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gestione documentale, un quadro complesso e talora di non facile interpretazione, ma comunque ineludibile da parte delle amministrazioni pubbliche.

Il modello ISO non può quindi porsi in conflitto con questa architettura normativa, ma può sicuramente rappresentare un utile strumento di confronto con altri modelli di gestione documentale, anche per integrare taluni profili: ad esempio, il rapporto tecnico dedica ampio spazio alla metodologia di progettazione e realizzazione di un sistema documentario, con un'analiticità e una sistematicità che meritano di essere vagliate, anche in relazione a specifici documenti di indirizzo come GEDOC 2, espressamente dedicato alle tematiche organizzative, tecnologiche e metodologiche relative all'automazione dei sistemi documentari⁴⁷; la descrizione sintetica ma sistematica dei requisiti degli oggetti documentali (autenticità, affidabilità, integrità e usabilità) delinea un efficace sistema di coordinate entro cui impostare le politiche documentarie; l'accento sulle responsabilità, così come posto in ISO 15489, merita di essere sottolineato e anzi recuperato.

Tali indicazioni sembrano essere state accolte dal legislatore, a testimonianza di una sensibilità crescente nei confronti di questi temi: nel recente parere del Consiglio di Stato⁴⁸ relativo allo schema di decreto legislativo recante il codice dell'amministrazione digitale è fatto esplicito riferimento alla norma ISO 15489, di cui viene riconosciuto il valore come studio fondato su un approccio complessivo al sistema documentario e al ciclo di vita dei documenti. Con estrema chiarezza, la Sezione consultiva per gli atti normativi invita "ad una maggiore visione d'insieme, che affianchi la gestione dei documenti a quella degli archivi, quella dei protocolli a quella dei sistemi di gestione [e] ricorda, a mero titolo di esempio, come recenti riflessioni anche in sede internazionale (ad esempio, quella che ha portato alla produzione dello standard ISO 15489 sul "records management") dimostrano proprio la necessità di una visione globale di tutto il processo documentario".

Il valore del modello ISO, quindi, risiede nella sua capacità di proporsi come progetto complessivo, prima ancora che come strumento di certificazione; come occasione di approfondimento e non come coercitivo strumento di normalizzazione; come strumento di riferimento e non come elenco di imperativi inderogabili. La citazione del Consiglio di Stato è un passo importante in questa direzione: l'auspicio è di proseguire su questa strada.

⁴⁷ Autorità per l'informatica nella pubblica amministrazione, *Linee guida alla realizzazione dei sistemi di protocollo informatico e gestione dei flussi documentali nelle pubbliche amministrazioni (GEDOC 2)*, Roma, 2000.

⁴⁸ Parere n. 11995/04 del Consiglio di Stato, Sezione consultiva per gli atti normativi. Adunanza del 7 febbraio 2005.

Hans HOFMAN ¹

Standardisation in records management

Abstract: *I processi di normalizzazione che in questi ultimi anni hanno investito il records management sono considerati momenti di crescita e maturazione della professione. L'autore descrive il lavoro effettuato dal Comitato tecnico TC 46 (Information and documentation), sottocomitato 11 (Archives/Records management) dell'ISO, che ha prodotto lo standard ISO 15489 e, nel 2004, lo standard 23081 sui metadata per il RM. Quest'ultimo standard nasce dalla necessità di fornire un apporto meno teorico e più pratico. L'autore mette in guardia dall'uso di generici set di metadata. Sono necessari set specifici elaborati in relazione alle finalità da raggiungere e agli ambiti da coprire. I metadata per il RM devono pertanto riguardare informazioni di contesto documentario e amministrativo, creazione e struttura dei documenti, contenuto, registrazione, classificazione, accesso, conservazione.*

Introduction

The records management community has become increasingly active in the field of standardisation during the last decade. The first landmark was the Australian standard for records management published in 1996 (AS4390). It was world wide seen as an important achievement and a big step forward for the records management profession in general. It was also taken up as a good starting point for developing a worldwide standard. So in 1997 a committee of the International Standardisation Organisation (ISO) started working on an international records management standard, which led in 2001 to the publication of ISO 15489. Since that day another standard has been published in 2004, ISO TS 23081-1, principles for records management metadata. Both standards reflect a maturing discipline and also an increasing professionalism within the discipline of records management. This field can be characterised still as rather pragmatic and practical, with a focus on filing, describing and appraising records. That image is changing now, although slowly and certainly not everywhere at the same pace.

What do these new standards mean? What are the benefits for organisations to

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use them? They are rather theoretical frameworks, so what impact do or could they have in practice on records and archives management? Questions one may ask in contemplating on this rather new phenomenon. In the following paragraphs these questions cannot be answered extensively, but a short overview will be given of the work going on in the committee of ISO that is responsible for these standards, TC46/SC11. Apart from that the two standards will be briefly discussed with the focus on the standard for records management metadata, ISO 23081-1.

The ISO context

The subcommittee within ISO that is responsible for records and archives management, TC46/SC11, consists of representatives of about 19 countries, among which UK, France, Germany, Australia, USA, Netherlands, Japan, Spain, Italy, and is still growing. The members are coming from different backgrounds, such as archival institutions, business companies, companies consulting on records management issues, standardisation institutes, and academic institutions. As such they represent a broad spectrum of sectors and perspectives and this will be beneficial for a wide acceptance of standards that the committee will develop and publish.

Within SC11 (subcommittee 11) work is done within different working groups. There are working groups on records management metadata, access rules, review of the ISO 15489 standard, and relationships of records management with fields as knowledge management, information management and alike. Apart from this the subcommittee is trying to keep up with what is happening elsewhere within ISO, specifically in related areas. Such areas are the one on imaging and microfilming (TC171) and technical documentation (TC 10) for instance. Both committees are dealing and addressing similar issues as SC11, but from a different perspective. Some co-ordination with those groups is necessary in order to prevent overlapping standards, which will not contribute to the authority of ISO work and will also add to the confusion on what records management exactly may be. There is growing collaboration for instance on issues as metadata and requirements for long term preservation.

The scope and the activities are described in the business plan of SC11 that is regularly updated. Such a plan is required to inform the Technical Committee to which SC11 belongs (TC46), as well as the co-ordinating body of ISO and other technical committees.

Finally, ISO committees not only develop standards. In principle there are three different types of documents. Apart from standards, there are also technical specifications and technical reports which are at a lower level and provide more practical guidelines with respect to a certain topic. The different types of documents have all their own balloting procedure before they are approved and subsequently published, the procedure for standards being the most thorough.

A standard for records management metadata

Standards reflect a codification of a body of knowledge acquired and available at a certain moment in time, that is agreed upon and published. In the records management community this has not been done before the Australian standard was published. In the archives community the Dutch Manual of 1898 may be seen as an very first example. Although not quite similar to an ISO standard, it has acquired its authority solely through a world wide acceptance.

The records management standard, ISO 15489, though giving a comprehensive framework, is still rather abstract. That was the reason for starting to develop additional technical reports and/or standards on specific aspects of the standard.

One of the main topics concerns records management metadata. This is a rather complex and conceptual subject. Most records managers would be pleased for instance to have just a metadata set they can use in their environment, without going into detail about the underlying principles. However, a basic understanding of the objectives and purposes of metadata within a business context from a records management perspective is necessary to be successful in applying and implementing not only the metadata required, but also in managing the records themselves. The basic principle of ISO 15489 is that records management has to be integrated and embedded in the business context of which it is part, in order to be effective. That goes for the associated records management metadata too.

When talking about metadata, currently the world of resource discovery is very much prevalent. The rather simple and flat Dublin Core metadata standard is dominant and widely used in the world wide web environment. Be it as it is, this metadata set as such is insufficient for managing records. So, if records managers want to make a point about the importance of having adequate metadata that can support the management of records, it is important to know what is needed and why. Unfortunately, in practice many records professionals do not always have sufficient knowledge to explain this. One of the reasons for this is the fact that the term and concept of metadata is rather 'new' within the discipline. Originally the term comes from the IT-community where it is used to indicate information about data being stored and processed in information systems. In the recordkeeping community the term has been taken over, but with a slightly different meaning.

It is in this context that in 2001 a working group within TC46/SC11 has been established to develop such a records management metadata standard. With the above mentioned situation in mind, this group has identified the scope and content and decided to develop a three-part document with the following structure:

- 1) Part 1 will provide an overview and discuss the principles of records management metadata. Those principles should give insight into the underlying concepts and the objectives of records management metadata. It is a general discussion of the topic and will help people to understand what roles, responsibilities and issues are involved and what types of metadata are needed.

2) Part 2 provides further explanation of the principles in Part 1 and goes into implementation issues. It offers more practical guidance. The main focus is on the design, development and implementation of metadata schemas, but it starts with an explanation why and how records management metadata support business functions and identifies the inextricable relationship between the two.

3) The third part, finally, will provide an evaluation instrument that will help organisations and professionals to assess whether the metadata set or schema they want to use or have developed within their business context complies to the principles as described in Part 1.

The three parts, when finished and published, will provide the records community a coherent framework for applying, implementing and managing records management metadata in organisations as well as over time. So far the first part has been published as a so-called technical specification in May 2004 (as ISO TS 23081-1), while part 2 and 3 will be published probably in Fall 2005 and 2006. In the meantime part 1 has gone through a ballot procedure to make it a real standard. The result of this ballot has been positive and will lead to an updated version of the existing technical specification that will be published as an ISO standard in 2005. The content of the whole series will be further discussed in the next paragraph.

The content, principles of records management metadata

In the first part the basic principles, the objectives and use of metadata are discussed. Although not a definition it uses the following description of records management metadata.

Metadata management is an inextricable part of records management, serving a variety of functions and purposes. In a records management context, metadata are defined as data describing the context, content and structure of records and their management through time (ISO 15489-1:2001, 3.12). As such, metadata are structured or semi-structured information that enables the creation, registration, classification, access, preservation and disposition of records through time and within and across domains.²

This characterisation explains the role of metadata and is further detailed in the following sections of the document starting with the purposes or records management metadata. This is obviously not only because of records management itself, but first and foremost and in line with ISO 15489 to support the business activities in which the records are created and used. Without metadata records will be more or less meaningless and will not provide the authoritative sources of information as may be required, e.g. for evidence in a court case or for accountability reasons. Metadata describe for instance why, where and when records are created and

² ISO TS 23081-1:2004, Clause 4.

used and what their relationship with other records is. They also provide information about what happened to the records in records management processes. All are important to know how authentic or reliable records are.

In understanding records management metadata it is also necessary to know how they relate to other types of metadata domains where other purposes prevail. In the digital preservation domain, such as the Open Archival Information System (OAIS) for instance, people try to develop 'preservation metadata' sets. Are these sets different or similar or overlapping with records management metadata? The same goes for information resource discovery metadata and the already mentioned Dublin Core set. It shows that there are many different ways of looking at the same thing. Different purposes may lead to different requirements and different sets. Therefore knowledge of the background and underlying concepts of metadata sets is crucial in order to apply them in the right context. Misinterpretation or misunderstanding them will lead to misuse as well as inappropriate and inadequate support of the possible requirements in an organisation.

The technical specification also describes the management of metadata and what processes are involved here. It is often and easily forgotten that this is an essential aspect of metadata. The reliability, authenticity and usability of the metadata involved is dependent on this management.

The final part of this document identifies the types of metadata that are required to support ISO 15489-1. Those types are shortly discussed and include metadata about agents (organisations, individuals), about records, about business rules, policies and mandates, about business processes or activities and finally metadata about the so-called metadata record.

The concept of the metadata record needs some explanation. About each of the above mentioned components metadata need to be captured, starting at the moment of first capture of the record itself and subsequently at all events happening to the record during its existence, such as records management processes, preservation activities, and use. At each event metadata need to be captured, so future users will be able to understand where the record comes from, what happened to it, what restrictions are connected to it, and how the record was used in the past. When records are moved outside their business context of creation metadata about this original context need to be made explicit. That needs to be done every time records are moved across domains. A similar process takes place when records age. Meaning of terms will change over time and these changes have to be documented. Archives have done so for archival records in their custody for centuries for instance.

The whole of metadata collected and captured during the existence of records can be called the 'metadata record', that in itself has to be managed and maintained at least as long as the record exists.

Nonetheless, the principles of metadata existed and exist in a paper environment too, because records and files were described (e.g. provenance) and records

management processes were documented, though may be not as systematically as required. The value of this standard is that these principles are now made explicit in a comprehensive and formally established international document.

The second part of ISO 23081 is not yet finished, but will go further into detail in addressing some implementation issues. First of all it tries to give a further underpinning of why records management metadata are necessary in supporting business activities. Requirements for documenting these activities and the people involved should be derived for instance from the business needs and regulatory context. Other reasons may be supporting interoperability between business systems as well as efficient migration of records between operational systems, and enabling records to be a valuable source of information within an organisation that will accumulate as new records are created and captured.

Most of this future technical report will discuss the design, construction and implementation of metadata schemas that will support the above mentioned requirements. Although many metadata schemas exist, it is still a rather new instrument in records management. Classification schemas, retention schedules and controlled vocabularies are more familiar instruments. It is the method that changes, among others due to the nature of the electronic environment. This does not mean metadata schemas are not applicable in a paper environment, on the contrary they are. It offers a better and more systematic approach, but will require a different implementation than in an electronic environment, where software can help in automating creation, capture and management.

The final section in this second part addresses issues such as appraisal and retention of metadata, capture, storage and preservation, presentation and finally the management of metadata over time themselves. It discusses questions whether metadata should be stored together with the record or separately. Presentation deals with human readable and machine readable expressions of metadata schemas. An example of a machine readable presentation is an XML-schema. This technical report will also include a checklist of issues to be dealt with in relation to implementation of proper metadata including their management.

The third and final part of ISO 23081 will consist of an evaluation instrument that will support organisations in assessing whether the metadata schema(s) they have adopted or constructed are compliant with the records management metadata principles laid down in part 1. Thus establishing a full circle. This work is being done in close co-operation with the Description Group in the Inter Pares 2 project.³ They are building a metadata schema registry, that will contain descriptions of metadata schemas and sets that are or may be relevant for records management or record-keeping. Examples are the Recordkeeping Metadata Set of the Australian National Archives, the Minnesota records management metadata set, the ISAD/G, preserva-

³ See <www.interpares.org>.

tion metadata sets, and even Dublin Core. The latter because many people still think this metadata set, developed for information resource discovery, is also adequate for records management purposes. Apart from a description of those schemas an evaluation is included in the registry. The evaluation the metadata sets and schemas is done against the principles in ISO 23081-1 and the authenticity requirements identified in the Inter Pares 1 project (1999-2001). Most of this work is done by people of the universities of Monash (Melbourne), Los Angeles (UCLA) and UBC (Vancouver). At the moment about 25 metadata sets and schemas are described of which 14 are analysed, while 26 are still waiting to be processed. The idea is that in the end the registry will be publicly available, but there are still organisational and financial issues to be resolved, especially the sustainability of it. Who will maintain the registry, who will own the intellectual property rights, how will it kept up-to-date?

Nonetheless, the whole series will offer a comprehensive set of documents, helpful for organisations to deal with the issue of records management metadata.

One of the critical comments and complaints often heard when discussing the creation, capture and management of metadata is that it is complex, time-consuming, too much, and requiring a lot of effort. Reasons for seeking refuge into simple 'solutions' as offered for example by the Dublin Core metadata set. Whether this will work out, however, is very much dependent on the risks involved by taking this path. If an organisation is dependent on reliable, usable and authentic records it certainly will not. Especially in an electronic environment records are only authoritative if their critical characteristics are well and explicitly documented in metadata and if they are properly managed. Resource discovery metadata are not developed for that and therefore will not support that purpose. Efforts to adapt a standard like Dublin Core for instance to accommodate such a purpose, as sometimes is suggested, may in practice lead to a standard that does not serve either purpose. That is too easily forgotten.

Finally

Alongside the metadata standard other work is being done building on the records management standard in TC46/SC11. Recently a standard with requirements for records management specifications in standards has been published (ISO DIS 22310:2004). The standard aims at including records management requirements into other ISO standards.

One of the main work items is the review of ISO 15489. According to the rules of ISO each 5 years a standard has to be reviewed to see whether it is still up to date with recent developments. In 2004 a user consultation has taken place, trying to collect ideas, suggestions, comments and experiences with applying the standard. The result has given a firm basis for review. First step is to make it more consistent and to align the standard itself better with the accompanying technical report. The current schedule is to have a new consultation draft at the end of 2006.

Another work item is a joint effort with TC171 (imaging and microfilming) to come up with a standard for long term preservation requirements, including functional requirements for systems.

A topic being discussed already for some time within the committee is that of 'access'. This deals with all matters at the interfaces between systems, organisations and users. It includes issues such as management of access rights, security issues, availability, retrievability, representation and interpretation of records, and monitoring quality of access. All these issues have not been dealt with very systematically, let be conceptually, within the records and archives communities so far and therefore it turns out to be not an easy topic to deal with.

Although no standards have been developed yet specifically for archives management, the work of TC46/SC11 is very relevant for archival institutions, because it is setting the scene of what they can expect in the future when archival records will be transferred. The metadata principles as a matter of fact already talk about keeping the records meaningful through time and across domains. This includes archives as well.

So far the archives community has developed its own standards mainly under the umbrella of the International Council of Archives (ICA), such as ISAD/G and ISAAR (CPF), but that may change. A liaison between TC46/SC11 and ICA exists already for some time and quite a few archivists are representatives of national member bodies in TC46/SC11.

Gianni PENZO DORIA

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Abstract: The author deals with some archival questions about records registration: definition, constituent elements, critical factors. He makes a depth analysis on records' attachments.

1. Una stagione di riforme che continua ancora

La normativa degli ultimi anni in materia di archivi e documentazione amministrativa, in particolare nel periodo 1990-2005, risulta non tanto copiosa, quanto piuttosto alluvionale. Si tratta di un segnale tutto sommato positivo in quanto indicatore di una rinnovata attenzione del legislatore verso un mondo poco conosciuto e forse anche per questo quasi trascurato, in alcuni casi, addirittura da un secolo¹.

Tuttavia, possiamo riscontrare inequivocabilmente anche indicatori di segno opposto. Tale è, ad esempio, la caducità delle norme, a fronte di una effimera rincorsa ai tecnicismi unita all'incoerenza lessicale e al mancato rispetto di una regola aurea, codificata anche dall'Unione europea: la norma deve mantenere una neutralità rispetto alla tecnologia².

Ma gli aspetti positivi ci sono e vanno evidenziati. Il pacchetto di riforme collegate alla cosiddetta *Bassanini 1*, assieme a mirati interventi promossi dall'allora Autorità per l'informatica nella pubblica amministrazione (AIPA), ora Centro nazionale per l'informatica nella pubblica amministrazione (CNIPA), ha infatti introdotto nel nostro ordinamento novità di assoluto rilievo, che hanno indirettamente permesso l'esplosione dell'interesse verso gli archivi³. Così, ad esempio

¹ Su alcuni problemi della normativa dei primi anni Novanta del secolo scorso, cfr. G. Penzo Doria *Piove sugli archivi. L'alluvione normativa dal 1990 al 1996*, in *Archivi e cittadino. Genesis e sviluppo degli attuali sistemi di gestione degli archivi. Atti della giornata di studio, Chioggia, 8 febbraio 1997* Chioggia, ANAI - Il Leggio, 1999, pp. 156-174; sugli ultimi anni, cfr. Id., *L'alluvione continua. La normativa in materia di archivi e documentazione amministrativa dalla riforma Bassanini alla costituzione del CNIPA*, in *Codice dell'archivista*, in corso di stampa.

² Recentemente, cfr. Consiglio di Stato, Sezione consultiva per gli atti normativi, adunanza 30 settembre 2002, *Parere sullo Schema di decreto del Presidente della Repubblica recante modificazioni a testo unico delle disposizioni legislative e regolamentari in materia di documentazione amministrativa concernenti le firme elettroniche (dpr 28 dicembre 2000, n. 445)*, punto 5.

³ Legge 15 marzo 1997, n. 59, *Delega al Governo per il conferimento di funzioni e compiti alle regioni ed enti locali, per la riforma della Pubblica amministrazione e per la semplificazione amministrativa*.