

Andrei Rybakou¹

APPRAISAL OF ELECTRONIC DOCUMENTS: CRITERIA AND STAGES

ABSTRACT

The article is devoted to special features of appraisal of electronic documents and special criteria that should be applied in the process of selecting documents for transferring to the archive. The author concludes that most of the criteria used in the process of the appraisal are traditional and equally applicable to both paper and electronic documents. At the same time, when evaluating electronic documents, a number of special criteria should be applied, such as the availability of the necessary metadata, the ability to reproduce and process electronic documents without using additional specialized software throughout the entire period of their storage, etc. The presence of special criteria determines certain stages in the process of appraisal, that should start from the stage of the design of the information system, in which electronic records will be created, circulated and stored.

Key words: *electronic document, information resource, information system, appraisal, criteria for the appraisal and selection of documents, stages of the appraisal*

VALUTAZIONE DEI DOCUMENTI ELETTRONICI: CRITERI E FASI

ABSTRACT

L'articolo è dedicato alle particolarità della valutazione dei documenti elettronici e ai criteri particolari che dovrebbero essere applicati nel processo di selezione dei documenti da trasferire all'archivio. L'autore conclude che la maggior parte dei criteri utilizzati nel processo di valutazione sono tradizionali e ugualmente applicabili sia ai documenti cartacei che a quelli elettronici. Allo stesso tempo, quando si valutano i documenti elettronici, dovrebbero essere applicati una serie di criteri speciali, come la disponibilità dei metadati necessari, la capacità di riprodurre ed elaborare documenti elettronici senza utilizzare software specializzato aggiuntivo durante l'intero periodo della loro conservazione, ecc. La presenza di particolari criteri determina alcune fasi del processo di valutazione, che dovrebbe partire dalla fase di progettazione del sistema informativo, in cui verranno create, diffuse e conservate le registrazioni elettroniche.

Parole chiave: *documento elettronico, risorsa informativa, sistema informativo, valutazione, criteri per la valutazione e selezione dei documenti, fasi della valutazione*

1 Andrei Rybakou, Ph.D., Belarusian Research Institute for Documentation and Archival Science (BelNIIDAD), Minsk, Belarus, e-mail: rybakou@belniid.by

VREDNOTENJE ELEKTRONSKEGA GRADIVA: KRITERIJI IN STOPNJE

Povzetek

Članek je posvečen posebnostim vrednotenja elektronskih dokumentov in posebnim merilom, ki jih je treba upoštevati pri izbiri dokumentov za predajo v arhiv. Avtor ugotavlja, da je večina kriterijev, uporabljenih v procesu vrednotenja, tradicionalnih in enako uporabnih tako za papirne kot elektronske dokumente. Hkrati je treba pri vrednotenju elektronskih dokumentov uporabiti številna posebna merila, kot so razpoložljivost potrebnih metapodatkov, zmožnost reprodukcije in obdelave elektronskih dokumentov brez uporabe dodatne specializirane programske opreme skozi celotno obdobje njihovega shranjevanja itd. Prisotnost posebnih kriterijev določa določene faze v procesu vrednotenja, ki se mora začeti v fazi načrtovanja informacijskega sistema, v katerem se bodo ustvarjali, krožili in hranili elektronski zapisi.

Ključne besede: elektronski dokument, informacijski vir, informacijski sistem, vrednotenje, merila za vrednotenje in izbor dokumentov, stopnje vrednotenja

ЭКСПЕРТЫЗА КАШТОЎНАСЦІ ЭЛЕКТРОННЫХ ДАКУМЕНТАЎ: КРЫТЭРЫІ І ЭТАПЫ

РЭЗЮМЭ

У артыкуле разглядаюцца асаблівасці правядзення экспертызы каштоўнасці электронных дакументаў і спецыяльныя крытэрыі, якія павінны выкарыстоўвацца ў працэсе адбору дакументаў для перадачы на захоўванне ў архіў. Аўтар робіць выснову, што большасць крытэрыяў, якія ўжываюцца пры ацэнцы, з'яўляюцца традыцыйнымі і аднолькава падыходзяць як да папяровых, так і да электронных дакументаў. У той жа час пры экспертызе электронных дакументаў павінен прымяняцца шэраг спецыяльных крытэрыяў, такіх як, наяўнасць неабходных метададзеных, магчымасць узнаўлення і апрацоўкі электронных дакументаў без выкарыстання дадатковага спецыялізаванага праграмнага забеспячэння на працягу ўсяго тэрміну іх захоўвання і інш. Наяўнасць спецыяльных крытэрыяў абумоўлівае пэўную этапнасць пры правядзенні ацэнкі, якая павінна пачынацца на этапе праектавання інфармацыйнай сістэмы, у якой электронныя дакументы будуць стварацца, абарочвацца і захоўвацца.

Ключавыя словы: электронны дакумент, інфармацыйны рэсурс, інфармацыйная сістэма, экспертыза каштоўнасці, крытэрыі ацэнкі і адбору дакументаў, этапы правядзення экспертызы каштоўнасці

1 INTRODUCTION

Issues related to the appraisal of documents and their selection for storage in the archive are among the most difficult and debatable in records management and archival science. When solving relevant problems, scientists and practitioners proceed from the goal of ensuring the future needs of the state, society and a person in retrospective documented information.

The difficulty lies in the fact that any document from the moment of its creation has a certain information potential and in the future may be demanded as a historical source (Илюшенко, 1973; Илюшенко, 1999; Илюшенко, 2000). Indeed, it is unlikely that the ancient Sumerians or Egyptians could suspect that the records they had made on clay tablets or papyrus scrolls, which in many cases had a purely utilitarian character, would be considered as the most valuable historical sources in the distant future.

Equally obvious is the fact that it is impossible from a practical point of view to preserve all documents generated in the activities of state, private, public organizations and individuals, since it requires colossal costs. This contradiction can be resolved by selecting documents with the greatest source potential for their subsequent transfer to permanent storage in the archive. However, it is not so easy to identify preliminary the degree of demand for the information potential of this or that document in the future and its ability to be used as a historical source. Initially, documents are created for different purposes and are designed to solve specific practical problems (management, accounting, social security, legal regulation, etc.). But none of them is created for archival storage for purposes of its future usage in historical research.

In these conditions, the records managers and archivists have to develop certain approaches to the appraisal of documents, to develop special principles and criteria, the application of which will ensure the selection and storage of the most valuable documented information in the archives, comprehensively and most fully revealing various aspects of political, economic, social, cultural life of society of a particular historical period.

The use of electronic records, the implementation of special information systems in the field of records and archives management, specially designed for their creation and storage, significantly actualize the above mentioned task. The specific nature of an electronic document requires a revision of the traditional approaches to the appraisal, the search for special criteria for the selection of electronic documents for permanent storage in archives. The task of appraisal and selecting electronic documents is significantly complicated by the fact that modern technical and software tools allow to create and store huge and constantly increasing volumes of documented information.

In turn, the possibility of storing large amounts of information on fairly compact media makes one think about the expediency of appraisal of electronic documents or, at least, their individual complexes. An electronic document is created and exists in a certain information system, so the idea of transferring to archive a full set of documents generated during the operation of this system looks very tempting. This approach seems to be the most promising in relation to documented information that is contained in information resources as their part (databases, data banks, etc.). In the world archival community more and more information appears that in a particular country a full range of digital information formed as part of one or another information resource has been accepted for archival storage. At the same time, in order to search for the required information as part of the "big data" accepted for archival storage, more and more hopes are pinned on "artificial intelligence".

Nevertheless, even if we agree that the entire content of all information resources has an enduring scientific and historical significance, it should be recognized that the preservation of absolutely the entire information massive of all information resources is hardly possible from a practical point of view. In the future, the accumulation of colossal volumes of information in archives will require the attraction of considerable and constantly increasing material and labor costs to maintain resources in working order. It should be remembered that any information system earlier or later will be decommissioned. Over time, it will be necessary to convert the information of databases into new information objects, its migration to other information systems, which will lead to the loss of identity, and in some cases – the authenticity of archival information. In these conditions, archivists will have to take responsibility for the correspondence of the changed information to its original state, take on the function of confirming this correspondence, and this additional responsibility and function of archivists can hardly be considered as good idea (Rybakou, 2020). In any case, archivists still have to solve the problem of long-term preservation of information resources.

The indisputable fact is that as the volume of digital information increases, the costs of its long-term preservation, ensuring its authenticity and availability for use will increase. It is known that storage of electronic documents initially has an advantage over the storage of their paper counterparts from the point of view of expenditure. However, already at the stage of operative storage, this advantage begins to disappear as the volume of documentation increases and software becomes obsolete. When organizing long-term archival storage of electronic documents, due to the above mentioned reasons, the costs increase many times over.

The possibilities of using "artificial intelligence" to search for the necessary archival information in the context of "big data" also seem to be very limited. Without systematization and proper archival description of documented information, the organization of its effective search becomes more and more difficult.

Thus, the need for an appraisal of electronic documents is obvious. It is also obvious that in the appraisal and selection of electronic documents for transfer to the archives, some general universal criteria will be applied, equally suitable for the appraisal of documents, regardless of the type of their medium and the form of their presentation. At the same time, the appraisal of electronic documents requires to use a number of special criteria, special methods that take into account the specifics of their creation and existence both at the stage of operational circulation and at the stage of archival storage. Let's consider approaches to solving these problems using the Belarusian example.

2. GENERAL PRINCIPLES AND CRITERIA FOR APPRAISAL. SPECIAL CRITERIA FOR THE APPRAISAL OF SCIENTIFIC, TECHNICAL AND AUDIOVISUAL DOCUMENTATION

The principles and criteria for the appraisal of documents, which are now guided by Belarusian archivists, generally correspond to the principles and criteria developed by the Soviet archival school in the 1960s-70s. The greatest contribution to the development of the system of criteria, applied with some changes to this day, was made by Vsevolod Tsaplin, who also proposed a generally recognized classification of criteria into groups (Черешня, 2004; Цаплин, 1966; Цаплин, 1974).

The principles and criteria for the appraisal applied today are enshrined in the Rules of Work for the Archives of State Bodies and Other Organizations (Постановление Министерства юстиции Республики Беларусь от 24 мая 2012 г. № 143 «Об утверждении

Правил работы архивов государственных органов и иных организаций», 2012, chapt. 7). The Rules is the act of legislation and all state bodies, as well as state, private and public organizations are obliged to use it when appraising the documents created in their activities and establishing the terms of their storage and their selection for archival storage.

The Rules stipulates that the appraisal of documents should be based on the principles of historicism, complexity and comprehensiveness.

The principle of historicism presupposes an assessment of the content of documents based on the historical situation in which the organization, in whose activities the documents were formed, (organization the "fond-creator") operated.

The principle of complexity assumes the appraisal of documents, taking into account their place and significance in the composition of the existing set of documents (fond) in the organization the fond-creator, as well as their relationship with documents of other fonds.

The principle of comprehensiveness presupposes an appraisal of documents from the point of view of their reflection of various aspects of the material and spiritual life of a person and society.

The applied criteria for the appraisal are classified in the Rules into three groups: origination, content, external features.

The criteria of origination include: the role and place of the organization in the system of public administration and (or) a particular economy sector, the significance of the functions it performs; the role and importance of an individual in government activities and other areas of public life, in the development of science, culture; time and place when and where the document was created.

The criteria of content include: the significance of the event reflected in the document; the value of the information contained in the document; repeatability of document information in other documents; name and type of the document.

The criteria of external features of the document are: the authenticity of the document and its legal reliability (the presence of signatures, dates, seals); the presence of resolutions, notes; features of the style and text design of the document; features of the material medium of the document; the physical condition of the document.

In addition to the above mentioned universal criteria used in the appraisal of all documents, regardless of their belonging to a particular system of documentation or the type of medium and the form of presentation, when appraising scientific, technical and audiovisual documentation a number of specific criteria, reflecting the specifics of these documents, are applied. These criteria are also enshrined in regulatory legal acts that establish special requirements for working with them.

So, in the process of appraisal of scientific and technical developments, along with general criteria, specific criteria and criteria of public recognition are applied.

Specific criteria are: the significance of scientific and technical documentation for the society and state; the degree of innovation, uniqueness and originality of the solution to the problem in a specific branch of science, technology, construction, production; the cost-effectiveness of the implementation of the results of a research or technical idea; social effectiveness of a research or development; the degree of mechanization and automation of technological processes in building the objects and in manufacturing the industrial products; fundamental nature of scientific researches; the degree of reflection of the level of development of science and technology in a research, project, capital construction object or industrial product, as well as the technology of its manufacture;

the number of standard solutions implemented in building object and industrial production; modification, maximum unification of industrial products, their technical aesthetics, reliability; mass production or serial production; the degree of reconstruction of the building object; national architectural features, specificity of geological and hydrological conditions.

Criteria of public recognition includes: the awarding of international, state or personal prizes to developments; nominating research and development for awards; demonstration of them at international fairs; patent and commercial value, i.e. patenting of developments, purchase of licenses by foreign companies (Постановление Комитета по архивам и делопроизводству при Совете Министров Республики Беларусь от 6 ноября 2003 г. № 38 «Об утверждении Правил работы с научно-технической документацией в организациях Республики Беларусь», 2003, chapt. 20).

Specific criteria for appraisal audiovisual documentation (film, photo, phono and video documents) are systematized into two groups: content and external features.

Specific criteria of content presuppose determining the value of audiovisual documents as works of art. They include: artistic merit of audiovisual documents, compositional and plot integrity, expressiveness and originality of documents.

Specific criteria for the external features of audiovisual documents presuppose taking into account the type of the information medium, the method of recording and reproducing information, the technical condition of documents (Постановление Министерства юстиции Республики Беларусь от 9 апреля 2007 г. № 27 «Об утверждении Правил работы государственных архивов Республики Беларусь с аудиовизуальными документами», 2007, chapt.19).

Naturally, when appraising scientific, technical and audiovisual documentation, the general criteria are applied selectively, taking into account the peculiarities of the content and material basis of these documents.

3. SPECIAL CRITERIA FOR APPRAISAL OF ELECTRONIC DOCUMENTS AND INFORMATION RESOURCES. STAGES OF APPRAISAL

The first attempt of Belarusian archivists to determine special criteria and the procedure for the appraisal of electronic documents dates back to 2005, when the Instruction on the Procedure of Appraisal and Transfer of Electronic Documents and Information Resources to State Storage was adopted (Постановление Комитета по архивам и делопроизводству при Совете Министров Республики Беларусь от 23 марта 2005 г. № 3 «Об утверждении Инструкции по проведению экспертизы ценности и передачи электронных документов и информационных ресурсов на государственное хранение», 2005).

Already in this normative legal act, a provision was formulated according to which the appraisal of electronic documents and information resources should be carried out on the basis of general and specific selection criteria, the list of which was also enshrined in the Instruction.

In 2010 and 2012 as a result of the revision, new instructions were adopted. They did not change the criteria for the appraisal and selection of electronic documents established in 2005 (Постановление Министерства юстиции Республики Беларусь от 30 июня 2010 г. № 37 «Об утверждении Инструкции по проведению экспертизы ценности и передаче на государственное хранение документов в электронном виде и информационных ресурсов и о признании утратившими силу некоторых нормативных правовых актов», 2010; Постановление Министерства юстиции Республики Беларусь от 11 мая 2012 г. № 121 «Об утверждении Инструкции о порядке проведения экспертизы ценности и

передачи на постоянное хранение документов в электронном виде и информационных ресурсов и о признании утратившим силу постановления Министерства юстиции Республики Беларусь от 30 июня 2010 г. № 37», 2012).

A detailed analysis of the above mentioned regulatory legal acts allows us to conclude that most of the proposed general and specific criteria for appraising electronic documents are universal and they can be equally applied to both electronic documents and documents on traditional media.

The validity of this conclusion is clearly illustrated by the list of specific criteria for appraisal of electronic scientific and technical documents, enshrined in the instructions. Among these criteria are listed: patent and license value; significance for the further development of science, technology, production and the national economy in common; fundamental novelty, uniqueness and originality of the research or development; the degree of reflection of the level of science, technology and production in the research or development; economic benefits at the moment of implementation of research results or technical ideas, etc. In fact, the specific criteria for appraisal of electronic scientific and technical documents repeat, literally or in a slightly modified form, the specific criteria for appraisal of scientific and technical documents established in the Rules of Work with Scientific and Technical Documentation in Organizations of the Republic of Belarus, which are universal and are not tied to the type of media of a document (Постановление Комитета по архивам и делопроизводству при Совете Министров Республики Беларусь от 6 ноября 2003 г. № 38 «Об утверждении Правил работы с научно-технической документацией в организациях Республики Беларусь», 2003, chapt. 20).

Moreover, when defining specific criteria for appraisal of electronic managerial documents, the developers of the instructions made a simple reference to the criteria "which are similar to the criteria used for the corresponding paper documents". In this regard, a well-grounded question arises about the specifics of the composition and content of special criteria for appraising precisely electronic documents of this type.

At the same time, the above mentioned instructions also contained a number of criteria designed to emphasize the specifics of the appraisal of electronic documents and information resources. Instructions, adopted in 2005, 2010 and 2012, listed among others the following criteria for appraising electronic documents and information resources: completeness of the parts and elements of an information resource or an electronic document; clarity of information and convenience of its use in comparison with paper counterparts; the ability to ensure permanent preservation of electronic documents; the ability to reproduce and process information without using additional specialized software; compliance with the established forms and procedures to ensure the authenticity and integrity of electronic documents; availability of accompanying documentation for electronic documents and technological documentation for the information system in which the documents were created and existed.

The instructions also established a number of specific criteria for selecting information resources for archival storage: completeness of information resources, that is, the ratio of information contained in the concrete information resource with the total amount of information available in the country for a given class of objects or phenomena; reliability of information; the uniqueness of the information resource, determined by the system of collecting the information, etc.

In 2019, new regulatory legal acts, that established the procedure for working with electronic documents at all stages of their life cycle, were adopted (Постановление Министерства юстиции Республики Беларусь 6 февраля 2019 г. № 19 «Об утверждении Инструкции о порядке работы с электронными документами в государственных органах, иных организациях», 2019; Постановление Министерства юстиции Республики Беларусь 6 февраля 2019 г. № 20 «Об утверждении Правил работы с документами в электронном виде в архивах государственных органов, иных организаций», 2019). It is fundamentally important that they have established certain stages of selection and transfer of electronic documents for storage in state archives. These stages to some extent coincides with the stages of selection and transfer of paper documents to archives, and these procedures starts at the stage preceding the creation of the document (Rybakou, 2019).

Special criteria for appraising electronic documents and information resources were not included in the regulatory legal acts. Therefore, on the basis of the accumulated experience, it was decided to develop separate methodological recommendations (guidelines), devoted to this issue (Методические рекомендации по проведению экспертизы ценности документов в электронном виде, электронных документов и информационных ресурсов в государственных органах, иных организациях, 2020).

Methodological recommendations for the appraisal of documents in electronic form, electronic documents and information resources in government bodies, other organizations have established general and special criteria for assessing the relevant documents and resources. It should be noticed, that according to the Law of the Republic of Belarus "On Electronic Document and Electronic Digital Signature", an electronic document is considered as a document in electronic form with elements (attributes) that allow to establish its integrity and authenticity, which are confirmed by using certified electronic digital signature of the organization or individual (persons) who signed this electronic document (Закон Республики Беларусь от 28 декабря 2009 г. «Об электронном документе и электронной цифровой подписи», 2009). Legislation in the field of archival work and records management provides for the possibility of creating, circulating and storing both the actual electronic documents and documents in electronic form, therefore, to refer to all these documents, we will further use the single concept of "electronic document".

Despite of the attempt to rethink the list and content of general and special criteria for appraising electronic documents and information resources, the authors of the guidelines could not avoid the methodological error inherent in the previously valid instructions on this issue. In particular, the general criteria for appraising documents, which are applied regardless of the belonging of documents to a particular system of documentation and regardless of the type of medium of the documented information, were again repeated as part of the general criteria for appraising electronic documents and information resources. Once again, special criteria for appraising electronic scientific and technical documents repeating the special criteria for appraising documents of this system regardless of the type of medium, were mentioned. At the same time, there are no special criteria for appraising electronic documents of other documentation systems, for example, audiovisual, medical, in the guidelines.

One of the main reasons for this confusion is seen as an insufficiently clear understanding of the place of electronic documents as part of functional systems of documentation. As a result, electronic documentation is considered as an independent system that includes all electronic documents of various functional systems. But it is obvious, that general and specific criteria for appraising documents of various functional systems are

universal in nature and should be applied when appraising all the documents of a particular functional system, regardless of the type of material basis.

Nevertheless, the authors of the guidelines were able to define special appraising criteria that take into account the specific nature of an electronic document. These specific criteria should apply to all electronic documents, regardless of their belonging to a particular functional documentation system. According to the guidelines among them are:

- completeness of parts and elements of electronic documents and information resources (for example, the presence or absence of an electronic digital signature, the completeness of metadata);
- the possibility of creating the special fond for use on the basis of electronic documents and information resources in order to improve the quality of use of the documented information in comparison with their analogues on paper;
- the ability to reproduce and process electronic documents and information resources without using additional specialized software throughout the entire storage period;
- availability of metadata for electronic documents and information resources in accordance with the legislation in the field of archival work and records management;
- the ability to create and preserve an electronic copy of a document equal to its paper original in case when it is impossible to save the original document on paper (for example, text fading, gaps);
- preservation of documentation for the software of the information system, in which electronic documents and information resources have been created and exist in order to support the operability of the information system.

If to generalize and somewhat simplify the content of the above mentioned criteria, it will become obvious, that some of them are analogues of the general criteria from the group of external features of the document, but in a slightly modified form, taking into account the special nature and structure of the electronic document. This is clearly demonstrated by the comparison of several criteria of the two corresponding groups:

Special criteria for appraising electronic documents	Group of criteria for the external features of the document
Completeness of parts and elements of electronic documents and information resources (for example, the presence or absence of an electronic digital signature, the completeness of metadata)	The authenticity of the document and its legal reliability (the presence of signatures, dates, seals). The presence of resolutions, notes.
Availability of metadata for electronic documents and information resources in accordance with the legislation in the field of archival work and records management.	The authenticity of the document and its legal reliability (the presence of signatures, dates, seals). The presence of resolutions, notes.
The ability to reproduce and process electronic documents and information resources without using additional specialized software throughout the entire storage period.	Features of the material medium of the document. The physical condition of the document.
the ability to create and preserve an electronic copy of a document equal to its paper original in case when it is impossible to save the original document on paper (for example, text fading, gaps).	Features of the material medium of the document. The physical condition of the document.

Among the special criteria for appraising electronic documents and information resources given in the methodological recommendations, the most important seems to be the two ones:

- the ability to reproduce and process electronic documents and information resources without using additional specialized software throughout the entire storage period. The application of this criterion provides for the creation of electronic documents and information resources in open formats, the possibility of converting or migrating electronic documents and information resources within the records management information system and information system for archival storage in order to ensure their storage;
- preservation of documentation for the software of the information system, in which electronic documents and information resources have been created and exist in order to support the operability of the information system.

Both these criteria actually represent special requirements for information systems in which electronic documents and information resources are created and stored. The presence of such requirements made it possible to single out an additional stage in the process of appraising electronic documents and information resources in comparison with the stages of appraising documents on a traditional (paper) medium.

So, the methodological recommendations determined that the appraisal of electronic documents and information resources in an organization should be carried out at the following stages:

- designing an information system that will be used for creation and circulation of electronic documents, as well as creation and operating an information resource;
- elaborating filing plan indicating the names of files and their storage periods;
- preparation of electronic documents and information resources for transfer for storage in the archive of the organization;
- upon expiration of the period of temporary storage of electronic documents and information resources in the organization established by the legislation.

It is obvious that these stages generally correspond to the stages of the appraisal of documents on paper, enshrined in the Rules of Work for the Archives of State Bodies and Other Organizations (Постановление Министерства юстиции Республики Беларусь от 24 мая 2012 г. № 143 «Об утверждении Правил работы архивов государственных органов и иных организаций», 2012, chapt. 8, pt. 51). A fundamentally important difference is the presence of the first stage – the stage of designing an information system, in which electronic documents and information resources will be created and used.

In fact, this implies that the projected information system must have functionality that allows to create electronic documents in formats suitable for storage for a specified period, including for permanent storage, as well as transfer these documents to other information systems, including information systems of the archive of the organization and the state archive without losing their identity (authenticity). Compliance with this requirement should allow in the future to select electronic documents, created and stored in such an information system, on bases of general and special criteria for appraising documents related to different functional documentation systems.

CONCLUSION

The performed analysis allows us to conclude that when appraising electronic documents, the informational essence of the document, its potential as a historical source are of paramount importance. An electronic document has the same informational characteristics and purposes of creation as documents on other media, therefore, the appraisal of electronic documents should be carried out on the basis of general criteria of appraisal, primarily the criteria of origination and content. Depending on the belonging of an electronic document to a particular functional system of documentation, general criteria should be supplemented by specific criteria, that are used when appraising documents of this particular system.

A group of criteria of the external features of a document has a significant specificity when appraising electronic documents. For example, the criteria of authenticity and legal reliability used when appraising traditional (paper) documents, are transformed into the criteria of presence of metadata, completeness of parts and elements when appraising electronic documents.

The physical nature of an electronic document is of secondary importance in the appraisal and should be taken into account in terms of its suitability for long-term preservation, confirmation of its identity (authenticity) throughout its existence, and the possibility of use in future. For these purposes, it is of fundamental importance to follow the established requirements for the creation, processing and storage of electronic documents at all stages of their life cycle – from the design of information systems in which electronic documents or information resources will be created, and ending with their storage in information systems of the archive of the organization and the state archive.

Considering that electronic documents are created and exist in certain information systems, it is important to preserve project documentation for these systems. This will allow in the future to maintain their working condition, including using the emulation method, correctly reproduce the documents and information contained in them and, if necessary, convert and migrate documents to other information systems without losing their identity (authenticity).

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