

Mikhail Larin¹

Nataliya Surovtseva²

AUTHENTICITY AND IDENTITY OF THE ELECTRONIC RECORD IN THE DIGITAL TRANSFORMATION OF ARCHIVES

Abstract

One of the key features of an electronic record is its authenticity. Ensuring the authenticity of management electronic records at all stages of its life cycle from the moment of creation to long-term storage allows us to remove obstacles in the digital transformation of archives. The authenticity of electronic records was the subject of research within the framework of the international project InterPARES. A record is considered authentic if its author, place and time of creation were definitely established, as well as the fact that this record really comes from the claimed author. To ensure this property of an electronic record, not only authentication and electronic signature procedures are required at the time of creation of the record, but also the creation of the so-called trusted environment, which is designed to ensure the preservation of records metadata due to controlled management procedures. The focus should be on the information system as a whole. This understanding of the authenticity of the electronic record was enshrined in international standards for information and documentation. In Russian practice, the concept of "authenticity" is used very rarely, and as applied to management electronic records, it is used mainly in the sense of identity to some source record. Such an understanding involves conducting comparison procedures with some reference record, which should remain unchanged. At the same time, in the electronic environment in which the functioning of electronic records takes place, it is practically impossible to ensure the safety of the records file (s) unchanged. Given the social nature of the record, we must understand that the immutability of an electronic record is a relative concept and concerns the preservation of the social function of the record. That is why we must allow only a relative recognition of the identity of electronic records, allow the possibility of some changes within which the electronic record retains its social functions. The difference between the copies of the electronic records within this difference allows us to talk about authentic records.

Keywords: Electronic record, authentic record, identical record, terminology, long-term storage, archival storage.

1 INTRODUCTION

For records, the creation, use and storage of which is carried out in the electronic environment of the information system, one of the most essential characteristics is authenticity. Authenticity is defined by us as a property of an electronic record that confirms the origin of this record, the author, the time and place of its creation. Authenticity is primarily associated with the procedures for officially certifying information about its origin, the presence of established rules for working with a record and the presence of a so-called trusted environment, the functioning of a record within which ensures the user's confidence in the information about the author, time and place of creation of the record contained in

1 Mikhail Larin, Dr., Professor, Head of the Department of electronic records management systems, Russian State University for the Humanities (RGGU), Russia, Moscow, 125993, GSP-3, Miusskaia pl., tel: +7 495 6285297, mobile: +7 910 4210529, e-mail: larin.m@rggu.ru, IIAS member.

2 Nataliya Surovtseva, PhD, Docent, Department of electronic records management systems, Russian State University for the Humanities (RGGU), Russia, Moscow, 125993, GSP-3, Miusskaia pl., 6, tel. +7 916 0202165, e-mail: nataliyasurovceva@yandex.ru

the record itself. The concept of "authenticity", of course, is primarily relevant for records used in management activities, and it can be applied equally to records on traditional media and electronic records. For electronic records, it is of particular importance due to the peculiarities of the technology for working with them (Surovtseva, 2020).

2 THE CONCEPT OF "AUTHENTICITY OF AN ELECTRONIC RECORD"

A study conducted by a group of specialists within the framework of the second InterPARES project was devoted to the issue of the authenticity of electronic records. In the context of expanding the scope and use of electronic records, it is the ability to ensure authenticity that has become the main parameter for the development of electronic records management in the context of electronic government. The starting points in this study were the concepts of "authentic record" and "authentic copy". A record was deemed to be authentic if its creator or author was definitely established, as established and that this record really comes from the claimed author. The property of authenticity is assigned to a record on the basis of its form (form of the record), the context of its creation, the mode of transmission of the record and the method of its storage and preservation. All this information should be included in the metadata.

Within the framework of the InterPARES project, case studies were carried out to ensure the authenticity of electronic records on the example of several projects implemented in the field of public administration of a number of foreign countries (USA, Canada, Ireland, Singapore, Germany, etc.), the reports on which helped to form general approaches to solving this task. It should be noted that initially ensuring the authenticity of an electronic record was reduced mainly to the procedure for authenticating its author or creator and using electronic signature means when transferring a record from one information system to another. However, as a result of the conducted research, an understanding of the insufficiency of these solutions came. The focus should be on the information system as a whole, the reliability of which is designed to ensure the preservation of record metadata, primarily through controlled management procedures. This makes it possible to ensure the authenticity of an electronic record throughout its life cycle, from the moment of creation, as well as, if necessary, its long-term storage (Duranti and Preston, 2008). Thus, the researchers approached the need to create a so-called trusted environment, as a complex of organizational, technological and technical requirements for working with a record in an information system that ensures the preservation of its main characteristics, including authenticity.

The Russian experience of working with electronic records shows that ensuring their authenticity in practice is carried out in full measure in the trend of global trends. However, the theoretical understanding of many issues, including the concept of "authenticity" in relation to electronic records, needs a deeper development.

3 THE RELATIONSHIP BETWEEN THE CONCEPTS OF "AUTHENTICITY" AND "IDENTITY" OF AN ELECTRONIC RECORD

We find the definition of "authenticity" in a number of national standards, a terminological dictionary for record management. The analysis of the definitions presented in them shows that the concept of "authenticity" of a record in most cases is understood as a definition of its identity. This approach is solely due to aspects of the practical work with electronic records in the management system. In this regard, consideration of authenticity in the context of identity, compliance with any standard brings us to the question of defining the "original", "initial" electronic record. Some Russian experts are looking for acceptable solutions to this issue. For example, M. P. Bobyleva believes that in conditions when a record is transferred from one information system to another, the record received and saved in the new information system can be considered equivalent to the "original", that

is, the original record created and signed in electronic form in "native" information system, subject to compliance with the established requirements of authenticity, reliability and integrity (Bobyleva, 2018, p. 35). This point of view is also supported by A. E. Rybakov, who considers it expedient to introduce the concept of "initial electronic record" into professional terminology. It is in relation to it that the copies in other information systems, as well as those obtained as a result of migration or conversion procedures, depending on the degree of compliance with the original electronic record, can be presented as identical and authentic electronic records (copies of records) (Rybakov, 2018).

A similar position was expressed in 2018 in the scientific report of VNIIDAD, in which it is proposed to store the original and master copy of an electronic record in some information system on the Internet. Verification of one of the presented copies allows one to speak in a qualified manner about the identity of the copies. Accordingly, the original copy stored in such an information system can be considered the "original". A copy of an electronic record that has passed the check for compliance with the "original" can be considered "reliable" and "authentic".

This approach is, in our opinion, conditional, since the definition of identity is the result of comparing a record with some objectively existing standard (original, copy, etc.). Such a comparison is possible only if the standard remains unchanged throughout the entire period of time during which the procedure for confirming the identity-authenticity will be necessary, that is, forever for records with a constant storage period. However, we know that for an electronic record, immutability is not a physically feasible characteristic.

The most consistent and detailed dynamic essence of an electronic record, associated with the technologies of its transformation in an electronic environment, was considered by V.A. Konyavsky and V.A. Gadasin. The immutability (fixedness) of an electronic record is achieved only at the time of recording information on the carrier and is violated in the course of any manipulations associated with its processing and transmission (Konyavskij and Gadasin, 2004, p. 15-17). This means that as soon as we turn to the reference record instance for identification, it will cease to be a reference copy from a mathematical point of view, since at least its metadata will be changed.

Obviously, in the field of office work and archiving, we cannot operate with such an understanding of the mutability of an electronic record. It is very important to remind here that an electronic record for us is primarily a record. Therefore, its fixity in the relative, that is, social sense, which will provide the possibility of its use as an instrument of interaction in social relations, should be important. This is achieved by regulating the work with electronic records, establishing the composition and order of procedures related to the processing and transmission of electronic records.

4 CONCLUSIONS

So, identity is manifested only as a result of social interaction of subjects and it is possible to talk about the identity of copies of electronic records in the context of public relations and their legal regulation. In addition, the composition of the record's metadata will necessarily change. As it goes through its life cycle, metadata will accumulate, but the metadata that was formed at the time of creation of the record, which identifies the record, must remain unchanged. Then again the question arises: what is the point of defining the first instance (it will definitely not be the only one) if the identifying metadata does not change? Maybe the last (or subsequent) copy of the electronic record, which contains the maximum information about the life cycle of the record, should become more valuable?

Indeed, modern information technology makes it possible to compare the objects of the information system. Semantic analysis, today is considered as one of the main

functions of the information system, which provides storage of records and work with them. However, it should be remembered that the object of the information system is not a record, but a file. A record is a social phenomenon; subjects of social relations operate with records. Obviously, even if one file in the information system corresponds to one record, the term "record" denotes an entity different from the term "file".

Such decisions indicate that in the Russian practice of working with records there is still a very strong need to apply traditional methodological approaches to working with electronic records. This can explain the aspiration of Russian specialists (archivists and record specialists) to "assign" the original, to determine which of the records functioning in different information systems will be the most reliable. And in the case when in relation to an electronic record the application of the concept "original" is preserved, an authentic record can act only in the status of an "authentic copy".

It is obvious that such an understanding of the authenticity of an electronic record, which is developing in Russian practice, does not correspond to its foreign meaning. Moreover, the term "authenticity" is very poorly mastered by Russian records management and archival studies, in fact, it is not used in practice and is interpreted mainly as compliance with a certain source record, identity to it. Moreover, the degree of this correspondence remains very vague.

At the same time, there remains a tendency to apply to electronic records the concepts and methodological approaches that have been developed in relation to records in traditional media. This is especially evident in the desire to determine the original of an electronic record when creating an information storage system for electronic records. In addressing this issue, the dual nature of an electronic record is manifested: social and electronic. On the one hand, it should be remembered that, first of all, it is a record and is used in the interaction of subjects of social relations, therefore, the preservation of the content and form of the record, their immutability is a priority task. On the other hand, storing a record in an electronic environment cannot ensure its permanent fixation and inevitably leads to a change and accumulation of metadata associated with electronic record files.

That is why we must admit only a relative recognition of the identity of electronic records, admit the possibility of some changes, some conditional "delta" (Larin, 2017), within which the electronic record retains its social functions. The distinction between copies of an electronic record within this delta makes it possible to speak of authentic records.

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