

# **Report on activities in the field of digitization in Serbia**

**Žarko Mijajlović, Serbia**

Institutions active in the fields of preservation, building inventories in traditional and digital form, digitisation of cultural and scientific heritage:

Faculty of Mathematics, University of Belgrade

Mathematical Institute SANU

Archaeological Institute SANU

National Library of Serbia

National Museum

Archive of Serbia

Institute for the protection of cultural monuments of the Republic of Serbia

Cinematheque of Yugoslavia

Institutions cooperating in the field of digitization:

Museum of the city of Belgrade

Museum “Nikola Tesla”

Historical Archive in Kotor, Monte Negro

**Faculty of Mathematics  
University of Belgrade**

<http://www.matf.bg.ac.yu>

**Key person:** Žarko Mijajlović, [zarkom@matf.bg.ac.yu](mailto:zarkom@matf.bg.ac.yu)

**Activities:**

Many completed and ongoing projects in the field of digitization.

One of the founders and the seat of the National center for digitization, hosting NCD: <http://www.ncd.matf.bg.ac.yu>

Organizer of one international and four national conferences in the field of digitization

**Key projects:**

Database of electronic editions of mathematical journals.

Archive of digitized works of Serbian authors in mathematical sciences.

Database of digitized doctoral and master dissertations of Serbian mathematicians.

Database of sacral objects in South Serbia with precise geographical coordinates and routs obtained by use of GPS.

**Key publications:**

NCD Review (editor in chief: Ž. Mijajlović)

Electronic edition: <http://www.ncd.matf.bg.ac.yu>

Catalogue of old books in the library of the Faculty of mathematics (450 books printed before 1900).

**Hardware and software:**

Fast Internet (2MB/s), Linux platform.

## **Mathematical Institute SANU, Belgrade**

<http://www.mi.sanu.ac.yu>

**Key person:** Zoran Ognjanović, [zorano@mi.sanu.ac.yu](mailto:zorano@mi.sanu.ac.yu)

### **Activities:**

Many completed and ongoing projects in the field of digitization.

One of the founders and the seat of the National center for digitization. Coordinator: Zoran Ognjanović

### **Key projects:**

Electronic catalogue of cultural monuments

Database of electronic editions of mathematical journals

Presentation of the City museum of Belgrade

### **Key publications:**

NCD Internet site (Editor in chief: Zoran Ognjanović)

## **National Library of Serbia**

<http://www.nbs.bg.ac.yu>

key person: Tamara Butigan-Vučaj, [tamara@nbs.bg.ac.yu](mailto:tamara@nbs.bg.ac.yu)

### **Activities:**

The funds and collections of National Library contain over 5 million publications of various types and origins. Besides the general collection, there are manuscripts, old and rare books, maps and plans, printed music and sound records, photographic material, engravings, serials and so on.

Digital Library contains over 500.000 scanned pages, about 400 digitized gramophone records, partially accessible through the web.

### **Hardware and software:**

**COBISS** – bibliographical system and services, IZUM, Maribor, Slovenia, commercial software, made according to the standards of the bibliographical description.

**Commercial software for digitized newspapers** – the database, MERIDIJAN, Belgrade, Serbia. No conformance to any standard.

**Homemade software in Macromedia Flash** – for web presentations of digital collections.

**Homemade software in JavaScript** – for web presentations of digital collections.

**Key projects:**

**Digital Library of Serbia**, projecting of database for digital documents.

The concept of “**deep catalogue**”, OPAC offering URLs to the digital presentations of library materials – under construction.

**Enlarging of the network** of the Virtual Library of Serbia, including public libraries in Serbia in COBISS system.

The **DOI database** of Serbian scientific journals.

**Involvement in international cooperation:**

National Library of Serbia is a full partner in the European project TEL (The European Library); participant in the ICDL project (International Children Digital Library); cooperates with other libraries under COBISS platform (ex-Yu countries)

**Legislative framework:**

**Zakon o bibliotečkoj delatnosti** – Law about Librarianship [1994].

**Pravilnik o evidenciji bibliotečke građe** - Regulation on the registration of library materials [1994] (sublegal act).

<http://www.nbs.bg.ac.yu/pages/article.php?id=1453>

## National, regional or local inventories of cultural and scientific heritage assets

(Please fill one table for each inventory).

<i>Responsible body</i>	National Library of Serbia
<i>Type of cultural and scientific heritage assets:</i>	Books, periodicals, manuscripts, maps, music, printed music, graphic materials, movies, photo materials, either in analogue or digital format.
<i>Technologies used in building inventories:</i>	Computer network, software for bibliographic database
<i>Conformance to standards:</i>	UNIMARC, family of ISBD standards
<i>Availability of the inventory in electronic form (reference to electronic resources, estimation of the coverage of assets):</i>	All the inventories are available on the web <a href="http://vbs.nbs.bg.ac.yu/scripts/cobiss?command=CONNECT&amp;base=70000">http://vbs.nbs.bg.ac.yu/scripts/cobiss?command=CONNECT&amp;base=70000</a> <a href="http://www.doiserbia.nbs.bg.ac.yu/">http://www.doiserbia.nbs.bg.ac.yu/</a> <a href="http://vbs.nbs.bg.ac.yu/scripts/cobiss?ukaz=GETID&amp;=win&amp;lani=sr">http://vbs.nbs.bg.ac.yu/scripts/cobiss?ukaz=GETID&amp;=win&amp;lani=sr</a>  About 30% of library materials are covered by the bibliographic database.
<i>Additional remarks:</i>	

## **National Museum in Belgrade**

<http://www.narodnimuzej.org.yu>

**Key persons:** Aleksandra Sojic, PR

Neda Jevremovic, Head of documentation-information department

### **Scope and inventory:**

All museum collections (archaeological, numismatic, art historical) are covered by traditional as well as digital inventories.

### **Hardware and software:**

MS Windows XP, RDBMS MS Visual FoxPro 9.0 (SQL)

MDA

Homemade (Programmer from the National Museum in Belgrade)

There is no LAN (due to the reconstruction of the Museum).

New generation of the hardware, programmer MCSD, MCDBA

Integration and administration of museum data of all museums in Serbia and technical support for all museums in Serbia (139 museums)

### **Key projects:**

Museum Network of Serbia (Unique database of all museums in Serbia located in the National Museum in Belgrade)

**Institute for the protection of cultural monuments of the Republic of Serbia**

<http://www.heritage.org.yu>

**Key person:** Siniša Temerinski

**Resources:**

Central register of stationary parts of the cultural heritage in Serbia (monuments, buildings, etc) of the highest importance.

Phototeca, Planoteca, Library

Inventory of exported cultural goods from Serbia.

**Key projects:**

Information system on stationary cultural goods in Serbia.

Catalogue of cultural monuments in Serbia.

## **Archives of Serbia**

<http://www.Archives.org.yu>

**Key person:** Ljiljana Blagojević

### **Resources:**

Archives of Serbia is the central archival institution of Serbia. It was founded by the Law on the State Archives, passed in 1898, and started work in 1900. Since then, all the activities and the organization of the Archives are based on the principles of modern archival science, century old experience and current laws. In Archive's repositories we keep and preserve 11. 000 meters of archival materials, divided into 905 record groups of central institutions, organizations and other bodies of Principality, Kingdom and Republic of Serbia, and 88 personal and family record groups and collections.

### **Hardware and software:**

Web applications, JAIS (data base) – Unified Archival Informative System (under development)

### **Key projects:**

JAIS

### **Involvement in international cooperation:**

International Council of Archives – EURBICA (European branch)

### **Legislative framework:**

Zakon o kulturnim dobrima/ The Law of Cultural Heritage.

Uputstvo o vodjenju Registra i Centralnog Registra arhivske gradje/Archival Guidance for keeping The Register and Central Register/Inventory of Archival Materials

### **Conformance to standards:**

ISO 15489 (national standards are under development).

### **Additional remarks:**

About 90% of Register and 10% of Central Register information also available in digital form

The most urgent efforts which have to be done are:

- regulatory framework changes - there is no Law of Archives and Archival Materials
- development of national standards

## **Cinematheque of Yugoslavia**

<http://www.kinoteka.org.yu>

**Key person:** R. Zelenović

### **Resources:**

Films (more than 80.000), posters, photos, technical means for film projections and motion picture production.

A part of register in digital form.

**Key project:** Development of data base (in MySQL and Delphy)

## **Archaeological Institute SANU**

**Key person:** Miomir Korać

### **Resources:**

Large collections of data of archeological data

Archeological collections

Data base of roman lamps (more than 3000 items)

Data in electronic form of the site Viminacium.

### **Key project:**

Data base and in detail presentation of Viminacium

Application in tourism.

## **NCD (National Center for digitization)**

<http://www.ncd.matf.bg.ac.yu>

**Key person:** Zoran Ognjanović

### **Resources:**

Journal NCD Review, founded in 2003, edt. |Ž. Mijajlović)

NCD site: <http://www.matf.bg.ac.yu>

Electronic collections:

**Virtual library:** digitized books and manuscripts in mathematical sciences (several hundred items),

PhD thesis in Math.

**E-lib:** Database of digitized Serbian mathematical journals

Several tens of thousand pages

Publications Matematique (Inst Math) since 1941.

Publications ETF (Faculty of electric eng.), since 1956.

NCD Review, . . .

**Presentations:** Collections of the Museum of the city of Belgrade

### **Supporting institutions:**

Faculty of Mathematics

Mathematical institute SANU

Serbian Ministry of Science

CEI

**People** who particularly influenced the work of NCD

Milena Dobрева, Nikola Ikonov, Mathew Driscoll

Adolf Knoll, Micheal Mac an Airchinnigh, Giuliana de

Francesco

**Projects:**

“Digitization of Scientific and cultural heritage”, Serbian Ministry of Science,  
UNESCO project on monasteries.

**Achievements:**

Forming first data base in Serbia of digitized scientific and cultural values.

Development of software in this filed.

Establishing standards in the field of digitization in Serbia.

SEEDI

International cooperation in digitization, in particular with neighboring countries (Bulgaria, Macedonia, ...)

Forming UNESCO body for Serbia

Organizing four international and one international conference.

NCD review