THE ARCHIVAL FUNCTION: STRATEGIC VALUE FOR ORGANIZATIONS

Alfonso Dávila Oliveda

I. - INTRODUCTION: PRINCIPLES OF ELECTRONIC ADMINISTRATION AND ARCHIVE LAW.

The Electronic Administration draft bill's preamble gathers citizens' right to communicate with the Government Administration through electronic means. The new law's spirit tends to boost citizens' right to have **electronic relations; that is, the right of a citizen to be administrated by electronic means and the right of a citizen to control Government Administration by these same electronic means**.

Complying with the constitutional standard of article 149, the draft bill will set minimum standards of future electronic administration regulations to assure that constitutional rights are not undermined. The maximum standards will, in the future, fall within the scope of the self-governing communities, who will be responsible for improving the rights of citizens within the scope of their community's electronic administration.

Title III of the Constitution gathers the right of citizens to the conservation and increase of their historical heritage, including documentary heritage, regulated by Organic Law 16/1985, relating to Spanish Historical Heritage, and therefore competence of Historical Archives. The regulation of the Administration's duties and of the citizens' right to access the Administration are found in Article 105 of Title IV, which covers future regulation through the law of citizens' audience rights, access to **administrative archives** and registers, and proceedings regulation, all of these being objectives of Organic Law 30/1992, relating to the Judicial System and Common Administrative Procedure.

What this draft bill contemplates is the regulation of the different electronic administration proceedings that have been approved over the years, and, above all, the regulation of the constitutional right to access **Electronic Administrative Registers and Archives**.

In Title III, the draft bill's preamble states that:
'The general acknowledgment of the right to electronically access the Government Administration carries many other consequences which must be considered. Some of these are:

1. The **privacy** of information that is provided in relation to a specific file, but that is stored electronically due to the method of transmittal, and can give rise to the problem of it being used, not in the same file as can be expected, but in other files of the Administration or of any other administration. The standards of Organic Law 15/1999 of December 13th regarding the protection of personal information should be enough and there's no need to revise them, but certain provisions should be made to guarantee that the information obtained through electronic means is only used for the purpose for which it was provided to the Administration.

2. The **interested parties' right of access** to the proceedings and documents of an electronically created or transmitted file. Such file must allow online access to interested parties in order to verify the file's status without diminishing privacy guarantees.

3. The **definition of the electronic administrative 'venue'** with which relations are established, fostering a system of identification, authentication, minimum content, legal protection, accessibility, availability, and responsibility.

4. The **definition of a series of terms and concepts** whose habitual use compels preciseness in the context of electronic communications. This occurs, for example, with the definitions of **electronic file** and **electronic document**, with **electronic registrations** and **electronic notifications**, or with the **procedure and reach of time stamps**.

5. The **use and filing of communications**. This applying to both, the **creation of an office file – linked to the processing of the file** – as well as the archiving of **files that have already been processed**.

6. There are several issues that can't be disregarded in the **electronic processing of files**. One is the presence of more than one interested party in the same file legitimately preferring that the file be processed in **paper form** – invoking the **principle of no discrimination** for using the traditional process – which will allow **examination of the file in traditional form** regardless of the form in which the documents were included in the file (electronic or not). Therefore, since we must recognize the right of each citizen to choose the way he or she communicates with the Administration and the electronic mean or platform that he or she considers more appropriate, it would be premature to impose electronic processing on all services of the Government Administration or of other Administrations, without prejudice to the establishment of some general rules in case electronic processing is instituted for certain types of files or to impose electronic processing on large companies with the capacity and means to comply with it in certain cases. Another issue is the establishment of general rules guaranteeing citizens' right of equal treatment by all Administrations in all of these cases.

7. The necessity to regulate the **validity of the documents and their copies** and the manner in which the electronic documents are fully valid in a conventional manner, and the manner in which conventional documents are transformed into electronic documents.

8. The **platforms to establish electronic communications** that can be used by citizens or by the Administration. Access to a computer and an internet connection can be a way, but it is certainly not the only one; SMS communications can be another way to act and some Administrations are already using them. Digital Television, for example, offers many possibilities that must be studied. The law cannot limit itself to regulate the use of electronic channels available today, since the great speed of technological development makes the emergence of new electronic instruments that could, before long, be applied to electronic administration possible, and this would require new regulation. The law must be based on a technologically neutral principle, since each form of technology could be adequate for certain processes in relation to its characteristics, reliability, and security of communications.

Article 6 of this draft bill gathers the citizens' rights and creates the role of the "Electronic Administration's Ombudsman", who will serve as the intermediary in conflicts arising out of the impairment of established rights:

a) **Access to services and public assistance** through the selected channel out of those available at any given time.

b) **Not releasing the information and documents held by the Administrations** who will be able to access them by electronic means as long as they have the citizens' express consent or a rule of law that allows it.

c) **Knowing the status of the file's processing by interested parties** through electronic means.

d) **Obtainment of electronic copies of the electronic documents involved in a proceeding by interested parties.**

e) **The conservation of electronic proceedings, part of any given file by the Government Administration.**

f) **Obtainment of the necessary identification means for the exercise of this right, being able to use electronic identification of National Identification Cards in all electronic proceedings before the Government Administration.**

g) The use of electronic certificates admitted by the Government Administration.

h) **The guarantee of security and privacy of personal information found in files, systems, and applications of the Government Administration.**

i) Quality of public services available by electronic means.

The draft bill defines the new principles to be established by the Law. These are the new definitions of proceedings and documents that will be established the Electronic Administration's future:

1. **Electronic Act**: Administrative acts adopted, transmitted, or archived in electronic format.

2. **Electronic Document**: Administrative documents issued through electronic means and validated by one or two electronic signatures.

3. **Electronic File**: Set of electronic documents pertaining to an administrative proceeding, regardless of the type of information it contains and allowing the inclusion of consented conversation recordings, and mobile phone images or messages.

The file's contents will be ordered and printed on an electronic index, signed or stamped by the Administration or competent body. The index guarantees the file's integrity and allows recovery of the different documents that make up the electronic file.

The transfer of files will be able to be substituted by the allowance of access to the electronic file, and the interested party will retain the right to a paper copy.

The electronic file consists of the following phases:

1. **Initiation of the administrative proceeding** by the interested party's request through electronic means, for which the electronic request systems or models will be used at the electronic venue, which must be accessible without technological restrictions other than those strictly derived from applicable communication and security standards and criteria according to national and international rules and protocol.

2. Interested parties will be allowed to **provide digital copies of the documents to be included in the file**, providing an acknowledged electronic signature in order to guarantee authenticity. The Government Administration can, at any time, ask to see the originals and check them against the copies provided. The submission of copies authorizes the Administration to access and use the personal information contained in them.

3. Standard application systems will be allowed to **include automatic verification of the information provided** against information kept by the Administrations, and even offer partly or fully completed forms in order to have the citizen verify the information and, if necessary, modify and complete it.

4. Throughout the **file's processing** by electronic means, **the deadlines, the identification of the proceedings' responsible parties**, and the **processing order must be guaranteed** by the applications and systems put in place.

5. The **issuance and the receipt of reports** or actions from intervening bodies or units shall meet all standards required by law: The communication systems used in electronic administration must be guaranteed by the intervening bodies and units.

6. **Submissions of allegations or requests of the right to a hearing by interested parties** must guarantee the use of the channels or means chosen by the interested party, or the Administration must facilitate to the interested party the electronic channels or means so that he or she may exercise the right to electronic administration, which must be published in the corresponding Official Journal.

7. **Resolution of Proceedings by Electronic Means**: The conclusion of the processing by electronic means occurs with the proceeding's resolution by electronic means. The resolution will be guaranteed by the use of legal certificates.

8. **Notifications by electronic means**: For this to occur, the interested party must have chosen or expressly consented to electronic notification. It can also be established by the Administration when dealing with legal entities or when dealing with individuals who because of their financial or technical capacity, profession, or other accredited reasons have access to and availability of the required technological means. To this end, the interested party must have an e-mail address. The notification system must certify the dates and times that notifications are received, as well as the ones received or downloaded by electronic means. These dates will be considered the ones on which the notification is made for all legal purposes. The interested party can, throughout the entire process, request that subsequent notifications are not issued by electronic means.

4. **Electronic Certificates**

4.1. **Electronic Certificates of individuals' National Identification Card.**

4.2. **Electronic Certificates of E-Signature** for natural persons, legal entities, and organizations, including the possibility that they contain references to other personal circumstances or attributes.

4.3. **Electronic Certificate of Administrative Body**: Identifies the competent body and its incumbent. The Government Administration will issue them in all cases that require them.

4.4. **Electronic Certificate for Automated Systems**: Identifies the body responsible for the processing and its incumbent.

5. **Passwords previously established in a Users' Register**: It is the mean by which a citizen's identification and accreditation are verified for those transactions that do not require a superior level of security due to the information and interests involved.

6.-**Electronic Copies**:

6.1. **Electronically created copies of electronic documents**: when issued by the interested party or by the Government Administration, they are considered authentic copies as long as the signature and time stamp allow verification of coincidence with the original document.

6.2. **Electronically created copies of documents originally issued in paper form** by the interested party or by the Government Administration. The series of documents originally issued in paper form of which electronic copies have been made. - In this case, originals can be destroyed, but only in the manner established by the Government Administration.

6.3. **Paper copies of originals created and signed by electronic means** will be considered authentic copies as long as they contain a verification code electronically generated that allows comparison to the original through access to the electronic files of the issuing body.

7. **Electronic Documentary Archives**: Archives containing the following documents:

1. The conservation of all documents used in administrative proceedings by electronic means.

2. Electronic documents containing administrative actions that affect the rights and interests of interested parties can be kept in electronic format, whether it is the same format in which the document was created or any other format that assures the identity and integrity of the information necessary to reproduce it.

8. **File backups of electronic documents**: There must be security measures in place to guarantee the **integrity, authenticity, quality**, **protection, and conservation** of the stored files. Particularly, these measures will assure **access control, identification**, and the fulfilment of the **guarantees established by the legislation regarding privacy of information**.

9. **Electronic Venue**: The electronic address available through free communication networks whose management and administration corresponds to a Government Administration, body, or administrative entity in the exercise of its functions.

10. **Virtual meeting of the Administrative Body's Members**: They can be constituted and adopt agreements using electronic means: Announcement, access to information, notification of the agenda, dates for debates, proposals, and adoption of agreements; all guaranteeing member participation in accordance with the administrative body's rules. The record will guarantee documentary proof of communications and members' access to adopted agreements.

11. **Electronic Means**: mechanism, facility, equipment, or system that yields, stores, or transmits documents, data, and information; including free or restricted communication networks (Internet, phone, cell phone...)

12. **Electronic access point**: Set of web pages grouped together in an internet domain whose objective is to offer users simple and convenient access to a series of resources and services aimed at meeting the specific needs of a group of persons or access to the information and services of a public institution.

13. **Electronic Register**: Application or internet service that validates and certifies the transactions related to electronic forms corresponding to automated administrative proceedings, recording and storing the information of record.

14. **Citizens' access to information regarding processing status**: The processing body will make available to interested parties an electronic service of restricted access, where they can consult the information available regarding the processing status. This information must include actions taken regarding the proceedings, the content of these, and the date they occurred. In all other proceedings, electronic information services will be provided, which must include, at a minimum, the stage reached, and the responsible body or unit.

15. **Electronic communication**: Process of information transmission from an emitter to a receiver by electronic means, using a specific code which must be encoded by the emitter and decoded by the receiver.

II. - THE CONTRIBUTIONS OF ARCHIVES TO ELECTRONIC ADMINISTRATION

II.1. - PRINCIPLES OF THE INTERNATIONAL ARCHIVAL DOCTRINE:

Concern about archives in relation to electronic administration began many years ago as computers produced the first electronic documents. Following professor Cruz Mundet in

his new text "Document Management by Organizations" and Canadian Terry Cook, archival practice has evolved with new administration systems giving rise, within the Anglo-Saxon community, to concepts such as "documentary management" developed by Schellenberg, which advanced the "integral archiving" notion, developed in Canada during the 70s, the "records-keeping" concept, and Cruz Mundet's "records continuum model".

From 1960 to 1976, the International Archive Council analyzed the impact of the implantation of electronic administration, as well as the problems generated in Government Administration by the substitution of archive work with electronic services, and the creation of informatics description grounds by University Institutions. This led to the Council's creation of the International Computer Science Commission, which derived their work from the analysis of documents generated by electronic means, the study of electronic administration users, and the study of informatics' treatments, whose work is published in the ADPA Gazette. A Pilot Project was designed in 1987 to archive the electronic documents of Government Administrations PGI 87/WS/14 (Enquête Internationale sur les documents informatiques dans les pays en développement).

From 1993 to 1996, the new Electronic Documents Committee summed up their efforts with the publication of the "Guide for Managing Electronic Records from an Archival Perspective" approved in 1997 by the CIA. During 2000-2004, the Electronic Documents Committee published the **"Electronic Records a Workbook for Archivists"**, translated into Spanish by Dolores Carnicer Arribas and José Ramón Cruz Mundet, and published by the Ministry of Culture. As their authors comment, its objective is to "provide practical help to all those that are interested in incorporating electronic documents into an archive system, preserve them, and make them available". It's, therefore, a condensation of ISO rules 15489-1, ISO/TR 15489-2, and, above all, of its professional experience and dealings

with the ISO/TC 46/SC and the InterPARES project (International Research on Permanent Authentic Records in Electronic Systems).

International bodies have also worked in the adaptation of archiving processes so that the same are carried out by electronic means. The different nations and professions related to documents and archives have reached the same conclusion, the need for standardization. Standardization of archive organization work: classification, order, and description. Standardization of languages: Thesaurus. Standardization of computer software: creation of a universal language compatible with any type of computer network.

All this work has yield various accomplishments that can be summed up in rules ISAD (G) and ISAAR (CPF) dealing with standardized description on an international level, the creation of an international reference database for which the Library and Information Science College of the University of Pittsburgh has developed the metadata system, and the creation of a universal XML language system which can be recognized by any type of platform. Finally, the EAD RULE has been developed (Codified Description of Archives): EAD is a DTD of SGML and XML that regulates the labelling of electronic instruments aimed at archive description. Its objectives are description instruments related to any type of documentary fund or collection, including documents of textual and electronic files, audiovisual material, and sound registers. It establishes the necessary labels to describe the structure of description instruments and the semantic of its different components. The last step in this process has been the approval of the International Description Rule by the International Archive Council in its Seville meeting in the year 2000: ISAD (G) and ISAAR (CPF), to which NEDA Rules or the Spanish Rule of Archive Description will be added in a near future.

II.2. - THE DOCTRINE'S PRINCIPLES IN THE SCOPE OF THE EUROPEAN COMMUNITY

The European Community's Government has three great projects in mind for the development of one unique electronic administration for the entire Community:

1. Plan of Action, Promotion, and Development of Electronic Administration: The Electronic Administration draft bill mentions the importance it acquires within the communitarian scope from the European Council of Lisbon and Santa Maria de Feira, and culminating in the i2010 Action Plan of Electronic Administration Promotion and Development.

The European Community has selected two crucial indicators to define the "eEurope" plan (Europe online):

- Feasibility of public services online
- Total number of public services that can be accessed online

These indicators were defined in the year 2000 as an objective of the "eGovernment" (Electronic Government), to facilitate generic access to electronic public services. 20 basic public services were chosen for this study by the European Commission, and their online electronic administration has been supervised. Since their implantation in 2000, their development has grown to the point that the 2006 report shows that 50% of these services exist in all the countries of the European Union, of which 75% carry out all their electronic administration online.

The 2006 June report shows that Spain offers 18 out of the 20 established public services online, highlighting the creation of the CIRCE Platform, the issuance of the CIRCE Platform's Authority Certificates, the Citizen Portal, and the Connect Plan with the

introduction of the electronic national identity certificate through the National Identity Document (DNI), presented at the March, 2006 meeting creating the Advisory Government Administration Council with the objective of transforming Government Administration by adapting the new roles of technological information and communication, removing obstacles that oppose its development, and communicating the development of a coordination model between the different administrations, establishing the Electronic Register, which will coordinate more than 800 administrative proceedings online, as its key.

2. DLM-Forum. (Donnés lisibles par machina) Machine legible data

It meets every three years to cover the conclusions of the European Union Council with the objective of improving cooperation within the field or archives. In 1991, the European Union commissioned a group of experts to produce a report covering the Community's archives, which was presented at the European Council's meeting of June, 1994 (BCE. Nº 235 of June 17th, 1994), leading the European Council to make the following conclusions:

1. Creation of a forum for Government Administrations, National Archive Services, and industry and research representatives in order to create the guidelines for the conservation of information stored in electronic format, delimit the basic documents of the information society's collective memory, search for the best means of conservation of electronic documents, and facilitate access to citizens at the same time that the information is being protected.

2. Favour the exchange of students and archivists through the use of continuous training and education programs.

3. Creation of an Information Guide to establish the security, standardization, and conservation criteria for the applications being used.

4. Creation of Technical Publications

5. Publication of Archive Description Instruments

In 1996, the DLM Forum established the necessity to determine the Model of Requirements for the Management of Electronic Registers, giving name to the MOREQ Management Model and Project.

3. MOREQ: Model of Requirements for the Management of Electronic Registers: We have alluded to the fact that the Spanish Ministry of Government Administration communicated, in the European Commission's March meeting, that the key to the future system of Spanish Electronic Administration lies in the Electronic Register.

The European Commission's General Directorate of Companies, based on the DLM Forum's recommendation, commissioned a small group of specialized advisors from the firm Cornwell Affiliates plc, with the support of experts and validation organizations from various countries from public and private sectors, to develop the specification models of requirements for the management of electronic registers.

Management of Electronic Registers is complex and requires the correct application of a series of functions since it is the validation key of electronic documents and the system that will give them diplomatic characteristics of veracity, not only to the documents themselves, but to the elements that make up the system and have been the object of study in the INTERPARES System.

MOREQ defines the management of Electronic Registrations such as the **Electronic Records Management System (ERMS):** made up of one or more electronic documents that may be generated on any type of information technology software (text, image, Sms), but that turn into registers once selected or recorded in the ERMS. Once recorded, the documents are classified, that is, they are assigned codes corresponding to the classification system's class they correspond to, and can, from that point forward, be managed within the ERMS.

The ERMS are accumulated and managed in electronic files and stored in electronic folders. The peculiarity is that these electronic folders don't have to really exist. They can exist virtually, in relation to the metadata associated to the corresponding registers. The software user handles the system as if the documents were really found within the folders assigned to these files.

This is why the system contemplates files as "register containers". Occasionally, to alleviate their weight, files are mechanically dealt out or divided among volumes that are specified according to size, number of registers, or vital cycles.

Files can exist for a limited time period, which means that they are opened at the beginning of the proceeding and closed once it has ended. Other files exist for an unlimited or almost unlimited time period, responding to continuous management procedures which are carried out through the use of volumes: Budgetary procedures continue in time corresponding to an annual period of budgetary management to a specific volume.

The management of registers requires the establishment of a structure that should reflect the activity's functions. This is referred to as "**Classification System**", which tends to rest on

a hierarchy although a thesaurus that is not of a hierarchical nature can also be used. This way, the System adopts a genuine appearance, but, in reality, they're only accumulations of registers in the different levels of the system or an accumulation of files composed of registers from superior and inferior levels of the hierarchy (the outline of classification systems correspond to the ISAD(G) rule approved in the year 2000). The hierarchical specifications receive the denomination of "Class", which in some texts are referred to as group, series, subgroup, or subseries.

- **Characteristics of the ERMS:**

1. It must allow use of the classification and organization system and be compatible with it. If the system is hierarchical, it must allow at least three levels, although, occasionally, the use of more level could be necessary.

2. When the ERMS is configured, the denomination mechanisms must be defined. This means that the initial elaboration of the classification system is directly linked to the configuration.

3. The ERMS must allow administrators to add new classes in any position within each class, as long as the files are not stored within the point in question.

4. If the ERMS possesses a graphic interface, it must allow the navigation and exploration in a visual environment of the files and the structure of the classification system, as well as the selection, recovery and presentation of the electronic files and their content by such mechanism.

5. The ERMS must allow the definition and simultaneous use of various classification systems (merger of two organizations), and it must allow the use of a distributed

classification system whose maintenance can be carried out through a network of electronic registrations deposits.

6. The ERMS: It must support the metadata of files and classes of the classification system. Once a register is captured, the administrator will be able to add or modify its metadata.

7. The ERMS must allow two mechanisms for the denomination of electronic files and classes within the classification system that can be applied conjunctively or individually within the same application:

    - Reference code of a numeric or alphanumeric structure
    - A mechanism that assigns a text title to each electronic file

8. The ERMS must allow the addition of files to the lowest level of any classification system, and the recording of a new class or file's creation and the inclusion of this date in the file. The system must automatically include the attributes related to its position in the classification system among its metadata. It must possess a vocabulary controlled by a thesaurus for the denomination and designation of files, the validation of names, assignment of terms, etc. (ISO 2788 o ISO 5964).

9. The ERMS must not impose limits on the number of files or classes, and it must automatically keep a list of files.

10. The ERMS must allow the opening of electronic volumes of any electronic file that has not been closed, record its date of opening, include its attributes in the metadata, allow the concept of volumes of open or closed files, prevent that electronic

registers are added to closed volumes, and allow administrators to reopen a volume that was previously and temporarily closed and close it again after adding the relevant registers (error correction).

11. The ERMS's maintenance must allow the relocation of an electronic file and its volumes, or of a complete class of the hierarchy in a different place of the classification system and guarantee that all electronic registers stay linked to the relocated files and volumes (fusion of organizations, restructuring, copy error corrections, etc.).

12. The ERMS must allow an electronic register to be classified in another electronic file's volume, reserve the capacity to move classes, files, volumes, and registers of the classification system to administrators, leave clear documentary proof of its class to know its history, introduce the reasons for the reclassification, and prevent eliminations except for conservation calendar reasons or as part of the audited process.

13. The ERMS must allow the closing of electronic files in accordance with the specific procedure reserved to administrators, that allows automatic closure when the previously defined criteria such as the end of the natural year, the conclusion of deadlines, etc., are met, automatically recording the closing date in its metadata. It must prevent a temporarily open volume from staying open after the administrator disconnects from the system.

14. The ERMS must allow cross references between files, connecting them to one another.

15. The ERMS must maintain at all times the internal integrity of relations and of the rest of the elements that permit multiple entries for one electronic register in various electronic files, without duplication of the electronic register through the use of markers.

16. The ERMS must allow the presentation of statistics regarding the characteristics of the classification system, including the number of files, registers, or electronic volumes created, closed, or deleted within a specific time period.

- **Control and security of the ERMS:**

Groups the requirements of a wide spectrum of controls related to the security of registers. Organizations must be able to control who is allowed access and under which circumstances because they can contain reserved personal information, commercial or operative, or allow restricting access to the country's external users. They must allow storage in an audit track (register of actions taken) of access to registers and any other related activity, such as documents or related information with the object of guaranteeing their legal admissibility and facilitate data recovery. Security also covers the capacity to protect them against any system failure by the creation of security copies and the possibility of restoring the registers.

- **Conservation and Elimination:**

Creation of conservation calendars that govern the elimination of registers from the functioning systems: The conservation calendars determine the time during which the ERMS must conserve the registers and how they are to be eliminated. Section 5.1 establishes the requirements related to conservation calendars. As to conservation periods, the system must allow that they are from 1 month to 100 years, and it must contemplate the transfers, among systems, including copies sent to another system.

- **Capture of Registers:**

The term capture is used to design the recording process of a register, the decision of which class it will be added to, the addition of complementary metadata, and their storage within the ERMS. In the context of an ERMS, the recording and the rest of the processes can be independent or indistinguishable among each other.

- **References:**

The different components that make up the ERMS (classes, files, volumes, registers) require unique identifiers each time the entity in question is considered, extending this characteristic to all of the ERMS or, at least, to the corresponding hierarchical level.

Search, Recovery, and Reproduction:

Recovery is an integral part of the ERMS, a search will be carried out when concrete details are unknown, and reproduction is the onscreen visualization, printing, and video or audio presentation.

- **Administrative Functions:**

Support and maintenance instruments of the ERMS must offer the possibility of organization transformations, modifications of the number of users, increase of requirements in storage capacity, recovery after a system failure, and follow-up of such failures. The ERMS articulates them as:

1. **General Administration**: Requirements related to the management of system parameters, security copies and restoration, system management, and user administration.

2. **Reports**

3. **Modification, deletion and creation of registers**: As a general principle, this action cannot be taken until the end of the life cycle within the ERMS, although exceptional circumstances can arise: User error, compliance with the law. Deletion can consist of destruction or of a note in the register's metadata that indicate that the register is considered withdrawn from the control of register management.

The system can require the publication or facilitate registers with reserved information, so the reserved information must be able to be suppressed without affecting the register. This process is called "drafting". The ERMS stores the original register as well as the copy, which is referred to as a register's "extract".

- **Other Functionalities:**

1. **Non-electronic Registers**: Referred to as "physical files", are classified registers, allowing the administration of hybrid files composed of physical and electronic registers. All the conservation or elimination tasks that must be carried out when dealing with electronic files are applicable to physical files.

2. **Administration of documents**: Sometimes organizations resort to documentary electronic management systems or EDMS, which can lead to dysfunctions with the ERMS.

3. **Task Flow:** It's the automated part or totality of a business process in which certain documents, information, or tasks pass from one participant to another with the object of taking actions according to a set of procedure rules. Within the ERMS we resort to task flow in:

- Management of processes or vital tasks such as recording procedures of files and registers
- Verification and approval of registers before proceeding to their recording
- Derivation of registers or files in a controlled manner among users, with the object of taking certain actions, such as verifying a document or approving a new version.
- Communication to users regarding the availability of registers
- Distribution of registers
- Network publication of registers

4. **Electronic signatures**

5. **Encoding**

6. **Electronic filigrees**

7. **Inter-functionality and opening**: Necessary in the environments in which establishing communication between the different ERMS is required, such as occurs, for example, in large firms or between different State entities.

- **Non-functional requirements:**

1. Ease of use: Online assistance, error messages, allowance of various records at once, possibility to configure the visualization windows.

2. Performance and scaling: Studies to what degree the ERMS presents a quick response period and is capable of providing a service to the user population for

which it was conceived. This will depend on the network's bandwidth, its use, and the server's configuration and resources.

3. Availability of the system: Users must be informed as to the system's availability.

4. Technical norms: Hardware setting, operative system, user interface, databases (related: OBDC, OLE DB, Oracle or Sybase), network protocols, codification at different levels, exchange rules (XML, HTML, SGML), development kits, and the following program interfaces: COM, DCOM, CORBA.

5. Rules and legislative requirements.

6. Data management by external services and third parties: Numerous organizations resort to service providers when dealing with storage and management of inactive registers or registers of infrequent use that must be conserved during the time period stipulated by law, whether required by judicial or State law or by industry regulators for reasons derived from long-term conservation. The contract between the client and the service provider must include that management is to be maintained at the minimum level of the client's own internal registers and that the client can recover the registers from the service provider according to the organization's rules and in a way that judicial validation criteria are met.

7. Long-term conservation and obsolete technology: Long-term refers to a time period superior to 10 years. In an organization the conservation time period should be fixed according to legislative and activity-related requirements. In some environments, this time period will cover various decades, in some archives it could even be centuries. Long-term maintenance depends on:

- Format degradation: As formats reach or surpass their life expectancy, the possibility that reading errors could occur increases. To extend this time period, it's convenient to have a clean, cold, dry, and stable environment, substitute formats before their life cycle ends, keep various copies of each register, and compare them systematically in accordance to a calendar.

- Obsolete hardware: A new strategy must be adopted based on the supervision of the state of the hardware and on the migration of information to new formats before obsolescence can affect them.

- Obsolete formats: The software doesn't tend to stand the pass of a couple of decades, so the strategies adopted are those of migration to other formats, emulation of old hardware, conservation of the technology or the original software, and linking of data to software (even in investigation). All the same, the conservation of information in open formats that enjoy general acceptance is preferred as well as that the conservation metadata is stored with the registers.

- **Metadata: As a general principle, organizations must allow the number of metadata believed to be necessary and they must allow the use of different formats such as alphabetical, alphanumerical, by date, and logical (YES/NO/TRUE/FALSE), as well as allow their validation. The ERMS must allow the classification of metadata elements at least by the name, identifier, and description defined by the user.**

- **Reference Model (Glossary of Terms)**

The MOREQ project received a total of 170 comments from 18 community countries between March and October of 2004, which were used to draft a base model whose application was to be simpler than the original MoReq, denominated MoReq2, which was approved in the year 2005 by the European Community's Commission. It's expected that after its final approval in 2007 it becomes the model of reference for all community countries regarding archive management of electronic documents. The MoReq2 is not a new Manual. It's complementary to the MoReq, and it improves several aspects. The MoReq2 establishes the following areas as priorities:

1. Facilitation of access and control, being necessary to include more options and flexibility for documents of collective bodies, documents of local coordinators, official registers, and document revisions.

2. Retention of schemes and rulings

3. Exportation and transfers

4. Conservation

5. Metadata

Since 2001, all these areas have undergone modifications derived from the approval of ISO15489 Rules of Document Storage, the work carried out by Great Britain's National Archives, the German DOMEA concept, and, overall, the standardization of key metadata words by the ISO 23081 and ISO 14721 Rules, and the integration to ISAAR (CPF) Rule.

The MOREQ2 structure is based on the MOREQ's own structure, which is why, once it's approved, it will be easy to establish one single Manual for all Electronic Management of Archives. The new resulting MOREQ will be introduced by the personalized review of each DLM Forum member country, paying close attention to the evolution of initial criteria over the archiving of electronic documents such as e-mail communications, which are now given special importance when it comes to their conservation, placing them at the same level of all other documents and recommending their archive form to prevent any alteration to them. This same importance is also being given to the integration of scanned images or image captured by the ERMS.

One of the most interesting proposals of the MOREQ2 is the "Casework" required by the National Archives of England, Gales, and the United Kingdom, which in Spain we consider them as the files that describe the conservation units or as the contemplation of the conservation units' contents found in the Topographic Inventory, useful to deposit recounts and, in the future, practical to recounts of the ERMS's files.

Another proposal is the Content Management Systems, which gather a great variety of contexts, including IP Internet Protocols, recommending the necessity of control by the ERMS's Archives System of the contents of Web pages, Intranet, and Extranet of public organizations.

Regarding conservation, the MOREQ2 states that conservation must be managed with priority from the beginning of the life cycle of documents, from their creation until their utility period terminates, establishing the conservation areas of the ERMS in the following areas:

- Management of Intermediate Archive (In Spain: Management or Office Archive): Necessity to maintain digital objects containing intermediate conservation metadata supported by document replicas created by the administrator, needing to verify their authenticity, and replacing them in intermediate time periods.

- Active conservation: The ERMS must allow identification of document formats and support migrations to different formats, keep opened links to format classifications, technologies, substitute formats periodically, rename them, keep links with the documents' different system uses, and provide their possible globalization or previous dispositions of document manifestations.

The consideration of semi-active or semi-current Archives is recommended (retaining the documents in the system during time periods of 3 to 5 years). Their intermediate conservation will depend on their volume, closing date, provisions for possible additions or aggregation of documents to be completed so that they can reach the end of their processing. The same should be easily migrated to other formats.

The principles of metadata actualization are based on ISO 15836, ISO 23081, and EAD Rules.

II.3. - PRINCIPLES OF THE ARCHIVAL DOCTRINE IN SPAIN.

Spain has never been a country too inclined to broadcast its archival knowledge by manuals and publications. Instead, the upholding of specific legislation on this subject has always been preferred. This means that the custody and conservation of documents gathered in citizens' rights are not matters open to social discussion and therefore not something that worries society in general.

The new technologies and the implantation of the rights of access to registers and administrative archives of article 105 of the 1978 Constitution are changing this tendency, as can be seen in that archive manuals appear accentuated in editorial advertisements and the same have been used to document and draft a good part of archival legislation.

Until the appearance of Antonia Heredia's Archive Manual, Spain lacked any specialized publications regarding archives except for archivist Matilla Tascón's "Cartilla" from the 1940s. Even so, we've had to wait until 2006 to find a Manual that can serve as orientation to solve the problems that arise within organizations regarding conservation and management when found entirely in electronic formats.

The 20th century ended with D. José Ramón Cruz Mundet's Archive Manual, and Ana Duplá del Moral's "Administrator's Manual of Office Archives". One was born out of the necessity to provide solutions to the field of municipal archives, and the other to arbitrate an administrative manual of a whole Archival System of new creation such as the one for the Community of Madrid.

Today, the profession counts with the manual titled "Documentary Administration in Organizations" by Professor Cruz Mundet, (who, in all justice, should be the one setting this forth), published by Pirámide Publishing House in 2006, and which I expect to see translated to Anglo-Saxon language soon, so that it serves as an incentive to our archive procedures and can be placed at the level of manuals such as the ones created by Schellenberg, Duchein, Durante, Cook or the famous French Archive Manual.

This manual, structured in 12 chapters establishes a new concept of the archival function in Spain to face the new management of files and documents within electronic administration.

We could have taken the easy way out and copy what has been done in the USA, Canada, and Australia, but Cruz Mundet has elaborated a new doctrine that comes from the roots of Spanish National Archives, from their beginning in the XIII Century with our first national archive (The Archive of Aragón's Crown), and the roots of our own criteria of administrative rationalization.

The first two chapters of the book serve the archivist as a way to know the solutions that archival schools of thought have applied to electronic archives: The Anglo-Saxon, including American, Canadian, and Australian, and the European, including the German Registratur and the French and Italian schools of thought.

Cruz Mundet, establishes that future planning of our electronic administration will be a hybrid of conservation of documents in paper form as well as of electronic documents, which seems to be the correct way to go, since the draft bill gathers the possibility of turning all electronic management to paper format for its conservation since systems only guarantee long-term survival for 10 years as the MOREQ specifies, but from this date, no company certifies the durability of computer formats.

However, parting from this handicap, Cruz Mundet presents the future archival strategy, proposing the planning of all bodies creating documents from a purely electronic perspective, giving full validity to future planning of Management Systems of Electronic Registers of the Government Administration or of any other company.

His manual distinguishes the following stages of archival organization:

1. Guiding Principles: (ISO 15489:2201)

1.1. Documentary management guides the work of archivists and organizations (which is contrary to archivists guiding the work of organizations' documentary management). It proposes a scheme of a single, common structure in all documentary management systems, independent of the size and complexity of the organization.

This system's structure is composed of:

- The **Subsystems**, depending on the vital cycle of the documents:

  1. The **Management Archive** considers a stage of creation and use from 0 to 1 year (The MOREQ2 considers the management of the intermediate archive). This stage corresponds to the performance of the following functions integrally affecting organizations:

     - Catalogue of Proceedings (Administrative Process Study): Pretends to standardize, describe, and control all activity processes or administrative proceedings with the objective of simplifying the processing, optimizing the use of technologies, and standardizing documents.

     - Catalogue of Documents: Comprises catalogue functions of proceedings to establish control over the production and standardization of documents.

     - Control of documentary flow: Comprises the system of management, distribution, and registration of documents with the objective of standardization.

  2. **Intermediate Archive**: Use and elimination 1 to 15 years (MOREQ considers them archives of long duration for a maximum of 10 years).

  3. **Historical Archive**: Use and conservation. Documentation that is older than 15 years (full coincidence with the historical archive guidelines of the MOREQ).

- **Functional tools**

1. Documentary control system: The management, control, and register system of documents created by organizations. For such, the following developments are required:

- Standard document design
- Restructuring of procedures
- Catalogue of documents
- Control of documentary flow

2. Classification and structuring system: MOREQ talks about the necessity to classify future Electronic Registers Management Systems, which are the main nucleus of the future Electronic Administration. According to Cruz Mundet, classification has the following advantages for organizations:

- Links documents to organizations
- Designates objects according to types
- Recovers all documents related to an activity
- Assures the protection, access, and adequate use of documents
- Conserves documents during the retention periods established in the evaluation and selection processes since their actions are carried out over series of documents.

The key to electronic documents classification lies in the architecture of its metadata, which is responsible for keeping the order since the metadata maintains all pieces united in the order they are created within the process.

The following are considered tools annexed to classification: Ordering system, use of controlled languages, indexes, and codification.

3. Description

The set of tools and tasks aimed at informing about the content of documents from a simple piece to the documentary background.

Some archivists, in this sense, talk about the concepts of macro-description or micro-description, depending on if they're referring to documentary funds and series or compound or simple documentary units. I don't really share this concept because it can't be simplified that way. It's more complicated than that. Within electronic administration, we must interpret the whole set of tasks that permit the identification of all ERMS components through the use of metadata sufficient and necessary to the description of systems as well as to the description of entries of system components.

4. Installation and deposit (Gathering of proposals of the General Administrative Archive's Electronic Administration).

It would be necessary to endow Archives with a **new sphere of deposits and services** with the objective of treating and conserving future databases and administrative treatments of telematic networks. This way, organizations would initiate historical conservation as common heritage of the Digital Patrimony, according to the recommendations of UNESCO in its document **LETTER FOR THE PRESERVATION OF THE DIGITAL PATRIMONY**.

UNESCO defines digital patrimony as "the unique resources fruit of the knowledge or expression of human beings. It comprises resources of a cultural, educative, scientific, or administrative character, and technical, legal, and medical information as well as other types of information that are directly generated in digital format or are converted to such format based on the existing analogical material. Products of digital origin do not exist in any format other than electronic."

UNESCO's concept of "Digital Patrimony" comprises therefore: "texts, databases, fixed or moving images, sound recordings, graphic material, computer software, or Web pages among many other possible formats within a vast repertoire of growing diversity". All of them are considered Documentary Patrimony according to article 49 of Law 16/1985 dealing with Spanish Historical Patrimony, which defines document as: "All natural or conventional language expression and any other graphical, sound, or image expressions in any type of material format, including computer formats". Its conservation for future generations is, therefore, the Government Administration's responsibility.

For this conservation task, it's necessary to establish novel architectural characteristics since conservation deposits for these fragile formats require special conditions of coolness, antimagnetic isolation, special measures of atmospheric pressure to avoid suspension dust, spaces reserved for the conservation of all types of computer equipment, digital laboratories, and a new concept of work spaces and consultation by researchers and citizens.

These new facilities should give coverage to the following work units:

RESEARCH AND DEVELOPMENT TECHNOLOGY

- Treatment of computer applications affecting the different facets of human activity, from accounting applications to scientific research, commercial activity, control of stocks, banking activities, client management, etc.
- Management of user-generated products
- Protection and design of security protocols
- Administration of computer networks
- Installation and uninstall/disassemble of programs and equipment
- Management, proposals, and administration of technologies aimed at the reproduction of documents independently of the format they're kept in
- Management of system and network communications
- Management, creation, and design of databases, files, and links
- References of reproduction on demand
- Conservation and diffusion programs
- Reproduction of secondary documents
- Management of files generated by the proceedings
- Analysis, study, and application of technological resources to encourage the dissemination of the Archive

Computer Systems:

- Communications, systems, and networks
- Physical maintenance: wiring, wiring racks (of data as well as voice), switches, routers, installation of shared devices (printers, CDROM units, etc.). Use and manipulation of voice and data distribution racks for enlargements and modifications (This task must always be done in collaboration with "Maintenance")
- Logic Maintenance: User network, access levels and groups, security, shared resources, network software installation and maintenance, installation of shared programs and applications, and security copies

- Exterior communication and other local networks
- Basic telephone lines (RDSI or RTB), Local connexions through conventional modems for e-mail
- Revision and control of equipment with e-mail access, equipment independent of the local network, and individual equipment
- Databases/ files storing images/ links
- Maintenance, control and follow-up of files that store images and all things related to digitalization and reproduction of documents
- Maintenance, control and follow-up of databases' modifications in general applications as well as in area-specific applications, and, specially, in description databases
- Creation of links, guiding files that connect the documentary database to the stored image files
- Network's physical maintenance

Image laboratories:

- Reproduction on demand for internal and external clients

  Photocopies

  Microfilm

  Printed images

  CDROM, DVDROM, etc.

- Conservation reproduction/ diffusion: This conservation reproduction will be subject o specific programs or projects:
  - Study, evaluation, and quantification, keeping in mind that before being reproduced, they must be described, at least, on a second level.

- The description process will determine if any copies are to be restored, and, as the last part of the process, they will be reproduced.
- It is convenient that this reproduction be in a format of superior durability, as common practice, and that the necessary copies are obtained from the master, both for consultation and sale of copies.
- Follow-up, actualization and renovation of digital formats.

- Coordination of tasks with the National Documentary Reproduction Service.
- Reproduction of secondary documents (description instruments, databases, etc.).
- Administration of technological resources of digital diffusion through any type of network

Management of the Electronic Administration's Documentary Deposits

- Supervision of software and hardware updates of magnetic formats for the conservation of electronic management and administration data.
- Custody and conservation of digital signatures' guarantees such as the historical databank of digital signatures
- Supervision and guarantee of environmental, antimagnetic, and anti-combustion conditions of documentary conservation deposits of management and electronic administration
- Guarantee the fulfilment of conservation deadlines and access restrictions in accordance to the preservation of information affecting citizens' privacy
- Diffusion of administrative data in electronic format to the Administration and to citizens, and information to citizens and to research requests

- Elaboration of studies regarding the declaration of goods of a documentary historical character from the Central Government Administration management databases
- Guarantee the conservation of Historical Proceedings in digital format

5. Valuation, Selection, and Elimination

According to Cruz Mundet, any well-designed system will take care of controlling the factors that influence document inflation, as we've seen when dealing with documentary control. Nonetheless, it's not always possible, nor convenient to preserve all that is produced, regardless of how controlled it is, since there are documents whose utility is limited and others who, though useful, cannot be reasonably preserved in their totality. It's, for the most part, a matter of logistics due to documentary inflation, since an organization now produces more documents in one year than those produced in previous decades.

In the case of electronic documents, "the conservation strategies must be selected on the basis of the capacity available to maintain accessibility, integrity, and authenticity of the document as well as cost-effectiveness" (ISO 15489-2, 2001, 20). Logically, in the ERMS, this activity must take place in the periods of intermediate archive.

6. Batch transfers

Within electronic administration they will be done between the ERMS, classified for that purpose, since the characteristics of electronic documentation will require the integral maintenance of the immediate archive management systems' characteristics. The procedure of electronic transfers, however, must still be defined, having dealt, up to date, only with PDF formats and software.

7. Vital documents and risk prevention

Cruz Mundet refers to this as operations aimed at safekeeping the ERMS from the possibility of catastrophes, which are enhanced in the scope of electronic administration since a general and prolonged power failure can destroy the safety measures of any security system of the ERMS. Archives must find the right strategies for the preservation of software against any contingency.

- **Normative Tools:**

1. **Rules of the Document Management System**

   Cruz Mundet establishes it aimed at the creation of corporate archive policies and to their implementation within a set of precepts and fundamentally technical inspiration that serve to set, interpret, homogenize, and carry out the exercise of such policies.

2. **The Procedure Manual**

   It's a compound and open document that standardizes and develops the operative fulfilment of procedures related to the use and archiving of documents in an organization. It originates from Total Quality principles and ISO 9.000 Rules.

- **Functional Tools:**

1. **Training of users**
2. **Group of speakers**

The strategy presented by Cruz Mundet regarding the contributions to organizations can be summed up in that it's not a planning of the organization's Archive System, but the

establishment of the principles under which the organizations will carry out their functions. The required principles would be:

1. **Identification of the needs of organizations** regarding documents. Documents are necessary to carry out the organization's activities, to assure that individuals and organizations are responsible for their activities, and to assure the rights of third parties. The archivist is responsible for identifying the documents that are vital to the continuity of organizations and third party rights as well as preserve the confirmation of their existence for the future.

2. **Evaluation of existing systems**: Action that allows organizations to adapt their structures to the necessities of the market or management. Its best control point is the analysis of the archives of each organization unit, the archives that the organization keeps outside of its offices, and the archives shared with other units.

3. **Identification of Archival Strategies**: Establishment of the conclusions reached in the analysis phase.

4. **Design, development, and revision**: The plan of archive and document management system contemplates it as the condensation of various plans at different levels: A long-term strategic plan, a series of sectional plans composed of the sectional stages and pilot projects since the components of the archive system must be integrated and adapt to the corporate management systems.

III. - ELECTRONIC SOCIETY AND THE WAYUU SOCIETY'S ARCHIVES

Weilerdr Guerra Curvelo, in his anthropological study of the Wayuu society "Disputes and words. The law of the Wayuu society", marks our humanity's social evolution in the case that organizations continue to develop and encourage the technological revolution without thinking about or solving the problem of the historical technological archive which must preserve not only the state of the actual humanity, but also the antecedents that make up our social structure background, population balance, and the preservation of social peace.

He gathers the beginnings of Roberts and Gulliver about antagonism and dispute according to which "the situations of antagonism in societies, which tend to precede disputes, present themselves when sources of tension arise between individuals or groups that can result in a declared struggle... The difference between disagreement and dispute (Gulliver: "Disputes and Negotiation: A Cross Cultural Perspective". Nueva Cork Academic Press) also has to do with the public or private character of both... (Roberts: Order and Conflict. Nueva Cork, Penguin Books, 1979). Roberts considers that some disputes frequently arise within a cyclical process and are linked to the type of socio-political organization, values, and imperative beliefs of the society involved, while others obey the behavioural changes in persons, the introduction of technological innovation, and the fact that the consequent environmental alterations can't adapt to the established social norms".

The demographic density of the Wayuu territory corresponds to a densely populated region geographically encapsulated population in continuous growth. The social response to this demographic overload has been the displacement of population surplus to urban centres complemented by new economic activities appropriate to urban grounds such as paid work and commerce. Spatial distribution of the territory corresponds to a pattern of disperse folding, in housing sets. The spatial distribution of the population is not uniform due to the financial opportunities and the ecologic options available in the different areas. The mobilization of families and individuals follows defined and limited migration patterns.

The most frequent is cyclical migration during the severe and prolonged summers to regions that present more favourable weather conditions such as the coasts. The return migration occurs in the winter. Disputes often occur over the control of water sources which require an extraordinary expense, control of marine resources, etc.

But this society, similar to our advanced technocratic civilizations, can become akin to ours in the future. One lacks the technology and the other can lack the background because technology is incapable of arbitrating real situations related to the conservation of the technological memory. Both societies, however, will end up equally because the survival of their legislation and rules must be led by a new social profession, the **"MEDIATOR", who in Wayuu society is the person in charge of dissolving and administrating social conflicts applying oral legislation.**

The origin of mediators goes back to the primitive knowledge of the Wayuu society such as the one of a great legislator (Ma´leiwa), who classified the wayuu into clans and dictated the first descriptions of their social organization. The mediators are trained by observation and experience of words. It's something that is transmitted from generation to generation. Words are learned by listening to elders, mediators, and persons who know how to speak and interpret a message, to later transmit them to future generations. This way they conserve their customs and maintain the power of words.

Mediators use rhetorical resources regarding nature, social background, moral rules such as life's praise, freedom and peace, and invitation to wealth. It's appropriate to invoke customary rules widely extended and explain obligations in relation to social ideas that are rarely mentioned in everyday interaction. The mediator or middleman provides a channel of communication between hostile parties and introduces a code of compromise and peace through which they can communicate.

These social rules of the Wayuu society are fully linked to the society emerging from the technological revolution. The databases and the www.com are becoming the propagation system of the power or words. Organizations run the risk of trusting the maintenance of this system without the intervention of the archive management systems, which might not be experts in the design of new technology, but do know the principles of durability of the systems and the means by which these shall continue to be transferred in the future. We also run the risk that all computer technology whose life period is estimated to be 10 years is transformed into a mediator that can only transfer the part of its memory that lives in the parts of the computer formats that have not yet been affected by natural degradation.

BIBLIOGRAPHY:

CRUZ MUNDET, José Ramón. Document Management by Organizations. Madrid: Pirámdie, 2006.

Idem: "Archive Manual". Madrid: Fundación Germán Sánchez Ruipérez.

DLM FORUM: http://europa.eu.int/ISPO/dlm

DUPLÁ DEL MORAL, Ana. Administrator's Manual of Office Archives. Madrid: Marcial Pons-Comunidad de Madrid

MOREQ and MOREQ2: Model of Requirements for the Management of Electronic Registers. At http://cornwell.co.uk/moreq

ELECTRONIC ADMINISTRATION DRAFT BILL: Spanish Ministry for Public Administrations, 2006