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# Digital Libraries in Poland.
# Status in 2006

*Abstract*

*The article presents the political context and the current status of digital libraries in Poland. It demonstrates the major challenges in the various areas in which libraries operate. It describes two important library initiatives that emerged in order to coordinate activities, and presents concrete examples of the actual digital collections accessible via the Internet. The author also attempts to diagnose the situation and indicate solutions, which may bring measurable benefits to Poland.*

## Poland's policy towards digitalization

Poland does not pursue any policy connected with the building of digital resources, and though some elements of such a policy may be pointed out in several governmental documents, they hardly provide a cohesive system. What is more, very little funding has been allocated. All technological initiatives focused on digital collections development in recent years, have been grass-root activities funded either by the library institutions themselves or, in very rare cases, by the EU structural funds. Their objective was to support learning and education and to close the gap between our libraries and those from the technologically more advanced countries. The gap is very large, not only considering the economic and organizational dimension, but also the level of know-how that Poland represents in terms of learned resources management or new technologies.

Institutions of culture have failed to make an impact on state cultural policy, and there is also a problem with the political and administrative system in which these institutions must operate. It is not an easy task to implement the kind of organizational and work strategies seen in more advanced countries, particularly when the role of libraries in Poland is so poorly defined. What is more, social consultations are not very efficient, whereas there is no institution that is prepared to take responsibility for strategic planning. On the other hand there are an excessive number of strategies devised within individual ministries that have all failed to provide adequately for digital libraries. It took librarians several years to convince the public administration of the importance of building digital collections. When finally the projects were launched in conjunction with the Ministry of Science and Information Technology Development, a new government was elected, which moved „information technology development" together with all the library projects to the Ministry of Home Affairs and Administration.

Information technology development is now the area of competence of the Ministry of Home Affairs and Administration, which has no projects for libraries, and is more interested in e-administration. The Ministry of Science and Higher Education responsible for academic libraries, concentrates on electronic journals and the building of repositories, whereas the Ministry of Culture and National Heritage, statutorily responsible for digitalization, places it in public libraries, museums and archives lying within the Ministry's area of competence. Under such a system reality and practice could only diverge with regard to administrative planning. What is needed for the building good digital libraries in Poland is cross-sectoral cooperation involving officials, librarians, archivists, museum specialists, IT engineers and publishers. Library communities have been lobbying for this for years, but all to no avail.

However, since Poland's accession to the European Union provisions on the necessity of building digital resources have been added to government strategic documents (*Narodowa Strategia Spójności - National Cohesion Strategy 2007-2013, Narodowa Strategia Kultury-National Strategy for Culture 2007-2013*) [1, 2] and subsequent operational programs of the ministries: for instance in the *Krajowy Program Ramowy - Domestic Framework Program*, with reference to the *Lisbon Agenda* or the most recent *i2010 - A European Information Society for growth and employment* [3]. Most importantly, these provisions are beginning to take effect. Towards the end of 2006 the Ministry of Science and Higher Education came up with a competition for a commissioned research project No. *PBZ-MNiSW-6/3/2006, Elektroniczne archiwum zabytków piśmiennictwa polskiego (Electronic Archive of Polish Literature Heritage Items)*, [4] inviting interested parties to submit applications. It needs to be stressed that the project emerged suddenly, and was not reviewed by the library community. All of these elements indicate that the competition was prepared from outside the mainstream of activities by a body unconnected with the community developing digital libraries, just as if the Ministry of Science had no information about the fact that centers of learning and research were already running over 10 digital libraries and providing access to the digitalized heritage items in the Internet using public funding. It is also unclear as to why the Minister of Science insists on the digitalization of books and manuscripts dated before the 16th century? Does this mean that it is now incumbent upon the administration to define the priorities of digitalization? Incunabula and manuscripts created before that time, often on parchment, will survive longer than 19th century book and scholarly journals printed on acid paper – and this is the chief concern of librarians, museum keepers and archivists. We cannot lose what is already subject to visible degradation.

**Digitalization initiatives 2006**

**The Digitalization Team at the Ministry of Culture and National Heritage**

Since 2005 the activity of the Ministry of Culture and National Heritage has greatly intensified. Through its Department of National Heritage, the Ministry will stimulate the creation of digital resources in Poland. On April 24, 2006 the Minister of Culture and National Heritage set up a Digitalization Team to act as its auxiliary body. The responsibilities of the Team are the:

(1) development of a uniform digitalization strategy with regard to Poland's cultural heritage and scientific output, irrespective of legal status or place of storage,

(2) development of uniform requirements for libraries, archives and museums for the digitalization process, access and digital materials storage

(3) integration of activities launched by individual libraries, museums and archives in the area of cultural heritage digitalization.

The team has already started to work along these lines, while consulting with librarians, archivists, museum specialists and IT engineers. There is a chance that once the digitalization strategy is ready, it will be possible to talk, about cohesion with EU policy, and it will be easier to raise the necessary funds. Additionally, the meaning of digitalization in this document will be broader – it will be understood as the building of digital resources, also repositories and the archivization of Internet resources from the PL domain.

**Polish Digital Libraries Consortium**

The second initiative that appeared in 2005 was connected with the building digital libraries in the academic community. Librarians from large research libraries who started to work on the creation of digital resources out of their own funds or EU funds made steps towards the consolidation of such activities. Fifteen of the largest research centers in the country, in

conjunction with two public libraries, decided to cooperate within a loosely organized consortium structure.

The main objective of the consortium is to provide all interested parties with free access to the digital resources concerned with learning, education and culture by developing a network of digital libraries. The consortium, acting under the binding copyright, press and publishing laws, wishes to pursue the following strategic goals:
(i)     coordinating domestic endeavors focused on the creation, acquisition, processing, access and archivization of digital resources;
(ii)    recommending international standards and best practices in the area of the creation, acquisition, processing, access and archivization of digital resources;
(iii)   securing digital resources against loss of data.

To pursue these goals the following priorities were adopted:
(a) developing and submitting recommendations and standards indispensable for the creation of digital resources;
(b) applying to the appropriate domestic and European institutions for funds to create digital resources; participating in national and foreign projects;
(c) promoting digital libraries at home and abroad.

The consortium is an open organization and wishes to cooperate with the Digitalization Team, particularly in the working groups. It plans to divide the work so as to avoid the duplication of effort. One of the major objectives shall be the raising of external funds for libraries for their cooperative projects, as well as continued international cooperation.

## Polish digital libraries – their genesis

Digitalization and building of world digital resources began in 1990s, mainly in rich countries, determined to improve the quality of access to historical materials in writing. The first digital collections could be viewed already in 1995 (American Memory), but an entire decade was needed to implement similar solutions in Poland. The 2004-2006 period was an important time in the development of digitalization in the country. The reasons for this state of affairs were multifarious, while it needs to be stressed that librarians have:
(1) acquired know-how over these years in the area of digital collection building;
(2) received a reliable and inexpensive IT tool to build resources (dLibra), supported Poznań-based IT engineers;
(3) looked for additional funding both from the EU and national funds;
(4) seen at least a minimum level of understanding demonstrated by the ministries;
(5)  understood that digitalization is the future;
(6) received models in the form of Great Poland and Kujawy-Pomerania Digital Library and part of the pragmatics involved which makes decision-making easier;
(7) sensed the social change (electronic reading statistics);
(8) discussed among themselves the possible opportunities and and threats.

Owing to the above circumstances in 2002-2006 thirteen digital libraries were established, not counting the Polish Internet Library, which was officially launched in 2001, but so far has not achieved the functionality of the more recent ones.

## Regional digital libraries [5]:

1. Wielkopolska Biblioteka Cyfrowa (Great Poland Digital Library)
   o   Since October 2002
   o   WWW: http://www.wbc.poznan.pl/
2. **Dolnośląska Biblioteka Cyfrowa** (Lower Silesia Digital Library)(formerly: Biblioteka Cyfrowa Politechniki Wrocławskiej – Digital Library of the Wrocław University of Technology)
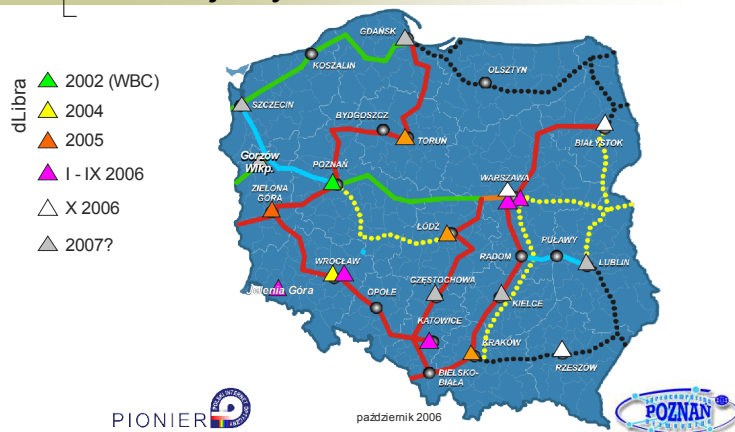   o   Since November 2004

- o WWW: http://www.dbc.wroc.pl/
3. Kujawsko-Pomorska Biblioteka Cyfrowa (Kujawy-Pomerania Digital Library)
   - o Since September 2005
   - o WWW: http://kpbc.umk.pl/
4. Zielonogórska Biblioteka Cyfrowa (Zielona Góra Digital Library)
   - o Since October 2005
   - o WWW: http://zbc.uz.zgora.pl/
5. Małopolska Biblioteka Cyfrowa (Little Poland Digital Library)
   - o Since January 2006
   - o WWW: http://mbc.malopolska.pl/
6. Śląska Biblioteka Cyfrowa (Silesian Digital Library)
   - o Since August 2006
   - o WWW: http://www.digitalsilesia.eu/ and http://www.sbc.org.pl/
7. Podlaska Biblioteka Cyfrowa (Podlasie Digital Library)
   - o soon to be launched...
   - o WWW: http://pbc.biaman.pl/
   8) Jeleniogórska Biblioteka Cyfrowa (Jelenia Góra Digital Library)
      a. Since September 2006
      b. WWW: http://jbc.jelenia-gora.pl/

**Institutional digital libraries:**

1. Biblioteka Cyfrowa Politechniki Łódzkiej  (Digital Library of Łódź University of Technology)

   - o Since December 2005
   - o WWW: http://ebipol.p.lodz.pl/
2. Biblioteka Cyfrowa Uniwersytetu Wrocławskiego (Digital Library of the University of Wrocław)
   - o Since December 2005
   - o WWW: http://www.bibliotekacyfrowa.pl/
3. Pedagogiczna Biblioteka Cyfrowa (Pedagogical Digital Library)
   - o Since May 2006
   - o WWW: http://www.ap.krakow.pl/dlibra/
4. Biblioteka Cyfrowa Politechniki Warszawskiej (Digital Library of the Warsaw University of Technology)
   - o Since May 2006
   - o WWW: http://bcpw.bg.pw.edu.pl/
5. Księgozbiór Wirtualny Federacji Bibliotek Kościelnych FIDES (Virtual Book Collection of the Federation of Church Libraries FIDES)
   - o Since August 2006.
   - o WWW: http://digital.fides.org.pl/ [6]

The earlier attempts at establishing a professional digital library lacked an efficient digital platform, consistent methadata and formats, not to mention both valuable resources and a professional interface. Having said that, volunteers are creating such collections worldwide (Projekt Guttenberg, Wikipedia). It is not guaranteed, however, that they will survive. Librarians, archivists or museum specialists must and do consider projects and processes that are completely different and are concerned with the creation of the national writing resource. First of all, the essence of building national digital resources is to ensure long-term storage and security. The appropriate state institutions that may always count on public support provide such a guarantee. It is also vital that librarians communicate with each other as to the collection content and try to agree what they should scan. The regionalization of digital libraries is a very good development for Poland – there is no duplication of effort as every region works on different items.

Instalacje systemu dLibra

*[dLibra system installations]*
*Figure 1.Map of Digital Libraries in Poland,*
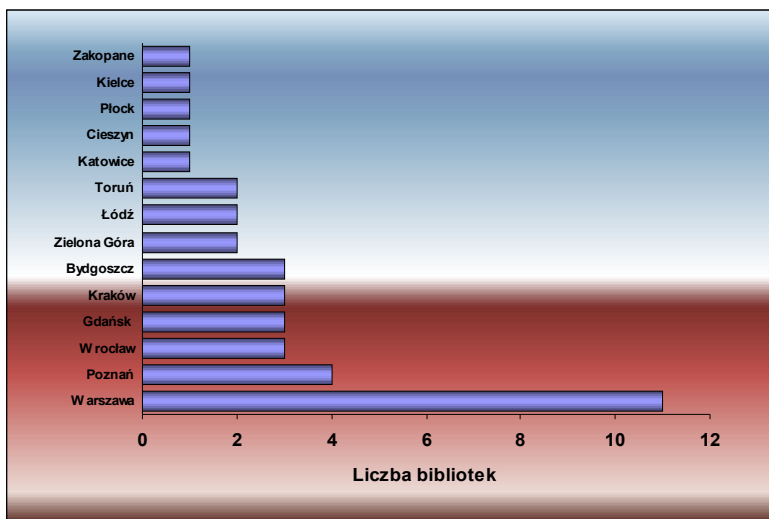*© Marcin Werla, PCSS Poznań 2006.*

**Technologies**

Thanks to the Poznań-based digital platform *dLibra* Polska offers a good-quality electronic product, which supports the creation of digital libraries. The Poznańskie Centrum Superkomputerowo-Sieciowe (Poznań Supercomputer & Network Centre) has developed a methasearch engine that enables to search and view the collections as a whole. The company's plans for development indicate that IT engineers are interested in this topic and are observing world trends, which raises hopes that the migration of documents or emulations to more advanced software will be a seamless and professional operation. If we manage to convince the political and decision-making bodies in the country that it is worthwhile to technologically support such endeavors and solutions, there is a chance for a coordinated approach to more ambition projects. [6]

Other products of commercial companies are also of good quality, but they are very expensive, and therefore they encounter implementation problems in individual libraries or even consortia of libraries. It is likely that technologies will become cheaper and that it will be possible to consider the building of knowledge repositories operating in a slightly different way than traditional digital libraries based on digitalization of content, and not on content that is already born digital. Repositories operate on the basis of the acquisition of deposits and the self-archiving principle, which helps to eliminate the problems with the copyright law. Depositing equals consent to store and provide online access to the material entrusted to the repositiory. Poland does not even have a single, real contemporary knowledge repository. Many of our scientists deposit their works in foreign, English-language sectoral repositories. Among librarians, however, there is a dominant view that domestic repositories need to be launched and that they should acquire and store all kinds of scientific material (reports, postprints, preprints, summaries, academic textbooks, lectures, courses) in the Polish language. This is the task that Polish librarianship needs to face.

**Digitalization in Poland – a study**

In 2006 Małgorzata Kowalska produced the first extensive scientific study on digitalization in libraries. *"The gathered data enable the discussion of the status of digitalization in Polish libraries and show that until the end of 2005 38 libraries of various types were actively engaged in collection digitalization. The most numerous were the group of 21 research libraries. The next group was public libraries (10), and the last group on the list was central*

*libraries (7). The territorial distribution of libraries engaged in collection digitalization is shown in Figures: 1, 2 and 3.*



(x - Number of libraries)
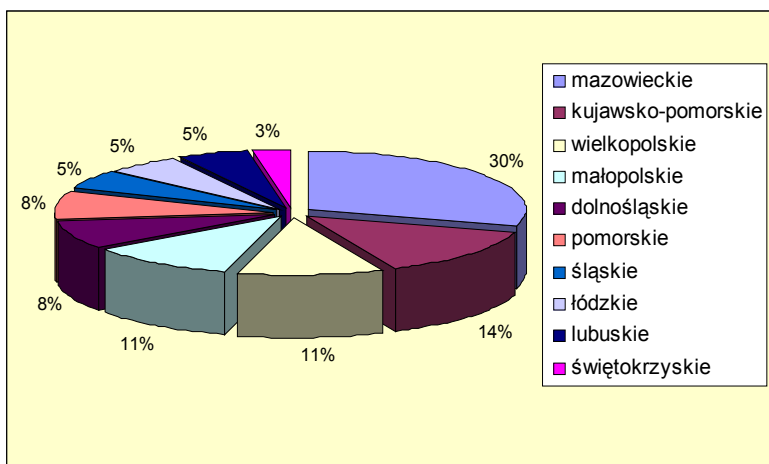Figure 1. Digitalizing Libraries by Cities
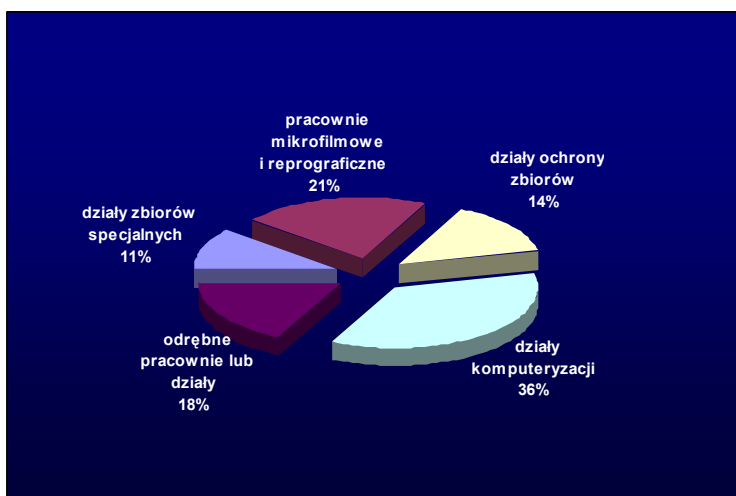


Figure 2. Digitalizing Libraries by Regions



Figure 3. Digitalization by Library Organizational Structures

(microfilming and reprographic workshops –21%,
preservation divisions- 14 %,
automation divisions – 36%,
digitalization workshops or divisions – 18 %,
special collection divisions- 11 %).

*It follows both from the data and the diagrams that compared to 2003 the number of digitalizing libraries grew by 13 (53%). Most of these libraries (11) were based in Warsaw, which resulted directly from the fact that all of the central libraries are located in this city. The next group on the list were libraries of the Kujawsko-Pomorskie voivodship, of which as many as 5 systematically digitalized their collections until the end of 2005. Another active digitalization area was also the Wielkopolskie and Małopolskie voivodships where 4 digitalizing libraries operated.* [7]

Obviously, not all libraries that have digitalization units, or have started to digitalize their resources, have created digital libraries. It does not happen automatically, because it depends on the implementation of an IT platform and on professional technological background, as well as a have high quality support team in place. Polish digital libraries need research on the use of digital resources, demand in this area, social reception, e-inclusion or e-exclusion, and the relationship with e-learning or education in general. Also legal and economic analyses are necessary in order to assess directions for development and changes in digitalization. The research aspect has been strongly emphasized in the digitalization strategy that is currently underway in order to be able to apply, as the next step, for the necessary funds.

**Practical examples**

To provide a full picture of digitalization in Poland it seems worthwhile to present practical examples of digital libraries that have been launched and may serve either as an example or a warning to those who wish to start a digital collection. The chronological list given below includes the projects that seem most important and exhibit potential for growth as they originated in institutions capable of implementing long-term plans and one divergent example that, however, was the first large-scale Polish project.
There is every indication that in 2006 many large Polish libraries will be involved in some kind of a scanning project. Thus the amount of resources will grow, and if libraries receive any financial support, we may soon create a considerable national resource. The list below does not comprise all the existing digital libraries in Poland, it provides only examples of such libraries.

**Polska Biblioteka Internetowa PBI (Polish Internet Library) http://www.pbi.edu.pl/ - 2001**

It is the first digital library created in Poland, commissioned by the government. The way it was developed, diverged, however, from the worldwide standards. Officials from the Ministry of Science and Information Technology designed the project with no prior consultations with librarians or archivists, and in spite of good intentions, its quality leaves much to be desired. A private company outside the library did the scanning, and it was not supervised in terms of methadata creation.

The first assumptions for this library were very general and it followed from them that the resource would cover all types of documents and all areas of knowledge represented by Polish science, and today there is rather talk about the literary resource and Polish cultural heritage. PBI contains at present over 20 thousand items. However, they are not uniform and coherently arranged, nor are they provided with correctly created bibliographic descriptions, thus they are very difficult to be identified. At present plans are underway to transfer the resource to different software and to complete the methadata.  PBI has received

substantial funding, so it has every chance of becoming a serious national digital library. Currently the Digitalization Team at the Ministry of Culture and National Heritage recommends the transferring of the digitalized items for repeated processing and introducing them, mindful of world standards and best practices, to a different digital platform. The National Library announced its own project codenamed *Polona* and there is a chance that it will use the resources that have been scanned with the use of very substantial public funds for the needs of PBI.

**Wielkopolska Biblioteka Cyfrowa WBC (Great Poland Digital Library)**
**http://www.wbc.poznan.pl – 2002**

WBC was the first digital library in Poland made according to European standards. Described as a cooperative initiative of the Poznań-based academic community, it was developed by the Poznań Foundation for Research Libraries. The project participating bodies include research and public libraries of Poznań and the Kórnik Library of the Polish Academy of Sciences, and also other regional institutions, such as archives or publishing houses. The main assumption was to provide access via the Internet to four types of resources: educational (academic textbooks, school textbooks and scientific monographs); cultural (selected literary heritage items held by Poznań-based libraries); regional (literature on Poznań and the Great Poland region); and musical (printed music and literature of music).

WBC is based on *dLibra* software – developed and updated by a Poznań-based company Poznańskie Centrum Superkomputerowo Sieciowe PCSS (Poznań Supercomputer & Network Centre). At the beginning of 2005 it contained over 6, 500 digital items of different types ranging from maps, to journals to book and printed music. In October 2006 the number of items increased to over 22, 000. The most comprehensive resource covers documents on Poznań and the Greater Poland region. Next to historical monographs it provides access to numerous archival documents (location acts, privileges, decrees), advertising leaflets of Poznań-based companies, exhibition catalogues, statutes of Poznań-based associations, electoral leaflets etc. The earliest material dates to the 13th century. The total number of online users from June 10, 2004 to October 10, 2006 was 2,971,752.

**Dolnośląska Biblioteka Cyfrowa DBC (Lower Silesia Digital Library)**
http://www.dbc.wroc.pl/ **- 2004**

The project was launched at the Main Library of the Wrocław University of Technology early in 2003 with the objective of providing online access to the university's library holdings. At first the digitalized didactic material was accessible only for the University of Technology's faculty and students, but thanks to agreements concluded with other libraries of the region today it may be used by all Internet users. The repository contains academic textbooks, handbooks and monographs, and pre-1949 library holdings. It contains publications of the Oficyna Wydawnicza Politechniki Wrocławskiej (Univeristy of Wrocław Publishing House). During the building process all licensing and consortia agreements were observed, as well as all legal regulations, and the Law on Copyright and Related Rights. The total number of users from November 24, 2004 to October 10, 2006 reached 744,463.

**Kujawsko-Pomorska Biblioteka Cyfrowa (KPBC) (The Kujawy-Pomerania Digital Library)  http://kpbc.umk.pl/ – 2005**

KPBC is a project implemented by the University Library in Toruń as a coordinating body in conjunction with the Library of the Casimir the Great University in Bydgoszcz since 2003. It assumes also cooperation with other libraries operating under the Consortium of Research Libraries of the Kujawy and Pomerania Region. It is the first project in Poland that has been meticulously designed and is financed from the EU structural funds under the Regional

Development Integrated Operational Program ZPORR. The goal of the project is to create a digital library supporting education, culture and tourism in the region. It will ensure fast access to knowledge resources and valuable literary heritage items. The KPBC resource breaks down into three big collections covering:

**regional holdings** – digital versions of books and collections: iconographic, cartographic, musical and ephemera related to the Kujawy, Pomerania, and Dobrzyński Region; also Vilniana will be placed in this collection – as resources of vital importance for the tradition and history of the Nicholaus Copernicus University in Toruń;

**didactic material** – digital copies of selected academic textbooks, monographs and scientific articles produced in the region;

**cultural heritage** – copies of the most valuable and most frequently consulted items: incunabula, rare books, manuscripts, iconographic, cartographic items and émigré collections coming from the region's libraries.

The Kujawsko-Pomorska Digital Library will serve scholars, students, pupils and all citizens of the Kujawy and Pomerania region. The institutions of higher learning in this region are interested in providing access to its own contemporary publications as fast as possible. The legal status of the publications introduced into KPBC has been settled. Access to certain items may be restricted – as requested by authors or copyright owners – to specific IP addresses or may be protected by a password. The first items with restricted access have already been published.  KPBC has been built with the use of the dLibrary software. In January 2005 KPBC contained 2, 222 digital items of various types: books, journals, maps, leaflets, catalogues, fine prints and other items. In October 2006 ca. 1,200 items were browsed and read. The total number of „netizens" who accessed the service from May 22, 2005 to October 10, 2006 reached 1, 853, 576.

**Zielonogórska Biblioteka Cyfrowa (ZBC) (Zielona Góra Digital Library)**
http://zbc.uz.zgora.pl/ – 2005

ZBC enables broad online access to knowledge repositories, educational resources, digital copies of the most precious written heritage items, the collection of works of art and regional material. The major features of the library are universality and accessibility. It is a service designed for scholars, students, pupils and all those who are interested in knowledge, science, art and culture. The project envisages regionalization of the resource at present under construction at the Library of the Zielonogórski University, and in the future to be shared by scientific, cultural, educational establishments from the city of Zielona Góra and the region. ZBC divides the online holdings into four main collections:

**learning and didactics –** covers academic textbooks, handbooks, monographic, serials and other local publications;

**diplomas, Ph. D. theses, habilitation theses**;

**culture and art –** covering the most valuable written heritage items (manuscripts, rare books, iconographic, cartographic and musical collections) and collections of works of art held by the University Library (drawings, fine prints, painting, posters, artistic photographs, bookplates);

**regional holdings –** embracing material, documents and works on Zielona Góra and the Lubuski Region, also within its historical borders. It presents contemporary publications and archival collections (annals, statutes, privileges, iconography, cartography, gray literature), and also the works of local artists forming part of the collection of the University Library.

The selection and preparation of documents for access in ZBC is the responsibility of the University Library. Access to some material may be restricted – as requested by authors or copyright owners – or may be protected by a password. ZBC was developed on the basis of an agreement and in conjunction with the Poznańskie Centrum Superkomputerowo Sieciowe company and is based on *dLibra* software. In early 2005 the digital library provided 522 digital items of different types from academic research works to fine prints, postcards, leaflets, books or serials. In October 2006 their number grew to over 1,000 , and the total number of users who logged in from October 25, 2005 to October 10, 2006 was 516,796.

## Biblioteka Cyfrowa Uniwersytetu Wrocławskiego (University of Wrocław Digital Library) - 2006

- This was an initiative of the University Library in Wrocław, which looked to preserve and promote its rich cultural heritage resources. It enables users to view written treasures, collections of works of art and regional material in a digital format. The University of Wrocław Digital Library also uses the dLibra software. It provides access to written heritage items, educational collections and exhibitions presenting the most interesting collections chosen from the notable holdings of the University Library in Wrocław. In October 2006 the number of digital items viewed exceeded over 4,800, and the total number of visitors from December 21, 2005 to October 10, 2006 counted 631,373.

- Conclusion

If we combine the five digital libraries presented above, then we are faced with a rich resource counting 40,100 items, visited 6,717,960 times since June 2004, i.e. slightly over 3 million per year over two years. This figure indicates the immensity of social demand for electronic resources. Supported by better funding  and dynamic promotion these figures could visibly increase, which would only have a positive impact on the dynamics and the state of research and education in Poland.

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*Toruń, October 10, 2006*