

Library information system of Slovenia

Ivan Kanič

National and University Library, Ljubljana

Slovenia

Slovenia is a small Central European state, neighbouring Italy, Austria, Hungary, Croatia and the Adriatic Sea. In the period between 1945 and 1991 Slovenia represented one of the six federal republics of Yugoslavia. In 1991 it attained its independence and has been a sovereign state since. Its population is round 2 million inhabitants, the ethnic composition being rather uniform – 88 % claim Slovene nationality. The official language is Slovenian, belonging to the South Slavonic branch of languages, making use of the Latin alphabet including three pairs of special characters (Čč, Šš, Žž). The area, covering mere 20,256 km², is very composite – partly Alpine, Mediterranean, Pannonian and Carstic regions meet there. The capital Ljubljana counts no more than 275,000 inhabitants. The national currency is Slovenian Tolar (SIT, 1 DEM equals some 91 Sit), annual inflation rate being less than 10 % in 1996. Financial statistics (1995) show GDP at 7,200 US\$ per capita. There are two universities, in Ljubljana and in Maribor, respectively.

Library Information System of Slovenia

The legal basis for the creation, development, operation and financing of the library system is the Library Act of Slovenia, adopted in 1961. In 1982 it was superseded by a new law which is still in force. Preparations for new legislation have resulted in the recent Proposal for the new Library Law in 1994, but there have been no tangible results of the initiative yet. Unfortunately, the proposal of the updated Legal Deposit Law has had a similar fate since 1993. The recent Copyright Law (1996) is a very strict one, restricting to some extent the fundamental functions of libraries as far as lending of «nonconventional» library material is concerned, so amendments are on their way.

The law, still in force since 1982, has provided a sound environment for a well structured and organized library system, joining libraries of all types (national, university, academic, special, school and public libraries). Standards for specific library types and their services were set, and the average library performances have reached a rather high level. The political doctrine of the past influenced the library collections in a higher number of certain authors and titles but has never prevented librarians from acquiring foreign lit-

erature (e. g. in 1980 there were some 10,000 titles of current foreign periodicals in Slovene libraries). Characteristic features of the socialist self-management system have hardly influenced the professional side of the legal document, so the transition to the «new democracy» required only slight changes to the law, mainly reflecting changes in management, financing and forms of property.

The library system consists of:

National Library	1 (acting as the National and University Library)
university libraries	3
academic libraries	69
special libraries	167
public libraries	60 (833 branch libraries)
school libraries	650

The horizontal linkage is ensured by the instrument of so called «parent» libraries performing advisory services and professional supervision on the local, regional and national level. The linkage in professional questions, including education and training, is coordinated by the national library and is transparent throughout all types of libraries.

Vertical linkage is carried out by central libraries, coordinating activities of libraries in a certain field of human knowledge. They often include information and documentation centres and serve as national coordinators of the subject field.

Professional education and training is carried out by the Department for Library and Information Sciences (Faculty of Arts, University of Ljubljana) and the Research and Development Department at the National and University Library, but can be performed by other licensed institutions as well.

Library activities are financed through three ministries: Ministry of Culture, Ministry of Science and Technology, and Ministry of Education, respectively. Public libraries are financed through their local communities to a certain extent.

Legal deposit is still regulated by the amended Legal Deposit Act dating from 1986 when 7 out of 22 copies were intended for the national libraries of the former Yugoslav republics. The recent amendment (1992) diminished their number to 16. The National and University Library and the University Library Maribor keep two copies each (one archive copy and one for circulation purposes), 2 copies are sent to the libraries of the Slovenian ethnic minorities in Austria and in Italy, 8 further copies are kept by the main public libraries.

Legal deposit is the major source of bibliographic data for the National Bibliography.

National and University Library

The National and University Library acts as the Slovenian National Library, at the same time performing functions of the Ljubljana University Library, «parent library» in the system with advisory and supervisory functions, inter-library loan, document supply and referral centre at the national level. Due to its rich and antique holdings of rara, as well as to a variety of its activities, it operates as the leading research library in the country.

The Library was established by a decree, released by the Empress Maria Theresa in 1774, when 637 books, spared by the fire in the previously dissolved Jesuit college, were transferred to the newly established library of the Ljubljana Lyceum, and henceforth intended for public use. The Lyceum Library was legally entitled to receive legal deposit copies from the province of Carniola as early as 1807. During the French occupation this privilege covered the entire Illyrian provinces. In 1850, simultaneously with the elimination of the Lyceum, the Library became the Main Reference Library of the province, intended for study and research.

After World War I it was renamed the State Reference Library, thus becoming the main library of Slovenia with the privilege of receiving legal deposit copies from that area. In 1921 the Library became the State Library and legal deposit copies from all administrative regions of Yugoslavia started to pour in. With the foundation of the first Slovenian university in Ljubljana in 1919, the Library took on functions, tasks and the name of the University Library. Claims for a new purpose-built Slovenian university library encountered vigorous resistance from the then Belgrade authorities. Persistent student action, however, coupled with demonstrations, brought an end to the tenacity of Belgrade. As a result, in 1941 the University Library moved into a new monumental building, situated in the immediate vicinity of the University.

After the Liberation in 1945 the University Library was legally recognised as the Slovenian national library, so it was again renamed National and University Library, Ljubljana.

Activities and services of the library cover

- collecting, cataloguing, conservation and access to documents, submitted under legal deposit (so called «Slovenica»); collection of manuscripts, important to Slovenian culture and science; collection of library and information science literature, as well as of doctoral dissertations and other

- theses; a representative collection of foreign literature, covering all branches of human knowledge,
- provision of information about Slovenian publications to libraries outside the country,
 - creation and publication of the current and retrospective Slovenian national bibliography,
 - central cataloguing activities, related to publications, issued in Slovenia,
 - provision of cataloguing-in-publication (CIP) records for Slovenian publications,
 - developing a national preservation strategy, thus organising restoration of the most valuable library materials,
 - co-operation with national and other major libraries abroad, mainly on the basis of interlibrary loan and international exchange of publications.

As soon as Slovenia became an independent country in 1991, the National and University Library was charged with additional tasks and responsibilities, previously performed by federal institutions:

- National agencies for international bibliographic control of publications
 - Slovenian ISBN Agency
 - ISSN Centre Slovenia
- national centre for the collection and exchange of official publications,
- national referral centre, catering for the needs of research and education,
- the Library has taken prompt action in order to obtain the status of deposit library for all publications, issued by UNESCO.

In the capacity of the national «parent library», it promotes library networking within the national library and information system, enhancing research, development and advisory activities, along with organisation of education and training in this field.

The total collections of the National and University Library comprise some 2.2 million units and there are over 8 million bibliographic records stored in its card catalogues; the Library's local on-line database, which is a constitutional part of the national union catalogue, contains more than 282,000 records. There were 235,000 reader visits in 1996, 65 % of the 11,400 registered users being students.

The Library resides in the monumental building planned and constructed by the famous architect and artist Jože Plečnik. It was initially intended to house 240,000 volumes at the most on a surface of 8,410 m² with 236 reader seats. Not only the ever-growing storage problem hinders the performance of the Library, but it is increasingly preventing the Library from implementing an up-to-date library and information infrastructure. Therefore, since 1987 the

National and University Library has been striving for the new building. According to the plans, the new building of the National and University Library will be fully operational in 2001, and it will undoubtedly be an institution the development of the information society will be based upon.



Ivan Kanič

Cooperative Bibliographic System and Services in Slovenia – COBISS

The basic principles of the shared cataloguing system, UNIMARC being chosen as the appropriate basic format, were agreed upon by the Community of the National Libraries of Yugoslavia in 1987 and the Institute of Information Sciences in Maribor (Slovenia) was appointed the role of the host of the system then, responsible for the development of the software suitable for distributed data processing in a vast network. Financed by the Yugoslav Federal Ministry of Science and Technology, the Institute soon provided the basic hardware, software and communication links to cooperating libraries which took part in the system development. In the process of shared cataloguing local databases are being built on local computer systems, simultaneous with the central, cooperative catalogue, being the result of coordinate and unique bibliographic description. Local catalogues perform on their own as independent units, but related to the shared catalogue as its segments. Identical en-

tries in several local databases relate to a single record in the cooperative database, so duplicates should be avoided. In this respect the shared database has the authority function in the process of creating records and gives efficient tools in information retrieval in all segments of the network. Data input, OPAC, acquisition, periodicals control, circulation control, interlibrary loan and information retrieval in other systems are the major modules of COBISS. Local catalogues as well as the cooperative database function as online public access catalogues (OPAC) to all users with no specific limitations.

Participating libraries

Active participation is open to all institutions capable of fulfilling the criteria set by the system: quality of information put into the catalogue, and VAX/VMS compatible computer equipment. The decision is up to the National Library and the host of the system following a thorough evaluation of a test database. Passive use of the system is open to all institutions and individuals.

There are some 167 special and 69 academic libraries within two universities, oriented towards fulfilling information needs of scientists, researchers and students in all subject fields. Due to their collections of technical and scientific literature from all over the world their cooperation in the shared cataloguing system is of great importance as they offer up-to-date information on information sources in Slovenia, including their location. According to subject coverage these libraries form a number of specialized systems for scientific information.

On the other hand, some 60 public libraries cover other strata of population, forming the spine of the Library Information System of Slovenia. Important collections of non-book material are to be found in public libraries, 8 of them functioning as legal deposit libraries. In this way, participating in the shared cataloguing system of Slovenia, public libraries act as information centres, which is the basic principle of the developing Library Information System of Slovenia.

The National and University Library is the central library of the system with responsibilities and competences covering research and development in the field of librarianship, education and training, universal bibliographic control of «Slovenica», editorial and coordinating function in the shared cataloguing system and fulfilling other functions of a national library.

Since 1988 almost 180 libraries of all types (national, academic, special and scientific, public, and school libraries) have joined the system as active participants. There are some 1.1 million records in the central database. The na-

tional bibliography (*Slovenska bibliografija*) has been printed as a product of the system since 1988, since 1995 the Slovenian National Bibliography is available in three forms, however – online as a segment of COBISS, in printed form, and in CD-ROM edition.

Terms of co-operation

The Co-operative Bibliographic Systems and Services – COBISS software supports the functions and activities of libraries and information centres applying a uniform methodology of distributed data processing on one hand, on the other this name represents also the association of libraries creating and using the union catalogue, including the bibliographic utility service. The concept of the association, its organization, terms and conditions of co-operation including the governance of the system had been stated in a document approved by the members in 1993 but individual issues have often been questioned and discussed since then, so an updated and more precise document should be prepared and proposed to the members of the association.

The present document introduces the notion of COBISS, computer and communications infrastructure serving the system, the software and its individual modules, the role of the bibliographic utility service and the national library in the system, organizational structure and the management of the system, evaluation of the services and the mode of payment, conditions and modes of joining the system, and the protection of the rights of the participants.

The National Library and the Bibliographic Utility Service have the leading roles in the process of designing, organizing and governing the system. In the document, and in the everyday practise as well, the questions of competence and responsibility have not always been adequately solved. This remains one of the important issues to think about in the preparation of the new document. So is the question of copyright in general and for particular records, taking into consideration the protection of the rights of the participants (i. e. creators of the bibliographic records) and the right of free use of their share in the union catalogue.

Libraries can join the association regardless of their type and size providing they meet the criteria and requirements of quality. There is an elaborated programme of education and training carried out by the National and University Library and the Institute of Information Science, including the evaluation of a test database and conferring of a licence to the cataloguers authorised to enter the data into the union catalogue. According to the needs and competence of individual libraries they can join under different conditions defining their status in the system. The **national member** (the National and University Librar-

y) assumes special rights and obligations in the management and development of the system, education and training, and quality control. **Full members** participate actively in the process of shared cataloguing by means of entering the data into their local catalogues and the union catalogue, as well. They have the right to participate in the management and development of the system. **Associate members** co-operate passively only, i. e. they make use of the union catalogue and have the right to download the records into their particular local catalogues.

It is envisaged that the national member, full members, and associate members participate in the management of the association through three bodies: the **Board of Directors**, the **Professional Council**, and the **Conference of Users**. The Conference of Users takes place once a year in the form of a seminar where the majority of the members meet but no decisions are supposed to be taken. The Professional Council was dissolved in 1995 as a superfluous structure. The Board of Directors meets once or twice a year being engaged predominantly with the adoption of the reports and plans of the previous and following year.

Machine readable format – COMARC

UNIMARC format had been chosen as the appropriate basis for the development of the local «dialect» COMARC reflecting the specific features and needs of the surroundings. The union catalogue COBIB, being the result of shared cataloguing, and the local databases of participating libraries are identical as far as the structure of bibliographic records and the structure of summary holdings data are concerned. Different specific subformats have been developed to support individual functions of the catalogue, e. g. COMARC/B for bibliographic data, COMARC/H for holdings data, COMARC/A for authority data. COMARC has been developed and implemented in close co-operation between the National and University Library and the Institute of Information Science, including experts from different advanced libraries involved in the verification of the proposed solutions.

The co-operative catalogue – COBIB

Local catalogues of individual libraries are closely connected with the union catalogue COBIB which contains bibliographic and summary holdings data of all the participating libraries. A specific bibliographic unit is represented by a single bibliographic record. The international ISSN database is integrated and used for authority control purposes in creating records for serials. Updating of individual local databases is carried out simultaneously with the

union COBIB database, and so is the indexing of more than 90 search indexes for bibliographic data, summary and copy specific holdings data. Opposite to the concept of some known shared cataloguing systems where new bibliographic records are created in the central database and downloaded into local databases afterwards, within COBISS records are created and stored in local catalogues and uploaded into COBIB afterwards.

Statistical overview of the catalogue shows the following features for the end of 1996:

participating libraries – members	185
national library	1
academic libraries	52
special libraries	63
public libraries	61
school libraries	8
total number of records	
union catalogue	1,100,061
local catalogues	2,221,064
entered records in 1996	126,960
copied records in 1996	293,270
converted records in 1996	348,586

According to the type of documents the structure of the union catalogue shows that some 72 % of the bibliographic data represent monographs, 24 % journal articles, and 4 % serials. Some 352,000 records had been created before 1991 by a number of libraries in former Yugoslav republics which for known reasons no longer participate in the system.

Sharing common bibliographic data in such systems is the major issue. The ratio of created records vs. copied records is increasing in favour of the copied ones, it showed 45:55 in 1995 in general, and is even higher for monographs, i. e. 33:67.

The functions performed by the system

COBISS pursues the ambitions of an integrated library system so a number of modules have been developed, others are in preparation or testing. The most important modules are as follows:

Cataloguing

is carried out with the help of pre-defined screen formats for monographs (book material or NBM), serials, collections and journal articles. Fixed or variable length fields can be repeatable or non-repeatable according to the specific format. It supports data entry and display for inventory, acquisition and serials check-in. On cataloguing a new item, the cataloguer has to check for the existence of the specific bibliographic description in the local catalogue first, then in the union catalogue. In case the appropriate record exists it is copied into the local catalogue, copy specific local data are added as well. A new bibliographic record is created exclusively in case it does not exist in either of the catalogues. Cataloguers can delete or edit their own data only. For changing and editing of data in the union catalogue special authorization is given to certain cataloguers.

Circulation control

is integrated with other segments so any change is reflected in real time in all the modules. It enables the use of different parameters and the implementation of specific rules to fit within different types of libraries. The module enables registration and maintenance of data concerning library users, loan, prolongation, reservations and return of different types of library material by using bar codes, preparation of reminders, financial management, and OPAC utilities.

Interlibrary loan utilities have been planned and are under construction at present.

Reports

enable librarians to produce different printouts from local catalogues, and from the union catalogue in some cases. Most of the reports are standardized and in some extent adapted to the needs of particular libraries. The reports include catalogue cards, bibliographies, inventory books or lists, labels, bar code labels, write-off lists, subject headings lists, statistical reports, acquisitions lists, and loan reports and receipts.

The Slovenian National Bibliography

The printed series of the national bibliography has been issued regularly by the National and University Library since 1945, and it has formed a constituent part of the union catalogue since 1988. The printed editions containing monographs, serials and journal articles are produced as an output of the machine readable catalogue, the data being accessible to the users through the OPAC, as well. To enhance the use and distribution of the bibliographic data the CD-ROM version (for Windows) of the national bibliography was published for the period between 1989 and 1995 and will be published on a regular basis in the future.

ISSN database

is serving authority control purposes and forms a constituent supporting part of the system. In 1996 there were 235 new ISSN's and bibliographic records for new Slovenian serials added. The records are converted to the International ISSN database on a regular basis.

ISBN database

is a subsystem supporting the activities of the Slovenian ISBN Agency. There are 891 records representing complete data on Slovenian publishers, 189 new entries added in 1996. The records are regularly included into the *Publishers' International ISBN Directory*. There were 2,971 new ISBN's assigned in 1996, the major part of the publishers already using the new Slovenian prefix (961). The ISBN assignment is usually connected to CIP (Cataloguing-in-publication) services so it is not surprising that the figures are almost identical (2,895 CIP records created in 1996).

CIP and recently assigned ISBN are used as a tool to control the regularity of the legal deposit. According to the Slovenian Legal Deposit Act printers and producers of AV material are liable, and the evidence shows that there are actually more than 1,000 of them in Slovenia.

OPAC

is a network application intended for the users to access local catalogues of their particular libraries, the union catalogue or the catalogues of any of the member libraries. According to the peripheral equipment one can use the standard VT terminal interface, or the PC Windows interface. A test version of the OPAC has been installed on a WWW server recently.

The user interface allows the three levels, for beginners, advanced, and expert mode. The beginners search mode offers six pre-defined search fields – author, title, publishing year, language, keywords, and words within the title. In the advanced search mode more than eighty search fields are available to the user, including index browsing and truncation. In expert mode the select query statement is implemented enabling the use of Boolean and proximity operators, truncation, index browsing, sorting, displaying and printing of results. There are five different display formats available for bibliographic data, two formats for summary holdings data, and one format for copy specific data. Libraries and end-users can download records to their PC or send it through e-mail.

To access the OPAC the following addresses can be used:

telnet nuk.uni.lj.si or telnet 193.2.8.10

username: OPAC

<http://www.izum.si/cobiss/>

COBISS/ATLASS

enables access and use of a number of specialized databases installed on the host system. They can be accessed individually or through simultaneous searching of multiple databases.

Current documentation and manuals cover the area of the concept, organization, and conditions of co-operation, bibliographic format, holdings format, cataloguing, circulation control, reports, OPAC and ATLASS.

Quality control

There are a number of aspects and procedures observed to ensure a reasonable level of quality control, authority control being envisaged as the major feature. At present the quality, uniformity and consistency of the union catalogue and the local catalogues are provided through the checking of duplicates, revision and editing of records, global code lists for standardized data such as countries, languages, UDC, local code lists for specific data within a certain library, controlling of unique identifications such as ISSN and ISBN, and implementation of automatic counters where applicable. A pre-defined educational scheme and licensing procedures are obligatory for active participants to ensure formal conditions of quality. A single bibliographic control manager within the National and University Library is supposed to form the nucleus of a future quality control service.

Special formats are being studied and developed for the implementation of authority control through authority files concerning names, subject headings, UDC, and serials titles. These particular modules are not operational yet.

Communications and networking

Communication costs have to be taken into consideration as there is still a classic division of computer networks into two groups: commercial networks and academic or research networks, serving the academic, educational, research and development sphere. International communications cause the highest costs, of course. Libraries in Slovenia, and COBISS as a system as well, make use of the national SIPAX communication network, the academic network ARNES, and partially the University of Ljubljana METULJ network, as well. ARNES, the Academic and Research Network of Slovenia, is the most important communications and network provider for libraries, including various Internet services. There is a national backbone to it, joining individual communication and mainframe computers all over the country in one hand, and shaking hands with other national and international systems

(EuropaNET, CARNet, etc.). To provide sufficient efficiency, ARNES is supporting different standards of technology – ISO OSI, DECnet, and Internet, respectively.

Services provided by ARNES cover utilities for remote access, electronic mail, file transfer, conference systems and access to all Internet services. Information servers supported by ARNES cover the major and most frequent services and servers offered by similar systems. Any node (mainframe) in the networks can provide additional services according to its abilities and needs of its respective users. The use of ARNES services is financed by the Ministry of Science and Technology for all the participating libraries irrespective of their type and size.

Computer infrastructure

The philosophy of the system is based on intensive communication between individual local systems and the central host computer system, making use of the above mentioned communications networks. For this reason high quality communications infrastructure had to be introduced for libraries in different environments. More than 50 VAX and AXP Alpha central computer systems based on Open VMS operating system support local catalogues all over Slovenia. Peripheral equipment includes standardized and uniform terminals (mostly VT420 and VT520), printers (dot matrix, laser and thermal for specific purposes), and laser bar code readers for circulation control. In some libraries PCs and specific terminal emulation (COBISS/OPAC and COBIS/Connect for Windows) are used. So libraries, and end-users as well, can access the catalogues in the following ways:

- through their own VAX or AXP computer system
- making use of a PC and the TCP/IP protocol
- making use of a PC or a terminal via leased lines or LANs
- making use of a PC or a terminal via dial-up lines.

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