Analysis Of The State And Problems Of Development And Implementation Of Electronic Archives Of The Archival Management System Of The Republic Of Uzbekistan In The Years Of Independence

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Abstract: This article discusses the main issues of the creation and development of electronic archives aimed at solving the problems of acquisition, accounting, storage and use of archival documents.

Keywords: electronic archive, EDMS, electronic database

1. Introduction.

In general, in the Republic of Uzbekistan over the past period up to 2019, the necessary infrastructure in the field of archiving and office work has been created, positive results have been achieved in the field of acquisition, accounting, storage and use of archival documents, the material and technical base of archival institutions has been strengthened, a certain intellectual and technological potential, the National Archive Fund was replenished with archival documents reflecting the material and spiritual life of the people of Uzbekistan, which have historical, scientific, social, economic, political and cultural significance.

At the same time, the analysis and results of the study indicate the need to introduce modern information and communication technologies into the field of archiving and office management, improve the material and technical base of state archives, and introduce modern mechanisms for the acquisition, accounting, storage and use of archival documents.

2.1 Measures aimed to further development of "Uzarchiv" Agency.

In order to improve public administration and control in the field of archiving and office work, further accelerate the digitization of paper-based documents, cinema, photo and background documents, as well as in accordance with the Action Strategy for five priority areas of development of the Republic of Uzbekistan in 2017-2021, a complex priority tasks, the implementation of which should ensure the further development of archiving and office work, as well as the radical improvement of the Uzarchiv Agency. To implement these tasks, the President adopted two regulatory documents. Namely, the Decree of the President of the Republic of Uzbekistan "ON MEASURES TO IMPROVE ARCHIVAL BUSINESS AND BUSINESS PRODUCTION IN THE REPUBLIC OF UZBEKISTAN" No. UP-5834 dated 20.09.2019 and the Decree "ON IMPROVING THE ACTIVITIES OF THE AGENCY" UZARKHUBEKHIVISTAN. " Of 2019

To implement these tasks, the Decree and Resolution approved:

The first - on the basis of the Agency "Uzarchiv" under the Cabinet of Ministers of the Republic of Uzbekistan, the Agency "Uzarchiv" of the Republic of Uzbekistan was established;

The second is the creation of the National Archive of Uzbekistan, the National Archive of Cinema and Photo Phono Documents of Uzbekistan, the National Archive of Scientific and Technical and Medical Documentation of Uzbekistan, the Central State Archive of the city of Tashkent, as well as at the Agency of the Scientific and Methodological Center for Archival Affairs and Records Management and Professional Development, and affairs.

The third - the accelerated introduction of modern information and communication technologies in the activities of archiving and office work, phased digitization and creation of insurance copies of archival documents of the National Archives Fund;

The fourth, the State program for the further development of archiving and record keeping in the Republic of Uzbekistan in 2020-2025 was approved. Which provides for the improvement of the regulatory and methodological base of archiving and office work, expanding the number of users of archival information by stepping up work on declassifying archival documents, the phased organization of the provision of archival services through the Centers of Public Services and the Single Portal of Interactive Public Services, strengthening the material and technical base and further modernizing the infrastructure archives, the introduction of modern mechanisms for the acquisition, accounting, storage and use of archival documents;

The fifth - construction of 2 new buildings and 12 state archives repositories in 2020–2025, reconstruction of 7 buildings of state archives in 2023–2025.

Based on these promising tasks, a new organizational structure of the Uzarchiv Agency, the structure of the Agency's

central office, standard structures of departments for archival affairs of the Republic of Karakalpakstan, regions and the city of Tashkent were radically revised and approved. Specific measures of state support for the development of archiving have been identified. The number of staff required has been revised. Measures have been determined to increase the salaries of employees, taking into account their specific contribution to archiving and office work. A number of instructions were given to complete the archives with the necessary equipment, computer facilities and information and communication technologies.

The Decree and Resolution, along with the solution of issues of development of the Agency "Uzarchiv", identified a number of measures to implement the state policy in the field of archival affairs and office work. It was established that from January 1, 2020, state and economic management bodies and local government bodies, as well as enterprises, institutions and organizations, regardless of their form of ownership, upon delivery, as well as upon destruction in the prescribed manner of managerial (clerical), scientific and technical and other documents required electronic copies and insurance copies of documents from the state part of the National Archives Fund.

2.2 Technical equipment and methods of operation.

The given program provides the National Archives with modern equipment for the restoration of specifically valuable documents and devices for digitalization, including the provision of 1 scanner, 1 film-scanner, 3 servers, 200 computer devices for digitalization (translation into electronic form) 200 units of documentation, as well as organization of 3 restoration laboratories. And also, within the framework of the program for the construction of buildings and repositories of state archives in 2020-2025, sectors for digitalization (translation into electronic format) of archival documents with a number of 30 staff units in the national archives of the republic and 10 staff units each - in the regional state archives and their proportional provision of devices for digitalization.

And also, it was instructed to optimize the composition of documents accepted for permanent storage, reduce the list of ministries, departments, sectoral state funds and organizations that have been given the right to permanently store documents from the state part of the National Archive Fund, to make proposals to the Cabinet of Ministers on the creation of a unified electronic system "Archival business », Fully covering the processes of archiving and having the ability to interactively search[3].

One of the characteristic tendencies in the archival environment of the modern world has become the processes of creating electronic archives, i.e. presentation of archival directories and documentary collections in digital form and organization of wide access to them.

The term "electronic archive" is currently not legally enshrined in the Republic of Uzbekistan, which leaves room for its various interpretations and invariance of its understanding. An available official concept is a fragment from the draft Law of the Republic of Uzbekistan "On electronic document management": "The storage period for an electronic document must be no less than the period established for a paper document of a similar purpose, unless otherwise provided by law." [1] And also a fragment from the draft Law of the Republic of Uzbekistan "On Electronic Digital Signature": "After the expiration of the storage period of the certificate of the electronic digital signature key in the form of an electronic document, it is excluded from the register of certificates of electronic digital signature keys of the registration center and transferred to the archive storage mode." [2] ... Prior to the development of a generally accepted definition based on legislation and regulatory framework, there is a widespread understanding of the "electronic archive" as a system of hardware and software for storing, systematizing, accounting, searching and presenting archival documents.

3.1 The notion of "electronic archive" and its accordance to the local law.

At this stage of solving the problem, we are ready to agree with the definition of "electronic archive" as an integrated information retrieval system that provides structured storage of documents in electronic form. Ideally, it should also have an effective search system and presentation on the Internet.

The main condition of the electronic archiving system should be its compliance (or not contradiction) with state acts of the Republic of Uzbekistan and international standards in the field of archiving. Let's name three main ones:

• General international standard for the description of archival documents - ISAD (G), approved by a special commission on the standards of the International Council of Archives (Stockholm, Sweden, January 21-23, 1993);

• Law of the Republic of Uzbekistan "On archival affairs" No.ZRU-252 15.06.2010;

• Regulations on the procedure for acquisition, state registration, storage and use of archival documents approved by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 101 05.04.2012.

According to these documents "electronic archive", which is often considered as a database / databank; it must support a multilevel structure for describing archival documents (Fund - Inventory - Case - Document); identify the ownership and address of archival materials (generate an archival cipher); disclose the content of documents to facilitate the search and exchange of information by keywords; create the ability to disseminate data to a wide range of users.

3.2 The structure of the archive and principles of its operation.

For non-archivalists, two main points are important:

First, the descriptive system of archival materials is multilevel, it has a definite clear hierarchy (fund - inventory - file - document). This procedure is enshrined in the international standard ISAD (G), it is also introduced into the Regulations on the procedure for acquisition, state registration, storage and use of archival documents, it also consolidates the century-old tradition of Russian archival science, which has justified itself over many decades throughout our country. There is no need to "reinvent the wheel", it has already been invented, you can sit on it "and ride".

Secondly, the Regulation on the procedure for acquisition, state registration, storage and use of archival documents also defines the procedure for the use of archival documents in archives, according to which undescribed (not processed scientifically and technically) documents are not used. Only the described archival documents have ciphers (links to the name of the archive, the number of the fund, inventory, case and sheet / sheets), by which they can be identified. It should be emphasized that a link to a site page as a uniform locator (locator) of a resource (English Uniform Resource Locator, URL), on which an electronic copy of a document is published on the Internet, can in no way replace the archival cipher of a document - an identification the address at which the original is "registered". Everyone has encountered cases of "moving" sites and their complete disappearance from the Internet, when it is still impossible to return the URL to the page without additional features. The researcher should always refer to the archival cipher of the documents. In addition, he should always have the additional opportunity to refer to the original, even when the electronic copy of the document is presented on the Web and is well readable. A number of methods of source study involves the study of not only the content of the document, but also its external features: paper watermarks, the nature of breaks and damage to the carrier, stains, marks on the back of the sheet, etc., which is not always transmitted by an electronic copy in full.

Only if the procedure recommended by the current regulatory framework is observed, it can be said that the software (software) that underlies the created database is something that can be called "electronic archive". This condition excludes from the considered area information systems, the name of which may contain the word "archive", but which do not meet the requirements of normative and regulatory documents applied to them.

The modern trend in the development of document circulation is the rejection of paper media in favor of electronic for the sake of ease of use and economic benefits. Electronic document management systems (EDMS) and electronic archive systems have a number of common features. It should be said right away that, ideally, the EDMS of an institution can solve a wide range of tasks related to the organization of a future electronic archive of documents and should be the initial stage in its creation. All current documentation of the organization is recorded in the EDMS, and archives (and electronic archives as well) are designed to preserve an important, informationally significant part of this documentation. But determining the value of a document cannot be 100% determined automatically, it is the task that professional archivists solve in a "manual" mode.

Therefore, we really look at the processes that take place in the management of document flows of state institutions. We are forced to admit that up to now the archives receive documents for permanent storage, as a rule, on paper. The problem of interaction between office work and archiving in departments has not yet been resolved. Therefore, the work on the creation of an electronic archive in institutions today begins with archives with a constant composition of documents, leaving the genetic connection between office work and the archival collection beyond the scope of the problem.

Paying attention to the process of converting a traditional paper archive into electronic format. So where does it all start?

The documents received by the Archives must be "funded", described and taken into account:

• The set of documents received by the archives from the fund creator must receive an official name and a fund number must be assigned to it.

• Documents should be described and grouped into cases; cases must be systematized into one or more fund records.

• All units must be accounted for and assigned identification numbers - archive ciphers: Fund number - Inventory number - Case number.

All the details of these activities are described in the "Regulations on the order of acquisition, state registration, storage and use of archival documents", as well as in the "Methodological guidelines for digitizing especially valuable archival documents in the state archives of the Republic of Uzbekistan".

The creation of a database "electronic inventory of the archive" is one of the primary tasks when creating an electronic archive in Uzbekistan.

The purpose of this stage of work on the formation of the "electronic archive" is the creation of a graphical database with an electronic resource of digitized inventories of the Archives' funds and collections.

After the accounting database has been created with an archival description at two levels (Funds - Inventories), you can start creating an electronic copy of the paper inventory of cases. Map "Images" of the descriptive level "Inventory" is intended for creating and storing graphic files (digital images) of sheets / pages of the traditional inventory of the fund (on paper).

Parameters for scanning inventories in the "State catalog" database:

• graphic format - JPEG;

• image resolution - 300 DPI (dots per inch);

• use the "color" mode.

The inventory of the archive fund is the main reference book on the composition and content of documentary materials deposited in the course of the activity of an institution or a person, systematized in a structured order according to a certain classification scheme when admitted to state storage. The scientific description of each storage unit and the arrangement of files in

a certain order within the inventory are the most important element of the scientific reference apparatus (NSA) of any archive, which helps the user to quickly and completely find the information he is looking for. An inventory is a document that is necessary both for archivists in their daily work, and for a wide range of researchers when searching for information in certain subject areas.

This stage of work begins with the creation of textual databases of case records (ie filling in the cards with metadata of the "Cases" description level in the State Catalog database).

The preparation of metadata (in archival theory and practice - secondary information) by means of analytical and synthetic processing of the primary information contained in the documents and extracting the necessary information from the accounting and other documents of the archive, ends with the creation of an automated scientific reference apparatus for documents for further search and multifaceted use ...

After creating the databases on the inventory of the fund, you can start digitizing the documents - i.e. creation of a digital (electronic) use fund (EFP).

A digital (electronic) fund of use is an information array created using information technologies, which consists of scientific descriptions of documents and digital images (electronic copies) of these documents attached to them documents.

The EPF includes digital copies of all storage units of the fund.

The electronic fund of use is created:
• targeted order (within the framework of the annual plans of the archive or the implementation of special projects);
• target order for all documents specified for insurance copying;
• targeted order for the most demanded documents;
• in the process of fulfilling orders of users-researchers;
• in the process of performing other works (exhibitions, publications, passing cataloging).

The organization of work and scanning parameters of archival documents are recorded in the "Methodological instructions for digitizing especially valuable archival documents in the state archives of the Republic of Uzbekistan".

Options for scanning archival documents:
• graphic format - TIFF (for insurance storage of an electronic copy);
• image resolution - at least 300 DPI; maximum 600 DPI (recommended resolution for insurance storage of electronic copies);
• you should use the scanning mode - "color".

In the process of creating the content of the EPF database, each file (electronic image of the document page) must be encrypted in accordance with the identification number of the Archive: Fund No. - Inventory No. - Case No. - Sheet No. (if the sheet has no reverse side). If the archival cipher does not contain designations of the reverse side of the sheet (as a rule, it is absent), but de facto there are such sheets, then the designation of the turnover should be provided in the file cipher - Sheet No. (rev.)

Scan parameters: TIFF; 600 DPI; "Color" - should be used to create an insurance electronic copy of the document. The EFP (insurance option) content can be recorded and stored on CDs - CD-ROM, CD-RW, CD-R, DVD, DVD-R.

To use the ESP content in the "State catalog" database format, it should be converted (compressed) to the following parameters: JPEG; 300-600 DPI and "add" the "Cases" description area to the map with the "Images" field (with the obligatory condition of filling in the "Case" card fields with metadata). This format is optimal for viewing images in the State Catalog database and the web version of the Archive database on the pages of the Uzarchiv Agency website.

For 2020, there are 104 state archives in the republic, 11 non-state and 123 state archives for personnel (self-supporting), whose activities are controlled and coordinated by the Uzarchiv Agency, as well as over 10,000 departmental archives.

104 state archives store more than 12.9 million storage units (hereinafter referred to as storage units) of documents, of which 8.6 million storage units are constitutes the National Archive Fund of the Republic of Uzbekistan (permanent storage period), 3.3 million storage units. personnel documents (with a storage period of 75 years) and 1.1 million storage units. documents for temporary storage is The receipt of documents in the archives is on average 200,000 units of storage per year.

123 state archives in terms of personnel (self-supporting) are stored over 3.1 million units. documents on personnel (with a storage period of 75 years).

The departmental archives of ministries, departments and organizations contain more than 2.5 million storage units. documents of the National Archive Fund of the Republic of Uzbekistan.

At the same time, in the departmental archives of ministries, departments, sectoral state funds and organizations that have the right to permanently store documents of the National Archive Fund of the Republic of Uzbekistan in accordance with the Appendix "Regulations on the National Archival Fund of the Republic of Uzbekistan", approved by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated 30.10.1999 No. 482, more than 4.1 million storage units are stored. documents.

Only 5-10% of the total volume of documents of the National Archival Fund, stored in state archives, have been digitized and electronic copies have been created, as a result of the lack of the necessary material and technical base and insufficient human resources.

A brief digital report of digitized documents in state archives (by region) is indicated in the tables below. Picture № 1 shows the state until the end of 2019 for the entire period of digitization of archival documents. Picture № 2 shows the electronic
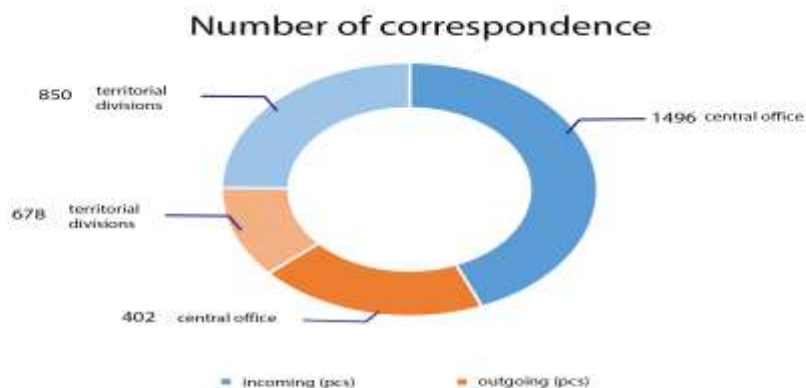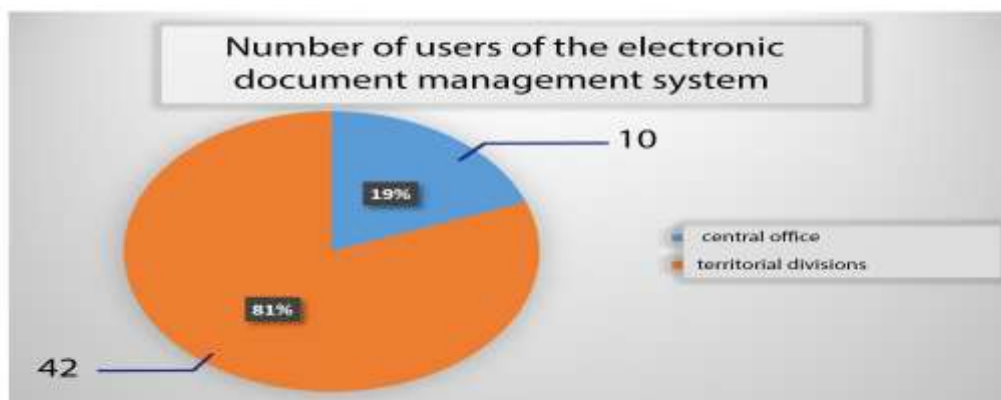
document flow for one quarter.

Picture № 1

Digitization status of archived documents

Picture №2

1

Number of correspondence
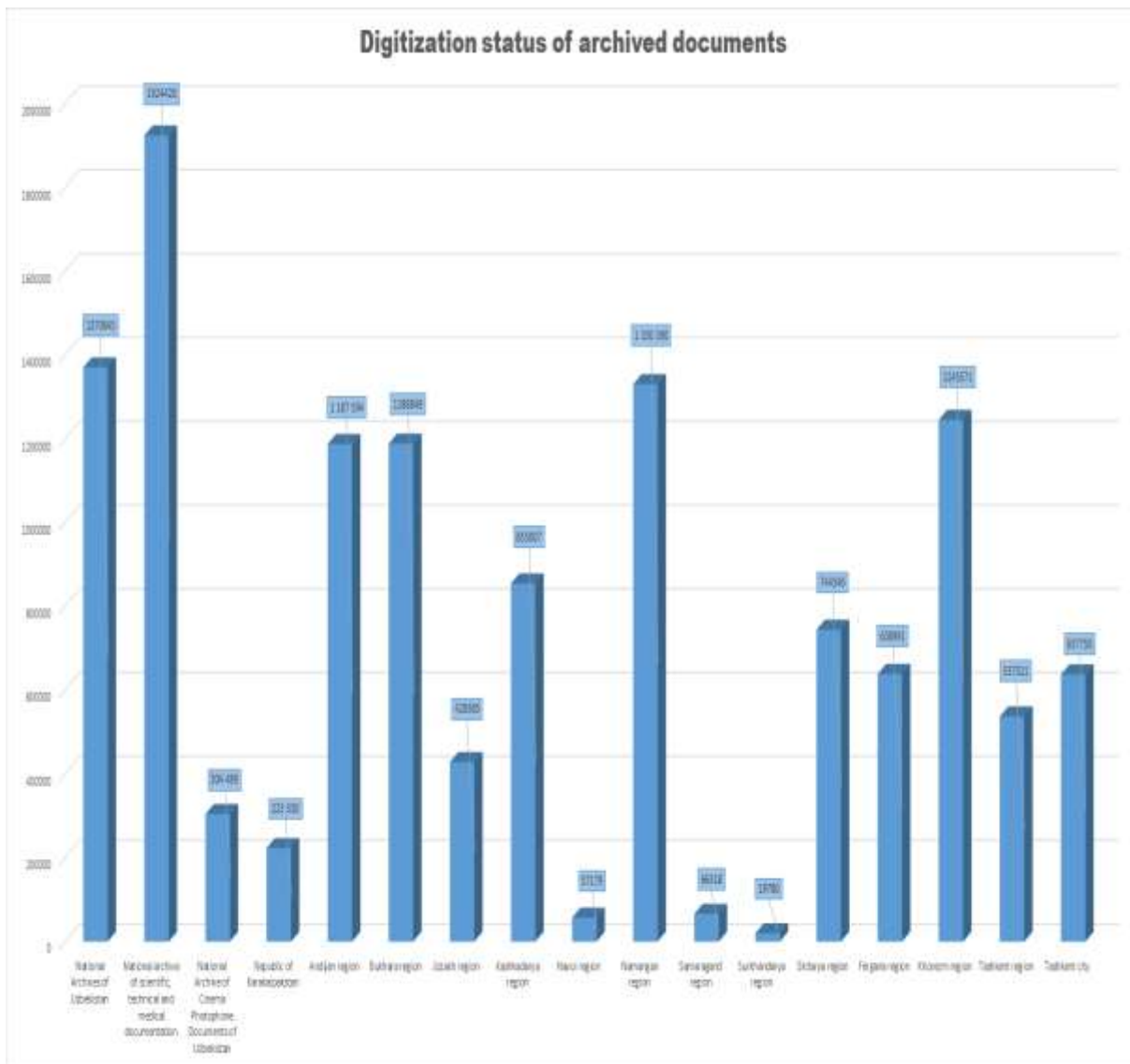
2

4. Conclusion.

Summing up, it should be noted that the electronic archive allows in the future to integrate on its platform all electronic information bases available in the organization and to ensure the full and high-quality use of the entire volume of information with minimal time spent on its search and extraction from any electronic database.

5. References

1. Decree of the President of the Republic of Uzbekistan No. 5834, 20.09.2020 "On measures to improve archival affairs and office work in the Republic of Uzbekistan" [Electronic resource]. - Access mode: https://lex.uz/ru/docs/4523388
2. Mirziyoyev Sh.M. - Message from the President of the Republic of Uzbekistan to the Oliy Majlis. January 25, 2020 [Electronic resource]. - Access mode: https://uza.uz/ru/politics/poslanie-prezidenta-respubliki-uzbekistan-shavkata-mirziyeev-25-01-2020
3. Abdullaev A.Kh. (Ph.D., Associate Professor) - Classification of corporate information systems by level in the hierarchical system of archiving management.
4. Archival storage of documents - compact, reliable, safe [Electronic resource]. - Access mode: http://www.e-arch.ru/stati/49-arkhivnoe-khranenie-dokumentov-kompaktno-nadezhno-bezopasno
5. The architecture of the electronic archive ETLAS [Electronic resource]. - Access mode: http://www.atlas-soft.ru/products/atlas-archive-architecture
6. https://lex.uz/ru/docs/