The National Library of Belarus: a new stage of development

Roman Motulsky

Professor Dr. Roman S. Matulski has been Director of the National Library of Belarus since 2003 and Dean and Professor in the Library Information System Department of the Belarusian State University of Culture for the past 5 years. He is also a member of the International Academy of Informatization at the United Nations. Professor Motulsky's scientific interests are the theory of the library information system and its management. He is a prolific author of more then 200 articles in the field of library science. During his professional career he participated in training activities or performed research in libraries in Holland, Germany, Poland and the USA. Currently Dr. Motulsky is member of the Board of the Ministry of Culture of the Republic of Belarus, the Interdepartmental Council of the Ministry of Culture, the Belarusian Library Association; the Editorial Board of *Library Journal* and *Bibliyatechny svet [Library world] and the* research and practice journal *Vestnik Bibliotechnoi Assamblei Evrazii [Eurasia Library Assembly Bulletin]*. He may be contacted at Nezavisimosti, 116, Minsk, 220114 , Republic of Belarus. Tel: (+375-17) 266 37 00. Fax: (+375-17) 266 37 06. E-mail: director@nlb.by

Abstract

The National Library of Belarus (NLB) is a major universal research library with the status of information, social and cultural centre of the Republic. For more than 85 years the National Library of Belarus has been keeping the national heritage of the Belarusian people and providing information services to the society. Construction work on the new building for the NLB started in 2002 and was finished in 2006. The new Library building in high-tech style is a visiting card for the city of Minsk. The upper part looks like a diamond placed in the centre of a stylobate (the lower part of the building). In the 'diamond' the collection of about 8.4 million items is kept. The Library collections are of historical and cultural value and are the most complete containing materials published in or about Belarus. There are 19 reading halls (2,060 seats), staff offices, administrative and technical rooms in the stylobate. More than 20 modern engineering networks combined into a technical complex provide for the functioning and security of the library building. The local network consists of more than 100 servers and 1,400 personal computers (mainly 'client terminals'). Electronic resources comprise 80 databases representing history, culture, the arts of Belarus, Chernobyl, national periodicals, dissertations, etc. The NLB is working on the retrospective conversion of its resources with a view to creating a digital library. The government of Belarus made great investments in the library building. A charitable account for the building was also opened and numerous companies, organizations and private people donated money. Almost every citizen of the country contributed to the creation of the new building which can thus be said to be truly a national project.

Keywords: National libraries; library architecture; library buildings; library design; information resources; information services

Devoted to the 85th anniversary of the National Library of Belarus

Introduction

The National Library of Belarus (NLB) is a major universal research library, which has the status of an information, social and cultural centre of the Republic. The Library is the leading institution of Belarus in librarianship, bibliography and bibliology, as well as being a methodical and a coordinating core for the library network.

The library collections are of historical and cultural value, and are the most complete collections containing materials published in or about Belarus. The collections are universal in content and include print documents, manuscripts, microcopies, digital and other materials from Belarus and other countries. The NLB is a depository library for the publications of the United Nations, UNESCO, the European Commission, the Organization for Security and Co-operation in Europe (OSCE) and the World Bank. The Library annually receives about 200,000 items.

The NLB is one of the founders of the international professional organization, the Library Assembly of Eurasia, Belarusian Library Association. It develops and participates in a number of international and national programs and projects and organizes key scientific conferences.

For more than 85 years the National Library of Belarus has been keeping the national heritage of the Belarusian people and providing information services to the society. Today the National Library of Belarus possesses its deserved place in the information network and the information services infrastructure of the Republic.

Foundation and History of Development

Born at the beginning of the 20th century, the Library is associated with the history of the State and became a part of Belarusian history.

The decision to found the Belarusian State Library was taken in 1922 and in 1929 the construction of the new building was started according to the special project of the architect, G. Lavrov. In 2003 this building was included in the State Register of the Historical and Cultural Heritage of the Republic of Belarus.

World War II brought huge destruction to Belarus and the Library was no exception – 83 percent of its collections were destroyed or looted, and the building suffered a lot.

In 1962 one more building was constructed and in the 1980s and 1990s some more edifices in different parts of the city of Minsk were allocated to the Library. For many years the problems of the growing collection and of creating comfortable conditions remained the most urgent.

New technologies were introduced with the development of the information infrastructure of society. In the late 1990s the computerization of the Library was one of the strategic tasks. Basically, all library processes (recording, processing, preserving, electronic cataloguing, etc.) were automated. The Library began the creation of its own digital information resources and databases.

In 1992 the Library obtained the status of the National Library.

The beginning of the 1990s was marked by the

transition of Belarus to the new economics. It was a time of major technological transformations. The Government of the Republic of Belarus realized the need for informatization as a main component of modern society. The next important step was to build a new building for the National Library.

A contest for the best architectural project for the Library was organized in 1989, and the winners were Mikhail Vinogradov and Viktor Kramarenko of the 'Minskproekt' Institution, later appointed as the general designer. In 1990 the 'Minskproekt' Institution was entrusted to make a draft project. Experts from several project organizations in Moscow as well as the Library staff took part in the development of separate parts of the project. Work on the draft project was carried out during 1990–1992, but completely ceased later because of financial problems.

The collapse of the Soviet Union brought tremendous political, economical and social opportunities and issues for all the former soviet republics, including Belarus. The first decade of independence was extremely hard for the renewed Belarus. The government faced difficult economical problems which postponed the construction work for the new library building.

In accordance with a decree of President A. Lukashenko, construction work on the new building for the National Library of Belarus started only in 2002.

To ensure an optimal structure for the Library building, the allocation of rooms and departments and the installation of functional and technological links, the experiences of major libraries of the world in Germany, Poland, France, China, Russia, Ukraine and Latvia) and the latest trends in library development were considered.

During the construction process some changes were made in the project as well as in the building and its architectural parts. For example, a decision was made to create the President Centre, including the President's office, two meeting halls and an international press centre. Moreover, some parts of the building are allocated to the National Archive – a leading institution of the State Archive Service.

Gradually, decision-makers came to the conclusion that it was necessary to create a large modern multifunctional information, social and cultural

complex, which would meet the world's standards. This required additional efforts from government bodies, the architects and the construction companies.

While the Library staff continued their routine work, decisions were made concerning the move and the organization of work in the new building. Library staff conducted a large-scale review of the collection. The weight of items to be moved was estimated to be 2,240 tonnes or an area of 90,594 shelved metres. The number of necessary catalogue boxes was also determined (18,958), with a total weight to be moved of more than 52 tonnes.

The NLB developed its own original technology for the transportation of library materials, which enabled it to complete the move in only 100 days – unique in world practice. This worked as follows: packed documents (4–5kg weight) were placed into containers (for 50–70 items according to the format) and loaded in trucks by specialized equipment (25 containers for one truck). Specialized machinery and materials were bought to pack library stacks that considerably shortened the time. Marking and labelling of packages, containers, separate collections and catalogues reflected the professional approach to the move and allocation in the new building. Moreover, different ways of loading and unloading were worked out.

The compilation of lists of documents to be insured, fixing the value of the most valuable manuscripts, archive and old printed books as well as the cost of insurance itself was an important stage of the preliminary work. The transportation of the most valuable items was secured by guards.

Acquisitions, the creation of the electronic catalogue and users services ran simultaneously with the conservation and packing of the collection. It was calculated that the user's services were reduced by only 10 percent during that period.

At the same time the Library staff started retrospective conversion of the general alphabetical catalogue (about 4 million cards) using 2 high-speed scanners.

Particular attention was paid to the future organizational structure of the Library and to the list of staff members, which was planned include more than 1,000 employees.

In 2005 the Government ratified the Conception on Creation of the Information, Social and Cultural Centre in the new Library building. Some perspective programs were initiated according to this Document, e.g. information resources and collection development, library and information services for users, internal art design, and the creation of a social and cultural centre.

The New Building

The decision to construct the new building for the National Library was taken due to a significant role of libraries in information supply and its value in the development of society.

The Government made great investments in the Library building. Moreover a charitable account for the Library building was opened and numerous companies, organizations and private people donated money. Almost every citizen of the country contributed to the creation of the new building, and we can say it was a national project.

Figure 1. The Library under construction.

The Library construction was completed in only 36 months – half the standard time (Figure 1). The opening ceremony was held in June 2006.

According to the project for the town-planning aspect of the new building, the composition was planned to be central and to fit the landscape. The architects' idea was that the building should give an impression of magnificence on all its frontages. The height and size of the Library were designed to ensure its harmonic fusion into urban surroundings Nowadays the National Library of Belarus is an outstanding city symbol (Figure 2).
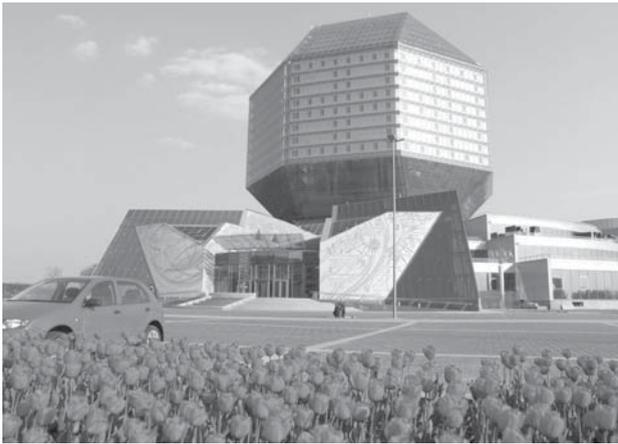
Figure 2. The Library today.

The building has the shape of a ball-like transparent polyhedron (coated with glass) which resembles a diamond placed in the centre of a stylobate (Figure 3).

Figure 3. The stylobate.

A monument to Francisk Skaryna, the first Belarusian printer, is placed in front of the main entrance. The main entry looks like two open book pages, made from unpolished granite. Its bas-reliefs are dedicated to the evolution of world and Slavic literature (Figure 4).

Figure 4. The main entrance.

The building has an area of 113, 669 square metres and is 73.67 metres high. The total weight is 140,000 tonnes and its foundations are sunk to 15 metres. The volume of the whole structure is 420,558 cubic metres (Figure 5).
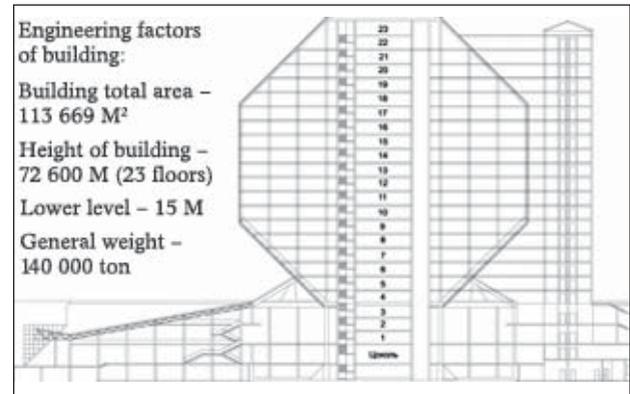

Figure 5. The general vertical scheme.

The originality of the project consists in the location of the library stacks in the upper part of the building (area: 54,960 m², total capacity: 14 million items). The stack is approximately in the shape of a ball with a diameter of 60 metres. This form gives the maximum storage compactness and efficiency of document delivery. This last parameter is a major one in design of modern libraries. Thanks to a modern delivery system – a Telelift consisting of 65 containers rolling on tracks, the total length of which is about 900 metres – it takes about 20 minutes to deliver materials to users (Figure 6). The Library stack was built on thermic principles. Technical corridors along the perimeter of its outer walls create an air layer between the stack and the environment to minimize temperature influences and provide the most optimal temperature and humidity conditions.

Figure 6. The Telelift system.

About 4,450 stationery and 1,397 mobile shelves (totalling more than 100 different types) were designed and produced by Belarusian companies. Today the general length of shelves in the Library stack is more than 145,000 metres and the length in open stacks and collections placed in reading halls is about 15,000 metres.

Service and passenger lifts, the Telelift and engineering communications are in the core of the building from the bottom to the top. On the 25th floor there is an observing place. Visitors get there by panoramic lift. In total there are 19 lifts in the library.

A terraced form of stylobate emphasizes the beauty of the construction and consists of three levels (the height of the three levels is 17.5 metres; the width of the first and broadest level is about 200 metres). On the ground floor there is a cloak-room for 2,000 visitors and users' safes.

The departments of registration and library loan, the reference area (Figure 7) and the children's room are on the 1st floor. People enter the Library through the security gate at the central part of the 1st floor using a special card with microchip and barcode (library card for users and personal card for staff) (Figure 8).

Figure 7. *The reference area.*

Figure 8. *The central area of the first floor.*

There are 19 reading halls (2,060 seats), staff offices, administrative and technical rooms in the stylobate. The reading halls of the first floor serve the general public (Figure 9), those on the second floor are for scientists and reference, and those on the third floor are for users working with special collections on art, rare books, etc.

Figure 9. *Reading hall for the general public.*

Three levels of the central reading area are surrounded by circular corridors and halls. The radial location of the reading halls facilitates the orientation within the building.

Special attention was paid to the natural lighting of reading halls, galleries and office. All halls are bright. The daylight penetrates into halls and some Library public and offices areas. This gives special colouring to the internal space and enables power saving.

The central part of the stylobate has a big open space – an atrium. There are permanent art exhibitions devoted to Belarusian culture, ethnography and folklore (Figure 10). Temporary exhibitions of modern Belarusian arts are situated on the third floor.

Figure 10. *The Library interior.*

The walls between corridors and reading halls are made of glass, which enlarges space and gives readers the possibility to enjoy the art works in the corridors. Diverse reading hall interiors create special psychological moods. The internal design is tightly connected with the idea that a book is a treasure of knowledge. Decorative materials, lighting, flowers and plants are accentuated in the design of reading areas (Figure 11).

Figure 11. Reading area.

Administrative, service and utility rooms have separate entrances. Special internal backyards isolate loading activities from Library visitors.

The new building also opened up new perspectives for the development of social and cultural activities. For these purposes a special social and cultural centre was organized. It includes a conference hall (490 seats), art galleries, a Book Museum, an observing place, and a fitness centre.

The President Centre (Figure 12) and its departments, including a comfortable press centre with 29 seats fitted with computer equipment, are used for summits and top-level meetings.

Figure 12. The President Centre Oval Hall.

The Library holds cultural and educational events with the participation of representatives of diplomatic missions, international governmental organizations and public professional organizations. Its unique architecture, works of art and original technology attract numerous Belarusian and foreign tourists. More than 20 modern engineering networks (cold and hot water supply, heating, ventilation, air-conditioning, dust removal, electricity, telephone and computer networks, television, etc.), combined into a technical complex provide for the functioning and security of the building. A single control point runs all these systems. Different security systems are implemented to keep the users and the library collections safe: theft alarm, fire alarm, access control, surveillance cameras, etc.

For the development of information resources and users' services a Complex of Informational and Technological Systems (CITS) is applied. The goal of this system is the automation of all library processes and operations, as well as acting as a networking and information centre for other libraries of the country. More than 100 servers and 1,400 personal computers (mainly 'client terminals') are united in a local network (Figure 13) with a total length of cables of more than 130 km. Systematic and effective work is performed by two remote server centres (a main and a reserve). Automation of internal and external library and information processes is supported by the integration of all CITS subsystems. There are 14 interconnected systems:

1. local computer network administration
2. automated library and information system
3. Internet portal
4. corporate cataloguing and maintenance of the joint electronic catalogue of the libraries of Belarus

5. national databases of authority records
6. digital documents
7. document preservation
8. document delivery
9. document security
10. training
11. library management automated system
12. restoration and conservation
13. editing and publishing work
14. user's service with digital and audiovisual documents and microforms.

All CITS systems work on software licensed by major vendors (management system of ORACLE databases, operating systems NP UNIX, Windows, etc.)

Figure 13. Computers for users.

Information Resources Development

One of the main tasks for every library is high-quality and efficient resources development. First of all, the entire NLB collection represents historical and cultural heritage. Today it accounts for more than 8.3 million items and is the fullest collection of the materials published in or about Belarus. The manuscripts, old printed books, rare books and archival documents are the most valuable parts of the Library's collection. The Library acquires annually about 200,000 items.

More than 80 databases (including both those subscribed to and those compiled by the Library) represent its electronic resources, which cover history, culture, the arts of Belarus, Chernobyl, national periodicals, dissertations, etc.

In recent years, NLB has been working on the retrospective conversion of its resources with a view to creating a digital library.

The main subsystem of the digital library is an electronic documents depository running on ORACLE ContentDB software. The electronic catalogue, Belarusian databases, the digital national archive of periodicals and various subject databases are used as searching tools.

Scanners of different size formats are used for digitization. They produce high-quality images without damaging documents. The Library possesses all necessary equipment for microforms, gramophone records, and the digitization of audiotape and videotape records.

There is no doubt that the digital library will become a part of the national digital library, with an important mission to integrate Belarusian digital resources into the world information space.

The Library will thus gradually be transformed into a portal providing access for all the people of Belarus to national and international information resources, and access from abroad to information on Belarus and its diverse achievements.

New perspectives are opening for NLB to become an important link to the world's information systems.

Library and Information Services for Users

The status of the National Library of Belarus defines the goal of its services – operational, full and high quality satisfaction of user's needs through the wide implementation of new technologies and networking with other libraries and information centres around the world.

Particular attention was paid to the creation of a comfortable environment, the installation of equipment that contributes to profound individual work and the active usage of the building's multi-functional areas.

The Library space can be divided into three parts:

1. Preliminary information area
2. Operational information area
   Document service area for meeting users' requests.

The main reading area is located on three floors of the stylobate. On the first floor there are a

reading hall for the general public, a reading hall for graduates from institutions of higher education, periodicals reading hall, the interlibrary loan department and the document delivery department. There are eight reading halls on the second floor: for Belarusian literature, dissertations, legal information, documents of international organizations, new acquisitions, and materials of limited circulation. There is also an Internet centre here. Art materials as well as reading halls for manuscripts, rare books and old printed books are on the third floor.

Most reading halls are united into areas with a common entrance hall. There are desks for documents delivery, shelves for reserved items and a closed stack collection here. Fast documents retrieval and ordering is available in the entrance halls.

A total of 2,060 users can be accommodated in the Library at a time. The number of seats for each hall was estimated according to the kind of service and the potential number of users. The biggest are the reading hall for the general public (411 seats) and the hall for graduates from institutions of higher education (375 seats).

Every fifth working place in the reading halls is automated. Approximately 450 computers and a number of multifunctional devices are available for users.

We hope that cooperation with other libraries and information institutions will lead us to a new level of service that meets the status of the National Library.

Conclusion

Today the National Library of Belarus is a unique institution, which has functions of an informational, political, social and cultural centre at the same time. Along with this the main task remains col-lecting and preservation of human knowledge and integration of Belarus into the common informational and cultural environment of the world (Figure 14).
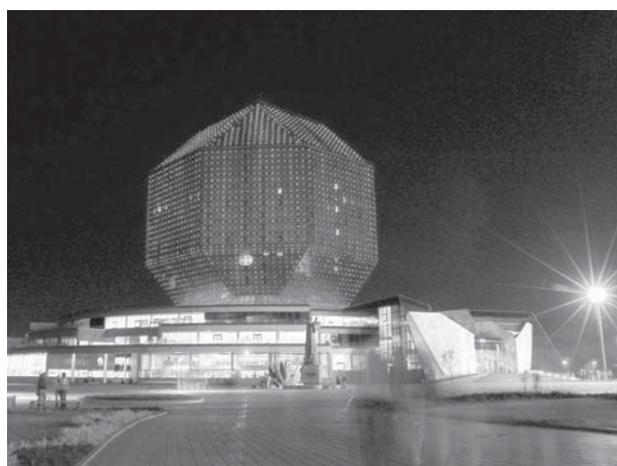
Figure 14. The Library at night.