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ELECTRONIC DOCUMENTS AND ELECTRONIC ARCHIVES IN THE USA

Abstract. The current situation in the archival world, the legal basis for the functioning of the archive business, approaches to the theoretical concepts of the science of archives and archival documents, the methodological norms of archival practice, the organization of preservation and the use of documentary heritage, including on the newest media – all these issues represent a serious scientific and practical interest. Archives are a dynamic structure that varies according to the specific conditions of its functioning. At the same time, there are changes not only in functions, structure, storage modes of documents but mainly in the documentary array on traditional and non-traditional media.

The article reveals the basic principles that guided the modern archival service of the United States when working with electronic documents and electronic archives. While disclosing the basic principles of this work, attention was focused on studying the experience of applying the latest methodological and technical means in the archives. In the context of this, the article details the problems of managing electronic documents, outlines the activities of NARA to create an electronic government and archive. The introduction of the latest archival technologies and standards when working with electronic documents and archives, and simplifying access to them, can be used to create models and standards in the field of archival science and documentation of Kazakhstan.

Key words: US National Archives, US Documentation Administration, Electronic Documents Archive "ERA", electronic documents, electronic archives, US archives.

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АҚШ-тағы электронды құжаттар мен электронды мұрағаттар

Аңдатпа. Мұрағат әлемінің заманауи жағдайы, мұрағат ісінің іске асырылуының заңды негіздемесі, мұрағат және мұрағаттық құжаттардың ғылыми теориялық ұсыныстары, мұрағат тәжірибесінің әдістемелік нормалары, құжаттар мұрасының сақталуы мен қолдануын, сонымен қатар жаңа үлгіде сақталуы мен қолдануын ұйымдастыру осы аталған сұрақтардың барлығы ғылыми-тәжірибелік маңыздылығы жағынан өзектілігі жайлы мәселесі көтерілді.

Мұрағаттар – қызметінің ерекшелігіне байланысты үнемі өзгеріп тұратын динамикалық құрылым. Сонымен бірге, өзгерістер тек құжаттардың сақтау функцияларында, құрылымдарында және режимдерінде ғана емес, негізінен дәстүрлі және дәстүрлі емес үлгідегі құжаттардың құрамының өзгеруін де атап кеткен жөн.

Мақалада АҚШ-тағы мұрағат қызметінің электронды құжаттар мен электронды мұрағаттармен жұмыс ұстанымдары жайлы мәселелер қозғалады.

Мақаланы жазу барысында басты назар мұрағатта жұмыс жасаудың соңғы әдістемелері мен техникалық құрылғыларды қолданудың тәжірибесіне аударылып жазылды. Жоғарыда көтерілген мәселенің мәнмәтінінде электронды құжаттарды ұйымдастыру, НАРА-ның электронды үкімет пен мұрағаттың қалыптасуына қосқан үлесі жайлы да сөз етіледі. Қазақстандағы мұрағаттану мен құжаттану саласындағы жаңа стандарттар мен модельдерді қалыптастыру жолындағы мұрағаттау саласына енгізіліп жатқан электронды құжаттармен жұмыс жасау барысындағы жаңа технологиялар мен стандарттарды қолдауы туралы мәселе көтерілген болатын.

Түйін сөздер: АҚШ-тың ұлттық мұрағаты, АҚШ құжаттарының әкімшілігі, «ERA» электронды құжаттар мұрағаты, электронды құжаттар, АҚШ мұрағаттары.

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Электронные документы и электронные архивы в США

Аннотация. Современная ситуация в архивном мире, юридические основы функционирования архивного дела, подходы к теоретическим представлениям науки об архивах и архивных документах, методические нормы архивной практики, организация обеспечения сохранности и использование документального наследия, в том числе и на новейших носителях – все эти вопросы представляют серьезный научный и практический интерес.

Архивы – это динамическая структура, меняющаяся в зависимости от специфических условий ее функционирования. При этом происходят изменения не только в функциях, структуре, режимах хранения документов, но главным образом в составе документального массива на традиционных и нетрадиционных носителях.

В статье раскрываются основные принципы, которыми руководствуется современная архивная служба США при работе с электронными документами и электронными архивами. При раскрытии основных принципов такой работы внимание акцентировалось на изучении опыта применения новейших методических и технических средств в архивном деле. В контексте этого, в статье подробно освещены проблемы управления электронными документами, изложена деятельность Национального архива и управления документацией США (National Archives and Records Administration (NARA) – НАРА) по созданию электронного правительства и архива. Внедрение новейших архивных технологий и стандартов при работе с электронными документами и архивами в этой стране, упрощение доступа к ним могут быть использованы при создании моделей и стандартов в области архивоведения и документоведения электронных документов и архивов Казахстана.

Ключевые слова: Национальный архив США, Администрация документации США, Архив электронных документов «ERA», электронные документы, электронные архивы, архивы США.

Introduction

The problem of the preservation of electronic documents in the modern world is a key one for archivists of all countries. In the new century, there are a number of regional archives which started to purposefully form digital archival resources in three ways: by receiving original electronic archive documents management services which digitize archives of traditional documents and managing the use of electronic materials (documents). In the 1990s, many countries, in order to organize work with electronic materials (documents), basing on their experience in working with paper documents, developed and implemented a number of rules and regulations; they set up an electronic document management process, thereby presenting clear regulatory requirements for archiving electronic materials (documents) under their control, processing, transmission, reception, storage, etc. American colleagues were close to the solving of the issue. Therefore, it is quite relevant and significant to analyze the results of scientific research carried out by American scientists in the field of work with ED, and to evaluate the measures taken by the National Archives of the United States to create the “ERA”, as known as Electronic Records Archive.

Unfortunately, the analysis of archival literature states that Kazakh archivists have no interest in this issue. Experts from the archives of Kazakhstan come to the conclusion that the American version of creating an electronic archive is only acceptable for countries with a strong economy due to the high cost of continuous technical re-equipment of archives and staff training.

This topic is most often mentioned in the works of Russian researchers, although not all aspects of work with ED are covered in the Russian archival literature. So, the Russian researcher O.I. Ryskov drew attention to the regulatory framework and the requirements imposed by NARA on US federal agencies in the area of ED safety [Ryskov, 2004: 51-53]. The article by L.L. Levchenko (Levchenko, 2014: 25-39) is devoted to the same issue. The problem is considered in more detail by M.V. Larin in a number of papers, where US regulations on the management of electronic documentation are analyzed (Larin, 2008: 208; 2012: 60-65).

In the USA, a number of publications are devoted to the problem of ensuring the safety of ED, among which you can point out the articles by C. Lynch (Lynch, 2000), M. Klunen (Cloonan, 2002: 70-106), G. Gladney (Gladney, 2009: 401-435) and other scientists. The researchers put attention to issues

such as the authenticity of electronic materials (documents); their integration into electronic space; strategy for long-term storage of ED.

In preparing the article, the author widely used the official website of the National Archives and Document Management of the USA – <http://www.archives.gov>.

Work with electronic records and archives

The first electronic materials (documents) (ED) began to appear in the National Archive and Record Management (hereinafter – NARA) since 1965. In 1989, the Electronic Records Center was created as a part of NARA, which included two divisions: storage and inspection and control.

In 1996, the US Congress adopted amendments to the Act on the Freedom of Information, which obliged federal agencies to publish their documents in electronic form and open reading rooms for citizens to familiarize themselves with them. In August 1998, NARA presented a report to the Presidential Administration in which it justified the need for research and cooperation with research institutes and universities in order to study the problems of ensuring the safety of ED and developing software to create an archive of electronic materials (documents). In the same year, NARA introduced the DoD standard in US federal agencies – 5015.2-STD “Design Criteria Standards for Electronic Records Management Software Applications” (1997). Scientists at the University of British Columbia (Vancouver, Canada) worked on the development of this standard, and funding was provided by the United States Department of Defense (UBC Project). The standard allowed the introduction of management procedures and disposition of ED in federal agencies. Since 2007, DoD 5015.2-STD (version 3) has been used in non-governmental institutions. The implementation of the ERA Program began in 2000, for which a special department, the ERA Program Management Office, PMO, was created in the structure of NARA. The program was headed by the famous American archivist and scientist K. Thibodo (Levchenko, 2014: 25-39).

Since 1998, NARA has sponsored a number of research projects to create an electronic archive. In 2003, the archive became a participant in the Network and Information Technology Research Development Program, funded by the US government. Since 2007, NARA received the status of a permanent participant of this program and guaranteed allocations from the federal budget, which it sent to support research

projects in the field of ED and archives (FY 2007 – \$ 3.5 million, FY 2008-2012 – 4.5 million dollars, FY 2013 – 2.0 million dollars) (Larin, 2012: 60-65).

NARA was also one of the first to support the project Inter PARES (International Research on Authentic Permanent Storage Documents in Electronic Systems). The project was implemented in 1998-2012 by an international team of scientists in more than 27 countries of the world under the leadership of the President of the Society of American Archivists.

In the late 1990s and early 2000 the supercomputer center from San Diego (California), the Institute for Advanced Computer Research (Maryland) and NARA implemented a pilot project “PAWN” (Producer – Archive Workflow Network), during which a prototype of software for transferring permanent storage periods from an institution to archive and their absorption by automated archive information system was created. The developers used the Metadata Encoding and Transmission Standard, METS standard to encapsulate metadata, create a packet of SIP information for transmission to the archive, transform SIP to AIP for storage, and DIP to output information on request. The software was developed on the Open Archival Information Systems (OAIS) platform and tested during the transfer of ED to the Stanford Elementary Particle Accelerator Laboratory at NARA.

Since 1995, NARA has been actively involved in the work of the OAIS Committee, held at its base 16 of the 19 OAIS seminars held in the United States. NARA has become one of the developers of the basic model of the ISO standard for OAIS “Data space and information transfer systems. Open archive information system. Reference Model” (ISO 14721: 2003). In 2012, ISO approved a new edition of the ISO 14721: 2012 standard. A new version of the recommendations of the ISO and the International Advisory Committee on the Standardization of Space Data Systems “Reference Model for an Open Archival Information System” (CCSDS 650.0-M-2), which establishes the requirements for the basic OAIS model, is currently under discussion. In addition, projects have been implemented on the application of forensic examination methods to determine the authenticity of ED. Despite the fact that these regulatory documents are advisory in nature, they play an important role in creating archives of electronic materials (documents) in all countries of the world.

In turn, using the experience of working with electronic materials (documents) in other areas, a group of scientists led by R. Moore from the Univer-

sity of North Carolina, in collaboration with NARA, focused on the development of technologies for safe and active storage of authentic ED using grid technologies. The process of active storage was considered as a mechanism of permanent incorporation of the old technology, allowing ED to migrate from one environment to another, while maintaining its appearance, content and authenticity.

As a result of the cooperation of NARA with the Georgia Institute of Technology (1999-2009), the software «PERPOS» (Presidential Electronic Records Pilot System) was developed in order to provide integrated support for the process of reception and transmission and storage of the Presidential Administration in NARA. Scientists have developed methods for automatic recognition of the type of document; convert files created in obsolete formats to modern or standard formats; systematization of ED in a series in an electronic archive; verification and editing of ED in order to extract information of limited access when preparing responses to requests in accordance with the Law on Freedom of Information; prevent unauthorized declassification of ED; descriptions of ED and creating search directories.

The project by NARA and the National Center for Supercomputer Application Tasks (University of Illinois) – «Advanced Information Systems for Contemporary Documents» (2008-2009) was aimed at creating methodology, algorithms and automated systems for the examination of the value of documents in PDF-formats containing visual images; providing migration, examination of value, selection for storage and retrieval of file metadata in 3D-formats. Another project with the same university focused on the selection and preservation of engineering, geographic and geological data; Converting scientific data files from various formats to HDF (hierarchical data format) used to store large amounts of digital information.

The current project (2009-2014) of NARA and the Texas Center for Advanced Computer Technologies (Austin) is considered to be one of the most promising. Scientists are trying to create archival technology of the future, using visualization techniques that allow users to present information in the form of an optical image, to transform data into color images that are easily perceived by archivists. Visualization can significantly speed up the systematization of huge collections of ED, help in the selection of documents for storage, analysis of metadata, risk assessment of the safety of ED.

A virtual laboratory in the building of the National Archives in Maryland was equipped with the participation of the Supercomputer Center from San

Diego and the Advanced Computer Research Institute (Maryland) for experiments of archivists with new technologies. Cooperation with scientists made it possible to solve a number of tasks in the field of examination of the value of ED and transfer them to storage in the archive, create technologies to ensure the safety of ED, proof of the authenticity of ED, both when taken for storage and after a certain period of time. The results of the projects were implemented in the development of software for the ERA system. The main result of the work in this direction was the understanding by archivists of what should be the archive of electronic materials (documents), the formation of a list of requirements for the future developer of his system. Two teams of NARA experts summarized the results of various projects, proposals of scientists, employees of the RMO and the ERA Program Support Team (POST), and developed a concept and list of requirements (Electronic Records Archives Requirements Document, RD) for the ERA, which included 1406 points in the first version.

According to archivists, the ERA Archive of Electronic materials (documents) should have become an integrated, dynamic “system of systems” in which all processes is automated. Its general structure should display four main archival functions: receiving and transmitting ED for storage; storage of ED; metadata storage; use of documents subject to restrictions on access to information provided by law. It was planned that the ERA system would manage documentation in more than 500 federal agencies of the United States and receive from them ED, regardless of the formats, software and hardware in which they were created. It was planned to have two subsystems: external – for managing the life cycle of all types of ED in federal institutions, and internal – for absorbing, storing and providing access to ED. ERA was supposed to work with the ED of the President, Congress and the US Supreme Court; to process both huge collections of ED and relatively small in volume; be extensible and independent of changes in formats, software and hardware.

For Americans, the document, above all, has probative value. ED runs the risk of being damaged or destroyed during the migration process, so ERA must take care of its authenticity, reliability, integrity, so that US citizens can trust ED and use it as evidence.

Thus, archivists presented the Archive of electronic materials (documents) as a system capable of:

- to coordinate the processes of examination of the value, preparation and approval of lists with

retention periods for documents on digital and traditional data carriers;

- to describe both traditional and electronic materials (documents);

- to process and store ED;

- to accept for storage and absorbing digitized documents, the originals of which are created on traditional media (digitization of traditional documents does not relate to the functions of the «ERA» system);

- to ensure and confirm the authenticity of ED;

- to dispose ED in accordance with agreements with institutions (disposition agreement – ISO 15489 – 1: 2001 and § 1226 “Implementing Disposition” of the Federal Documentation Management Rules);

- to ensure compliance with legislation in the field of access to ED;

- to keep ED of unlimited access and limited access with the stamps «Secret» and «Top Secret».

In 2003, it was decided to create a federal archive of electronic materials (documents) «ERA». In 2005, as a division of the Archivist of the United States, the Electronic materials (documents) Archive Advisory Committee was established, and in the same year, Lockheed Martin Corporation, widely known for its anti-missile defense systems, space and information technology, won the contract to develop software for ERA. Congress allocated \$ 317 million for the creation of the system.

The creation of the ERA system began in 2006 and was supposed to consist of a phased commissioning during 2007-2012 with five increments: 1) Base System Business Functions; 2) Congressional Records Instance, CRI; 3) Online Public Access Instance; 4) Preservation Framework; 5) Base System Architectural Augmentation.

The basic system of functions, namely, the three modules that ensured the absorption and automatic verification of ED, were commissioned at the end of 2007 and the beginning of 2008. In December 2008, the Executive Office of the President module was launched, with which the deployment began second increment system.

With the launch of the “ED Congress” module in December 2009, the deployment of the third increment began. The module, which included two parts – the absorption and storage of ED, was created to support the work of the NARA Legislative Archives, the offices of the Secretary of the House of Representatives and the Secretary of the Senate. In April 2010, the NARA staff installed the “Online Public Access”, OPA, and “Transformation Framework Prototype”, TFP.

As of January 2012, the ERA Archive of Electronic materials (documents) received 131 TV electronic materials (documents) for storage, including those from the Presidential Administration, Congress and federal departments. The system is able to maintain their storage in the formats in which they were created, and transform into a small number of other formats; to ensure the absorption and storage of XML-metadata in accordance with the standard “PREMIS” (version 2.2); provide access to ED through « Online Public Access, OPA. OPA is a catalog in which descriptions are entered on 75% of traditional documents, 77% of artifacts, more than 95% of ED stored by “ERA”. ED are systematized in 800 series, including more than 750 million unique files. In addition, researchers have gained access to more than 1 million pages of ED. OPA searches on the joint portal of NARA – “archives.gov”, which includes the sites of the archive and all presidential libraries.

An important function that the ERA system is capable of performing is the management of documentation in federal departments. This is exactly the function that NARA has set itself the priority at present. This decision is dictated by the Memorandum of President B. Obama and the new amendments to the Law on Presidential and Federal Documents (HR 1233). This amendment was aimed at improving the document management process, which focuses specifically on electronic materials (documents), as well as on the fulfillment by the National Archives of the United States and the Agency for Management and Budget of the requirements specified in the 2011 Presidential Memorandum on the management of government documents.

According to Memorandum n Before NARA set targets by the end of 2015 – the revision of the value of the examination criteria, management and disposition of documents temporary storage time; by the end of 2017 – a significant reduction in the number of departmental lists, making changes to the General (typical) list of documents in order to standardize the creation of a series of documents and simplify the process of examination of value. By December 31, 2016, institutions are obliged to implement systems for the selection, storage and retrieval of e-mail documents. Institutions are also obliged to take care of digitizing documents created on paper and in analog formats.

In order to timely respond to the challenges of constantly developing information and communication technologies and computer equipment, increasing formats, NARA is obliged

to revise and adjust the instructions governing the transfer of ED, metadata and e-mail documents for permanent storage. Thus, the National Archives published a new Electronic Messaging Management Bulletin (NARA Bulletin 201502: Guidance on Managing Electronic Messages). Prepared in accordance with the Managing Government Records Directive (M-12-18) and due to the rapid development of new technologies, this document includes basic document management guidelines for text-based email messages and text-based dialogues on the Internet, voice messages and other similar forms of electronic transmission systems, as well as for the transfer of functionality in social networks or applications. In addition, the Bulletin contains a new definition of the term “electronic messages”, approved in the latest amendments to the Law on Presidential and Federal Documents 113-187 of 2014: “electronic messages are e-mail messages and other electronic transmission systems used for communication between individuals”.

In mid-April 2016, NARA published “E-mail Document Management Criteria in accordance with the Government Documents Management Directive (M-12-18)” (Criteria for Managing Email Records in Compliance with the Managing Government Records Directive (M-12-18) ”. These criteria are generalized requirements for the management of e-mail documents based on the Federal Documents Act, the Code of Federal Rules and the existing guidelines of the NARA. They are intended for internal use by the federal executive authorities in order to assess the fulfillment of the task of the Directive on the management of government documents, namely, the management of all e-mail documents in an accessible electronic format.

Currently, NARA has already created a set of regulatory documents: application forms for the approval of lists; recommendations on the use of the standard DoD 5015.2-STD; instructions for transferring to storage e-mail messages, scanned documents, ED created in engineering, geographic and geological systems containing GeoTIFF images, ED and metadata to them, web sites, digital audio and video documents. NARA has also developed instructions for the implementation of Electronic Recordkeeping systems at the institutions (automated processes for managing the ED of the institution) and Electronic Records Management” (automated processes for managing documents of an institution, regardless of the tangible medium).

In January 2015, the United States National Archives and Records Management published the report “Open Source Tools for Document

Management” (Open Source Tools for Records Management), which, in accordance with the NARA / OMB M-12-18 State Document Management Directive, describes the open source tools for managing electronic materials (documents) for federal executive bodies. The objectives of this document are: to ensure transparency, efficiency and accountability of federal executive bodies. By the end of 2019, government agencies are required to manage all electronic materials (documents) in electronic form and by the end of 2016, all electronic messages in electronic form.

That same year, the National Organization for Information US standards (NISO) has published a new “Practical advice on signs of metadata to provide access to and licensing of electronic content” (Recommended Practice on Metadata Indicators for Accessibility and Licensing of E-Content (NISO RP-22-2015)). These recommendations, developed by the NISO working group, set forth practical methods for identifying metadata in order to freely read the contents of digital documents, taking into account the duration of the license to use the contents of documents. The objectives of the recommendations are the presentation of a format for indicating bibliographic metadata and a set of visual signs describing the rights of users to access specific works, as well as their reuse and user messages. In addition to these recommendations, in 2018, the US National Information Standards Organization (NISO) presented the publication “Understanding Metadata. What is metadata and what is it for?” In framework series called «Primer» this manual includes a comprehensive review of information about the creation, title, subject, functions of the document. Work is currently underway on “Linked Data for Cultural Institutions”.

The National Archive and Documentation Management also published a new Document Management Bulletin in 2015 concerning the establishment of digital identification for the authentication of electronic materials (documents) (New NARA – Bulletin on Digital Identity Authentication Records). This document provides guidelines for government agencies in managing documents related to the establishment of digital identity for electronic materials (documents) such as digital certificates and files related to public key infrastructure (PKI) created or used during the institutions’ business operations. This Bulletin replaces the previously established document management guidelines for electronic materials (documents) created during an institution’s business process, the authenticity of which is confirmed by

digital PKI – signatures. The term “establishment of a digital identification» includes a wide range of technological processes that guarantee the integrity and authenticity of electronic materials (documents) to the institutions. Institutions use these technologies for the following operations: approval of electronic business transactions; providing access to electronic information only to those who have special permission to receive it; to confirm that the documents were created legally, have not been changed, and that creation, access and their use are allowed only to persons who have special powers.

One of the latest developments of the archive in 2018 is the publication of the “Universal Electronic Records Management Requirements”. These requirements can be used by employees of federal agencies in writing technical specifications for tools or services for managing electronic materials (documents). Documentation services managers can share these requirements with the IT and procurement departments of their departments as a basis for working on the specific requirements for these government systems. Requirements are divided into software and system, mandatory and desirable. Universal requirements are developed based on existing regulatory documents, policies and guidelines issued by the National Archives.

Also, the US National Archives and Records Management Administration presented the draft of The Federal Electronic Records Modernization Initiative (FERMI). This document includes FERMI’s two main objectives: through an improved procurement process, to help agencies acquire electronic document management (ERM) solutions and services that meet the needs of the agency; and to respond proactively to changes in trends in the management of electronic materials (documents) by setting policies for new solutions and services.

The strategic plan for 2018-2022, which includes the current mission, values, strategic goals and objectives of the NARA, reflects a constant commitment to open access of the public to archival documents and the further development of their digitization process. This plan provides federal agencies that are already engaged in the implementation of electronic document management, recommendations for the next phase of transition to fully electronic workflow. In the strategic plan, it is noted that “By December 31, 2022, the NARA will no longer accept documents in analog formats for permanent or temporary storage, but only in electronic format and with appropriate metadata”.

Ultimately, the ongoing reform should ensure the selection and transfer for safekeeping in NARA of valuable historical documents of the modern era, created in digital formats, expanding citizens’ access to documents and information, the implementation of the Open Government policy.

Use of electronic materials (documents)

In the use of archival documents, preference is given to modern information technologies. So, the portal of the National Archives – The National Archives Experience: the Digital Vaults is constantly updated. Here are visual documents such as photographs, films, popular media materials illustrating the history of the country.

Another archive portal, Eyewitness, places eyewitness accounts of the events and is presented in the form of letters, diaries, audio, and sound recordings in a chronicle sequence of dramatic events in American history.

Since 2013, the portal has been in operation – discovering the Civil War period. For 150 years, researchers have been studying the documents of the American Civil War and finding more and more new facets in them. These documents are not fully studied, so the archive encourages everyone to join the search for documents of the Civil War.

In March 2014, the National Archives and Records Administration of the USA digitized the second part of diaries from France and Belgium in the amount of 3,987 pages of documents from the period of the First World War. These documents are available on the NARA portal (First World War 100). The documents relate to cavalry and infantry divisions deployed on the Western Front of the First World War and talk about the soldiers of France and Belgium from the moment they arrived at the front until the end of the war. William Spencer, military documents specialist at NARA, stated that the second part of the military diaries contains detailed information on the actions of the troops arriving on the Western Front. In the first eight weeks from when the war diaries were digitized and available online mode, more than 10 thousand people from all countries of the world voluntarily offered their assistance in verifying the names, places of hostilities and other details contained in the diaries. The first reports showed that 260 096 separate surnames, 332 484 geographical names and almost 300 thousand data concerning military actions were verified. More than 200 diaries already have tags and verifiers.

The National Archives and Records Administration of the United States is participating

in a project to create America's first digital public library (DPLA). DPLA project – a large-scale joint project developed by the government, research institutions, museums, libraries and archives to create a digital library platform to provide free access on-line to archival documents of cultural and scientific history of America. According to the project, the content of archival documents from archives, including NARA and Harvard University, will be digitized over a 2-year period. The project started in April 2013.

The DPLA will include 1.2 million digital copies of the NARA directory, including documents about the founding of the nation and photo materials from the project “Documerica 1970s”, posters of World War II, the work of the photographer Mathew Brady, he made at the time of the American Civil War, archival documents about human rights, etc.

NARA is proud of the work organized jointly by other interested institutions in the actual creation of the digital public library of America, which makes it easy to find the necessary information from the collections of leading cultural, historical and research institutions.

The publication activities of the National Archives and the management of US documents are also varied. In early 2014, the archive prepared and went on sale the third volume of state documents of the President Barack Obama. The third volume of documents prepared by the Department of the Federal Register of the National Archives of the United States has 1068 pages and includes texts of public speeches by President Obama, press conferences, messages and statements, addresses to Congress and federal ministries, and photos from January 1 to June 30, 2010 of the year. All materials are given subject and name index.

US government documents are published in the “Series of Presidential Government Documents” twice a year and cover the six-month period of the president and his administration. This series has already published documents related to the activities of Presidents Hoover, Truman and Eisenhower.

“FRANKLIN” is another one of the new special projects for the digitization of a large number of archival documents by President Franklin Delano Roosevelt. The project worked on: the National Archives of the United States, the Presidential Library and the Roosevelt Museum, public, corporate and non-profit organizations, as well as the Roosevelt Institute, which contained many microfilms of archival documents. Digital partner Roosevelt Library and the owner of a web-based network is Ma Rist College, who created the database

infrastructure «FRANKLIN» based on “platform of Archon » and controls the system using powerful servers, produced in collaboration with IBM.

In the future, all FRANKLIN documents will be made available to users of the US National Archives in open online access mode. “FRANKLIN” is digital copies of 350 thousand pages of archival most important documents and 2 thousand historical photographs; This is a virtual reading room and digital document repository, providing free and open access to digitized documents from the Presidential Library and the Roosevelt Museum for anyone around the world. The FRANKLIN system allows you to find the archive documents and photos in the virtual space using the keyword and view entire files, just as if you yourself came to the reading room of the Presidential Library and the Roosevelt Museum. Mode online One of the most significant documents of the twentieth century on American history is available – these are the documents of Franklin Roosevelt and his wife Eleonora, telling about the difficulties that fell on the Americans during the Great Depression, the New Deal and the Second World War.

The National Archives of the United States regularly hosts exhibitions. So, at the exhibition “Making Their Mark: Stories through Signatures” (2014) archival documents with signatures of many famous personalities were presented. In the archival documents signed by these people, unknown historical facts are revealed. Signatures reveal to the public the fate of many people who “left their mark” in the history of the American state.

Popular online exhibitions and permanent exhibition called “The National Archives: Documented Rights”, shows the rich collections of the National Archives and the chronology of human rights and civil liberties in the United States.

Conclusion

Thus, it is impossible not to admit that the United States is a leader in the development of technologies for working with ED, although, having received them for the first time in the 1960s, the Americans for a long time did not take serious steps to solve the problem of their safety and were actually forced to create an archive of electronic materials (documents) faced with the danger of losing the nation's digital heritage. Archivists of the United States once again proved that only scientific research and close cooperation with research institutes and universities will help find the necessary technological solutions for examining the value, ensuring the safety of ED,

confirming their authenticity, organizing access and use. Scientific and technological solutions found during projects sponsored by NARA, implemented jointly with research institutes, allowed American archivists to develop the concept of the archive of electronic materials (documents), the requirements for software development of the ERA system, to solve certain problems in the field of value examination, preservation, systematization, description, access control, authentication of ED.

NARA successfully cooperates with the organizations responsible for the record management, lawyers and experts on information technologies;

it evaluates the effectiveness of the application programs to determine a risk, the problem has spread and is best practice. In order to find new solutions in the field of the federal institution's "clouds", economically sound approaches to the automated management of e-mail documents, social media and other types of digital documentary content of institutions, NARA works closely and with private corporations of the information industry and stimulates research in this area.

US experience is widely used while creation of international models and standards in the field of archives and records management.

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