O P I N I O N

by Prof. Dr. Elena Pavlovska (UniBIT)

Area of higher education: 3. Social, economic and legal sciences
Professional field: 3.5. Public Communications and Information Sciences
Master's program: Book studies, library studies, bibliography - Digitization of cultural heritage.
Dissertation title: "Electronic Archiving - Challenges for the Archival System in Bulgaria"
Author of the dissertation work: Orlin Lyubenov Iliev
Research supervisor: Prof. ScD Tsvetanka Hristova Pancheva

The necessary documents for the review were submitted in electronic format within the deadline: dissertation work, abstract for it, declaration of originality of the work, autobiography of the doctoral student and a list of his publications that meet the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation and the Regulations for the terms and conditions for acquiring scientific degrees and occupying academic positions at the Sofia University "St. Kliment Ohridski". The publications are equivalent to 55 points according to the National minimum requirements for area 3.5. Public communications and information sciences with a minimum requirement of 30 points.

General presentation of the author of the dissertation

Orlin Iliev is a part-time PhD student at Sofia University "St. Cl. Ohridski", BSICP department since 2019. He has a BA in "History"" and two MA: in "Law" (specialty "Law") and in "History" (master's program "Archives and museums, preservation of the cultural environment in the information society") at the Faculty of Law and History of the Southwest University "Neofit Rilski", acquired in the period 2008 - 2014. Since 2006, Orlin Iliev has worked in the State Archives, and from 2012 to the present he is the head of the "Digitization" department in the State Archive Agency. His professional activity is related to the development of analyses, plans, methodological documents, instructions, as well as the quality control of digital objects and digitization of archival documents.

General description of the dissertation work

The presented dissertation has a volume of 208 pages and is structured in four chapters, an introduction, a conclusion, a list of used sources (normative documents, publications and Internet resources), containing 173 titles and 7 appendices. The text of the work is illustrated with 43 figures and 7 tables. The topic of the dissertation, dedicated to the analysis of the digitization processes of archival activities, is important and relevant. This is the first development in our country that systematically and seriously examines problems related to electronic archiving and

it is undoubtedly of interest to the Bulgarian scientific community as well , as well as for practice. The presented dissertation work can be considered as a contribution to the research of this important problem. The content of the dissertation really reflects the topic.

In the Introduction of the dissertation, the choice of the topic is clearly motivated, the object, subject (pages 5-6), the goals and the research hypothesis (pages 7-8) are formulated. The main objectives of the research are the definition of the specifics of the archival system in Bulgaria, the study of the development of the archival file in a modern electronic environment, the determination and analysis of the complex of factors influencing the development and improvement of the archival file in modern conditions, the study of the specific relationships of the archives with the state, society and business. The achievement of these goals, as well as the proof of a research hypothesis, concretized with several working hypotheses, are carried out by solving six research tasks (p. 11). The limitations of the research carried out are indicated on page 5 (issues related to 3D digitization, cyber security and working with classified documentation are not considered, as well as the activity of other departmental and scientific archives is not analyzed).

The chronological scope of the study has also been defined: from the end of the 19th century to the present.

In the first chapter of the work, the historical development of the archival work in the country and its normative regulation are traced. The main terms used in the study are defined: digital object, digital image. The process of automating the activity of the Bulgarian archives over the years is described in detail and competently. The developed automated information systems are presented: ISA, AISA, ISDA and NERA. Their functional possibilities are described: data transfer, information search in the database by separate criteria and by a combination of the criteria, the outputs from the systems - references, illustrated with fig. 5 – 10 and tables, the efficiency of the systems is evaluated. Special attention is paid to the important initiative of the Bulgarian archives - creation of its own Digital Archive, containing descriptions of thousands of digital objects. Its development from 2014 to 2023 is analyzed and the problems that hinder the development of the central unit in the archives are outlined: insufficient funding, lack of appropriate infrastructure, equipment and personnel, etc.

The second chapter is dedicated to the normative provision of e-governance and its sub-level e-archiving. The main activities and documents of the European countries and in the country for the implementation of the elements of e-government are described: the adopted State Strategy for the Development of e-Government in the Republic of Bulgaria (2014-2020) and the Roadmap for its implementation, the adopted fundamental Law on the electronic document and electronic signature (LEDES), requiring the introduction of electronic document circulation and the issuance of documents in electronic form, the Ordinance on the internal circulation of electronic and paper documents in administrations, the Ordinance on the requirements for the unified environment for

the exchange of electronic documents and etc. These documents are of particular importance for the Bulgarian archival system in terms of e-documents received in the state archives. The modern strategies for e-governance in the country until 2015 have been studied and commented on; for the period 2014-2020 and the sectoral strategy for e-governance in the field of electronic archiving and electronic archiving of documents 2024-2030.

The dissertation emphasizes the important place that the archival institution occupies in the e-government of the country and notes that now one of the main problems that hinders the introduction of e-archiving is that the archives are not yet perceived as a partner in e-governance. The main conclusion of this chapter is that in the coming years the main priority of the active labor market policy will be investing in increasing the qualification and retraining of the workforce in accordance with the new needs of the labor market, with an emphasis on developing the digital skills of workforce

The third chapter of the dissertation is devoted to electronic archiving. At the beginning of the chapter, emphasizing that the main element of the e-archiving system is an electronic document, the PhD student reveals the essence of this concept, gives a definition of the e-document and describes its characteristics, presenting his own opinion on this issue. Examples from practice in the implementation of e-archiving systems are given. of the USA, Australia, Denmark, Canada, South Korea and a number of European countries.

An important part of the third chapter is the description of the stages of development and implementation of the technological model for the introduction of the new archiving system. It is emphasized that the new technological model will start with the creation of a specialized system for e-archiving of valuable electronic documents (CEA). Describes the empirical survey of archives staff attitudes conducted by the PhD student in 2022. The survey, containing five questions that relate to electronically created documents and cover the existing regulatory framework, infrastructure, information products implemented, file formats, strategies, document flow, as well as the future vision for their management, was sent to all EU member states and to the public administration in Bulgaria. An analysis of the responses to the survey was made and the problems facing the archives were outlined. The problem of the integration of the SEA and the ISDA system, which has been operating since 2012, has also been highlighted, because both databases will be administered. The important issue of preservation and storage of electronic documents is considered. Risks that must be taken into account during long-term storage of documents are indicated. The possibilities for citizens' online access to the public web page of the archives, visualized with figures and photos, are presented, the issue of information security is also touched upon. The lack of a center in the country for storing working and backup data sets is noted as a drawback. The main conclusion of this chapter is that the implementation of the CEA technological model is a priority task of the Bulgarian archive system.

The fourth chapter presents the electronic services provided by the two e-archiving systems ISDA and SEA. The developed functional module is described, providing 9 system's electronic services, which allows tracking of request execution, online payment and service provision. As a result of the analysis of consumer behavior through various general and private studies abroad and in Bulgaria and the theoretical developments in this field, the PhD student derives general indicators, which he uses to conduct the empirical research (survey) in order to study consumer attitudes. Questionnaire cards for evaluating the quality of services provided by e-archiving systems have been processed and analyzed. A study of the reports was also carried out, which showed an increase in the number of users of e-services and a decrease in physical visits to the reading rooms. The data are presented in tables. New accessibility tools and advertising tools are presented, visualized with figures and screenshots. As a conclusion from this chapter, the PhD student notes that the Bulgarian archive system has been offering digital content on the Internet for ten years and more, which from 2022 has been enriched with audio and video materials with the implementation of the new information system. 24/7 online service has been introduced through the e-services module. The digital archive is growing, its level is not significantly behind the world and european archives. The lack of additional possibilities for searching and analyzing user information, the relatively low level of information protection given the increasing number of hacker attacks and phishing, etc., were noted as disadvantages.

The Research Conclusion summarizes the conclusions drawn by the PhD student at the end of each chapter of the dissertation and emphasizes that the implementation of the empirical study proved the working hypothesis of the dissertation.

Scientific apparatus

Theoretical and empirical scientific methods of research are used in the dissertation work: research of scientific literature in the problem area, analysis and evaluation of documentary sources, systematization, comparison and summary of the obtained information, observation in the Internet environment, identification, differentiation and typology, as well as comparative analysis of the obtained results. The PhD student is fluent in the terminology. The printed and electronic sources of information used by him are correctly cited.

Evaluation of the abstract for the dissertation work

The submitted abstract has a total volume of 39 pages and contains: general characteristics of the dissertation work (relevance of the problem, object, subject, goal, tasks, research hypotheses of the study, research methods, limitations), structure and content of the dissertation work, contributions and publications on the subject. The author's abstract of the dissertation work is informative, faithfully reflects the content of the work, the main statements,

the scientific contributions formulated by the author and the results obtained in the course of the research.

Publications on the subject of the dissertation

There are seven publications on the topic of the dissertation work (six of them are independent and one is co-authored). The publications are articles and reports from national and one international scientific conferences, published in the editions of Sofia University and Orell State University. All publications are on the problems, related to electronic archiving in the Bulgarian archival system. The PhD student's dissertation and publications ensure publicity of the results.

Dissertation Contributions

The main scientific and practical-applied contribution of the dissertation work is the author's systematic approach to the problem of electronic archiving as an important element of electronic management, based on a deep and serious analysis of the Bulgarian archive system, a study of international experience, opinions and strategies and the conclusions drawn and recommendations for development and improvement of the national archive system.

Critical Notes to the Dissertation

Several critical remarks can be made to the dissertation work:

- There are repetitions in the text, for example, the tasks facing the archives, the need to study the user's profile, his requirements, etc.

- The paper contains additional and less informative explanations, which do not contribute, but make it difficult to understand the text:

- the description of the stages of the development of the automated systems and projects with specific dates. Much more important are descriptions of the outputs of these systems and suggestions of what information they should provide to users;

- the text regarding the awarding of public contracts for the selection of the company that will develop AIS (p. 41). This is an important element in the work report, but not in the thesis;

- it is unnecessary, in my opinion, to explain what a server is (almost the entire page 48);

- there are inaccuracies, missing letters and punctuation marks in the text.

Conclusion

The critical remarks addressed to the dissertation work do not diminish the actuality and significance of the topic, as well as the value of the results obtained and the conclusions drawn by the PhD student.

The submitted dissertation is a completed, independent study. The actuality of the topic is indisputable and is determined by the exceptional role of electronic archiving in information providing of the administration and citizens and in building an electronic government.

The objectives and tasks set in the dissertation have been fulfilled. The methodology and research methods are correctly chosen and competently applied, the obtained results are described comprehensively, and the author's conclusions and recommendations are very useful. The dissertation is written in good literary language. The personal contribution of the PhD student in obtaining the contributions in the dissertation work is undeniable. Its authorship is beyond doubt.

The dissertation work has the necessary qualities and meets the requirements for obtaining the educational and scientific degree "doctor", provided for in the Law on the Development of the Academic Staff in the Republic of Bulgaria.

All this gives me the reason to give a positive assessment of the work and to propose to the esteemed jury for the dissertation work on the topic "Electronic archiving - Challenges to the archival system in Bulgaria" that Orlin Lyubenov Iliev be awarded the educational and scientific degree "doctor".

Sofia, 03/04/2024   Prof. Dr. Elena Pavlovska
                                                                          Member of the scientific jury