

# Bulgaria

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## A. DIGITISATION AND ONLINE ACCESSIBILITY

**A1. Progress on the systematic gathering of information about current and planned digitisation of books, journals, newspapers, photographs, museum objects, archival documents, audiovisual material and the availability of overviews of such digitisation in order to prevent duplication of efforts and promote collaboration and synergies at European level.**

Since mid 2007 the Ministry of Culture, the Department Museums, Galleries & Fine Arts have started the process of digitization of museum funds, and in particular the so-called "movable" cultural heritage collections. This is a process that has the following components:

- Software development for museum funds management
- Development of a technical infrastructure, located within the Ministry of Culture
- Development of a central database.

At the moment the first component is in the process of implementation. The Terms of Reference for open public bid are developed. In the near future, methodical analyses and activities for optimization and transformation of museums funds will be initiated with the aim to facilitate and accelerate the process of introduction of the unified software. Also, the department is seeking financial support for museum staff training for working with the software. ICT-based services and applications are not used in Bulgarian museums (and art galleries) archives, and in comparison with other EU member states Bulgaria needs to develop this area. Museum and gallery buildings are often not suitable for exhibiting collections; preservation conditions are far from being reliable. More than 80% of museum exhibitions are outdated. Unsatisfactory results in the education of both, museum/gallery teams the future museum public. Cultural heritage disciplines are not taught in the schools. The only exception

is in State University of Library Studies and Information Technologies, where there is a specialty: "information funds for historical and cultural heritage"

<http://www.svubit.org/subjects.php>.

There are many universities which offer specialties "culture studies", "history and theory of culture", "cultural tourism", where cultural heritage preservation and digitization is only mentioned in the curriculum.

There is no national digitization strategy neither technical guidelines for digitization of cultural heritage, but the Ministry of Culture created a co-ordinating body on digitization, accessibility online and long-term preservation in order to adapt to the EC guidelines and recommendations. This body will aim to establish the national strategic and methodological framework in digitalization and will coordinate the efforts which currently are not interoperable. One of the basic aims of the Digitization Centre at the Institute of Mathematics and Informatics is to overcome this setting by providing common guidelines and ensure their dissemination throughout the country. Staff training is also planned.

Because of the lack of an effective museum management, a marketing and advertisement strategy, museums don't offer services. Additional training of specialist among museum/gallery teams is needed in the areas of digitization standards for different types of heritage, best European practices (incl. WEB 2.0 and WEB 3.0 technologies), data preservation and digital curation, high level computer literacy.

### BULGARIAN WRITTEN HERITAGE

#### **Digitization center at St.St. Cyril and Methodius National Library**

<http://www.nationallibrary.bg>

There is progress in gathering using of systematic information for planned digitization of old-printed books, journals, newspapers in collections of the National Library St.St. Cyril and Methodius.

More than 3000 documents (manuscripts, archives, pictures and serials) were scanned and digitized at the National Library Digital Center up to January 2008. Using DocuWare (Nemetchek Ltd.), the specialists from the National Library set up them in several different data bases.

Machine book catalogue of NL:

<<http://search.nationallibrary.bg/CyrISISweb/DataBaseSearchCatalog.html>>

Search engine at the NL:

<<http://193.200.14.178/scripts/cgi/dwis.pl>>

#### **Sofia University Library**

<<http://www.libsu.uni-sofia.bg>>

<<http://www.libsu.uni-sofia.bg/resources.html>>

The Library web site offers online and offline databases on various topics as well as library with Slavic texts "Славика" <<http://www.libsu.uni-sofia.bg/slavica>>. E-catalogue:

<<http://62.44.111.2:4501/ALEPH/ENG/LSU/LSU/LSU/START>>

#### **Bulgarian Academy of Sciences**

<<http://www.bas.bg>>

In the framework of the Bulgarian Academy of Sciences five institutes, Institute of Mathematics and Informatics, Institute of Sociology, Institute of Information Technologies, Institute of Literature and Art Studies Institute as well as BAS Central Library are involved in projects (mostly international) related to digitization of cultural material and its use. From them working digitization chain has been created, both infrastructure and professional team in IMI only (Humanities Informatics Dept.).

Selected projects in the frame of BAS are:

##### **1. Institute of Mathematics and Informatics at BAS**

[2006-2008] DIGMAP Discovering our Past World with Digitised Maps

<<http://www.digmap.eu>>

IMI-BAS is associate partner. For contact: M. Dobрева, Head of Humanities Informatics Dept.

[2007] Project "Digitization of Audio Archives and Production of a Directory of institutions from SEE Involved in Digitization of Cultural Heritage", funded by UNESCO. For contact: N. Ikonov, deputy of the head of Humanities Informatics Dept.

[2004-2008] Project Knowledge Transfer for Digitisation of Cultural and Scientific Heritage in Bulgaria. For contact: M. Dobрева, Head of Humanities Informatics Dept.

[2005-2006] COMTOOCI - COMputational TOOls for the librarian and philological work in Cultural Institutions. For contact: N. Ikonov, deputy of the head of Humanities Informatics Dept.

#### **MICHAEL**

<<http://www.michael-culture.org>>

BAS Central Library and IMI-BAS is associate partner (no digitization activities have been done yet).

For contact: M. Dobрева, Head of Humanities Informatics Dept.; Z. Galibov. For BAS Central Library: D. Krustev

MINERVA Plus IMI-BAS is associate member (no digitization activities have been done yet).

For contact: M. Dobрева, Head of Humanities Informatics Dept.

[2004-2006] JASON On-the-job e-training skills to deal with digital cultural heritage content

<<http://jason.mediaprimer.pt>>

For contact: Radoslav Pavlov, deputy director of IMI and Vice President of Alliance for Strategies and Development of the Information Society

[Project under development] Digitization of musical periodic - RIPM. For contact: N. Ikonov, deputy of the head of Humanities Informatics Dept.

[2007] Digitization of the archive of founder of BAS, Marin Drinov (in collaboration with BAS Central Library) <<http://www.math.bas.bg/digi/indexdrinov.html>>

For contact: M. Dobрева, Head of Humanities Informatics Dept.

Digitization of mathematical heritage, IMI archive, archive of High Attestation Committee (BAK) has been done too, but these are not closely related to culture heritage field.

##### **2. Institute of Information Technologies**

<<http://www.iinf.bas.bg>>

[2004-2006] IIT is partner of JASON project.

[1999] PHARE program P-70/99 Multimedia project  
 "The Thracian Treasures in Ancient Europe"  
 <<http://www.iinf.bas.bg/thrace>>

### 3. Institute of Literature

[2000–2007] Project "Repertorium of Old Bulgarian  
 Literature and Letters with Computer Tools"  
 <[http://clover.slavic.pitt.edu/~repertorium/  
 index.html](http://clover.slavic.pitt.edu/~repertorium/index.html)>

Over 300 Slavic manuscripts from collections in Bulgaria, Serbia, Russia, Czech Republic, etc. form informational massive (in XML format). The core DTD follows TEI guidelines with some new elements, created especially for Slavic manuscripts. The team has followed five principles, formulated by David J. Burnham <<http://www.slavic.pitt.edu/~djb>>. The template includes metadata, original texts, pictures and samples from manuscripts. All codicological, archaeographical and textological information is searchable <<http://clover.slavic.pitt.edu:8080/exist/mss/index.xml>>. Repertorium Initiative is closely coordinated with three other projects: the project for *Authority Files*, which defines the terms and ontology necessary for medieval Slavic manuscript studies; *Libri Slavici*, a joint undertaking of the Bulgarian Academy of Sciences and the University of Sofia in the field of bibliography on medieval written heritage; and *Repertorium Workstation*, identifying the typology of the content of manuscripts and texts with the aid of computational tools. All three of these share the common structure of the TEI documents and use a common XSLT (Extensible Stylesheet Language for Transformations) library for transforming documents to a variety of formats (including XML, HTML and SVG) thus providing a sound base for the exchange of information and for electronic publishing. For contact: Anissava Miltenova (head of the project, Department of Old Bulgarian Literature, Institute of Literature BAS)

[2005–2008] Project "Metadata and Electronic Catalogues. Reference Book for lecturers and scholars in palaeoslavistics".

The project aims to develop a system of reference books (glossaries, thesauri, authority files) for the working station of Repertorium.

The team is working on a thesaurus of standardized terminology in palaeoslavistics in eight languages

(Latin, Greek, Old Slavonic, English, German, Russian, Serbian and Bulgarian), 210 articles are available. For contact: Anissava Miltenova (head of the project, Department of Old Bulgarian Literature, Institute of Literature BAS)

[2007–2008] Project "SLOVO: Towards a Digital Library of Slavic Manuscripts"

<<http://slovo-aso.cl.bas.bg>>

The project won a grant from the ASO (Austrian Science and Research Liaison Office) and follows several main objectives among which is to activate the cooperation between Southeast Slavic countries and Central Europe in the field of medieval Slavic studies, and especially research work on the Balkan written cultural heritage. Participants of five countries construct a network between institutions, directed to the research of Balkan monastic culture and presenting of the Slavonic culture in comparative plan. Developing international standards for the computer encoding of the Slavic written heritage is one of the considerable effects of the project in order to create a common platform for electronic publishing. The most important outcome of the project will be building of the Internet web site containing the results of existing research for the Balkan written heritage and culture and of the relevant software. For contact: Anissava Miltenova (head of the project, Department of Old Bulgarian Literature, Institute of Literature BAS).

[2008–2010] Swedish-Bulgarian project "Building a digital library of Slavic manuscripts, early printed books and reference data base" is based on an enlarged cooperation between Gothenburg university, Uppsala university and the Institute of Literature BAS. It will be centred on the integration of current technological advancements in the field of electronic description of manuscripts and early printed books along with the results achieved during the next stage of Swedish-Bulgarian cooperation (2005–2007, the project entitled "Computer processing of Slavic manuscripts").

[2005–2007; 2008–2010] British-Bulgarian project: "Machine-readable description and searchable catalogues of cyrillic Manuscripts". The aims of the project are consonant with the existing aims of the Repertorium, making an important resource

available to specialists and non-specialists alike, providing searchable accurate descriptions of MSS, illustrating every entry with at least one image, or a representative selection, and supplementing earlier printed catalogues with searchable new descriptions, up-to-date bibliographies, images, and a link to MOLCAT of British Library. At the same time, a publicly accessible e-catalogue of the records in XML format will be created at the BAS (IL BAS, Central Library of BAS, British Library in London)

[2006–2008] Russian-Bulgarian project “Description of Slavic manuscripts and their accessibility to the informational technologies” (IL BAS, Central Library of BAS, Library of Russian Academy, Sankt Peterburg)

#### 4. Central Library – BAS

<<http://www.cl.bas.bg>>

For contact: Dincho Krustev, director

#### 5. Institute of Sociology, BAS

Bulgarian partner for digitizing and providing material for Central and Eastern European Online Library

<<http://www.ceeol.com>>

CEEOL is an online archive which provides access to full text PDF articles from 312 humanities and social science journals and re-digitized documents pertaining to Central, Eastern and South-Eastern European topics. For contact: Todor Galev, Institute of Sociology, BAS

#### BULGARIAN ART HERITAGE

##### Art Studies Institute - BAS

[2008-2009]. Project: “Bulgarian Art Archives, resources and research technologies”

<<http://www.softlib.primasoft.bg>>

<[http://www.artstudies.bg/index.php?navPage=news&news\\_id=50&Lang=2](http://www.artstudies.bg/index.php?navPage=news&news_id=50&Lang=2)>

The project, funded by the state (National Fund “Research”), aims to digitize the archives at ASI-BAS. For contact: Yanakiev, Director of Art Studies Institute and Tania Voinikova, SoftLib Ltd.

#### Bulgarian academic music portal

<<http://musicart.imbm.bas.bg/default.htm>>

The objective of the project is to ensure Internet access to the multimedia information about the Bulgarian musical culture and academic musicology systematised in several databases. The main objective is to realise in the shortest time an essential, scientifically applicable and widely accessible result. The programme product is an open system and provides opportunities for adding and enlarging the search through other fields, which are research subjects in the Music Sector of the Institute of Musicology, as well as through information sources from other departments of the Bulgarian Academy of Sciences, and from other cultural and educational institutes possessing collections of scientific and cultural information about Bulgarian art and music.

#### BULGARIAN FOLKLORE MUSIC

##### WebFolk project

The project WebFolk.BG is a result of over five years work, realized by a research team under the conduction of Lubomir Kavaldjiev at the Institute for Art Studies – Bulgarian Academy of Sciences. It contains Multimedia Database for Authentic Bulgarian Musical Folklore – over 8000 records including text (both lyrics and analytical data), audio (MP3), notes, photos (GIF) and video material (RM) in Bulgarian folk music. Some records include scores, directly scanned from paper sources. There is also a search engine with good possibilities for searching by all indicators-fields in the database record.

##### Balkanfolk.com

Folk music and folk songs chart. There are free audio samples in MP3 or RA formats, also free notes (sheet music) for some songs in PDF and GIF files. It takes the 20<sup>th</sup> place in Free-scores.com (8/13/2003). Examples: Magda\_tsvete\_brala [See <<http://www.math.bas.bg/~nkirov/2003/digit/magda.html>>], Breznishko horo [See <<http://www.math.bas.bg/~nkirov/2003/digit/brel.gif>>]

##### Bulgarian books and music

The site contains data about Bulgarian folklore instruments with sound samples in MP3 files. Some books concerning Bulgarian folklore music are announced. For example Anthology of Bulgarian

folk musicians contains scores of some songs.

Examples: [See <<http://www.math.bas.bg/~nkirov/2003/digit/БББ.jpg>>, Izlele Delyo haidoutin.

### **Authentic folklore from South-West Bulgaria**

The database and website are granted by the National foundation "Cultura". It includes 47 authentic danceable melodies (horo) described by Iliia Manolov. 21 of them have full records audio files in MP3 and WMA formats.

### **Digitization center – Bulgarian National Film Archive**

ICT-based services are partly used in Bulgarska Nacionalna Filmoteka. The catalogues of film titles (feature films, animations, documentaries, newsreels) – both, national and foreign – are 2/3 digitised, which allows quick search and printed information about the most part of our collection. Online accessibility is not achieved yet due to the lack of appropriate financing and in general, a national digitisation strategy.

As a film archive, the BNF can also provide an ICT-based access to its posters, photos, press clippings, dialogue lists. A significant part of the dialogue lists of many Bulgarian films are translated in English, French, German, Italian, Greek, and Russian not all of them in the languages mentioned, but sometimes we do have several foreign language translations of a single Bulgarian dialogue list. Their digitisation could be made by scanning if a relevant technical equipment could be acquired, again an intolerable financial burden for the Archive.

**A2. Progress on the development of quantitative targets for the digitisation of analogue material in archives, libraries and museums, indicating the expected increase in digitised material which could form part of the European Digital Library and the budgets allocated by public authorities.**

Completed information not available at present.

**A3. Progress on partnerships between cultural institutions and the private sector in order to create new ways of funding digitisation of cultural material.**

There is a traditional partnership between local museums and the following NGOs, located in Sofia and other Bulgarian towns:

### **NGO: CULT.BG Foundation**

<<http://www.foundation.cult.bg>>

«... act as a hub for other organizations and individuals, carrying out all our activities with relevance to the regional and European context. CULT.BG Foundation aims to create a creative and fruitful environment for sharing ideas and experience, setting up partnerships and broadening the debate on cultural policy. Therefore our aims are:

- taking part in elaborating cultural policies, raising debate, advocating and lobbying for cultural development
- tracing tendencies, mapping practices, discerning and pointing out problems and working out and proposing solutions in the area of arts and culture
- promoting contemporary Bulgarian art and culture on the Internet
- strengthening the position of the Bulgarian server for contemporary art and culture as a media, through informative, compact coverage and dissemination, presenting multiple standpoints and plurality of viewpoints
- establishing partnerships with similar to Cult.bg Foundation structures operating abroad, joining regional and international networks
- securing presentation at national and international forums of the informational and technological services, software and online solutions to organizations operating in the area of art and culture.

Cult.bg Foundation integrates in its platform the experience and resources of InterSpace Media Art Center and the infrastructure and managing expertise developed through Cult.bg Server for Art and Culture. Thus we had the chance to start with an already tested and reliable model of operation and from an already familiar and recognizable public position.»

### **NGO: Familiata**

<<http://familia.cult.bg>>

Familiata is a united body of NGOs in the culture & art sector in Bulgaria whose aim is to ensure the participation of NGOs in making state cultural policy. The list of all participating NGOs can be found here:

<[http://familia.cult.bg/?page\\_id=5](http://familia.cult.bg/?page_id=5)>

### **NGO: Fabrikata**

<<http://fabrikata.bg>>

"The fabriC" Regional Cultural Resource Center was founded in March 2006 in the city of Gabrovo as a cooperation project of "The fabric Association and the Swiss Cultural Programme South-East Europe and Ukraine. The Center offers a wide range of services to cultural organizations and professional artists in the region of North Central Bulgaria in order to promote and diversify the cultural life in the region with a long-term perspective. The Regional Cultural Resource Center is the first of its kind in Bulgaria. The collaboration between the above mentioned NGOs and culture heritage holders is not aimed at funding digitization activities, but in some of their successful projects digitization of cultural material is done. One of the business representatives, with tradition in collaboration with state and cultural institutions is Soft Lib.

Bulgarian National Film Archive collaborates with some cultural websites such as pop.bg, programata, kafene, avtora.com, dir.bg, metropolis, providing detailed information about the programming of the archival cinema theatre Odeon.

#### **A4. Progress on the set-up and sustaining of large scale digitisation facilities.**

Because digitization in Bulgaria during the last 15 years was made in the context of scattered projects lacking state strategy there are no large-scale digitization facilities. The Institute of Mathematics and Informatics opened the first national digitization center in 2004 which digitized c. 50 000 pages in 2007 from the collections of State archives, Scientific archives of BAS, National Library and Plovdiv, etc.

What infrastructure is available: most of the regional and national libraries have some kind of computer system and scanner, but do not have qualified professionals to do digitization work according to European quality standards. IMI-BAS, National Library Sofia, Sofia University library are exceptional. Museums and galleries are not included in this process, and as a result, digitization work, and online access to their collections are unavailable.

#### **A5. Progress of cultural institutions, as well as publishers and other rightholders to make their digitised material searchable through the European Digital Library. Describe in particular the progress on the application of common digitisation criteria by cultural institutions and,**

#### **where relevant, private companies, in order to achieve interoperability with the European Digital Library and to facilitate cross-language searchability.**

Interoperability issue is not addressed but it will definitely cause problems when Bulgaria will start to create a national registry and will deliver digital materials to European portals. Currently, Milena Dobrova from IMI-BAS is a member of the work group 2 (Standards and Interoperability) of EDL-Net project.

#### **A6a. Progress on mechanisms to facilitate the use of orphan works.**

#### **A6b. Progress on mechanisms to facilitate the use of works that are out of print or out of distribution.**

#### **A6c. Progress on the availability of lists of known orphan works and works in the public domain.**

#### **A6d. Progress on the identification of barriers in your legislation to the online accessibility and subsequent use of cultural material that is in the public domain – and the steps taken to remove them.**

On point (6 a, b, c, d) no progress has been done.

## **B. DIGITAL PRESERVATION**

Digital preservation of audio archives is within the research interests of the Humanities Informatics department. A project which deals with digital preservation of the dialect archive of the Institute of Bulgarian Language is the only example of a digital preservation project.

#### **B1. Progress on national strategies for the long-term preservation of and access to digital material. Describe the organisational approach, indicating the roles and responsibilities of the parties involved as well as the allocated resources. Describe the specific action plans outlining the objectives and a time-table for the specific targets to be met.**

No progress has been done.

#### **B2. Progress on exchange of information with other Member States on your strategies and action plans.**

IMI strategy: Coordinator of SouthEasternEuropeDigitizationInitiative  
<<http://www.ncd.matf.bg.ac.yu/seedi/>>

[2004-2006] In collaboration with IM-SANU, Serbia, joint project "Digitization of Cultural Heritage".

Our contacts in the field of digitization and long-term preservation are with states in SEE region as well as the member states Czech republic, Ireland, UK, Italy and others.

**B3. Progress on legal provisions for multiple copying and migration of digital cultural material by public institutions for preservation purposes.**

**B4. Progress on policies and procedures for the deposit of born-digital material. Please note how you are taking into account developments in other Member States in order to prevent a wide divergence in depositing arrangements.**

**B5. Progress on legal provisions for the preservation of web-content by mandated institutions.**

On point (3, 4, 5) no progress has been done.

