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DEVELOPMENT OF THE INTERNATIONAL RECORDS AND ARCHIVES MANAGEMENT STANDARDIZATION SYSTEM

Abstract

Standardization of different aspects of recordkeeping at the international level has quite a long history and has played an essential role in recordkeeping processes in almost all countries worldwide. A good example could be the international ISO standards for paper formats, principles of writing addresses, dates and time. However, it was not until the year 2000 that the international records and archives management standardization system began to take shape. The basis of this system was laid by the international standards ISO 15489-2001 and IEC 82045-2001, as well as by the MoReq specification. Before 2010 this system had been evolving progressively and the new international standards mainly supplemented the provisions of ISO 15489. Yet in 2011 the situation changed fundamentally, and the emphasis was placed on new priorities in this system, bringing the ISO 30300 series to the foreground. Nowadays we can witness the final stage of building an international records and archives management standardization system, but it is still difficult to say whether it will be as widely and consistently used in the world as the first international methodological standard ISO 15489-2001.

Keywords: *standardization, records and archives management, international standard, international standardization system.*

1 INTRODUCTION

Standardization of records management is one of the activities of the International Organization for Standardization (ISO) established in 1946. However, it was not until a little more than a quarter of a century ago that ISO got systematically involved in the standardization of certain aspects of recordkeeping (writing addresses, dates on documents, etc.) and archiving (e.g., requirements for the quality of archive shelving), although the practice of standardizing paper size (such as A1-A8) and its quality (for example, in terms of density and color) goes several decades back. Most of these standards are adopted in all countries of the world either by the method of literal translation (so-called "cover method"), or by developing national standards on the basis of ISO. Russia and Slovenia are no exception in this regard. In view of that we are not going to dwell on the historical aspect but will focus on the present times.

2 THE BEGINNING OF THE INTERNATIONAL STANDARDIZATION SYSTEM OF RECORDS AND ARCHIVES MANAGEMENT (2001-2010)

As a matter of fact, the standardization of records and archives management originated in 2001 from the publication of:

- The first standard of the International Organization for Standardization on Records Management (ISO 15489-1: 2001 "Information and documentation. Record management. General"²);

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2 ISO 15489-1: 2001 "Information and documentation. Records management. Part 1:General" //www.iso.org

- The first standard of the International Electrotechnical Commission for records management (IEC 82045-1: 2001 "Document management. Principles and methods"³);
- European Union specifications for electronic records management systems (MoReq⁴).

Together, these three key documents laid the foundation for the international records and archives management standardization system. At the same time, each of them played their role in this process, finding its application in the practice of work of records managers.

The MoReq specification (in all its variants) is well known to Europeans, since it is applied in almost all European countries, so we will not focus on it. In the context of this theme we will focus on the international standards ISO 15489 and IEC 82045, which, as noted above, were issued simultaneously and independently of each other by two of the most important international organizations on standardization. Despite the fact that both standards deal with the general issue of records management, they approach this process from different points of view.

ISO 15489: 2001 demonstrates the classic managerial approach to working with documents and records and follows the processes of recordkeeping. However, ISO 15489:2001 does not spell out the metadata questions, but only mentions the need for their creation. Metadata are dealt with in a special standard ISO 23081: 2004⁵, which presents the types and kinds of metadata created and used in records management. From the point of view of terminology, ISO 15489: 2001 introduced the concepts of records management, records management system, metadata, migration and conversion of records and some others, typical of information technology used in management. Yet it just formally differentiated between the concepts of record, document and documented information, without any connection with the information carrier, and practically did not reflect the specifics of the electronic document. The 2001 version of ISO 15489 was intended for mixed (paper and electronic) records management systems, which was relevant in that period.

IEC 82045: 2001 considers records management from the point of view of the process approach characteristic of product manufacture, i.e. from the moment of the emergence of the idea of manufacturing the product all along the process of its production and up to the moment of its manufacturing cessation. Moreover, the question of metadata formed in the process of creating and using documents accompanying the product manufacturing is clearly regulated within the framework of the same standard. At the same time, IEC 82045: 2001 assumes that the process of documents management is conducted mainly in electronic form, and introduces a number of terms specific to electronic record keeping: an aggregated document, a compound document, etc.

In the context of the concepts used by these standards, the names of the latter stand out. ISO 15489: 2001, which regulates the mixed document flow, is named as "records management", and IEC 82045: 2001, regulating mainly electronic document flow, as "document management". It should be noted that both of these standards have found their consumers, being really relevant and even groundbreaking for that period, and the only ones which systematically considered the issues of records management. However, the existence of two conceptually different international standards created uncertainty in the priority of their use. As a result, after 5 years of joint ISO and IEC coexistence, a coordinated decision was made to empower ISO to develop conceptual, methodological and terminological standards used in records management, and IEC - to develop technical standards

3 82045-1: 2001 "Document management. Part 1:Principles and methods"// www.iec.org

4 Model Requirements for the Management of Electronic Records (MoReq)// www.MoReq.info

5 ISO 23081-1-2004 (2006) "Information and documentation. Records management processes. Metadata for records - Part 1: Principles"// www.iso.org

related to records management. At the same time, joint development of standards related to technologies used in records management (e.g., digitization of documents, migration of documents, etc.) became a practice.

The ISO International standards on records management for the period 2001-2010, which can be characterized as progressive in its development, prompted an understanding of the importance and significance of records management and aroused interest in this area. Given the fact that these standards are already well studied and described, it seems sufficient just to list them:

- ISO 15489:2001. Information and documentation - Records management - Part 1: General; Part 2: Guidelines⁶;
- ISO 23081-1:2006, Information and documentation - Records management processes - Metadata for records - Part 1: Principles⁷;
- ISO 22310:2006, Information and documentation - Guidelines for standards drafters for stating records management requirements in standards⁸.

The international standards of ISO devoted to the problem of long-term storage of electronic documents stand apart and need special attention. These standards were developed by ISO/TC 171 "Applied systems for creating and storing documents", as a rule, together with the International Electrotechnical Commission (IEC). Most of these documents are not standards in the literal sense of the word, but are technical reports created and used internationally as an example of solving a particular problem or for reinforcing some advanced, but not proven technology.

The international standard ISO/IEC 19005-1:2005 "Document management - Electronic document file format for long-term preservation Part 1: Use of PDF 1.4 (PDF / A-1)"⁹ describes the principles and methods of using the PDF format for long-term document storage both in organizations and archives (including government structures).

ISO/TR 18492: 2005 "Document management application. Long term preservation of electronic document based information"¹⁰. The document contains a concept for developing strategies and practical ways of its implementation applicable to a wide range of electronically documented information (including records) of the public and private sectors to ensure their authenticity and availability over time. The standard contains practical recommendations for ensuring long-term safety of documented information (including legally valid electronic documents) and the possibility of access to them (and of their use) even in cases where their storage period exceeds the estimated period of the use of technologies (hardware and software) the latter having been used to create and maintain these electronic information resources.

The above standards and technical reports represent by no means a complete list of the documents of interest for our theme, but they are fundamental. The point that all these standards have in common is their subordination to ISO 15489: 2001 which was the basic standard, while all others lined up around it and complemented or developed its provisions.

6 ISO 15489-2:2001 "Information and documentation. Records management. Part 2: Guidelines"// www.iso.org

7 ISO 23081-1:2006 "Information and documentation. Records management processes. Metadata for records - Part 1: Principles"// www.iso.org

8 ISO 22310:2006 "Information and documentation. Guidelines for standards drafters for stating records management requirements in standards" // www.iso.org

9 ISO/IEC 19005-1: 2005 "Document management - Electronic document file format for long-term preservation Part 1: Use of PDF 1.4 (PDF / A-1)"// www.iso.org

10 ISO/TR 18492:2005 «Document management application. Long-term preservation of electronic document-based information»//www.iso.org

3 THE EVOLUTION OF THE INTERNATIONAL STANDARDIZATION SYSTEM OF RECORDS AND ARCHIVES MANAGEMENT (2011-2018)

The period since the end of 2010 can be described as a new stage in ISO activities, which is characterized by an integrated approach to the standardization of records management processes through the development of a series of standards devoted to a certain theme, as well as to building the subordination of all standards not to one of them, but to a group of standards, namely, ISO version 30300.

The ISO standards 30300 series "Information and documentation". Management system for records" are developed to assist organizations of all types of ownership and all organizational and legal types to create, use and modernize (improve the performance of) records management systems; and for the purpose of compatibility and application of common elements and methodology with some international ISO standards and their spread to other management systems (for example, the quality management system).

Within the framework of the international ISO standards 30300 series is planned to develop the following:

- ISO 30300 "Information and documentation. Management system for records. Fundamentals and vocabulary"¹¹ laying the groundwork which the records management systems and the terminology of this series of standards must conform to.
- ISO 30301 "Information and documentation. Management system for records. Requirements"¹² shaping the basic requirements for records management systems.
- ISO 30302 "Information and documentation. Management system for records. Guidance for implementation"¹³ practical guidance on the implementation and use of records management systems created on the basis of ISO 30301.
- ISO 30303 "Information and documentation. Management system for records. Requirements for bodies providing audit and certification"¹⁴ containing requirements for bodies carrying out audit and certification of records management systems developed on the basis of ISO 30301.
- ISO 30304 "Information and documentation. Management system for records. Assessment Guide"¹⁵ providing guidance on the assessment and self-assessment of records management systems developed on the basis of ISO 30301.

In 2011 the first two standards of this series were developed. ISO 30302 was adopted in 2015, but the others have not been approved by ISO so far, although the work on them is underway.

The publication of the first two ISO 30300 series standards in 2011 fundamentally changed the international records management standardization system. The scheme of this system was given in the first of them and looked as follows:

11 ISO 30300:2011 "Information and documentation." Management system for records. Fundamentals and vocabulary" // www.iso.org

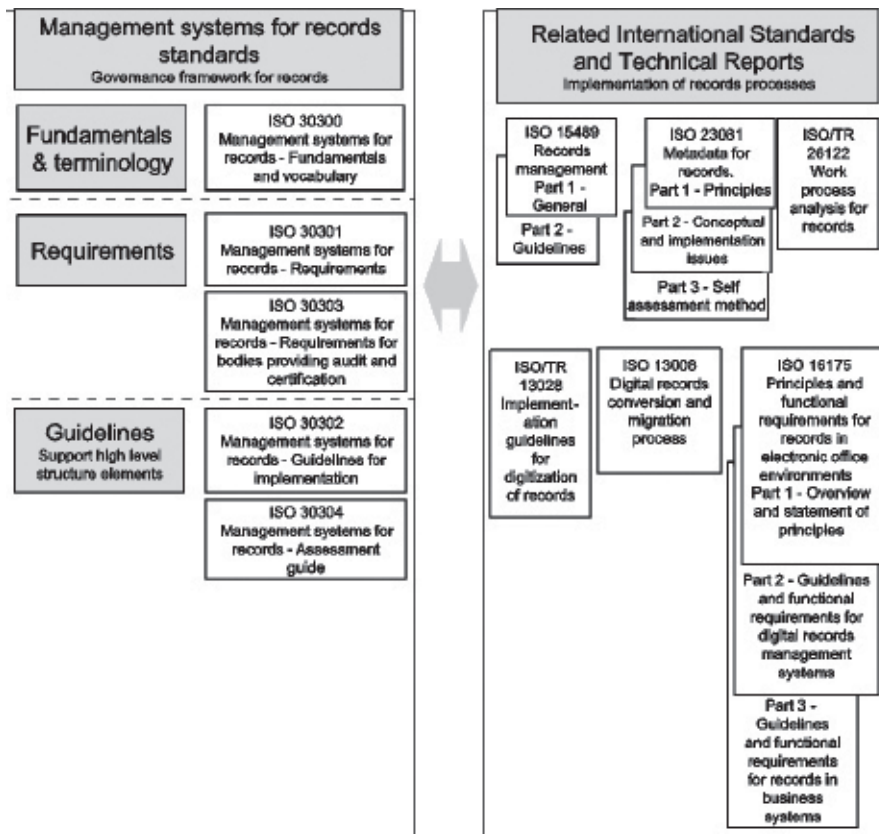
12 ISO 30301:2011 "Information and documentation. Management system for records. Requirements" // www.iso.org

13 ISO 30302:2015 "Information and documentation. Management system for records. Guidelines for implementation" // www.iso.org

14 ISO 30303 (draft) "Information and documentation. Management system for records. Requirements for bodies providing audit and certification" // www.iso.org

15 ISO 30304 (draft) "Information and documentation. Management system for records. Assessment Guide" // www.iso.org

Figure1: Standards on MSR prepared by ISO/TC 46/SC 11 and related International Standards and Technical Reports¹⁶



According to the scheme, it is the ISO 30300 standards that became fundamental, and ISO 15489 supplements them. In the right hand column we can see both well known ISO standards (15489, 23081) and the new ones (28122, 13008, 13028, and 16175). Let's have a closer look at some of them.

International Standard ISO 16175 "Information and documentation. Principles and functional requirements for records in electronic office environments" represents interrelated standards developed as its integral parts and having one common number:

- ISO 16175-1:2010 "Information and documentation. Principles and functional requirements for records in electronic office environments. Part 1. Overview and statement of principles"¹⁷;
- ISO 16175- 2:2011 "Information and documentation. Principles and functional requirements for records in electronic office environments. Part 2. Guidelines and functional requirements for records in electronic office environments"¹⁸;

16 The scheme was taken from ISO 30300 "Information and documentation." Management system for records. Fundamentals and vocabulary "// www.iso.org

17 ISO 16175-1:2010 "Information and documentation. Principles and functional requirements for records in electronic office environments. Part 1. Overview and statement of principles" // www.iso.org

18 ISO 16175- 2:2011 "Information and documentation. Principles and functional requirements for records in electronic office environments. Part 2. Guidelines and functional requirements for records in electronic office environments"// www.iso.org

- ISO 16175-3:2010 "Information and documentation. Principles and functional requirements for records in electronic office environments. Part 3. Guidelines and functional requirements for records in business systems"¹⁹.

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ISO 13008:2012 "Information and documentation. Digital records conversion and migration process" contains recommendations for converting documents from one format to another and migrating documents from one hardware-software configuration to another. It includes requirements for records management and describes the organizational framework for the implementation of conversion and migration processes, as well as issues of technological planning, monitoring and implementation of measures to monitor these processes. The standard for each of these processes specifies the stages, components, specific methodologies and also addresses the issues of workflow management, versioning, testing and validation.

ISO/TR 18128:2014 "Information and documentation. Risk assessment for records processes and systems" is designed to assist organizations in assessing risks related to documentary processes and documentary systems. The technical report contains a methodology of risk identification analysis and a risk assessment guide. The report also describes the methods for analyzing potential consequences of adverse events and a guide for documenting identified and assessed risks in order to mitigate their negative consequences.

ISO/TR 18800:2012 "Information and documentation - Implementation guidelines for disposition of records" understands "disposition" as a series of processes that provide for the classification, disposal or transfer to storage and other controlled actions with records that can be performed when accessing/receiving or creating a record, changing the status of the record, in the case when the record no longer has administrative, legal, cultural or historical value, as well as for archival purposes.

Since 2011 there has been an increased focus on ISO storage processes and the preservation of documents through the publication of specialized standards that complement the provisions of ISO 30300 series. It was suggested that ISO 15489 should be cancelled, but due to a number of circumstances (first and foremost, the position of experts) it was modernized and adopted as ISO 15489-1:2016 "Information and documentation. Records management. Concept and principles"²⁰. Much has been already written about this standard, so we will not analyze it in this paper; however it is interesting to note a change in its status in the system of international standardization of records management processes. From the fundamental standard regulating the issues of records management, it was transformed into a lower-level practice-oriented standard, complementing the provisions of ISO 30300 series standards addressed to an organization's top management. At the same time, the very system of the international standardization of records and archives management acquired a completely finished form. However, most international standards for the period

19 ISO 16175-3:2010 "Information and documentation. Principles and functional requirements for records in electronic office environments. Part 3. Guidelines and functional requirements for records in business systems" // www.iso.org

20 ISO 15489-1:2016 "Information and documentation. Records management. Concept and principles"// www.iso.org

2001-2010 were outdated from the perspective of the development of modern IT, which required their conceptual revision (like ISO 15489) and / or updating (like ISO 23081 and others). This process is gaining momentum and will probably be continued by ISO in the near future. We are not only observers, but also participants in this process by working in ISO national committees, which allows us to treat the international standards on the basis of modern positions and raise the question of whether they should be adopted using the "cover method", as was previously the case. Perhaps it is worth developing integrated national standards (using the full range of international ISO standards addressed to records and archives management) that will take into account the national specifics of working with documents and records in management and archives. There is no definite answer to this question yet, but it is no longer idle. It remains to be seen.

4 CONCLUSION

The development of international norms and standards in the area of records and archives management in the International Organization for Standardization is carried out by Technical Committee (TC) No. 46 "Information and Documentation" involving more than 34 national committees members of ISO – Federal (or State) Agency for Technical Regulation and Standardization.

ISO was the one of the first organization having standardized the processes of records management and which continues to work actively in this direction. It is important to note that the ISO records management standards complement one another. Each subsequent standard develops the provisions of the previous one. ISO standards are international in nature and recognized worldwide. In most developed countries of the world ISO records management standards are adopted by the cover method and are used directly without omissions and specifications, due to a high degree of their elaboration. Given the fact that every 3-5 years all ISO standards are revised (updated or canceled), we can be sure of their relevance.

Speaking about the international standardization of records management, it should be said that since 2001 the work in this area has been carried out systematically and consistently. At the same time, it is impossible to ignore the change in ISO's approach to this issue. Before the year 2000 ISO had been developing standards for individual documentation management issues, but since the publication in 2001 of ISO 15489 (a systemic fundamental standard for records management that comprehensively addresses this issue), the new ISO standards have been seen to be developing the provisions of ISO 15489 or standardizing new aspects of this problem, but within the framework of its ideology and with detailed references to its provisions. The situation began to change in 2010-2011 since the development of the ISO 30300 standards "Information and documentation. Document Management Systems" and acquired a new finished approach in 2012, aimed at building a system of international standards for records and archives management. However, as far back as in 2016, with the release of the updated ISO 15489 and the beginning of work on the revision of both the old ISO standards and ISO 30300, we can see a new surge of activity in the standardization of records and archives management by revising most of the highly-reputed and top-requested standards. From the point of view of the standardization process development in the area of records and archives management, this is an important and very timely step, but it is not possible to accurately predict so far whether the new standards and technical reports will be adopted literally in most developed countries of the world, as was the case of ISO 15489: 2001.

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