Opinion

by Elena Asenova Yanakieva, Assoc. Ph.D., National Library "St. Cyril and Methodius"

for the dissertation work of Orlin Ljubenov Iliev for the award of the educational and scientific degree "doctor" in professional field 3.5. Public communications and information sciences /Book studies, library studies and bibliography/

Topic "Electronic archiving - challenges facing the archive system in Bulgaria"

Research supervisor Prof. Ph.D. Tsvetanka Hristova Pancheva

1. Compliance of the procedure with the current regulations

The presented dissertation work and all other materials meet the criteria and indicators laid down in the Act on development of the academic staff in the Republic of Bulgaria, its Regulations and the Regulations for the conditions and procedures for acquiring scientific degrees and for occupying academic positions of Sofia University "St. Kliment Ohridski"

2. General presentation of the candidate

Orlin Ljubenov Iliev holds a bachelor's degree in history, a master's degree in "Law" and "History" - master's program "Archives and museums, preservation of the cultural environment in the information society" at the Faculty of Law and History at the Southwestern University "Neofit Rilski". Since 2019, he is a doctoral student at Sofia University "St. Cl. Ohridski". He worked as a specialist and expert in various departments at the State Archives - Sofia. Since 2014, he has been the head of the "Digitalization" department. His main professional activities are related to the development of methodological documents, analyses, instructions, opinions, etc. in the field of digitization of archival documents. Organizes and participates in the filling of the database of the digital archive in the Information System of the State Archives /ISSA/.

Actuality of the issues of the dissertation work

The introduction of electronic document archiving for the needs of administrations, directly related to the development of information and communication technologies and the imposed trend for a "digital" society, is becoming extremely relevant. Many unexplored problems have emerged that the new information carriers pose, and which directly affect the archives - infrastructural, financial, personnel, legal value, preservation of documents, access to them

and a number of others. In this sense, the topic of the historical development of archives and their path to electronic archiving as a part of electronic governance, largely unexplored so far, is relevant and relevant.

3. Structure and content of the dissertation

The dissertation consists of an introduction, four chapters, a conclusion, used sources and literature /26 pages/— unpublished sources - 3, published - normative and strategic documents - 57, publications - 79, electronic resources - 135. Seven appendices are also presented . The total volume is 208 pages, of which 181 are main text. The paper contains 7 tables and 43 figures. The chronological scope of the study is from the end of the 19th to the present.

The introduction indicates the goals, tasks, object, subject, research methodology and working hypotheses. The object of the research is the system of the Bulgarian archives and specifically of the State Archives Agency, its functioning in a digital environment and the role of electronic archiving. Due to the volume, it is appropriate to make limited ones related to working with classified documents, cyber security and artificial intelligence. The subject is the construction of information systems, digital archive and management of electronic documents, as well as implementation of electronic services. The goals are clearly defined and are related to tracking the historical development of the archives in our country, their current state and their specific relations with the state administration, as well as the factors that influence its development. The dissertation states that it aims to provoke a field for discussion on these issues. In order to achieve the goals, the doctoral student formulated six main tasks, and in connection with two of them, two surveys and an interview with employees in the archives were conducted. The first was held in 2020 in connection with the construction of an e-archiving model and is aimed at the central and municipal administration in our country and at national archives from EU countries. The second was conducted in connection with the fulfillment of the requirements under the Common Assessment Framework - CAF . The doctoral student also states five working hypotheses, which he proves in the course of his research. The research methods used are appropriate to the topic - observation, search, analysis and synthesis.

Chapter one is dedicated to the history and current state of the archives in Bulgaria. The history and legal arrangement of the archives is presented in detail and with excellent knowledge of the documents. The main principles underlying them, the creation of specialized units, of a comprehensive methodology for working with archival documents are highlighted. The transformations in the Bulgarian archival system in terms of automation of part of the processes, creation of a national archival fund, structural changes are commented on. The doctoral student notes that the structural changes require the creation of a centralized database, but now in an electronic format, the definition of specific concepts, a new methodology adapted to the electronic environment. The next part of this chapter is devoted to the automation of archival processes and the creation of a new information system of the state archives. And here the doctoral student shows a very good knowledge of the problem and interprets a number of questions that arose in the process of work. In the last part of the first chapter, the "Digital Archive" project is presented in detail. For comparison with similar

activities in other countries, he made a survey. The conclusions are related to the fact that archives have transformed their activities so that they have become portals for access to digital documentary heritage from being passive custodians of documents. The main problems he highlights are related to the need for periodic data migration and specialists with the necessary qualifications /"software engineers"/, not only archivists, insufficient space for data storage, the lack of permanent funding, which, according to him, makes the situation in the Bulgarian archives "unpredictable in the long term".

Chapter two. Electronic governance and the place of the archival institution in it

In this chapter, the PhD student thoroughly presents and interprets the activities undertaken at the state level for e-governance - normative documents, strategies, concepts, etc. and logically traces the relationship of e-archiving to e-governance in detail. It presents the adopted state strategy for the development of e-government in the Republic of Bulgaria /2014-2020/ and the Roadmap for its implementation. Analyzing the set strategic goals, he points out that electronic archiving is included in the strategy, and "relations with the archives are clearly defined, as they are a direct participant in a hierarchical system of state administration." Other strategic documents related to digital transformation and Bulgaria's place in European and international studies were also reviewed. The results are presented in many figures and commented extensively. For the archives, according to the doctoral student, the problems are related to the low pay of highly qualified specialists, low social mobility, low level of professional skills, etc. Recognizes the importance of education and the need for training to increase digital skills. The doctoral student draws the following conclusions - the functioning of e-governance must be connected to the highest level of executive power; the connection between individual units should be through a special body; the government to focus its efforts on sustainability, minimization of public costs and better management, as well as integration with European countries and institutions. The priority should be the development of skills for the future, increasing qualification and retraining, with an emphasis on increasing digital skills. As a main problem, the doctoral student points out that archives are still not sufficiently recognized as a partner in e-government.

Chapter Three. E-Archiving

This is the most important topic in the dissertation. The doctoral student examines the problems of electronic documents and the need for a technological model for them as fundamental for the Bulgarian archival system. It emphasizes that it is based on a specialized e-archiving system and examines the "Sector strategy for the development of e-government in the field of electronic archiving and electronic archiving of documents 2024-2030" and the "Road Map" project proposed by the archives. It clarifies the definition and main characteristics of the electronic document, the definitions for them in it and in the Law on the Electronic Document and Electronic Signature - ZEDEP, and justifies its own understanding /coinciding with the definition in ZEDEP/. The other important part of this chapter is the implementation of a new System for electronic archiving of valuable electronic documents - CEA. The doctoral student makes a thorough analysis of the system, outlines problem areas, researches technological activities, presents various foreign practices. For its assessment, it

uses the data from an empirical internal archival study, carried out through a survey sent to the public administration in our country and to the EU member states. This survey is important, as it allows for greater objectivity, despite the small number of countries that respond /six European archives/, and the incomplete number of responding administrations in our country. The focus of the survey is on electronically created documents. Questions cover the regulatory framework, infrastructure, document flow, file formats and strategies and vision for future management. The PhD student interprets the data in detail and points out major issues at the national level, e.g. Bulgarian archives do not have their own digital data storage center, unlike other countries; the Bulgarian administration has many Administrative Information Systems /AIS/, but there is a lack of coordination with archival methodology in the field of electronic documents and their mandatory metadata. As a major omission, the doctoral student points to the lack of an electronic management archive in AIS, which, according to him, is the "bridge" with the archives. It also indicates a number of gaps - lack of rules for the destruction of electronic documents, the lack of finances for hiring suitable specialists, sufficient disk space for data storage. The subject of the analysis is also the integration of the new system and the existing ISDA, since two databases will be administered, as well as the architecture of the system in terms of integration with external information systems.

The third part of this chapter analyzes the preservation and storage of electronic documents. According to the PhD student, archivists' tasks start from the moment the electronic document is created; expertise and selection must be integrated into the management process itself; archives as an institution have a major role – it is commented on in detail. Other problems that the doctoral student analyzes are related to online access, the new professional competences of archivists, researching the attitudes of users of archival information.

In this main chapter of the thesis, the PhD student argues that electronic archiving is a top priority for archives, and the construction of a technological model of CEA and its evaluation is the basis for their work going forward. Shows a very good knowledge of the normative and other documents, of the technological and technical issues, of the theoretical and practical positions in the Bulgarian and foreign practice. His rich practical experience contributes to setting a number of problems. At the same time, it seems to me that the analysis of so many documents, projects, models, standards, technical data, etc. leads to some blurring, difficult to understand and follow the main theses of the doctoral student.

Chapter Four. E-services in archives as a consequence of e-archiving and digitization

In this chapter, the doctoral student clarifies the provision of public access to stored electronic archival documents and related services. Tracks the beginning and analyzes the results of the introduction of nine electronic services, the compliance with the regulatory framework, the levels of control, the possibilities to check the status of the service, etc. It investigates user attitudes, which is directly related to the quality of services, by analyzing questionnaires filled in by users about the quality of services and the suggestions made, i.e. steps on sufficiently reliable data, and thoroughly interprets them. It also presents empirical data on the use of digitized and electronic documents /accessibility/, comparing with examples from European

practice. It notes that the activity has been extended with the possibility of preparing written references on request and written responses, which should be considered as part of accessibility. Based on the reports, it identifies trends, the most important of which are an increased number of users who prefer electronic services and a decrease in physical visits to reading rooms. The data are presented in tables. Another investigated indicator is the number of archival units used in the reading rooms. For the last three years, they have been decreasing progressively, and the main reasons are the pandemic situation and the introduction of ICT. Another decreasing indicator is the number of copies of archival documents and an increase in the number of digital ones, as well as those taken with our own equipment. Other proposed information is about user interests in digital information contained on the Internet, collected from the Bulgarian archives, as well as data from the public part of ISDA about the most popular documents for viewing. The steadily increasing number of documents for the period 2015-2022 in ISDA is clear evidence of user preferences for remote access. Access to audiovisual documents through CEA is yet to be analyzed, but the results so far confirm the outlined trend.

In the last part of the fourth chapter, the publicity and advertising activities are presented - creation of specialized sites and platforms, etc., as well as the experience of other countries.

The conclusions are related to several main trends - growth of the digital archive, the level of which is comparable to European and world archives; 24/7 service; using digital technologies to add value through indexing, search algorithms, etc. The lack of additional options for searching and analyzing user information, low level of protection, technical errors are indicated as a weakness.

In **the conclusion**, the doctoral student summarizes his main thesis - the emergence of electronic documents, bearing qualitatively new characteristics, presents archives with challenges. Technological solutions aimed at ensuring and improving access to archival information must be in accordance with normative, strategic, administrative, management, etc. documents, standards and protocols, as well as to be based on a study of the skills and requirements of the new type of user. It is necessary to change the methodology for working with the new documents, to clarify the terminology, to change the attitudes of the archivists, looking for a balance between traditional and new methods of work. These and other issues should be widely discussed.

4. Scientific-theoretical and practical-applied contributions

- A particularly important contribution for me is the PhD student's comprehensive approach to the subject – electronic archiving is part of electronic governance; it must be based on normative and departmental acts and related strategic documents that need changes; the optimization of activities is directly dependent on information technology; changes to the products and services offered are necessary; the change can be done by motivating the employees and new competences; consumers are an important actor in change. This approach determines the structure of the dissertation work.
- For the first time, a complete analysis of the development of the archives in our country from their creation to their current state and their increasingly digital transformation has been

made; principles for electronic archiving are derived; a thorough analysis of the new technological model for management and access to electronic documents was made; the changes in the archivist's profession are studied and presented; archival and technical terms are defined or thoroughly interpreted.

- The specified activities are based on a huge number of normative, strategic, methodical, etc. documents and good foreign practices and surveys, which guarantees their objective evaluation
- The most important problems are indicated insufficient coordination in the creation of the individual systems, the need for cooperation at all levels, raising the qualifications of the staff, etc. These are set out in the conclusions after each chapter. This is particularly important for the assessment of SEA.

5. Abstract

The abstract correctly presents, and in certain cases complements, the dissertation.

- 6. Publications on the topic the doctoral student presents six independent publications and one co-authored one. They are all on the subject of work.
- 7. Notes and recommendations the topic is extremely complex, affects various scientific fields, requires the study of a huge amount of information and poses a number of problems. It seems to me that in trying to cover them all normative, legislative, organizational, technological, economic, conservation, access, presentation of foreign practices, empirical data, etc., the PhD student presents and analyzes too much information, which makes difficult to comprehend and to some extent blurs the text. This applies most to the third chapter, the main one in the proposed work.

8. Conclusion

Orlin Iliev's proposed dissertation is an in-depth and contributing study on an unexplored and very important topic. I recommend that Orlin Ljubenov Iliev be awarded the educational and scientific degree "doctor" in professional direction 3.5. Public communications and information sciences /Book studies, library studies and bibliography/.

25.03.2024 Assoc. Dr. Elena Yanakieva