione bibliotecaria. Servizi DD e risorse elettroniche: le esigenze degli utenti, le risposte delle biblioteche, Napoli. 18-19/05/2006, <http://biblio-eprints.bo.cnr.it/archive/00000073/>, Jacopo Di Cocco, and Vincenzo Verniti, ACNP: perspectives and future developments of an open catalogue. In Proceedings Document Delivery via Internet e cooperazione bibliotecaria. La qualità al servizio della cooperazione, Pisa 5/5/2005, at <http://biblio-eprints.bo.cnr.it/archive/00000068/> and Vincenzo Verniti, Integrare servizi e cataloghi di periodici: la risposta di ACNP e del progetto CASA, in le biblioteche accademiche del futuro: idee, progetti, risorse, Roma, 22-23 maggio 2000, Gruppo di lavoro "Evoluzione ed integrazione dei sistemi informativi bibliografici" http://www.cib.unibo.it/acnp/docs/doc/Documento_evoluzione.doc

² See Jacopo Di Cocco, Vincenzo Verniti, Dall'archivio collettivo nazionale dei periodici al progetto europeo CASA: storia di una collaborazione aperta a prospettive di sviluppo, in "Nuovi annali della scuola speciale per archivisti e bibliotecari", a. 7, (1997), p. 249-279.

The catalogue has been populated with 134.700 ACNP records. The working database for librarians has 1.193.400 records downloaded from the ISSN Register available to be captured³.

Actually, libraries participating in the catalogue derive records from the ISSN Register and add their holdings. If the record is not present in the ISSN Register, a library makes a proposal which is then validated by the Italian ISSN Centre and finally sent to the International ISSN Centre for registration into the ISSN International Register.

ACNP is an integrated catalogue because it not only offers serials descriptions and holdings, but also information about the libraries holding them, business hours, services, and document delivery terms and procedures.

Single libraries, institutions and library networks can participate in the catalogue. If a library already has an electronic catalogue of serials with several titles, it can be uploaded with a batch procedure on ACNP, using ISSN and holding information.

Electronic serials

Electronic serials have been available in ACNP since 2002. It was decided that electronic serials would always require a specific record, even when print and electronic serials had the same ISSN. We thought this approach could permit us to handle better links to the appropriate information about holdings and services having different registration for different media. We were not sure that it was the correct solution, however during the twenty-second Meeting of Directors of ISSN Centres, May 27-30 held in Budapest in 1997, we were glad to hear the “reaffirmation of the existing policy of assigning separate ISSN to serials issued in multiple physical formats. Each format, including online versions, will continue to be issued a separate ISSN”⁴.

The catalogue started when electronic serials did not exist. It has been necessary to modify records' structure to take into account electronic serial requirements⁵. The following fields have been added:

- Edition (electronic, print...) "on-line (remote)"
- A link to a URL which can be the serial's home page (if it exists), or the publisher's home page or any other relevant open access page
- A link to different editions of the same journal (for instance to the corresponding print journal): "Titoli collegati: HA PER ALTRO SUPPORTO: [*20 century British history](#)",

Periodico/Rivista:	*20 century British history				
Editore	Oxford University Press				
Luogo pubbl.	s.l.				
Da anno - Ad anno	0-				
Lingua	ENG				
Paese	GB				
ISSN:	1477-4674				
Cod.CNR:	P 00205674				
Fonte	ACNP				
Supporto:	On-line (remote)				
Accesso Pubblico alla rivista:	http://www3.oup.co.uk/tweceb/				
Titoli collegati:	HA PER ALTRO SUPPORTO: *20 century British history				
<table border="1"> <tr> <td>FULL TEXT</td> <td>Indici</td> <td>Doc Delivery</td> <td>Servizi online</td> </tr> </table>		FULL TEXT	Indici	Doc Delivery	Servizi online
FULL TEXT	Indici	Doc Delivery	Servizi online		

Figure 1: An electronic journal in ACNP

By clicking on [FULL TEXT](#) users can see:

- Years to which users can access (corresponding to holdings for print journals)

³ See <http://acnp.cib.unibo.it/cgi-ser/start/it/cnr/co-p.tcl> for further data about ACNP.

⁴ <http://www.loc.gov/catdir/lccn/lccn0509.html#2>

⁵ For this paragraph, see Alessandra Citti *Il 'sistema' ACNP e i suoi utilizzi nelle biblioteche*, in “Bibliotime”, anno VII, numero 1 (marzo 2004), <http://www2.spbo.unibo.it/bibliotime/num-vii-1/citti.htm>

- A link to conditions of access
- A link to [FULL TEXT](#)

*20 century British history

UNIBO Biblioteche del Sistema Bibliotecario d'Ateneo, SBA
 Posseduto Fascicoli: **13(2002) n. 1-**
[FULL TEXT](#) (Accesso riservato utenti autorizzati): [Info sulle condizioni dell'accesso online](#)
 Ultima revisione catalogo 2003

Figure 2: E-journal information about holdings and FULL TEXT link

ACNP users might have different conditions of access depending on their IP. Therefore they must first select their library or consortium to access papers. Users at the University of Bologna will select the FULL TEXT available for CIPE Consortium.

*Accounts of chemical research (Online)

CIPE Cooperazione Interuniversitaria per i Periodici Elettronici
 Posseduto: **1968-**
[FULL TEXT](#) (Accesso riservato utenti autorizzati): [Info sulle condizioni dell'accesso online](#)
 Ultima revisione catalogo 2002

PG100 Biblioteca di Scienze Chimiche, Farmaceutiche e Biologiche, Università degli Studi di Perugia
 Perugia, tel: 0755855600-01/5503, Fax: 0755855599
 Posseduto: **1997-**
[FULL TEXT](#) (Accesso riservato utenti autorizzati): [Info sulle condizioni dell'accesso online](#)
 Ultima revisione catalogo 2003

Figure 3: different links to FULL TEXT for different institutions

A single journal might be available at different URLs also for a single University, if it has acquired different years from different sources. This happens for instance when back years have been digitalised by specific projects, whereas recent years might be accessible from the publisher or a subscription agency.

For instance, users at the University of Bologna can access *American Journal of Mathematics*

- for the years 1(1878)-117(1995); on JSTOR by clicking on CIPE
- for the years 118(1996) n. 1- on MUSE, by clicking on Unibo.

*American journal of mathematics (Online)

CIPE Cooperazione Interuniversitaria per i Periodici Elettronici
 Posseduto Fascicoli: **1(1878)-117(1995);**
[FULL TEXT](#) (Accesso riservato utenti autorizzati): [Info sulle condizioni dell'accesso online](#)
 Ultima revisione catalogo 2003

UNIBO Biblioteche del Sistema Bibliotecario d'Ateneo
 Posseduto Fascicoli: **118(1996) n. 1-**
[FULL TEXT](#) (Accesso riservato utenti autorizzati): [Info sulle condizioni dell'accesso online](#)
 Ultima revisione catalogo 2003

Figure 4: different links to FULL TEXT for the same institution

ACNP and OPEN URL resolvers

The solution of including different links for full access, depending on the way each institution accesses electronic resources as for *Accounts of chemical research* was the easiest for librarians, but not the most practical for users. Adopting an Open URL resolver would show to users only the “appropriate copy”, which means the copy the user has the right to access.

Since the beginning of October, ACNP has an Open URL source and target⁶. The University of Bologna adopted SFX⁷, but many other Open URL resolvers are available and can be interconnected with ACNP. For instance, users searching for Science with ACNP before October or from Institutions not having an Open URL resolver, will see the following result and will have to select the correct link to access full text (subscription agency for some institutions, the publisher ...).

***Science (Washington, D.C.)**

	E-mail Biblioteca
	Fornitura Documenti

Le biblioteche in grigio non aggiornano on-line il c

BO015 Biblioteca Area della Ricerca CNR di Bologna
 Via P.Gobetti, 101, 40129 Bologna , tel: 051/6398028, fax: 051/6398130
 Il servizio di document delivery è sospeso dal 7 agosto all'1 settembre 2006
Posseduto: 1996-
 Dettaglio Posseduto: 270 (1995) n. 5233-
[FULL TEXT AAAS/Consorzio CNR Area Bo](#)
 (Accesso riservato utenti autorizzati)
[Info sulle condizioni dell'accesso online](#)
 Note: Contratto attivato nel marzo 2002.
 Ultima revisione catalogo 2006

CIPE Cooperazione Interuniversitaria per i Periodici Elettronici
Posseduto: 1996-
 Dettaglio Posseduto: 274(1996) n. 5284-
[FULL TEXT HighWire - American Association for the Advancement of Science](#)
 (Accesso riservato utenti autorizzati)
[Info sulle condizioni dell'accesso online](#)
 Ultima revisione catalogo 2003
Posseduto: 1880-1997;
 Dettaglio Posseduto: 1(1880)-3(1882), 1(1883)-23(1894), N.S. 1(1895)-278 (1997);
[FULL TEXT JSTOR](#)
 (Accesso riservato utenti autorizzati)
[Info sulle condizioni dell'accesso online](#)
 Ultima revisione catalogo 2003

MI312 Biblioteca IRCCS Fondazione Centro San Raffaele del Monte Tabor
 v. Olgettina,58, 20132 Milano , tel: (02)26432760, fax: (02)26432761
Posseduto: 1995-
[FULL TEXT Varie](#)
 (Accesso riservato utenti autorizzati)
[Info sulle condizioni dell'accesso online](#)

Figure 5: Several links to FULL TEXT for different institutions

Users of the University of Bologna searching for *Science* 1095-9203, can see the link to SFX and will not have to select the correct link to full text.

1 ***Science (Washington, D.C.)**
 American Association for the Advancement of Science

Biblioteche	Indici	Full Text	Doc Delivery	Servizi online	Titoli collegati	
-------------	--------	-----------	--------------	----------------	------------------	--

2 ***Science (Washington, D.C.) [ON LINE]**
 American Association for the Advancement of Science

Biblioteche	Indici	Full Text	Doc Delivery	Servizi online	Titoli collegati	
-------------	--------	-----------	--------------	----------------	------------------	--

Figure 6: New ACNP: link to SFX

By clicking on SFX link, they will see all services available for the University of Bologna users: full text, access to different databases etc. As it appears in Figure 7, for Science FULL TEXT on

⁶ Further information (in Italian) at <http://www.cib.unibo.it/acnp/attivita-di-sviluppo/acnp-dev> (site last accessed on 30th August 2006).

⁷ For SFX see Miriam Blake, *Implementation of the OpenURL and the SFX Architecture in the Production Environment of a Digital Library*, http://lib-www.lanl.gov/lww/articles/OpenURL_vala.pdf

publisher's site, back issues on *JSTORE* are available, but also access to *Journal Citation Report* and *Ulrich's* database.

SFX Servizi di linking

Risorsa: Science [0036-8075]

⤴ Servizi di base

Vai al Full Text:

AAAS - American Association for the Advancement of Science
Year: Volume: Issue: Start Page: **GO**
Available from 1880 volume: 1 issue:1

JSTOR Health & General Sciences
Year: Volume: Issue: Start Page: **GO**
Available from 1880 until 2000

Cerca il documento nei cataloghi:

Controlla il posseduto nel **Catalogo Nazionale Periodici Italiano** **GO**

⤴ Altri servizi

Cerca informazioni su questa rivista in:

Verifica l'Impact Factor in **JCR - Journal Citation Report** **GO**

Ulrich's **GO**

Figure 7: FULL TEXTs and other services available for University of Bologna users

ACNP is not only a source for OPEN URL resolvers, but also a target, therefore if a user of the University of Bologna finds articles on subscribed databases, he will find the link to SFX, as in figure 8. By clicking on it, he will access either the ACNP catalogue or the electronic journal, if a subscription to that journal exists for the University of Bologna.

2. Use of circulation statistics and interlibrary loan data in collection management
[Knievel, Jennifer E; Wicht, Heather; Connaway, Lynn Silipigni](#)
College & Research Libraries; 67 (1) Jan 2006, pp.35-49
... the holdings, circulations, and interlibrary loan (*ILL*) borrowing requests of the English-language monograph *collection* at the University of Colorado at Boulder. Data for each area were mapped to conspectus subject areas, using ...
[View Record](#) | **A-link**

Figure 8: A record from Lisa - Library and Information Science Abstracts: link to SFX

Some virtual special opacs

Some library networks, for instance Medical & Health Sciences, Veterinary libraries, Astronomy libraries and Social and economic sciences network of Piedmont found that ACNP could offer virtual special opacs to their scholars (see figures 9-11).

Covet Library
Catalogo Italiano dei Periodici (ACNP)

[Help, Informazioni sul catalogo.](#)



Seleziona la [Base Dati](#) su cui cercare

Titolo:
Ente Autore:
CDU
Principali Codici
Codice CNR: **Codice ISSN:**

Azione: Cerca lista autore lista CDU lista CB

Figure 9: Veterinary union catalogue

**Biblioteche degli Osservatori Astronomici
 e dei Dipartimenti di Astronomia**
Catalogo Italiano dei Periodici (ACNP)

[Help, Informazioni sul catalogo.](#)



Informazioni sulle Biblioteche astronomiche aderenti ad ACNP

Seleziona la [Base Dati](#) su cui cercare

Titolo:
Ente Autore:
CDU
Principali Codici
Codice CNR: **Codice ISSN:**

Azione: Cerca lista autore lista CDU lista CB

Per informazioni sul catalogo nazionale contattare [Vincenzo Vermiti](#)
 Performed by webmaster@clib.unibo.it, Ariadne

Figure 10: Astronomy union catalogue

HELP **BESS, Biblioteca Elettronica di Scienze Sociali ed Economiche del Piemonte**

[vai a Ricerca Avanzata](#)

Titolo	<input type="text"/>
Ente Autore	<input type="text"/>
Cod. ISSN	<input type="text"/>

Figure 11: Social and economic sciences virtual library of Piemonte

This permits them to offer a service and to be part of a national network, without the burden of developing and maintaining a catalogue.

TOCS and indexing services

Electronic serials available in the catalogue include free access serials which librarians considered interesting for their users and also some serials available on open archives⁸. The University of

⁸ Further information on open archives at <http://www.openarchives.org/documents/FAO.html>. "The Open Archives Initiative develops and promotes interoperability standards that aim to facilitate the efficient dissemination of content. The

Bologna has decided to catalogue also some valuable and ancient serials which are being digitised within the Digital Library project⁹. For instance, if we search *De Bononiensi scientiarum et artium Instituto atque Academia commentarii*, a serial published in the 18th Century, we can see a link to [Accesso pubblico alla rivista](#) (public access to the journal).

Periodico/Rivista:	*De Bononiensi scientiarum et artium Instituto atque Academia commentarii					
Ente/Autore (Marc 710):	Accademia delle Scienze dell'Istituto di Bologna					
Editore	Bononiense scientiarum ed artium Institutum atque Academia					
Luogo pubbl.	Bologna					
Da anno - Ad anno	1731-1791					
Lingua	ITA					
Periodicità	IRREGOLARE					
Paese	IT					
ISSN:	1122-4150					
Cod.CNR:	P 00050101					
Fonte	ACNP					
Supporto:	Printed text					
Accesso Pubblico alla rivista:	http://diglib.cib.unibo.it/?piresID=1&intresID=3891&format=jpg&seqnum=1&x=16&y=3					
Titoli collegati:	POI: *Novi commentarii Academiae Scientiarum Instituti Bononiensis					
<table border="1"> <tr> <td>Tutte le Biblioteche</td> <td>Biblioteche agg. online</td> <td>Indici</td> <td>Doc Delivery</td> <td>Servizi online</td> </tr> </table>		Tutte le Biblioteche	Biblioteche agg. online	Indici	Doc Delivery	Servizi online
Tutte le Biblioteche	Biblioteche agg. online	Indici	Doc Delivery	Servizi online		

Figure 12: *De Bononiensi scientiarum et artium Instituto atque Academia commentarii* on ACNP

By clicking on such link, users can access the journal.

Open Archives Initiative has its roots in an effort to enhance access to e-print archives as a means of increasing the availability of scholarly communication". Document Version 2002/06/10T11:00:00Z (site last accessed on the 30th August 2006).

⁹ For this paragraph, see Alessandra Citti, *Nuovi bisogni per nuovi servizi*, in "Bibliotime" anno VI, n. 2 (luglio 2003), <http://didattica.spbo.unibo.it/bibliotime/num-vi-2/citti.htm>

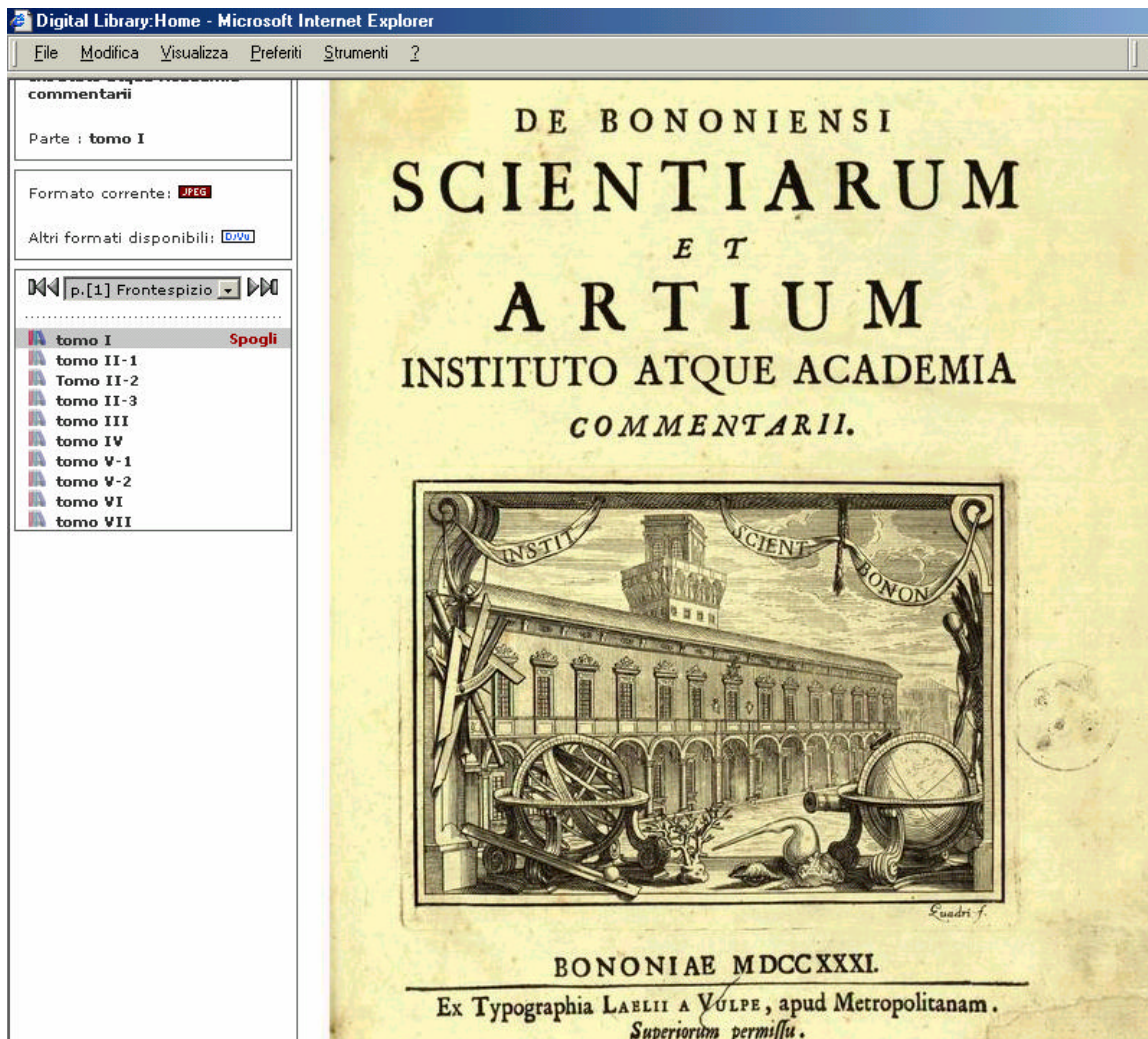


Figura 13: De Bononiensi scientiarum et artium Instituto atque Academia commentarii

By clicking on Indici (“Tocs”) users will have the following result:

La ricerca *find articoli where fasc_issn='1122-4150' sort by level,fasc_key/DESCEND, pagina_ini_num/ASCEND* ha
Si mostrano 100 riferimenti a partire da 1

Selezionare un intervallo oppure rifai la ricerca sulle Annate Precedenti

Annate selezionate 1998-2002

Per ulteriori informazioni selezionare i riferimenti di interesse.

1. Brunelli, Giovanni Angelo; Canterzani, Sebastiano
[De flumine Amazonum.](#)
[De bononiensi scientiarum et artium Instituto atque Academia commentarii](#), 70, 1791, pp. 23 - 24 , [full-text](#)
2. Bibiena, Antonio; Canterzani, Sebastiano
[De hirudine.](#)
[De bononiensi scientiarum et artium Instituto atque Academia commentarii](#), 70, 1791, pp. 24 - , [full-text](#)
3. Brunelli, Gabriele; Canterzani, Sebastiano
[De locustarum anatome, deque reptilium organo auditis.](#)
[De bononiensi scientiarum et artium Instituto atque Academia commentarii](#), 70, 1791, pp. 24 - 25 , [full-text](#)

Figura 14: De Bononiensi scientiarum et artium Instituto atque Academia commentarii: TOCs

Full text access is also available, as appears in Figure x:

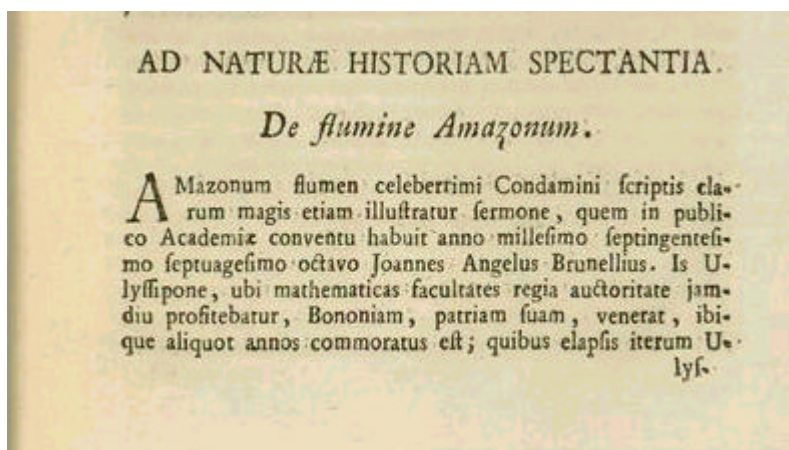


Figure 15: Full text of a single contribution

Serials check-in

ACNP is integrated with the Serials check-in system, which permits librarians to capture serials descriptions from the catalogue and end users to be informed about issues actually available in libraries¹⁰. Check-in system is a project carried out and maintained by the Interlibrary Centre at the University of Bologna and is offered to all libraries participating in the catalogue.

If an end user clicks on a serial and then on "Libraries", it can see libraries holdings, as we can see in figure n. 16

BO651 Centro Servizi e Biblioteca (C.S.B.). Facoltà di Chimica Industriale dell'Università.
 Viale Risorgimento, 4, 40136 BOLOGNA , tel: (051)2093655, fax: (051)2093654
Holding: 1935- [Last issues](#)

Figure 16: a library holding *Sapere* in ACNP

By clicking on [Last issues](#) he can see which issues are available and which are expected (Fig. 17).

Periodico/Rivista: ***Sapere (Bari)**
 ISSN: 0036-4681
 Codice CNR: P 00007405
 Periodicità: Bimestrale

Stato Ricevimento	Volume	Fascicolo	Data/Descrizione Fascicolo	Anno
Atteso	72	4	01.08.2006	2006
Ricevuto	72	3	Giugno 2006	2006
Ricevuto	72	2	Aprile 2006	2006
Ricevuto	72	1	Febbraio 2006	2006
Ricevuto	71	6	Dicembre 2005	2005
Ricevuto	71	5	Ottobre 2005	2005
Ricevuto	71	4	Agosto 2005	2005
Ricevuto	71	3	Giugno 2005	2005
Ricevuto	71	2	Aprile 2005	2005
Ricevuto	71	1	Febbraio 2005	2005
Non disponibile al momento	70	6	Dicembre 2004	2004
Non disponibile al momento	70	5	Ottobre 2004	2004

Figure 17: Issues received, expected and temporary not available in ACNP

¹⁰ For this paragraph, see Alessandra Citti, *La Gestione Amministrativa Periodici della nuova ACNP: servizi per gli utenti e funzioni per gli operatori*, in "Bibliotime" anno VI, numero 1 (marzo 2003), <http://didattica.spbo.unibo.it/bibliotime/num-vi-1/citti.htm> and Alessandra Citti, *Serials Control for the Italian Union Catalog of Serials*, in "Serials Review", 29 (2003), 169-178.

Issues not yet received appear as “*atteso*” (expected). Issues already received appear as “*ricevuto*” (received). Issues sent to binding or temporarily not available appear as “temporarily not available.”

To make check-in quicker and to reduce human errors, search and check-in can be made not only by searching the title or ISSN and typing issues’ data, but also by reading the bar code with a bar code reader. The programme recognizes both SICI and EAN¹¹. Such standards are more and more often printed on serials issues. Since both bar codes contain ISSN and enumeration data, clicking on such codes permits us to fill in all fields necessary for issues identification.

If we analyze SICI (Serial Item Contribution Identifier) - the standard ANSI/NISO Z39.56-1996 - we can see that it contains all necessary information to check-in issues.

Item segment			Contribution segment (article...)	Control segment				
ISSN	chronology	Enumeration		CSI Code structure identifier (fasc./ art.)	DPI Derivative part identifier (paper 0, Toc 1, index 2, abstract 3)	MFI Medium/form at (TX a stampa)	Standard version n.	Check char.
0886-9383	(200112)	15:10	< >	In the example, it has been omitted by the publisher	In the example, it has been omitted by the publisher	In the example, it has been omitted by the publisher	1	-K

Figure 18: SICI code for Journal of Chemometrics, Dec. 2001, vol. 15, n. 10.

The left part of the code – the item segment – is the relevant part for checking-in. ISSN retrieves univocally the serial. Chronology and enumeration identify the issue. The librarian has the possibility to add further data, for instance a specific title for a monographic issue, and then has to confirm.

SICI, in figure 18, identifies *Journal of Chemometrics*, whose ISSN is 0886-9383. Chronology identifies December 2001 and enumeration refers to volume 15, issue 10.

DDS

Information about holdings and issues actually received are essential also for the DDS, because librarians can check which library has already received an issue before asking for an article. ACNP is the main resource Italian and foreign librarians and scholars use to locate a journal, to find information about it or its services and to request DDS. In August 2006, ACNP was added in Karlsruhe Virtual Catalog KVK and in September ACNP had 200,000 accesses from Karlsruhe.

ACNP does not require libraries to have specific procedures or software for DDS. Participating in the union catalogue only implies that a library offers DDS. Libraries are free to offer it at the conditions they consider appropriate, using any technical solution. Since libraries participating in ACNP are academic, research, public, and company libraries, they have different requirements, regulations and technological facilities. Therefore ACNP does not force them to adhere to a unique DDS module or unique DDS terms.

To facilitate DDS, the catalogue has been linked to the most common products adopted for DDS in Italy: ICCU ILL and NILDE.

ICCU is the Istituto Italiano per il Catalogo Unico located at the National Central library in Rome. It is responsible for the Italian union catalogue of serials and monographs called SBN. Actually, in Italy

¹¹ SICI standard is available at http://www.niso.org/standards/standard_detail.cfm?std_id=530, for EAN bar code, see <http://www.eanbarcodes.com>

we have a union catalogue of serials – ACNP – and a union catalogue of monographs – SBN -, which contains also serials. The ICCU module was originally produced for SBN, but is now also interconnected with ACNP. The module carried out by ICCU has been offered not only to libraries participating in SBN, but also to Italian libraries asking to adopt the module and to offer DDS/ILL service. 284 libraries have adopted this module. ILL SBN is an open system which can be interconnected with local loan systems and international DDS. It records requests, generates statistics and permits us to track requests and therefore to check if an item has been processed. ILL SBN took into consideration the functional and technical solutions adopted for the European project AIDA (Alternatives for International Document Availability) which experimented the international standards ISO ILL 10160 - ISO ILL 10161¹².

Another Document delivery system in use in Italy is NILDE. “NILDE (Network Inter-Library Document Exchange) is an Internet-based Document Delivery System which has been developed at the Research Area of Bologna Central Library within the framework of a National Research Council (CNR) project in order to take advantage of new Internet technologies and promote cooperation among CNR and Italian university libraries¹³.

NILDE was tested between 2000 and 2002; since 2004 several libraries have accepted to share a 'set of good practice' rules about mutual cooperation and efficiency in Document Delivery.

NILDE allows libraries to:

- send requests to a specific lending library (this operation is facilitated if the library participates in ACNP, to whom NILDE is dynamically linked);
- manage all the received requests;
- send requested documents in a secure way via Internet, or fax or surface mail;
- archive all transactions, in order to provide statistical reports;
- get accounting reports, based on a 'reciprocity' policy established among libraries which agree to cooperate.

NILDE supports secure electronic delivery via Internet by means of a file-uploading/Web-server; this very simple user interface assists libraries in retrieving requested documents. The file uploading allows us to send large size documents, therefore resolving problems that users may encounter with e-mail agents.

Today NILDE accounts for more than 500 libraries among Italian academic and research institutes and the number of exchanges is about 100,000 items per year¹⁴.

To make the presentation more concrete, I will show how the service appears to catalogue users. After searching a serial, a librarian clicks on "Doc. Delivery" to see the terms and conditions of the services offered by all libraries holding the journal.



Figure 19: The journal *Sapere* in ACNP

In the case of the journal *Sapere* many libraries hold the title.

If we click on the symbol representing DDS, we can see that Centro Servizi e Biblioteca C.S.B. has selected two possible ways of receiving ILL requests: ICCU module or e-mail.

¹² <http://www.iccu.sbn.it/genera.jsp?id=65#caratteristiche>

¹³ See <http://nilde.bo.cnr.it/>

¹⁴ Silvana Mangiaracina, *Current issues on Italian document delivery*, in “Proc. of the IV Italian Conference on Internet Document Delivery and library cooperation”, Naples, 2006, <http://biblio-eprints.bo.cnr.it/archive/00000090/> (text in Italian, English translation by S. Mangiaracina).

BO651 Centro Servizi e Biblioteca (C.S.B.). Facoltà di Chimica Industriale dell'Università.
Richiedi il documento attraverso < il servizio ILL ICCU > < la posta elettronica >
Posseduto 1988- Note: Rivista collocata presso Dip. chim ind., annata corrente presso bib. centr. chimica ind.
Visualizza la disponibilità dei fascicoli
Si effettua DDS a titolo gratuito alle biblioteche che offrono le stesse condizioni, preferibilmente in formato elettronico, ma anche per fax o posta. Si effettua DDS alle altre biblioteche o a utenti singoli (nel rispetto della vigente normativa sul copyright) a titolo gratuito se brevi - anche per fax. Per articoli lunghi o nel caso di richieste molto consistenti si richiede il rimborso spese. Nel caso di utenti esterni all'università è previsto un addebito di Euro 1,55 per ogni richiesta, oltre alle spese per le fotocopie. La fattura viene inoltre gravata di IVA, secondo la normativa vigente.

Figure 20: ACNP and link to ICCU ILL module

If we go back to the catalogue, the librarian might first check if the issue where the article he is interested in has already been received in the library, then will select either ILL ICCU service or e-mail.

By selecting ICCU module the serials title is automatically copied into the ICCU form

Figure 21: ICCU form for ILL/DDS

The librarian has then to input the article's data and confirm the request.

Other libraries such the Biblioteca Centrale dell'Università del Molise have selected NILDE as preferred DDS/ILL system.

CB001 Biblioteca Centrale dell'Università del Molise
Richiedi il documento attraverso < il servizio ILL NILDE > < la posta elettronica >
Posseduto 1989- LAC. 1989;1994;1995;1996;1997;
Le richieste possono essere inoltrate per posta, per fax o per e-mail. Il servizio è fornito gratuitamente, a biblioteche e a istituti di ricerca, sulla base del reciproco scambio e nel rispetto delle vigenti normative sul diritto d'autore. L'invio degli articoli avviene ordinariamente per posta. Il servizio è sospeso nel mese di agosto e durante le festività natalizie.

Figura 22: ACNP and link to NILDE module

NILDE is interconnected with ACNP, therefore by clicking on NILDE the serials title is captured in NILDE form and as for SBN ILL system the librarian has only to add articles data and confirm the transaction.

Modulo Richiesta Articolo

Username Biblioteca Richiedente	bo651
Biblioteca a cui si invia la richiesta	CNR Area Ricerca di Bologna Biblioteca Centrale

Nome Rivista	* Sapere (Bari)
Titolo Articolo	<input type="text"/>
Autori	<input type="text"/>
Anno	<input type="text"/>
Volume	<input type="text"/>
Pagina iniziale	<input type="text"/>
Email utente [Facoltativo]	<input type="text"/>
Note	<input type="text"/>

Figure 23: NILDE's form for ILL/DDS

New services

I will only mention some new services, to show how the catalogue is evolving.

Server Z39.50

New ACNP's OPAC is integrated with a z39.50 server, which answers to queries having z39.50 protocol. Any z39.50 client can send queries to it.

New output formats

ACNP's OPAC has different output formats. As well as html, users can select:

- ◆ xml output: research output is shown in xml output.
- ◆ xml_short output: it is a format shorter than the above. Instead of holdings a link to holding page is supplied (in html format).
- ◆ Marc21 ascii output.
- ◆ Marc21 xml output.
- ◆ Marc21 output (which permits to download records Marc21 in binary format).
- ◆ Dublin Core xml output: output in xml format with Dublin Core tag.

ACNP has been evolving to meet user requirements and to become an integrated tool that provides access to a wide range of resources and services. Electronic serials were added to the catalogue in 2002 and a direct link to full text - or direct links when more points of access were available - were added to facilitate users. Integration with Serials check-in was carried out to offer a tool both to librarians and to end users. Agreements and interconnections with the most adopted DDS services in Italy are a further result of integration.

New register of libraries¹⁵

The new register of libraries is a project aimed at supplying information about different kinds of libraries and institutions in Italy. The aim of the project is to produce a regularly updated resource easy to access, to facilitate ILL and DDS at international and national level.

The quality of the service depends on the quality of the information available. For this reason the database is a cooperative product which permits us to make available data already present in the different institutional systems.

The description and the formalization in XML format will be based on open standards. The final project will adopt the following standards:

- Identifying data (ISO 15511 ISIL)
- General information, address, contacts, ... (ISO 2146);
- Functional and managing relations (ISO 2146);
- Participation in programs, projects and networks (ISO 2146);
- Services to users (ISO 2146);
- ILL/DD services and terms of access (ISO 2146, ISO 8459, ISO 10161, national standards);
- Resources and local data necessary to handle data (extension of ISO 2146scheme, compiled with ISO 2789);
- Statistical information and quality indicators (ISO 2789, ISO 11620).

The register and the interface have been developed using open-source modules, largely adopted at international level and open-source available.

¹⁵ A description of the project (in Italian) is available at <http://registro.cib.unibo.it:8080/registro/Info.jsp>