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Technical Problems and Question of Archival Material from 20th century in Bulgarian Archives

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The current massive flow of electronic records mustn't throw into the background the existing rich archival materials from 20th century which were created on paper but the availability of new technologies and the public interest towards them make the archivists look for other ways of their use. The application of modern technologies for access to them is given through the experience of two projects on digitization: 'Digital Archives' project and '100 years from Bulgarian Independence' digital exhibition. The strategic goal to preserve the cultural and historical heritage by the use of alternative ways of access is explored along with the broader and effective consulting of the digitised paper records from the 20th c. by the users. The criteria of choosing which records to be digitised will be followed as well as the paper archives' preservation after being digitised will be examined.

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Il corrente massiccio flusso di documenti elettronici non deve far passare in secondo piano l'esistente ricco materiale archivistico del XX secolo creato su carta, ma la disponibilità di nuove tecnologie e l'interesse pubblico fa sì che gli archivisti ne ricerchino altri utilizzi. L'applicazione delle moderne tecnologie per l'accesso ad essi è data attraverso l'esperienza di due progetti di digitalizzazione: il progetto "Archivi digitali" e la mostra digitale "100 anni dall'indipendenza della Bulgaria". L'obiettivo strategico di preservare il patrimonio culturale e storico per mezzo dell'utilizzo di vie alternative di accesso è esplorato assieme alla più vasta e effettiva consultazione dei do-

1. Introduction

1.1 Background

The need to reveal our archival material from the 20th century and catch up on specifications and requirements for electronic records demands updating in our archival management. My point of view will face the modernization and administrative transparency process. Dealing with issues like this brings up many technical problems and questions.

In this situation I will focus mostly on archival activity like planning, control, guiding, and organizing our established goals.

Thus, in order to define them, I must mention also all other inherent activities which are important for the digital archives: creation, keeping, use, and appraisal of records, records preservation, records processing, storage and repositories. Dealing with management of this kind requires updating.

1.2 Relationship between electronic and paper records

I shall explain from the very beginning that our main work is to strengthen ability to serve the public by creating more autonomy in decision making. If we pay greater attention to our archival material from 20th century, we have the potential to do rat good if put them in proper use. The current flow of electronic records mustn't throw into the background the existing of paper records. Electronic records had replaced traditional paper records in many cases. They're simply the computerized versions of traditional paper records created and kept by all. Typical electronic records are desktop applications such as Word, Excel, images, and e-mails and so on. But we will need simple and general rules to accomplish this task.

Today professionals continue to integrate the latest electronic storage solutions into their management plans hoping to achieve a "paper-free" environment, but are the elimination of paper records realistic? Is this possible and functional for state organization like archives? Though the National Archives preferred - and still prefers

- paper records to electronic ones, it was impossible to generate hard copy records in all cases. Choosing whether paper or electronic records (or both) is ongoing debate. The cost of storing electronic records is much lower than that of storing paper records. The decreasing cost of electronic storage combined with the increasing cost for paper storage means that it is no longer cost-effective to store all records in paper form. Further more - the cost of finding records is much lower and searching capability is greatly extended in an electronic environment. Unless paper records are well managed and well documented, they can be difficult to find. An electronic environment allows more sophisticated ways of accessing and retrieving data records.

Since 2008 Archives State Agency is charged with the responsibility to identify, preserve, and use digitized archives besides these on paper. The new information technologies and imaging systems have had profound implications on the ways we create, record, manipulate, circulate, store, interpret, remember and use this information. In turn, archives are inevitably and inextricably implicated in such changes to the technological, intellectual, and social production, organization, and dissemination of knowledge.

In modern society more than 90 percent of records created today are electronic - which includes formats from digital media, such as DVDs and CDs, to scanned documents and e-mail correspondence. Electronic records have assisted in the speed of communication, as data is shared in a compressed and downloadable format eliminating the need of slower moving faxes or postal service. They also provide funds and space savings as they may be stored by thousands in the same space needed to store a handful of paper files.

As technology and records management merge in the workplace, archivists are eager to transfer paper records to electronic formats and make them workflow. It's important to understand the challenges of electronic records management and the best solutions to create an effective information management program. However, I can see paper records persisting for many years to come, because archives are tools - "*Like all tools, they are kept to be used*"[1].

2. Digitization projects

2.1 "*Digital Archive*"

Archives State Agency of Republic of Bulgaria started a project for creation of digital archive in 2007 in the frame of centralized digitization policy. The main goal is to increase the accessibility of the most valued archives without endangering their physical condition. The project "*team*" initiative the foundation for digitization - creating of digital images and related metadata, quality control, storage and retrieval. The Agency creates the digital archive as a complex of interconnected activities and provides public access to them. Making and managing of the project is one of the vital elements in the Agency "*Strategic Programme (2008-2012)*". The centralized base of the digital archive consists of digital still images of archives (textual archives, architectural blueprints, engineering documents, photo-

cumenti cartacei digitalizzati del XX secolo da parte degli utenti. Verranno seguiti i criteri di selezione riguardanti quali documenti debbano venir digitalizzati, così come verrà analizzata la conservazione dei documenti cartacei dopo la digitalizzazione

ORLIN, Iliev, Tehnični problemi in vprašanja pri arhivskih dokumentih v bolgarskih arhivih v XX. stoletju. Atlanti, Zv. 19, Trst, 2009, str. 77-83.

Zdi se, da je v XX. stoletju nastalo veliko upravljanje z računalniškim vnašanjem arhivskega gradiva, čeprav so bili dokumenti narejeni na papir, vendar pa je zaradi javnega interesa pripeljalo arhiviste do novih poti uporabe arhivskega gradiva. Dostop do tega je gotovo aplikacija sodobnih tehnologij, ki se kaže v dveh bolgarskih projektih, ki se nanašata na digitalizacijo in sicer projekt Digitalni arhivi in digitalna razstava 100 let bolgarske samostojnosti. Temeljni cilj tega je bil v ohranjanju kulturne in zgodovinske dediščine, ki je plod tudi alternativnih poti, ki se kaže v novi in uspešni raziskavi tudi v digitaliziranih dokumentih. Kateri dokumenti bi se naj digitalizirali, pa bo znano po temeljitem preučevanju dokumentov po digitalizaciji.

SUMMARY

In 2007 Archives State Agency of Republic of Bulgaria started a project for creation of digital archive in the frame of centralized digitization policy. The passed stage of the digitization project has a result refinement of the methodological base and accumulation of digital masters. Because of this one the first principles is to create and store high quality master images which could serve as a source of derivatives for a variety of current and future user needs. During the next two years 2008-09 Agency build digitized archives besides these on paper. All new digital objects have been made for a period 1878-1944. At present the base of digital archive includes 16 600 master image files and related metadata. The total

1. Andrew Simons, courtesy of Amistad Research Center, Tulane University.

size is approximately 856.600 MB. The next stage of the routine development of the digital archive depends to high extent on the new ***Information System (ISAD)*** *of the State Agency. The software is written by an external supplier especially for the needs of the Agency and should e implemented by the end of this year. As a special section of the information system, the digitization software is expected to ensure the digitization workflow management, storage and retrieval of the digital objects and metadata. It is also expected to include a quality control system. All this is costly and dangerous in a severe economic crisis. We are convinced that our solutions are liable to further refinement and development and that this is not possible without taking account of the best practices in the field. In 2008-09 State Agency worked upon several public projects jointly with the South-West University, the National Assembly, the Regional Archives, the State Military Historical Archives and other public organizations. All they revealed archival material from 20th century and helped in making a digital art exhibition (another experience in our work with digital images). Finally, we educate the public about the mission and functions of the archival profession and we increase our "users".*

graphic materials, cartographic archives, records on leather) and related metadata. All images are grouped into digital objects. Each digital object represents a single archival item. Metadata is colleted at a single digital object level. The archive is setting a scheme to improve the process and procedures with regard to appraisal, selection, transfer, storage, sustainability and delivery of archival material.

The first project step was to develop on theoretical and methodological base and creating the standard practice manuals and organization charts. For example, only records with legal and historical value were chosen. Archives can play a significant role in educating the general public and we wish to ensure that records which document government policy, individual's rights and entitlements, and other kinds of records identified as being of permanent value, can be managed in a way that ensures their continuing existence and accessibility to future generations. In addition this year National State Agency will make and apply keeping standard for all Regional Archives. They will be changed in the end of 2009 when a new ***Information System*** (***ISAD***) of the State Agency will be launched in Bulgarian Archives.

When project "*team*" members began researching many questions came up. How to make an examination on all created digital objects (***master*** and ***derivative***) from Regional Archives which they send to State Agency? What requirements we need for the system operating with electronic records and their technical data? What must be a record capture - format, the cost of making and storing digital images*?*

At this stage we intend to store digital objects and metadata on servers. Apart from the digital objects and metadata we consider including in the digital archive also structured electronic transcriptions of the full texts of chosen handwritten archives. We do not consider the digital master appropriate for preservation reformatting to create surrogates that could replace the original archives in the cases of loss or destruction. Rather, we see their relation to the preservation of archives in their capacity to encourage the use of digital copies instead of originals. Because of this one the first principles is to create and store high quality master images which could serve as a source of derivatives for a variety of current and future user needs. That is why the issues of the preservation of the digital masters are of great importance for us, especially with regard to the expected increase of the base. The next stage of the routine development of the digital archive depends to high extent on the new information system of the National Archives.

All digital objects have been made for a period 1878-1944. In making some exhibitions we made digital records on some documents from XVI and XVII century, but they are singles. At present the base of digital archive includes 16 600 master image files and related *metadata*. The total size is approximately 856.600 MB.

2.1.1 Problem's in making Digital Archive

National Archives of Bulgaria faced a number of problems and questions which gave us widespread concerns in the end of 2008 and

still in this year. Generally, the first of our problems is lack of trained staff. The creation and management of digital archives produced in an environment where desktop computers have replaced pen and paper has been of concern to both record managers and archivist and the reason is simple. The capacity of a computer enables it to handle records which are unmanageable in paper or microfilm. It's obvious that appraisal cannot be based on the physical format of a record, but on the information the record contains. Records are, after all, preserved in an archival institution because they have values that will exist long after they cease to be of use, and because their values will be for others than the creators.

The digitization software will be an integral par of the new information system of the Bulgarian National Archives. This is our second problem - upgrading our computer center. The system is considered to cover the main processes of creation, storage and retrieval of information about the holdings of the Archives State Agency in compliance whit *ISAD* standard and Bulgarian regulations. The software is written by an external supplier especially for the needs of the Agency and should e implemented by the end of this year. As a special section of the information system, the digitization software is expected to ensure the digitization workflow management, storage and retrieval of the digital objects and metadata. It is also expected to include a quality control system. All this is costly and dangerous. There is a risk, because a severe economic crisis may make the performance of your routine duties impossible. If you run out of money, you may lose your data. In the preservation and creating digital archives you always need some manpower and supplies. That made us think about what we actually did need.

A further problem is the safety of the new data. Safety means safety in every respect, and it means both safety of material and safety of citizens, too. When we think of the digital archives, we are accounting the ageing of the new objects and other threats. Surely there are always risks of facing attacks from inside and outside the system. In first case is the opportunity for isolated attack on individual machines or at a central facility database. Research by users outside the organization must be secured. We are partners' with researchers in researching process[2]. In sort we also mustn't forget that society tends to change as well. If we think of the permanent preservation of digital archive, we must accept that the future is uncertain. We hope, of course, that the next century is happier than current one, but we can't be sure of that.

In addition all documents formats are constantly changing and eventually they will become unreadable. For example, it is nearly certain that Microsoft Word documents that we are creating today will not be readable in 10, 30 or 50 years time. This involves the literal warehousing of hardware and software in order to run programs on the system for which they were designed.

We are convinced that our solutions are liable to further refinement and development and that this is not possible without taking account of the best practices in the field.

2. Gerg Koep, courtesy of New Jersey History Society.

2.2 Public Programs

In 2008 the Archives State Agency began several public projects and art exhibitions which helped our digital archive "team". These projects were running by the State Agency jointly with the South-West University, the National Assembly, the Regional Archives, the State Military Historical Archives and other public organizations. Consequently, the archival profession has moved from a custodial role, in which the archivist's primary duties was keeping and protect, to a more activist role promoting the wider use of archives. Archives help make history come alive for young people.

Firstly, we are educating the public about the mission and functions of the archival profession. We won't to increase our "users", no matter how they approach archives. Some user needs can be met more effectively through public programs. They not frill, but an integral part of institutional mission. In every one we used digital images from our "***Digital Archive***". Our main objectives in public relations policy is to harmonize with state laws. Secondly, consist of a plan of action that is clearly spelled out. Thirdly, we (administrators) should have a clear directive as to our role - emphasize building strong relationships and partnerships. This will require an understanding of public relations.

2.2.1 South-West University - "Digital Archive" project

In 2008 the Archives State Agency cooperated with South-West University (SWU) for making project ***Science Information complex*** "***Digital Archive***". Agency and University won state-aided money from Ministry of Education and Science. The goal of this module is to help in making digital university archive and strengthen the public relations with our partners. *SWU* send a team build up by since workers and students. They worked with pointed staff members from project "***Digital Archive***". Both sides exchanged experience and become pioneers in making digital objects. Projects like this are important, because they will strength and augment the knowledge and skills of archivists, general practitioners and specialists alike, which are performing a wide range of archival duties in all types of archival duties in all types of archival manuscript repositories. Archivists have an important opportunity to help students appreciate historical documents and archival institutions.

"Team" members work in couples, the first one is making the scanning and the second is filling up the data information. Scanning and sorting all new data is affordable. The new professional archiving software search lightning fast in thousands of documents using a phrase or a single word. In that work creators faced difficulties in making digital objects for some books whit hard covers, parchments and steals.

In some ways, the enthusiasm and excitement that students ring to project can make working with tem very rewarding. Planning reference service for students requires awareness of the types of assistance needed. They use the knowledge and experience to do big progress with main digitalizing center. All new digitized images meet the highest technical standards. The University has established stan-

dards for the technical quality of digital objects.

2.2.2 "100 Years from Bulgarian Independence

In 2008 on September 22, Bulgaria celebrates the Day of Liberation - 100 years since Bulgaria received its freedom from the Ottoman Empire. A number of events have been organized to mark this date as part of national celebration. The exhibition presenting the original Declaration for the Unification of Bulgaria is named: "Bulgarian Independence". It was organized with the assistance of the State Agency "Archives" and is consecrated to the 100th Anniversary since the proclamation of the Independence of Bulgaria on 22 September 1908 in Veliko Turnovo. The general art exhibition is one of the best practice models for government departments wishing to demonstrate a high level of commitment to managing their information and history archives.

Making of a digital art exhibition was another experience in our work with digital images from archival material from 20th century. The exhibition includes more than 500 items from the Bulgaria Heraldry and Vexillology Society, Archives State Agency, National Library and 26 Bulgarian museums. For the project Agency produce materials which were unpublished until this moment - typical comprise correspondence, diaries and photographs.

The exposition was opened by the National Assembly Chairman who expressed his gratitude for the opportunity given to the National Assembly to present it first to the public. He stressed that the Bulgarian parliament has an important contribution to the preparations, the proclamation and the international recognition of the Independence. The Independence was reached through the efforts and adroitness of the Bulgarian diplomacy - noticed Boyana Bojashka, head of the "Archives". According to her the proclamation of the Independence was the most dazzling example of the unity of the Bulgarian people. She stressed that the documentary exhibition launches a national program combining numerous events to mark the 100th Anniversary of the remarkable date and informed the public that such exhibit of the original Manifesto happens very rarely.

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