

Digitisation of Cultural and Scientific Heritage in Russia

State-of-the Art, Problems, Perspectives.

1.Introduction

During last years, extensive development of digital cultural, educational and scientific information resources (both – digitised and digitally born) has been going on in Russia. Institutions and organisations of various ministries and departments as well as private companies and individuals are engaged in creation and collection of digital resources. By 2004 the total amount of digital libraries in Russia in the area of education, science and culture may be estimated in minimum 3-5 thousand (non - complete cross referencing of existed catalogues makes it difficult to estimate the exact amount). Numerous owners of Internet –portals and web sites initiated maintenance of the catalogues of digital resources available on the Internet. There is already an impressive number of such catalogues existed on the Russian Internet and the largest of them includes 200 and more references or records concerning digital resources [2].

Registration and inventory of digital resources including those in the area of education, science and culture, are the major activity of several Russian and international projects. However, the catalogues and the registers, produced by various project teams, have been developed without any agreement on record standards. Different projects have their own ways for collecting and recording materials. A United National Register of digital information resources has not been developed and there are no plans yet to create it. It is important, that not only Internet resources but also off-line digital resources (databases, digital libraries, catalogues, CD-ROM and DVD-ROM publications, etc) are registered in inventories and catalogues. This importance is due to low level of Internet penetration in Russia and especially in provincial Russia. In general, only 10% of Russian population have the Internet access. Therefore, dissemination and access to off-line resources still are and will be very important in the near future. Apart from that, off-line information resources potentially might be available on the Internet in the future, when the financial, economic and legal situation in Russia will be improved.

Potential demand in a program able to integrate local digitisation initiatives has emerged a long time ago. Federal program “Electronic Libraries” (1998) may be considered as the first practical attempt in this direction. Step-by-step, digitisation and digital publications has been becoming an element of the information policy of many institutions [15].

2. Federal and Regional Programs

The Federal Target-oriented Program “Electronic Russia 2002-10” has been adopted and is being implemented on the federal level (<http://www.e-rus.ru/>). The basic purposes of the Program are creation of conditions for democratic development, raising of effectiveness of economics functioning, state administration and local self-government at the expense of introduction and mass dissemination of ICT, securing of rights for free search, receipt, transmission, manufacture and distribution of information, expanded training of ICT specialists and qualified users.

Unfortunately, digitisation and development of cultural and scientific information resources was not considered a priority of the “Electronic Russia” program, and the Ministry of Culture was not involved in the program on the first stage [14]. The program envisaged development of the united digital catalogue for Russian libraries, but this project didn’t get any funds. The

only project on digitisation supported by the program in 2002-2003 was the project “The Digital Archive of the President of the Russian Federation Accessible to Citizens and Organizations”. In the framework of the project, the information resource of digital documents (database of document samples, index cards, text files) with total volume of 500 000 pages was created. The project has been continuing in 2004. Another project, drawing attention to the cultural heritage is the annual contest “The Best Region and the Best Project in the ICT Area” with a nomination “ICT in Culture”.

The Ministry of Education of the Russian Federation has been implementing the program “Development of United Educational Information Environment (2001-2005)” (<http://www.russia-gateway.ru/content/>). Here are examples of several projects of this program that were undertaken in 2004-2005. The Ministry of Education signed contracts with hardware suppliers for 2.26 billion rubbles in the framework of projects “Computerisation of Rural Schools in the Russian Federation” and “Delivery of Computing Equipment and the Mediateque to Elementary and High Schools in the Russian Federation”. It is planned that by the end of 2005 two thirds of Russian schools will get the Internet access. About 20 regions of Russia in 2005 will be selected to get free Internet connections in the schools, which will get computer workstations and multimedia equipment for their libraries.

Supported by the World Bank, the project for computerisation of Russian Community Colleges and special educational institutions has been developing. It aims to establish no less than 200 regional and municipal computer centres in 7 cities and regions of Russia. Later on, all the country will adopt the best practices.

The Ministry of Education considers as one of its main goals building the industry, developing the educational software, which will be similar to the existing arrangements with industry producing traditional textbooks. The ministry intends to announce a competition for the development of educational portals.

Some programs focused on digitisation in the field of culture were developed and have been successfully implemented during last 5 years in various regions of Russia such as Yaroslavl and Smolensk regions, Republic of Carelia, etc. though they need modernisation. A new generation of regional programs for ICT development such as “Electronic Moscow”, “Electronic Saint -Petersburg”, “Electronic Tatarstan” has been developed after the model of “Electronic Russia” program. Some of them include special sections or sub-programs of ICT development in the field of culture.

The federal program “Culture of Russia (2001-2005) ”, implemented by the Ministry of Culture and the Federal Archive Service, has extensive sections concerning digitisation in the field of culture. Implementation of the program made an impressive input to the digitisation process in the field and basically prepared numerous cultural institutions to join the information society. However, the national policy in the area of cultural heritage digitisation, digital heritage preservation and sustainable access was not clearly announced in the program. The national library policy sounds more up-to-date, it is well worded and structured.

3. Development and Implementation of the Library Policy by the Ministry of Culture of the Russian Federation

Establishing the efficient working library service system, able to provide the complete, fast and open access to the information, is a principal goal of the library policy, elaborated by the Russian Ministry of Culture [6]. The library policy priorities are the following: building and development of the all-Russian information library network LIBNET, implementation of the National Program on the library holdings preservation, providing access to the information in

the public domain, etc. The Ministry of Culture of the Russian Federation has two principal and fundamental goals in its library policies: to provide rights to open access to knowledge and information in the public domain and to preserve of the Russian cultural heritage accumulated and hosted by libraries.

The Ministry of Culture in Russia draws special attention to basic international, interdepartmental and branch programs and projects which dramatically influence and stimulate the innovation and modernisation process in the library area as well as create a new philosophy, produce guidelines and recommendations for libraries, develop the system of the institutional and interpersonal professional communication, and build the infrastructure for the library area.

3.1. Integration of the Library Information Resources

The Ministry of Culture in Russian Federation has been co-ordinating the activities defined by the national library policy. This gives an opportunity for two technologies to co-exist and be developed, that is the WEB technology, which is the basis for the National Information and Library Centre, and Z39.50-Technology that serves as a basis for regional library consortiums ARBICON.

3.1.1. Program “Development of the Russian National Information Library Computer Network LIBNET”

Program LIBNET development was marked by the establishment of the National Information Library Centre LIBNET in 2001. The Centre aims to promote the corporate cataloguing technology in Russian libraries by means of the Central Joined Digital Catalogue. This will lead to an essential reduction of total national expenses on current and retrospective cataloguing of the published materials as well as to the standardisation and the improvement of record quality in digital catalogues of Russian libraries.

By April 2003 the Centre LIBNET resources have reached the following parameters:

- Joined Digital Catalogue of Libraries in Russia contains 700.000 records.
- Retrospective Database “The Whole Russia” contains 350.000 records.
- “Russian State Bibliography” database contains 120.000 records (all the acquisitions from January 2002).
- Authority File Database contains 1. 500. 000 records.

About 2.000 records are being monthly downloaded from the LIBNET databases.

Cataloguing of the Internet resources have been continuing. This include the Register of the Internet full-text and reference resources in the library area (using Dublin Core format) and the server (www.RUSLIBNET.RU) development that hosts and gives access to the current and reference information on the LIBNET program. The web sites of the largest federal and regional libraries of Russia are accessible. The Internet portal “Libraries in Russia” (www.LIBS.RU) is opened and supported.

3.1.2. Regional Library Consortiums Association (ARBICON)

The Regional Library Consortiums Association (<http://www.arbicon.ru>) was created in 2002 and supplies technologies for distributed access to the library information resources, using the Z39.50 protocol.

The Distributed Information System includes 13 Library Consortiums. It provides access to on-line digital resources (catalogues and full-text resources) of Russian libraries through the Internet central access point. At the moment the central access point gives access to digital

resources of 194 library in 54 regions of Russia, including 83 university libraries, 73 public libraries, 9 medical libraries and 12 academic, departmental and special libraries.

Library digital catalogues use the Russian UNIMARK version (RUSMARC) format. The volume of the ARBICON catalogue is 28000000 records. The library catalogues provide access to 100000 full-text digital resources; the majority of them are for educational use.

3.1.3. National Electronic-and-Information Consortium

A new project of the Russian Ministry of Culture is support and development of the National Electronic-and-Information Consortium (<http://www.neicon.ru>) with the aim to bring together the libraries, interested in access to the scientific information. The vital advantage of the project is to give the Russian libraries access to digital resources of the world community minimising the total expenses.

Apart from providing access to resources of western scientific publishing houses, the Consortium aims to reach the goal of providing access to Russian –language resources for the world Internet users. Recently, Russian resources are attracting more and more attention not only of the research community but also of the general public. The project will help libraries in far away regions to overcome the digital divide.

3.1.4. National Digital Library

National Digital Library is a new program of the Ministry of Culture. This is the integrative resource of the national scale, which combines programs on cultural and scientific heritage digitisation with access to existing digital resources. A number of ongoing projects on library holdings digitisation and accessibility are being developed in parallel with the concept of the National Digital Library.

Creation of the electronic dissertation library (<http://diss.rsl.ru/>) is the first large-scale project. It intends to deal with digitising dissertations, building the electronic dissertation repository, providing an open access to a certain part of dissertation collection and providing the library users with full-text dissertations. After signing a contract with the author, dissertations and thesis are accessible on the Russian State Library (RSL) web site in the Open Russian Electronic Library for all the Internet users. To meet the needs of virtual users, the RSL started a program on establishing Virtual Reading Rooms in libraries and other institutions on the regional level.

By May 2004, the Open Russian Electronic Library (<http://orel.rsl.ru>) provides access to 5.774 books and 290 dissertations. It also hosts mirrors of most popular full-text electronic libraries on the Russian Internet.

3.2. Access to the Information in the Public Domain.

The Ministry of Culture supports a number of programs aimed to provide access to information resources in the public domain. These are programs establishing Centres of Legal Information, Municipal Information Centres and Ecological Information Centres in Russian libraries; a project on development of model public libraries in the countryside, special programs for children and youth libraries and programs providing library services to disabled people.

Most successful is the program "Creation of all-Russia Network for Public Centres on Legal and Municipal Information (PCLI) in public libraries".

Providing open access to the essential legal information for the entire public, this program is already working efficiently and reaching European standards of services. The Program was presented in Paris on the second meeting of the Inter-Governmental Council of the "Information for All" UNESCO Program in April 2003. The presentation showed that the

novel mechanisms for implementing this large –scale national program are serving as a model for the building and implementation of similar programs in other countries.

At the moment, there are about 500 Centres and Points of Legal Information working in public libraries. About 1.5 million citizens have already accessed essential information on different issues.

More than 33.000 persons used the Centre of Legal Information in the Russian State Library during the 3 years of its existence. They borrowed more than 150 thousand publications and made more than 60 thousand requests at the Reference Desk. More than 70% of requests were fulfilled with the aid of the digital legal databases.

The Ministry of Culture invited the company “Codex” to start working on the general Russian portal “Public Centres for Legal Information”. The portal will help to integrate resources and to establish co-operation for centres network as well as to open a “hot reference line” to provide citizens with the information.

3.3. National Program for Preservation of Library Holdings in the Russian Federation

Practical activity in the program framework was started at the beginning of 2000, though the program itself was approved by the Collegium of the Ministry of Culture on 26.07.2000 and endorsed in September of the same year by the order of the Minister. The program consists of seven sub-programs: “Conservation of the Library Holdings”, “Building the Russian Depository of Library Documents. Information Preservation”, “Book Monuments of Russia”, “Library Holdings Security”, “Library Holdings Preservation in Use Process”, “Registration of Library Holdings” and “Staff Provision for the Process of Holdings Preservation”.

About 1 billion library holdings in the Russian Federation include about 3 million of old and rare books, the earliest of them dating from the 5th century. These books demand special conditions for preservation and use as well as continuous work to prolong their life. The National Program accumulates a vast experience of leading experts, specialising on developing the ideology for preservation of library holdings, which would be adequate to the present situation. The leading research, methodology and co-ordination Centre in the area of library holdings conservation is the federal Centre on library holdings conservation created in the Russian National Library (www.nlr.ru). The Centre adopts and develops the modern methods of document protection. The Centre staff uses the technology of preventive conservation, which has been widely used in the world library practice. It is a combination of actions to provide standard conditions for use and storage of any type of documents.

A network of established Regional Conservation Centres will be the basis for modern conservation technologies for library holdings. Centres will be responsible for research, training, supervision and practice in this field. At present, ten of such regional centres are already set up. Large-scale activities are in process in the framework of the sub-program “Security for Libraries and Library Holdings”. 45 regions of Russia have been financed for strengthening the protection of library buildings and holdings against fire. They implement latest protection tools for all kind of emergencies, including library protection against terrorist.

Libraries in 25 regions of Russia carry out microfilming of different types of documents (regional periodic, rare books, and other publications with intellectual content) to insure holdings of library documents. The total amount of microfilming is about 1 million of frames annually. Digitisation of microfilms will provide an impressive volume of digitised information.

The Russian State Library (www.rsl.ru) is a research and co-ordination centre for implementing the sub-section “Book Monuments of Russia” in the National Program for Preservation of Library Holdings in the Russian Federation.

The database “Rare Book Collections in Russia” is being developed by the staff of the Russian State Library. It contains detailed records of 300 rare books collections from all the Russian regions (the history and content of each collection, including quantity, language and chronological parameters). A prototype of the web site “Rare Book Collections” has been prepared; the Russian State Library’s server will host it.

New information technologies make it possible to unite in a joint collection digital copies of books, the original versions of which are preserved not only in Russian book repositories but also abroad. The digital collection “Early Printed Slavic Books of the 15th – first half of 16th centuries” is based on this principal. This is a unique collection, containing digital versions of books held by libraries of Russia, Ukraine, Byelorussia, Yugoslavia, Romania and France, united in a joint electronic library. The collection of early printed Slavic books contains 75 volumes that have been identified at present. Altogether, the 20.000 pages are printed at 20 CD-ROMs in digital format and are opened on the Internet. The collection “Early Printed Books of Russia 1553-1565” is also now available in digital form. The collection was digitised for the 450th anniversary of the first Russian printed book. The Russian State Library in co-operation with the Russian National Library prepared a digital collection “The First Russian Newspaper “Vedomosti”(“Register”), 1703-1727”. The electronic version is based on copies of the “Vedomosti”, preserved in the four largest libraries of Russia. The users may see an exact image of every issue. The collection may be enlarged by some other issues of the newspaper from the holdings of other libraries and archives [5].

According to a long-term plan “Memory of Russia”, the Russian State Library intends to prepare a whole lot of digital collections and digital versions of rare books, Russian photograph collections, engravings, maps, and newspapers.

4. Museum Information Resources

4.1. The State Catalogue of Museum Holdings in the Russian Federation

With the support of the Ministry of Culture, the project of the united Federal information system in the field of culture and arts is being developed. The all-Russia network of museum holdings is being built. About 2.000 cultural institutions with 50 million of items in their collections will participate in the program, creating a database of Russian museums. At the moment, the project working group is testing the prototype, and is developing the tools for recording museum objects. ORACLE is the general sponsor of the project. It contains data repositories, the tools to input information, monitoring tools, replication tools and the tools to synchronise the data between repositories. The system also includes a functional web site for browsing the information stored in the database. The replication system allows every cultural institute (museum, etc.) to maintain their own databases, which afterward according the hierarchy, will be replicated into regional databases (where data will pass through identification, verification and editing processes) before uploading into the Federal Database of the State Catalogue maintained by the Ministry of Culture. A technological web site, which allows easy search and printing of the requested information, is being also developed in the framework of the system. At present, the work group is collecting and processing the data to produce a unified key word index for the State Catalogue. Leading originators of Russian museum information systems – the State Information Computing Centre of the Ministry of Culture and the enterprise “Alt-Soft” have agreed to convert museum databases based on their software into the State Catalogue.

4.2. Museum Information Resources.

About 200 museums (or 10 % of existing museums) in Russia are using specialised museum information systems for registration and to cataloguing of their collections. However, there are a very few museums that offer on-line catalogues for open access on the Internet.

The largest and the most famous Russian museum, the State Hermitage is the undoubted leader. The State Hermitage web site (<http://www.hermitagemuseum.org>) has been developed by the IBM Company. Developed by the IBM, the search technology QBIC (Query By Image Contents) allows the searching of art works by visual parameters. It is possible to search images by operating a colour palette or by placing colour patches on the canvas. One may specify search results by a request for art works with similar visual attributes.

The first complete illustrated catalogue of museum holdings on the Internet has been presented on the web site of the Rybinsk Museum-Reserve in the Yaroslavl Region, updated in March 2004 (<http://rmuseum.orbis.spb.ru>). At the moment, the on-line catalogue of the museum collection contains abstracts of more than 50.000 objects, held in the museum. Records for the major part of the collection, about 21.000 items, are supplied with the image. It is one of the most significant presentations of Russian museum collections on the Internet with developed search tools, including analogue and associative search. All the information on museum objects has been placed on the web site from the internal museum information system CAMIS (developed by “ALT-Soft”, Saint Petersburg), which the museum has been operating since 1994.

ADIT (Association on Documentation and Information Technologies in Museums, Russia) has been collaborating with the Russian Library Association for many years. In 2002, the Saint-Petersburg Company “ALT-Soft” initiated a research on standard CIMI and Z.39.50 usability in the museum and archive practice in Russia. As a result, museums and archives have become powerful suppliers of network information resources to the inter-library network information system, presenting full-text digital catalogues (digital publications with images) on cultural heritage objects [4].

The State Russian Museum in Saint Petersburg was the first in Russia to use virtual reality technologies in museum practice. The project “Virtual World of the Russian Museum” is based on virtual reality technologies and the newest research techniques that provide interactive access to collections. Virtual reality makes it possible to present museum palaces and rooms in three-dimensional (3-D) space as well as allowing users to “enter” into the space of the picture. In the framework of the Project it is planned to create a Poly-functional Computing Centre (PCC) [11].

4.3. Multilingual Access to the Museum Information

For Russia, the problem of multilingual access has three aspects:

- providing access to the world cultural heritage to Russian citizens;
- providing access to Russian cultural and scientific information resources to the world-wide user;
- providing access to information resources in national languages of Russian Federation people.

An example of a possible solution for providing the multilingual access is a unique joint project “Horizons. Landscape in Russian and Canadian Painting”, accomplished by ADIT, the State Tretyakov Gallery (Moscow) and the Canadian Cultural Heritage Network (CHIN). The virtual exhibition displays 250 well-known Russian and Canadian paintings, allocated according four principal themes: Traditions, Innovations, Travel and Spirit Quest. Images for

the virtual exhibition came from 14 museums in Russia and Canada, including 7 museums from regions of Russia (western and central regions, Volga Valley and Siberia). All exhibition materials are available on the virtual Museum of Canada web site (<http://www.virtualmuseum.ca/Exhibitions/Horizons/>) in three languages: English, French and Russian. In this case, to provide the multilingual access, professional art historians translated all the project materials into three languages [13].

Better solution of the problem, however, is to create a multilingual thesaurus. Participation of the State Historical Museum (Moscow) experts in the NARCISSE project (which was supported by the State Department of Museums in France and was developed in 1990-1994 under the supervision of Mr. Christian Lahanier) and, 10 years later, in the EROS project (by the Scientific and Research Centre for Museums in France (CRMF) provided an opportunity to include Russian into the multi-language thesaurus system EROS. It also includes Russian dictionaries-thesauri, which had been developed initially in NARCISSE project. One of the thesauri of EROS is iconography thesaurus by Mr. F. Garnier. This is a unique instrument to index and search through databases of digital images. The Russian version of this standardised thesaurus has been developed by the sector of the Videography Protection databank of the State Historical Museum. At present, the thesaurus contains French, Russian and English languages. The work on translation of the author name index and the index of picture titles is in progress. The Author Index contains about 3 000 names, and the index of picture titles is really impressive. More than 15 000 digital images of paintings and 35 000 digital images of art objects were converted from NARCISSE to EROS databases; the whole volume of EROS database is 160 000 digital photo-documents. The participation in these programs marks a large step in international co-operation and accessibility of digitised art works of the world significance. [8].

The republic of Tatarstan is one of the largest regions in Russia. Tatarstan culture had been formed on the “East-West” border during hundreds years. The portal “Museums in Tatarstan” (<http://www.tatar.museum.ru>) is oriented to various user communities, including numerous Tatar diaspora abroad. Tatarstan is considered a historical motherland for all Tatars wherever they live, and Kazan is the cultural capital. Because of that, special effort was made to produce the Tatar version of the portal. During the history of the 20th century the Tatar alphabet had been changed twice (once in 1928, and again in 1939). But sounds of the native language, its poetry and music still unite all the Tatars. That was the reason to pay special attention to including audio fragments (texts, Tatar poetry and music) into the Tatar version of the portal. The same audio fragments are available in the Russian and English versions.

5. Non-movable Cultural Heritage

The Ministry of Culture of the Russian Federation has a number of functions to administrate historical and cultural monuments in the country. Objects of monumental (non-mobile) property are considered to be part of the cultural heritage. This differs from the international definition of the cultural heritage, which also includes historical and cultural objects. Cultural heritage objects are divided to three categories in their historic and cultural significance: federal (national), regional and local (municipal). The Ministry of Culture is dealing with the cultural heritage objects at the federal level only.

Since 1940-s, all historical and cultural monuments have the passports which contain all the information, including photographs, maps and measured drawings. The passports are basic register documents; they confirm the historical and cultural value of the objects. Passports must be registered in the Ministry of Culture. As a result of registration, Ministerial Archive contains approximately 150 thousand passports of the historical and cultural monuments.

There are more than 100 thousand historical and cultural monuments in Russia, including historical, archaeological, urban and architectural monuments. About 26 thousand historical and cultural monuments have been considered as objects of the national level. The Main Information and Computing Centre of the Ministry of Culture has developed an information system “Monuments of Russia”. The system is based on an electronic database in the CYBD Access environment and provides multi-user access.

At present, the database contains about 90 thousand records; about 26 thousand of them are on cultural heritage objects of national level. A number of institutions on protection of cultural and historical monuments in the territories of the Russian Federation have acquired the database, containing the information on cultural heritage objects, located in the regions.

In 2002 regular digitisation of the passports have been started (PDF. format, text and graphics, maps and photographs). The image database, related to the United National Register through the inventory number of objects, has been developed. At the moment, the database contains 12 thousand digital passports. On requests of regional Departments on monument preservation, a paper copy of the passport can be issued.

The developed database is an administrative information resource as it is opened for a limited group of users responsible for the administration of cultural heritage objects. However, it cannot be considered as an on-line information resource for research and/or education. To make the database “Monuments of Russia” accessible on the Internet, it is necessary to find solutions to the intellectual property right problems as well as to a number of organisational, technical and financial problems. Problem solutions required a budget that is several times as much as existing budget for the development and support of the administrative information resource [12].

Some illustrated catalogues of historical and cultural monuments of Russian regions are now available on the Internet for public use. For example, there is an on-line database of architectural, historical and cultural monuments in Pskov and the Pskov Region (www.opskove.ru). The digital catalogue presents the database and the bank of images, created in the Pskov State Research and Development Centre for Protection and Use of Historical and Cultural Monuments (SPC). Apart from text, the database records contain graphic information with images of exteriors, interiors and maps of monument locations. At the moment, there are more than 1 thousand images, for the first time gathered together to be available for the Internet user community.

The portal “Architecture of Russia” has been developed in 1999 and is available on the Internet. It is focused on the history of the Russian architecture and contemporary “state-of-the art”. It is addressed to architects, art historians, and to anyone who is interested in Russian culture. The Catalogue of Monuments (370 monuments and 940 photographs) is accessible through the portal. It presents monuments in several territories of Russia.

The first project in Russia to present 3D model of architectural buildings is the project of virtual reconstruction of the Moscow Kremlin. It was presented at the beginning of 2004 at an exhibition in Bonn (Germany). The Darmstadt Technical University that has an extensive experience in digital documentation of the World Cultural Heritage monuments, was the project partner [16].

6. Federal Archive Service

Before 2004, the Federal Archive Service was directly subordinate to the Government of the Russian Federation. As a result of ongoing administrative reform, it has become a Federal Agency under the Ministry of Culture and Mass Communications. Therefore, all institutions, dealing with the cultural heritage preservation, are now united under the same Ministry.

A concept and a program for the archive sector digitisation have been developed since 1995. Issues of archive documents digitisation, digital heritage preservation and sustainable access were examined then. The Federal Archive Service organised very efficient registration and invetarisatation of digitised resources.

The official web site of the Federal Archive Service (www.rusarchives.ru) is available on the Internet. It provides the information on archive sector activity, the directory of federal and regional archives and the index of local archive databases and on-line archives.

One of the most successful initiatives on archive holdings digitisation and visualisation is the project of the COMINTERN Archive. The Federal Archive Service and the International Archive Council have signed the agreement for the joint project on June 7, 1996. Archive services of Germany, Switzerland, Spain, France, Italy, Sweden as well as the Archive of the Open Society Institute and the Library of Congress (USA) were involved into the project. The collection of 1 059 354 scanned document images has been created so far. It is now a part of the COMINTERN Archive's information system. Project participants have received a complete copy of the database for the access at their reading rooms. They also received a copy of the collection of digitised document images. It is open and accessible to everybody. Similar principals of open access will be adopted for all the copies of the database and the collection of digitised document images in each country involved into the project. The work on the English version is at its final. The Library of Congress accomplished the transliteration works for personal and geographical index. 167 researchers from 54 countries were participated in the transliteration works. The complete version of this information resource will soon be available on the Internet. Access to the COMINTERN Archive database will be free. A subscription will be required to use the collection of digitised images.

25 February, 2004 the presentation of the project "Electronic Archive" has been held at the State Archive of the Russian Federation (SA RF). SA RF has accomplished the project in collaboration with the corporation "Electronic Archive" in 2003-2004. The presentation was included in the meeting agenda of the Russian Federal Archive Service Board and related professionals. The presentation has shown development and content of information-and-search systems (ISS) "Electronic Inventories SA RF for the Reading Room" and "SA RF On-line". The uniqueness of the project is that it took no more than a year to accomplish not only the software development but also a significant part of the indexing (800 inventories and 540 000 electronic titles of files which is 10% of the total amount of the archive volume). The Diaries of Nikolai II have been scanned and digitised and the electronic gallery of 4 000 pictures of the Romanoff family has been created. ISS "SA RF On-line" provides access to electronic versions of archive inventories through the Internet.

Another project by SA RF is SMAD (Soviet Military Administration in East Germany) which was accomplished in collaboration with the Bundesarchive, Germany. The project idea is to study and to publish the documents of the Soviet Military Administration in Germany. 259 695 frames of microfilm negatives of insurance holdings for 1 156 SMAG files and 99 839 digital copies of documents have been created. They were given to the Bundesarchive to copy and to use for research. The Bundesarchive in its turn produced for SA RF positive copies of microfilms as well as digital copies of missing documents. The File Catalogue includes 9 700 records, the document catalogue contains 26 035 titles and 55 768 digitised document images.

Cinema archives and photo archives are the most active in holdings digitisation; they visualise their illustrated catalogues through the Internet. For example, the on-line catalogue of the Russian State Cinema-and-photo document Archive (<http://www.rusarchives.ru/federal/rgakfd/catalog/catalog.htm>) contains 40 6000 documents, 12 281 photo documents and 1 734 personal files which are now available on the web site of

the Central State Cinema-and-photo document Archive in Saint-Petersburg (<http://photo.altsoft.spb.ru/photo/index>).

7. Legal Issues

The Constitution of the Russian Federation and a number of federal laws focused on culture, library activities, museums, education and science guarantee the right of free access to the information to all citizens. However, acting federal legislation doesn't regulate all the aspects of cultural, research and educational information resources development and accessibility. There are certain contradictions between the right of open access to information and the law of the Russian Federation "About Copyright and Associated Rights".

The Russian legislation in the area of the state information resources production and development is not perfect, there are many gaps in the traditional legislation in the area of digitisation which do not take into consideration the interests of educational and cultural institutions [3]. There is a conflict between the need to following the law and the public interests. It is necessary to find new approaches to the copyright law as well as a compromise, allowing the provision of better information services to citizens that would match the contemporary level of the society needs[10].

Legal issues of open access to information and IPR were topics of serious discussions, which recently have been taking place in governmental structures, educational and cultural institutions, at conferences and seminars and in mass media. The Russian Committee of the UNESCO "Information for All" Program (www.ifap.ru) considers IPR issues a priority and organises the annual international conference "Law and the Internet". The Russian Committee supports the UNESCO position on necessity of fair balance between IPR holders and the society.

8. The role of MINERVA project in Russia

After the signing of the "Okinawa Charter" by the President Vladimir Putin, the information society development, access to information for citizens and integration into the world information environment, are principal priorities in Russia. Cultural and scientific information resources play the key-role in this process. MINERVA and MINERVA PLUS could serve as a model and a catalyst for the process of Russian cultural and scientific heritage digitisation and for developing mechanisms to provide access to information for everyone.

Participation in the MINERVA PLUS provides an opportunity to elaborate suggestions for formulating the Russian National policy in the area of cultural and scientific heritage digitisation, harmonised with the European policy; and to develop the action plan for digitisation. The plan implementation will lead to high-quality cultural and scientific information resources production and provide easy access to them, will integrate Russian resources into the European information space and facilitate access to the European information resources for Russian citizens.

To reach these goals, efforts of various departments of the Ministry of Culture, cultural institutions, organisations working under other Ministries and Departments, various Russian and International programs and projects will be united. In this sense, co-operation with the Russian Committee of the UNESCO "Information for All" Program is of special importance, as Program priorities (open access to information, cultural diversity, multilingual access, intellectual property right, digital cultural heritage preservation, etc.) are alike the policy and the philosophy of the National Representatives Group, MINERVA and MINERVA PLUS projects.

The Russian web site (www.minervaplus.ru) was developed in the framework of MINERVA PLUS project. It presents the information on NRG activities, on history, structure,

achievements, progress and special events of MINERVA and MINERVA PLUS. Basic documents of the both projects are also available on the web site in Russian [7].

9. References

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