## **Electronic Records Management**

# Maja Kovačević Kuzmanić<sup>1</sup>

#### **Abstract**

The author explains a problem of preservation of archival materials in electronic form. She gives a short overview of records management inspection service in State archive in Croatia. Then she gives a basic definition and analyses of electronic records. She explains how to identify and evaluate electronic records. She underlines the importance of communication and cooperation of the records management inspection service with the makers of electronic records, the companies that are obligated to give their records to the archives. The author explains the role of archives in the process of long-term preservation of electronic records. Further she defines the problem of preservation as a problem of enabling access to electronic resources through the long-time period. Finally, she gives few examples of projects for electronic records preservation in the world.

**Key words:** records management inspection service in Croatia, electronic records, identification and evaluation of electronic records, electronic records management, longterm preservation

The idea and the entire concept of "archive" exist as a necessary response to the practical need of a man to keep record of public, private, administrative, political and other legal transactions and events, or in order to demonstrate and illustrate relevant historical facts. Modern European archives were created by the contemporary authorities with the intent to convey conspicuous quantities of data in one, central place that can be easily accessed and consulted.

The protection of archival material in Croatia is performed through the service of protection of archival material carried out outside the archives also known as records management inspection service (RMIS). The RMIS, as a process undertaken at the system level, is supposed to participate actively in creating the preconditions necessary to establish new, better standards in archive management. Before the complete assessment and classification of materials and the evaluation of the creator itself is done, we can not expect improvements at the primary care and security level, nor we can undertake a policy of systematic acquisitions in the archives. Long story short: no serious improvement is possible without RMIS. All archives in Croatia supervise the selection and preservation of archival records through regular general and extraordinary inspections. After the inspection is completed, it is customary to issue a written report with deliberations on the given measures. Experience shows that the creators' approach in the performance of their duties appears to be more serious if they are given a written document. Closely related to this topic is the control of the implementation of sets of measures given to the creators. The control and constant supervision is necessary for preservation of records.

The records management inspection service as a constitutive unit within the body of the State Archives represents a specific and a very useful form of cooperation between the Archives and the records creators.

<sup>&</sup>lt;sup>1</sup> Maja Kovačević Kuzmanić, Državni arhiv u Splitu, Glagoljaška 18, 21000 Split, Croatia,

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The main goal of the records management inspection service in Croatia are inspection, registration, appraisal, weeding approval and taking into custody of the potential archive records (acquisitions). Within the records management activity, the communication with the records creators is of extreme importance even though methodologies and models may differ from country to country.

The **records management inspection service (RMIS)** in State Archive in Split registers and categorizes all potential records creators. The RMIS range goes from regular general inspections to extraordinary inspections, if needed. Extraordinary inspections can be necessary in case the records are being moved to another location, or in case records creators change radically their standard business organization, etc., or in any other occasion when necessary to preserve the records and guarantee their security.

A further task in the protection, preservation and maintenance of archives is the appraisal and weeding approval. This segment of the protection is of great significance. If RMIS does not perform this part of the process with the due accuracy, some written documents could be lost forever and some could never be substituted with records of equal importance. While performing this vital task, archivists rely mostly on the discretion and the requirements of certain laws issued to regulate the bureaucratic and the administrative aspect of the matter without considering the high value of information from the historical point of view.

All records made by the records creators or other staff members on charge of records creation (record keepers) must be catalogued in order to avoid unauthorized destruction of records. To facilitate the records creators' (record keepers) tasks, State archives create legal acts such as Lists of records containing data on the record retention period or the duration of the record in the archive i.e. whether a record will be kept forever or not.

The final phase of the process of protection of archive records is its acquisition. If all of the above mentioned procedures are performed correctly and the level of protection and conservation at this point of the procedure is satisfying, the acquisition is a purely formal act, in accordance with legal requirements and guidelines of the archival profession. The handover must be performed with extreme care for this is the last occasion to correct omissions and to complete the incomplete files. When records are ready for the acquisition in the archives they should be completely and thoroughly organized. The records management inspection service assists and monitors the acquisition policy of the Archives due to its delicacy and importance: without the adequate records management inspection service it would not be possible to perform systematic analyses of the archives in order to preserve them and increase their efficiency as a part of the national cultural heritage.

In the late 19 century, in Croatia a theoretical connection between Archives and the records creators existed, but in practice it started to exist only after the 1945. But since then a lot has changed: the modalities in which records creators operate, the way they store and manage their documents (digitalized electronic format), the media etc. In the modern era, with rapid changes occurring, it is not hard to realize the importance of the efficiency of the updated and upgraded archive system and also that the mere inspection of the archives of records creators is not sufficient by itself to keep the system together. The best practice experiences show that the monitoring of the entire life cycle of the document is recommended. Only when RMIS are thoroughly informed about the whole process concerning the document they can be efficient in its preservation to the future generations. It is also important for the archivists to become more active in creating legal acts and professional standards regarding the records preservation based on their experience. The role and the position of modern archives and records offices are determined by a complex network of components among which the laws regarding the records management, the quality of the archival service, practical, continuous records consultation and rapid changing technology (digital records). Another challenge of the modern records management inspection service is to organize training courses for record creators.

The main aim of the course is to inform records creators about records management, about the tasks of archive, about legal acts and standards that concern them as records creators. Archives need to be more involved in the records creators work. The Law in Croatia says the records will be taken into custody of the archives only if they are arranged and listed, so it was logical for the records management inspection service to organize education for the records creators. In that way the records management inspection service helped record creators to care for and to protect properly their records, to repair them when necessary and made preparations for taking records into custody of the archives.

With the evolution of the records (i.e. the media on which they are saved) it is important to make sure the classic archival methods follow the pace. **Electronic records** topic raises a set of delicate questions of almost romantic nature such as those on the necessity of keeping traditional records and centralized archives. Nowadays, in the world of electronic records the document's life cycle is different in comparison to what it was a couple of decades ago. The documents are easier to transfer but, in the same time, more difficult to protect. A great number of archivists all over the world are now in contact with new kind of records like such as virtual archives, digitalized ones, etc. In 1997, the ICA (International Council on Archives) released The Guide for Managing Electronic Records from an Archival Perspective. ICARUS (International Centre for Archival Research) organized in Vienna in 2010 the international conference dedicated to the "Archives on the Web – Experiences, Challenges, Visions". It is, thus, obvious that there is a tangible need for a fast on-line access through which the vast majority of users satisfy their necessities for images of documents with no originals needed. In the era of IT the preservation of archive documentation becomes more low cost but in the same time high quality and high tech; the people get the large amount of information in a very small amount of time increasing their research effectiveness.

However, the electronic records have not changed the basic nature of the records creation. Documents exist because the administration needs them in order to work properly, they still need to be consulted because of their value as a historical and a part of cultural heritage. The foundation of the idea of the archive has not changed a bit: the documents are kept as evidence. What changed are the ways the documents are kept, as well as the access to the records. Unlike the paper materials or microfilms, the digital technologies allow multiple access to the same document at the same time with almost no space required. However, while electronic record technology increases the efficiency of local records, it also brings some risks: those records and those information can be easily lost.

During the course of routine business, some agency generates thousands upon thousands of electronic records, from e-mail to web pages to complex e-government transactions. Most are useful for only a short period of time, but some you may need to keep permanently. For those records, records keepers will need to implement a well-considered, well-documented plan for their preservation in order to ensure that they remain trustworthy and useful over time. Tools such as migration, conversion, metadata, and eXtensible Markup Language (XML) will help them not only preserve their records, but also realize their full value.

The most common approach to preserving electronic records involves a combination of two other techniques: migration and conversion.

Migration is the process of moving files to new media (also known as —refreshing) or computer platforms in order to maintain their value.

Conversion entails changing files from one format from one to another and may involve moving from a proprietary format, such as Microsoft Word, to a non-proprietary one such as a plain text file or XML. To avoid losing data in the process, one should perform initial tests and analysis to determine exactly what changes will occur and whether they are acceptable. With both migration and conversion, special attention must be paid to also maintaining the accessibility of any associated metadata.

When properly planned and executed, the migration and conversion approach probably represents the easiest and most cost-effective preservation method available today.

Rapid changes in technology mean that file formats can become obsolete quickly and cause problems for records management strategy. A long-term view and careful planning can overcome this risk and ensure that one can meet legal and operational requirements. Legally, records must be trustworthy, complete, accessible, legally admissible in court, and durable for as long as approved records retention schedules require. For example, one can convert a record to another, more durable format (e.g., from a nearly obsolete software program to a text file) and that copy, as long as it is created in a trustworthy manner, is legally acceptable. The software in which a file is created usually uses a default format when the file is saved. This is indicated by the file name suffix (e.g., .PDF for portable document format). However, most software allows authors to select from a variety of formats when they save a file. For example, Microsoft Word allows the author to select document [DOC], Rich Text Format [RTF], or text [TXT], as well as other format options. Some software, such as Adobe Acrobat, is designed to convert files from one format to another. The format you choose will affect your long-term records management abilities.

Nowadays archivists must maintain the basic function and purpose their profession and that of archives as well and preserve documents of great historical significance no matter on what platform. Essential future challenge for the archivists is to preserve the archives importance within the administration. At the end of 2006 Croatian State Archive started the construction of a new archival information system which should cover all archival functions: storage, preservation, management and facilitate the use of archival records. **ARHINET** is a web application which includes several modules: Security and authorization, Description and processing of archives, Archival register and documentation, Creators and holders of archival material, Preservation of archives, Digital contents and Education. It is, currently, the national archival system in the Republic of Croatia, and it is recognized by the Ministry of Culture as the national project, as part a of the e-Croatia program, the operational plan of the Government of the Republic of Croatia. ARHINET serves as an integrated system on the national basis for the exchange of information among institutions that keep archival records and archives portal for all information regarding the archival material of any kind and content relevant for Croatia. This Register contains all the necessary data on funds and collections, archival units, almost 19.500 records creators and 7.000 holders of archival material.

Another example of preservation of digital records in the world is **DELOS**. DELOS is Network of Excellence on Digital Libraries partially funded by the European Commission in the frame of the Information Society Technologies Programme. It started on 1st January 2004 and has a duration of 48 months. It presently has 55 members.

Digital Libraries represent a new infrastructure and environment that has been made possible by the integration and use of a number of IC technologies, the availability of digital content on a global scale and a strong demand from users who are now on-line. They are destined to become an essential part of the information infrastructure in the 21st century.

The DELOS vision for digital libraries is that they should enable any citizen to access all human knowledge any time and anywhere, in a friendly, multi-modal, efficient and effective way, by overcoming barriers of distance, language, and culture and by using multiple Internet-connected devices. The new generation digital libraries should not just be seen as static information repositories but as growing, interactively, and collaboratively used nuclei of what will be at some stage, a good part of human knowledge that depends as much on information as on communication.

The main objective of DELOS is thus to contribute to the development of the enabling technologies so that its vision for digital libraries may become reality.

Digital Libraries is a multi-disciplinary field whose progress relies on the advancement of many enabling technologies. It is of crucial importance that the research activities that are carried out separately under these enabling technologies are integrated with research activities being conducted within the digital library field, and we consider that to be the main task of DELOS.

DELOS also aims at disseminating knowledge of digital library technologies to many diverse application domains. It can provide specific user communities with access to advanced digital library technologies, services, testbeds, and the necessary expertise and knowledge to facilitate their take-up.

Another project of managing digital records started in 2004. in Australia. In 2003 the National Archives of Australia (NAA) established the Australian Digital Recordkeeping Initiative as part of an ongoing programme which commenced back in the early 1990's with the release of the culmination of effort by numerous parties including the NAA, the State Records Authority of New South Wales (SRANSW) plus many other government agencies, private industry, professional associations and Standards Australia in the release of the then revolutionary Records Management Standards, AS4390.

Dr Andrew Wilson - Project Manager – **Managing Digital Records for Access (MADIRA)** of the NAA (also know as the Archives) advises that the long-term preservation of electronic information is, of course, only one component of a comprehensive approach to managing digital records, but nevertheless it is one of the central issues faced by institutions responsible for preserving access to digital objects over time. Dr Wilson believes that it is important to remember that preservation fits within a broader framework of recordkeeping. So, the Archives activities in the area of digital records preservation need to be seen in the wider context of a developing approach to managing digital records.

## **Conclusion**

When you look at the definition of electronic records and take into account all the problems and complexity of preserving their authenticity, reliability, integrity and usability, it can be concluded that the registration, evaluation and preservation of electronic records is very complex process.

There are many conditions that must be met in order to preserve electronic records properly, and its creators must be aware of and work with the archives as soon as possible in the life cycle of the electronic records.

Archives must help records creators in the evaluation process so that resources are used efficiently for the preservation of important electronic records. In Europe there are already developed systems such as DELOS examining the necessary technical settings, their impact on the authenticity of the records, the potential costs of keeping records, associated metadata, etc., in order to determine the possibilities of quality preservation of records.

Despite already long-term use of electronic records in the business life of records creators, knowledge of archives about electronic records is still mostly only in theory. In practice, archives must begin to supervise preservation of electronic records as soon as possible.

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