

InterPARES Trust Project Report



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1. Introduction

In the research project of the appraisal of archival material on websites, whose case study is the English language website of the Ministry of Foreign Affairs of Israel, we dealt till now with the entire system of appraising archival material in the Ministry, and proved the difference between the various elements of the records on the website, compared with the administrative records of it; both in the essence of their nature and the ways of their presentation and contents. We have reached the conclusion that most of the records on the site have Public Relations (PR) characteristics bordering on the publication-journalistic. As a result, we considered it appropriate to study the use of the various sections on the site, while analyzing Visits and returning visits by users, taking into consideration the parameter of users in the various sections by countries. Thus, we reached the conclusion that users should be one of the parameters for the appraisal of websites¹.

At the present stage of the research project, we are studying the subject of metadata on websites, in the area of records management, with an emphasis on appraisal and preservation. Our research and discussion on the subject are conducted from the stage of creation to the stage of transfer to the archives (not inclusive). As we have done in the previous stages, on this subject as well, we will relate to the levels of section and sub-section², which in the language of computers is regarded as a folder and sub-folder. In addition, it should be pointed out in advance that in no framework of metadata management of the website is there any reference to appraisal and disposition of records, not at the level of sections or sub-sections, and not at the level of records.

This leads to several research questions:

- What parameters of appraisal of conventional and/or electronic records created in a business environment (in the broad sense of the word) can suit records on a website of the type we are discussing?
- Other than the users' parameter, what other parameters should be taken into consideration, in addition to those mentioned in the previous question?
- What metadata addresses the needs for determining the requirements of those parameters?

¹ Silvia Schenkolewski-Kroll & Assaf Tractinsky, (2015). EU01-Research on retention and disposition processes in an internet website of the Government of Israel: The Ministry of Foreign Affairs; Silvia Schenkolewski-Kroll & Assaf Tractinsky, (EU25). Research on Users of the English Website of the Israel Ministry of Foreign Affairs as a Criterion for Appraising Records.

After the conclusion of the second stage of our research project, a paper was published that relates to the subject of archival appraisal from the users' point of view. It does not refer to websites. The paper studied the subject by means of a users' survey, compared with the method in our research project, which was based on studying users' behavior on websites by the use of Google Analytics.

Hea Lim Rhee (2016). Utilizing user studies in archival appraisal practice: feasibility, value, and benefits, Arch Sci. DOI 10.1007/s10502-016-9270-z

² Regarding the relation to sections and sub-sections, see EU01, pg. 31, and EU25, pg. 4, as well as the research presented in this report.

- Are there standard tools regarding the required metadata; and if so, what are the adjustments required for the concrete case under discussion?
- What is the need to create metadata *ex nihilo*?

2. Literature Review

The professional literature that deals with the subject of our discussion can be divided into three types: Those that result from previous research done by InterPARES; National standards dealing with the subject; and those discussed in papers.

The InterPARES dealings with the subject in its previous stages relates to appraisal and metadata of electronic records in the general sense, not specifically on websites; however, we can achieve insights that can be applied to websites from it. Only in the present stages of the InterPARES Trust is research relating to website being conducted.

According to a chronological order of the development of the research, we can start with InterPARES 1 where "The Appraisal Task Force" investigated "whether the theory and methodology of appraisal for electronic records differs from that for traditional records, and what role the activities of appraisal play in the long-term preservation of electronic records".³ The literature review concluded that the theory and methodology that governs the appraisal of electronic records should be the same as that which governs the appraisal of traditional records, and also that the question of authenticity has rarely been addressed in the discussion of appraisal. Similar conclusions were drawn from the review of the policies and procedures of archival institutions.

The Task Force found that information on the context of electronic records was vital to the selection process, especially information on their technological context, which aids in the assessment record authenticity and the feasibility of their preservation. First, policies, procedures, and strategies, informed by the records' context, appraisal decisions (and their updates) and disposition information, need to be developed to manage the selection process.

The next activity of selection the function model identified was the appraisal of electronic records, which is comprised of compiling information, assessing value, deciding the achievability of preservation, and making a decision. To assess the authenticity of an electronic record, the appraiser must consider the extent to which that record's identity has been preserved and its integrity can be ensured by collecting evidence backing the authenticity of the record and comparing it to the benchmark requirements

The final activity of selection in the function model is the carrying out of disposition, which is composed of three parts: "prepare[ing] electronic records for disposition; prepar[ing] records for transfer to the responsibility of the preserver; and transmit [ing] electronic records to the preserver". To conclude its report, the Task Force discusses the differences between the appraisal of electronic records and that of traditional records. In a digital

³ InterPARES 1, Appraisal Task Force Report (2001?).
http://www.interpares.org/book/interpares_book_e_part2.pdf

environment, the appraisal of records early in their life is a key to assessing their authenticity and context early on, as is the continued monitoring after they have been appraised and before they are disposed of. Appraisal, the task force argues, is key to long-term preservation because it requires the gathering of “essential information and evidence to ensure authenticity of electronic records and to set in motion their disposition and long-term preservation”. Due to its basic assumptions, this research can be used as a base for further dealings on the subject.

In Parts Four and Six of the report of InterPARES 2⁴, reference to the subject can be found. Part Four discusses methods of appraisal and preservation, and Part Six studies the role of metadata in the records' cycle of life.

In Part Four⁵, the most important part for us is the one that deals with the question: What metadata are necessary to support appraisal and preservation of authentic digital records resulting from each activity? The researchers found that, with regards to the appraisal and preservation of records, there needed to be a distinction between stored digital records, defined as “the encoding of a digital record within a system”, and manifested digital records, defined as “a stored digital record that is visualized in a form suitable for presentation either to a person or to a computer system”.

The Domain 3, methods of appraisal and preservation, researchers also differentiated between retrospective records (such as dispositive, probative, supporting, and narrative records) and probative records, which “determin[e] the form and/or content of records, actions or states subsequently created”. With regards to the question relating to metadata, the Domain 3 researchers did not have time to determine preservation strategies for the case studies' records and the creators studied in the case studies were involved in neither the appraisal nor the long-term preservation of their records. However, the Project's Modeling Cross-domain included the question of metadata necessary for the appraisal and preservation of authentic digital records in their development of the Chain of Preservation model.

In Part Six⁶ the Description Cross-domain Task Force investigated the role of metadata in the creation, control, maintenance, appraisal, preservation and use of records in InterPARES 2's three focus areas (artistic, scientific, and governmental activities), while also looking at the role of metadata in addressing requirements of reliability, accuracy, and authenticity of records. The Task Force also addressed how metadata should be managed for it to remain trustworthy. In their report, the researchers present their Metadata and Archival Description Registry and Analysis System (MADRAS), a metadata registry system for identifying, registering, and analyzing metadata schemas which was developed for their own

⁴ International Research on Permanent Authentic Records in Electronic Systems (InterPARES): Experiential, Interactive and Dynamic Records, (2008). Luciana Duranti and Randy Preston (Eds.). Associazione Nazionale Archivistica Italiana, Padova, Italy.

http://www.interpares.org/ip2/display_file.cfm?doc=ip2_book_complete.pdf

⁵ Ibid, pp. 160 - 192

⁶ Ibid, pp. 261-307

research purposes but was later adapted into a system for other users. In doing their own analysis of selected existing metadata schemas, the researchers found that schema documentation was often spotty and that in most cases schemas did not meet the requirements necessary to fulfill their stated scope. Next, the Task Force report presents the metadata specification model, which aims to “identify an overall set of metadata requirements that specify what metadata need to be created, from which sources, how and by whom”. Lastly, the researchers present their conclusions drawn from examining several case and general studies. The studies indicated that sectors where legal requirements for recordkeeping are stricter (such as in the government) there are more metadata implementations.

If until now the above has referred to the research of InterPARES 1 and 2, InterPARES 3 also refers to metadata and appraisal, as well as referring to preservation of records in the environment of websites. These are modules 4⁷, 5⁸ and 7⁹ in Digital Records Pathways: Topics in Digital Preservation, regarding digital preservation.

Module 4 of InterPARES 3 and ICA’s “Digital Records Pathways: Topics in Digital Preservation” focuses on giving an overview of metadata specifically within a digital environment and aims at informing information professionals how digital objects (both digitized and born-digital) can be managed and preserved using metadata. The module presents the different categories or classifications of metadata (descriptive metadata, administrative metadata, structural metadata, use metadata) and their relevant purposes. Next, the module provides an overview of how metadata is created, where it exists, how it can be added to a resource, and its structure. In particular, the module explains the development and use of metadata application profiles to realize intentional interoperability. What follows is a presentation of an InterPARES 3 general study to develop a metadata application profile for authenticity, in which the researchers identified the functional requirements (the purpose of the metadata), constructed a domain model (the representation of the entities described and their relationships), and identified the Description Set Profile (metadata elements used to describe the entities) of the authenticity metadata application profile. The module also presents a brief discussion of metadata encoding and metadata harvesting, as well as some questions that need to be asked when deciding to create and maintain metadata application profiles. Lastly, the module contains an annotated list of some of the better-known metadata standards that exist.

Module 5 covers appraisal strategies for organizations’ digital records by presenting on one hand the history, theory, rationale, and issues of selection and appraisal (both by the

⁷ InterPARES / ICA (July 2012). Digital Records Pathways: Topics in Digital Preservation- Module 4: An Overview of Metadata, DRAFT. http://www.interpares.org/ip3/ip3_products.cfm?cat=5

⁸ InterPARES / ICA (July 2012). Digital Records Pathways: Topics in Digital Preservation - Module 5: From ad hoc to Governed – Appraisal Strategies for Gaining Control of Records in Network Drives, DRAFT. http://www.interpares.org/ip3/ip3_products.cfm?cat=5

⁹ InterPARES / ICA (July 2012). Digital Records Pathways: Topics in Digital Preservation - Module 7: Management and Preservation of Records in Web Environments, DRAFT. http://www.interpares.org/ip3/ip3_products.cfm?cat=5

creator and the preserver), and on the other hand “an action plan that offers a workflow to gain control of unstructured digital records”. As part of the discussion of appraisal and selection of digital records, the module brings forward some key points which can be applied across appraisal methods or strategies: “analysis is key to appraisal” and “appraise early, appraise often,” which refers to the need for appraisal to start at the creation of the record, and for appraisal decisions to be updated as time goes on and technology evolves. Appraisal should be done by both the creator, who identifies how long records should be retained during their active and semi-active life, and the preserver, who determines the records’ continuing value and how they will be preserved. The module presents an appraisal process which involves four activities: “compiling information about digital records, assessing the value of the digital records, determining the feasibility of preserving authentic digital records, and making the appraisal decision”. As part of the research component in compiling information about the records, one should determine the records’ various contexts: legal, administrative, provenancial, procedural, documentary, and technological. In the assessment of value of records, not only should the continuing value of records be determined, but there should also be an assessment of their authenticity through a determination of their identity and integrity. The determination of the feasibility of preservation is composed of establishing which records elements and digital components of the records need to be preserved and ascertaining the extent to which preservation requirements can be met. The final step of the appraisal process is the decision, which must be documented whether records are kept to be preserved or not, and records should be reappraised later on in their life to ensure the decision is still valid before the final disposition of the records.

Module 7 of the Digital Records Pathways discusses the different factors to be considered when developing a website preservation program or strategy: “technological abilities; rights management; training; resource description, documentation and access; choice of file formats; validation checks; disaster recovery planning; storage medium; standards; and website capture method”. The more complex the website structure, the more necessary it is for those involved with its preservation to understand the technological environment in which it exists. Clear policies and procedures for recordkeeping should be put in place (if they do not yet exist) and followed to ensure that the institution can demonstrate that it is keeping its records in an accountable way and that these records are accessible in the long-term. Metadata are also necessary to ensure that websites are captured and accessible in the long-term. The module presents the metadata that are required for the capture of individual records on websites: “date and time of creation and registration of the record into a recordkeeping system; organizational context; original data format; the use made of the record over time, including its placement on a website; mandates governing the creation, retention and disposal of the records; and management history of the record following creation”. The module encourages the completion of a metadata audit when beginning of preservation program, to make sure that all the necessary metadata are present upon the capture of the records. Intellectual property rights should be assessed, copyright holders should be contacted for permission, and staff should be properly trained prior to the start of the preservation program. In addition, the method of classification and

description, as well as a disaster recovery plan and an acceptable file format for preserved records, are to be considered when embarking on a preservation program. Once web resources are captured, they must be checked in their new environments to confirm that they “are working as they should”.

Tennis’ research¹⁰ builds on the InterPARES 2 Modeling Cross-domain’s development of the Chain of Preservation (COP) model by investigating the metadata requirements the creation, keeping, and preservation of records. The article breaks the metadata requirements down into a series of categories following each stage of the life cycle (creation, keeping, preservation) and then further them down even further into classes within each category, describing each category and sub-category in detail. Within the category of records creation metadata, three classes of metadata were identified: identity, integrity, and transmission metadata. Identity and Integrity metadata must remain attached to the record throughout its life and into its preservation. The last class of records creation metadata is Transmission Metadata, which allows the record to be transferred into a recordkeeping system at the end of its creation. Next comes the recordkeeping stage of the lifecycle and its associated metadata, which is broken down into four classes: protective procedures, access, destruction, and transfer metadata. The last category of required metadata is those which relate to records preservation. At this point, “the preserver assesses what sets of metadata should be kept as evidence of the record’s life cycle, and what metadata can be discarded”. Within this category, the article identifies six classes: transfer verification and authentication metadata, feasibility of preservation confirmation metadata, record accession metadata, preservation action metadata, description metadata, and retrieval, presentation, and package output metadata. To create Description Metadata, the preserver references Identity, Integrity, Preservation, Appraisal, and Transfer Metadata to “attest to the presumption of authenticity of each record”.

An example of national standards relating to the subject is that of Canada (2010). In its appendices notes the basic requirements of metadata for managing records, related to a description of the information sources of transactions; a description of the agent, author and trustee of information resource with business value; and a description of the event, and the components comprising it, such as date and agent¹¹. An additional two appendices note metadata that relates directly to websites, and include types of resources of the site that require metadata, such as home pages, information to the public, main publications, etc., as well as content management of the resources, including retrieval of information by the use of a thesaurus. With regard to the last two appendices, there is mention of standards such as ISO, and various parts of the Dublin Core¹². This document does not refer to appraisal and disposition from websites, but only to their ongoing management.

¹⁰ Joseph T. Tennis (2008), InterPARES 2, Metadata in the Chain of Preservation Model: Draft Metadata Specification Model. http://www.interpares.org/display_file.cfm?doc=ip2_cop_metadata_model_v2.pdf

¹¹ Government of Canada (2010), Standard on Metadata, Appendix B: Recordkeeping Metadata Requirements, <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=18909>

¹² Government of Canada (2010), Standard on Metadata, Appendix C: Web Resource Discovery Metadata Requirements and Appendix D: Web Content Management System (WCMS) Metadata Requirement, <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=18909>

The only paper that deals directly with our subject is that by Pennock and Kelly¹³, from 2006, which refers to preservation of websites from the aspect of records management. After having determined the fact that preservation of the authenticity and integrity of a site is determined during the time that it is active. One of the main determinations that is integral with the appraisal of archival material in general, is that not everything should be saved. Therefore, a policy should be adopted in order to mandate supervision on the life cycle of website records, from the creation of the record until its permanent preservation or destruction. This supervision should ensure preserving the records' authenticity, even taking into account the frequent changes that characterize updates on websites. In addition, they emphasize the coordination between the creators of the records, their managers and the repositories. A special emphasis is put on assigning the metadata "that offers alternative mechanisms for accessing or understanding content" and maintain log files. They also argue that systems used to update Web sites should retain records of their updates and metadata offline to demonstrate accountability.

This paper refers to single websites, as defined by us as a test case¹⁴. That is not the case in the following three papers, which discuss the accession of many websites at the same time, and none of them deals with conducting a single site. All three refer to the stage of the transfer from a website to an archive. Each of them puts the emphasis on a different aspect of choosing the material intended for preservation, what stages it must go through in the process of accession, as well as the various types of the methodology of the selection – both from the aspect of quantity, as well as the aspect of the subjects taken into account. All this, accompanied by the descriptive and administrative metadata¹⁵. Another paper puts the emphasis on the issue of the size of the collection that one wants to establish, and on the differences between archivists and researchers regarding the relation to the characteristics of the collection¹⁶. Only one article out of the three specifically relates to the appraisal of the material, and determining its disposition: domain, media type, genre, and topic or event. According to the authors, in general, appraisal and selection "can be associated with either a value-based selection or a representative sampling method". In addition, in order to preserve the authenticity and integrity of the chosen material, the principle of provenance must be preserved, and in each case, to use the metadata from the general to the particular, without reaching the stage of single document¹⁷.

To summarize the survey of the literature that discusses our subject, it can be said that the material deals mainly with the stages we discuss: appraisal, preservation, destruction and the metadata that relates to them; while relating to the entire electronic records, and only

¹³ Pennock, Maureen and Brian Kelly (2006). "Archiving Web Site Resources: A Records Management View." In: WWW2006, 15th International World Wide Web Conference.

¹⁴ See Footnote 1, which mentions two of our previous research projects - EU01 and EU025, which discuss the website of the Ministry of Foreign Affairs in Israel.

¹⁵ Kim, Heejung and Hyewon Lee (2007). "Development of Metadata Elements for Intensive Web Archiving." *Journal of the Korean Society for Information Management* 24, no. 2: 143-160.

¹⁶ Dougherty, Meghan and Eric T. Meyer (2014). "Community, Tools, and Practices in Web Archiving: The State-of-the-Art in Relation to Social Science and Humanities Research Needs." *Journal of the Association for Information Science and Technology* 65, no. 11: 2195-2209

¹⁷ Nui, Jinfang. "An Overview of Web Archiving." (2012). School of Information Faculty Publications. Paper 308.

in special cases discussing issues related to websites. However, these discussions do not arise from the aspect of single websites, but with the purpose of appraising and preserving a certain number of sites according to the parameters that suit this type of preservation. Only from the paper dealing with websites and records management,¹⁸ and from the guidelines of the Canadian archives, can we learn about single websites¹⁹.

3. Structure of the Website – Present State

In total, there are 23 metadata fields being used by the website records²⁰.

In the present state, there are three sources for the metadata fields in the system:

1. Metadata fields that are taken from the government internet infrastructure – Govx.
2. Metadata fields that have been defined by the Ministry of Foreign Affairs, and begin with 'mfa'.
3. Administrative Metadata fields that have been defined by the SharePoint 2010 system, and begin with 'MMD'.

The reason for the fact that the metadata fields arrive from three sources is that in Israel most of the government websites are found in the server farm of E-government unit. This unit determines the standards and technological infrastructure for all the government websites²¹. Therefore, when the E-government unit took Microsoft's shelf product and adjusted it to the needs of the websites under its authority, activated Microsoft's extended metadata mechanism as a default choice, and defined within it what was required according to their standards. When the Ministry of Foreign Affairs built their website, it took the ready-made models of the available government unit and expanded them to their needs, by changing the models in such a way that they would contain additional metadata fields, over and above those defined by the unit. The third group includes fields of metadata that are found as a default choice in the SharePoint system. The SharePoint 2010 system of the Ministry of Foreign Affairs website contains several hundreds of metadata fields, but only a small part of the fields serve the internet site needs; and in addition, some of the fields are double. At this stage of the system's operation, only one use had been made of metadata at the level of folder /section, and that is for the section alone. The SharePoint 2010 system makes it possible for material at the level of a document to inherit data from metadata fields at the level of a folder. This is done by applying definitions to the fields. Thus, theoretically it is possible to define to the folder metadata of appraisal and retention schedules, and inheritance them on to the documents it contains. However, in practice, as stated above, an appraisal procedure in general, and retention periods in particular, do not exist on the Ministry of Foreign Affairs website.

Since at earlier stages of the research project we referred to three sections with regard to the possibility of appraisal and reached the conclusion that there was no practical possibility of conducting an appraisal at the level of a document; here, too, we will proceed in the same direction²². Therefore, from the metadata aspect that determines records

¹⁸ See Footnote No. 13.

¹⁹ See Footnote No. 10.

²⁰ See Appendix 1.

²¹ E-government Unit. <https://www.gov.il/en/ExternalAbout>.

²² See footnote No. 2.

management and appraisal will be at the level of section and sub-section, which correspond to the level of folder and sub-folder, and not at the lower level of document or single page.

Since at the level of section or sub-section only the name of the section is used, at a later point of the research the intention is to develop a metadata for managing records to the site, mainly relating to appraisal and disposal at the required levels. Because metadata exists on the site at the level of records (see Appendix), we will try to take advantage of it in accordance with its software and functions to metadata of the higher levels; this, compared with the metadata proposed by Rogers and Tennis²³. The fields related to appraisal and disposal we will take from the same model, and add to it as needed.

4. Discussion

As mentioned above, a research project was already conducted within this framework about users according to sections and countries; and the conclusion was that in the case of a website, and according to its characteristics, they constitute a parameter for determining an appraisal for the content of the site, at the level of sections and sub-sections²⁴. Another element that has not yet been studied, and that may serve as an additional parameter, is the periods of time a page or pages remain in a section or sub-section. The reason for changing them, and whether the frequency of change is results from a permanent order determined by preordained circumstances, or is the result of ad-hoc decisions that change in accordance with the circumstances. An example of the first case is the section of the Consular Services in which, according to orders by it if the slightest change occurs in the texts appearing in the section, the page or pages must be changed. This is due to the judicial nature of the contents of this section. A second example of the first case may be permanent sections such as MASHAV, which publishes programs of courses at set times. The "About Israel" section can serve as one example of the second case, for it changes according to events occurring within Israel. A second example "Foreign Affairs" section – which coordinated information about Operation Protective Edge, and received a special sub-section for that material. Theoretically could now be removed from the site, since there has not been any new material presented on this subject for the last two years²⁵. All the above may affect appraisals and determining periods of retention of a section or a sub-section.

It doesn't seem that with regard to the appraisal itself, there are any additional parameters that are specific to websites; all the other parameters do not deviate from the norm in appraising conventional and electronic records. As for the four values driving this appraisal – legal, administrative, research and social - It seems that according to the characteristics of the material, the last two are those that stand out. The legal value appears in the original record, which is found in the organization's archive; the administrative value exists if the site serves an administrative purpose of any sort, such as in the cases of the Consular Services and MASHAV.

With regard to retaining samples and examples, there also doesn't seem to be a need to implement special methods, but rather to use existing methods for records that repeat

²³ See footnote No. 26.

²⁴ See Footnote No. 2.

²⁵ See previous discussions on the subject of changes in the periods of time pages remain in a section, EU01, pp. 21 – 22, EU25 – Final Report, pp. 6 – 7.

themselves²⁶. In any case, taking into account the nature of the material, this subject requires further study.

Who should participate and determine the appraisal? Should it be the same factors who determine retention periods of routine records? In earlier stages of the research it was already determined that the retention periods that were set for administrative records of the Ministry Foreign Affairs are not suitable for the web site records²⁷. The question arises whether to implement the same procedure, and by the same people, for the website records, despite their special characteristics²⁸.

It seems that in principle, the same composition of factors that determine the appraisal of the ministry's records can determine the appraisal of the various parts of the website. The direct creators of the material: the website manager, his superior from the PR department, and representatives of the various units that provide the material, as well as the records manager, and a representative of the legal department. With regard to the continuation of the process at the Israel State Archives, there too, no changes are required²⁹.

4.1. The Issue of the Metadata

Rogers and Tennis conducted research under InterPARES 3 on the implementation of a profile of authentic metadata³⁰. It is a most inclusive study, which takes into account all the existing possibilities in the metadata of electronic records, in any condition and at any stage of the life cycle of the record. Since we are dealing with determining metadata for the material of a website which is mainly an adaptation of material that is in one of the stages of the life cycle of a record in the Ministry of Foreign Affairs; or that was written not for the purpose of conducting a transaction, as defined for records, but rather for PR or publication purposes. Therefore, there is no need to use all the details of metadata proposed by the authors. In fact, we are dealing here in defining metadata for material that is not a record in the classic sense of the definition. On the one hand, we cannot define the pages of the website as classic records; on the other hand, we do not wish to appraise single pages of the website, but rather, relate to and appraise sections and sub-sections³¹. In fact, if we wish to follow the proposal of Rogers and Tennis, we can define a sub-section as a sub-Folder and a section as a Folder³², because a sub-section contains pages, and a section has files.

²⁶ Terry Cook, (Summer 1991). "Many Are Called, but Few Are Chosen": Appraisal Guidelines for Sampling and Selecting Case Files Archivaria 32.

²⁷ For the incompatibility of the retention periods of records on the websites with the instructions and regulations of the Archives Law-1955, see Silvia Schenkolewski-Kroll & Assaf Tractinsky (2015). EU01- Research on retention and disposition processes in an internet website of the Government of Israel: The Ministry of Foreign Affairs case study. pp. 26-27.

²⁸ On the appraisal process in the Ministry of Foreign Affairs, according to the Archives Law and the rules of the Israel State Archives, *ibid*, pp. 14.

²⁹ *ibid*, *ibid*, pp. 14.

³⁰ Corinne Rogers & Joseph T. Tennis (Last Revision 2016)), General Study 15 – Application Profile for Authenticity Metadata: General Study Report.
http://www.interpares.org/ip3/display_file.cfm?doc=ip3_canada_gs15_final_report.pdf

³¹ See footnote No. 2.

³² In a definition taken from the dictionary of terminology of the InterPARES research, in the world of computers the definition of Folder refers to: A directory in the sense of a collection of computer files. The term is more common in systems such as the Macintosh or Windows 95 which have a graphical user

If we work according to the order the authors determined, we will take into account selected parts from the two following chapters, Managing Records in a Record-making System (A2) and Managing Records in a Recordkeeping System (A3), which relate directly to this phase of our work. We will not deal with Managing Records in a Permanent Preservation System (A4), because this chapter deals with preservation of records in a permanent system – a subject that deviates from the field of our discussions.

In the first part of the sub-chapter that deals with Managing the Making and Receipt of Records (A.2.2.2)³³, we will take into account details of metadata that deal with capturing the record from the aspect of its documentary form, chronology and digital presentation.

In Identifying (A.2.2.3)³⁴: we will use the names of the author, writer, originator, subject or title, the name of the author that appears at the bottom of the record, and his position. We will not take into account the addressee, the recipient, the digital signature nor its authentication, because sections or sub-sections on the website do not have a designated receipt body, nor signatures and their authentication; in addition, no evidence is required.

From the following stage - Declaring Captured and Identified Documents as Records (A.2.2.4)³⁵ – determining new metadata was taken into account: classification code and registration number, which, in accordance with its complexity, may answer all the needs of identity, including the disposition of the records, such as their preservation or destruction. Therefore, only copyrights or other intellectual property rights, if any, were taken into account, and the transfer and/or destruction program.

With regard to Managing the Setting Aside of Completed Records (A.2.3.2)³⁶, our case relates to sections and sub-sections, as opposed to various types of documents, as presented by Rogers and Tennis. As for the process itself, there is no transfer to record management; as a result only the paragraph dealing with the management of various versions and the receipt of audio-visual materials into the section or sub-section was taken into account, and two paragraphs related to the subject of appraisal.

All the parts and paragraphs that relate to this sub-chapter - Managing the Disposition of Kept Records (A3.4)³⁷ - are taken into account, because they discuss the disposition of records; both those that relate to destroying (3.4.3), and those that undergo a preparation process towards accession (3.4.4), and the transfer itself (3.4.5).

As we have seen till now, the metadata system presented by Rogers and Tennis covers all the possibilities in which we are interested – appraisal, disposition and destruction – even if they don't specifically refer to websites. Therefore, we will take the paragraphs selected above and compare them with the metadata of the Ministry of Foreign Affairs website that relates to single records, which can be adjusted to the levels of section and sub-section³⁸.

interface and provide a graphical file browser in which directories are traditionally depicted as folders (like small briefcases). [Computer and Information Sciences]

InterPARES 2 Terminology Database. http://www.interpares.org/ip2/ip2_terminology_db.cfm

³³ Corinne Rogers & Joseph T. Tennis (2016), *General Study* 15, p. 11

³⁴ See *ibid*, pp. 11-12.

³⁵ See *ibid*, *ibid*, p. 12.

³⁶ See *ibid*, *ibid*, pp. 12-13.

³⁷ See *ibid*, *ibid*.p. 18.

³⁸ See footnote 2. Rogers and Tennis's paper, *Authenticity Metadata and the IPAM: Progress toward the InterPARES Application Profile*, discusses the need to add the functional requirements and the metadata proposed by InterPARES, to establish and appraise its authenticity; because none of the other metadata

4.2. Determining Retention Schedules

Another subject connected with appraisal is determining the retention schedule of websites in the government sector. The Australian National Archives have published the recommendations and policy of the Administrative Functions Disposal Authority (AFDA) for capturing websites and their contents. Due to their positions and standing, they are considered official records and are subordinate to the Australian Archives Law 1983. The AFDA has determined that websites and their contents will be dealt with by the legal tools used by the various agencies for retention, destruction or transfer to the National Archives. The document that was published includes retention periods that include three details³⁹: The AFDA number, a description of the material it refers to, and its disposition, such as 'Retain as a National Archives',

Classes 1935 and 20329⁴⁰

AFDA 1935	Snapshot of agency's public website taken in accordance with National Archives policy on archiving websites	Retain as National Archives
AFDA Express 20329	The following significant records: ... and Snapshot of agency's public website taken in accordance with National Archives policy on archiving websites.	Retain as National Archives

or 'Destroy when reference ceases'.

Classes 1936 and 20337⁴¹

AFDA 1936	Snapshots of agency's intranet site, extranet sites and websites hosted on accordance with National Archives policy on archiving websites	Destroy when reference ceases
AFDA Express 20337	<ul style="list-style-type: none"> • Records documenting: routine operational administrative tasks supporting the function; and • publication activities, other than those covered in classes 20329 to 20336 	Destroy 7 years after action completed

methods used concentrate on the authenticity of the records. Joseph T. Tennis and Corinne Rogers (2012). "Authenticity Metadata and the IPAM: Progress toward the InterPARES Application Profile." Proc. International Conference on Dublin Core and Metadata Applications: 38-45.

³⁹ National Archives of Australia Archiving Websites: Advice and Policy Statement, http://www.naa.gov.au/Images/Archiving%20websites%20advice%20and%20policy%20statement_tcm16-47166.pdf (undated).

⁴⁰ See above, pg. 1.

⁴¹ See above, pg. 2.

The different types of material that may appear on a website have been taken into account, such as pages of agencies that are retained permanently in accordance with the policy of the National Archives, as opposed to pages of internet and extranet, which are destroyed when their relevance is concluded. There is also a difference between publications that appear only on the website, and their retention is permanent and official publications that appear on the site but are copies of paper or electronic publications, which are kept in the Australian National Library, and are intended for destruction.

This method, which is used in Australia for determining retention schedules (this is not a reference to earlier phases of appraisal), is not very different from the method used in Israel⁴². Therefore, with regard to the present research, this method can serve as an example. The Archives Law in the State of Israel will also have to determine retention schedules for this type of material, including that of the Ministry of Foreign Affairs.

An example of retention schedules from the Archives Law 1955 of the State of Israel – international cooperation (MASHAV). The Ministry of Foreign Affairs retention guidelines⁴³.

16. International Cooperation (MASHAV)

<p>1. Records that discuss the subject of international cooperation (MASHAV) with countries and international organizations (excluding MASHAV agreements and negotiations to achieve agreements), including:</p> <ul style="list-style-type: none"> - Courses in Israel - Mobile courses - Intermediate reports on courses 	<p>In the head office – 10 years after blocking the file or the conclusion of the affair. In the legations – 5 years after blocking the file or the conclusion of the affair.</p>
<p>2. The Peace Club</p>	<p>In the head office – permanently In the legations – permanently</p>
<p>3. Records on the subject of negotiations for achieving a MASHAV agreement, including an agreement</p>	<p>In the head office – permanently In the legations – 5 years</p>
<p>4. Records on the subject of MASHAV ties with: ministries, national institutions, professional unions, companies, research institutes and universities</p>	<p>In the head office – 10 years In the legations – 5 years</p>
<p>5. Records on the subjects of MASHAV research and projects (excluding final reports on execution of projects and research)</p>	<p>In the head office – 10 years after the conclusion of the research or project In the legations – 5 years after the conclusion of the research or project</p>

⁴² State of Israel, The State Archivist, The Archives Law 5715-1955 and Regulation, Jerusalem 1967. On retention schedules in Israel, especially for the two sections 'MASHAV' and 'Foreign Policy', see Silvia Schenkolewski-Kroll & Assaf Tractinsky, (2015) EU01-Research on retention and disposition processes in an internet website of the Government of Israel: The Ministry of Foreign Affairs case study, pp. 23-26.

⁴³ Israel State Archives site (Hebrew). This is not an official translation.

<http://www.archives.gov.il/%D7%90%D7%95%D7%93%D7%95%D7%AA/%D7%AA%D7%A7%D7%95%D7%A4%D7%95%D7%AA-%D7%A9%D7%9E%D7%99%D7%A8%D7%94-%D7%95%D7%91%D7%99%D7%A2%D7%95%D7%A8/>

5. Conclusions

To summarize what was said in the discussion regarding the questions that appear at the beginning of this research report, it may be said that of the parameters used in a business environment in the broadest sense of the word, because of the nature of websites, the research and social values are the most common. The legal and administrative values are common only in cases of performing administrative-legal functions using the website, such as in cases of the Consular Services or the MASHAV section⁴⁴.

The users' value is undoubtedly an influencing factor in appraisals, since the entire goal of the website is to serve users, of all different types. Other than that, an additional value typical of websites should be the frequency of changing pages (adding new pages and/or removing old pages) on the various sections and sub-sections; in accordance with the characteristics of the section or sub-section, and the contents of the pages they contain. There may be cases in which it is possible to determine ahead of time the frequency of the changes – days, weeks, months – such as in the case of the Foreign Policy section, whose frequency of change is high; and also those where the pace of events dictates their frequency of change, such as in times of war. In addition, the parameter of change also gives rise to determining the appraisal permanently, such as special or one-time events. There is a need to analyze this issue more deeply, and also to take into account the matter of samples and examples.

The metadata that provides the answer to these parameters can be found in the metadata that appears in the management of electronic records. In our case, that which is proposed by Rogers and Tennis, with additions that serve on other levels of websites; such as in the case of adapting metadata of single pages to the needs appearing at the levels of sections and sub-sections. What is mentioned here proves an answer of records management for appraisal and destruction. With regard to the change value, it may be possible to use the metadata of changing versions. In contrast, the users' value requires creating unique metadata; despite the conclusion, in principle, regarding using existing metadata, and only in special cases creating metadata *ex nihilo*. This issue also requires deeper study.

After weighing all the values mentioned above, the example of Australia can serve as a guide to managing retention schedules. The custom in Israel in this matter is similar to the Australian procedure, from the aspect of the process of making decisions on retention schedules for dealing with a website at the level of section and sub-section, as in the rest of the records of the Israel government in general and the Ministry of Foreign Affairs in particular.

6. Continuation of the Research

A comparison between the metadata of the website and the Rogers and Tennis's Application Profile for Authenticity Metadata, and the metadata requirements in standards for records management: ISO 23081-1/2, MoReq 2010, the American Standard for Records

⁴⁴ Silvia Schenkolewski-Kroll & Assaf Tractinsky, (2015) EU01-Research on retention and disposition processes in an internet website of the Government of Israel: The Ministry of Foreign Affairs case study, pp. 21-22.

Management DOD 5015.2, ICA -Principles and Functional Requirements 2-345. Only then will it be possible to achieve metadata that is adapted to all the values we mentioned as determinants related to sections and sub-sections of a website. Then it will be possible to determine which metadata is suitable for a concrete case under discussion, and whether it requires the creation and addition of new metadata, because none of the systems that have been investigated have a solution to its needs.

⁴⁵ ISO 23081-1, Information and documentation — Records management processes — Metadata for records, Principles, 2006; ISO 23081-2, Information and documentation — Records management processes — Metadata for records — Part 2: Conceptual and implementation issues, 2007; MoReq2010, Modular Requirements for Records Systems, Volume 1, Core Services & Plug-in Modules, Version 1.1, 2011; DoD 5015.02-STD ELECTRONIC RECORDS MANAGEMENT SOFTWARE APPLICATIONS DESIGN CRITERIA STANDARD, 2007; ICA, Principles and Functional Requirements for Records in Electronic Office Environments Functional Requirements, Module 2, Guidelines and Functional Requirements for Electronic Records Management Systems, 2008; ICA, Principles and Functional Requirements for Records in Electronic Office Environments Functional Requirements, module 3, Guidelines and Functional Requirements for Records in Business Systems, 2008.

7. APPENDIX 1 – Fields of Metadata

A. Folder Level

.1. Name

B. Document Level

.1 Name

.2 Title

.3 Scheduling Start Date

.4 Scheduling End Date

.5 Contact

.6 GovXDescription

.7 GovXEventDate

.8 GovXRobotsFollow

.9 GovXRobotsIndex

.10 GovXContentSection

.11 GovXDescriptionImg

.12 GovXMainTitle

.13 GovXParagraph1

.14 GovXParagraph2

.15 GovXParagraphTitle1

.16 GovXParagraphTitle2

.17 ContentFiles4Download

.18 NewStatus

.19 MFAEmbed

.20 mfaCountriesLookup

.21 mfaTagsLookup

.22 MFASummaryNew

.23 Approval Status