



Electronic Legal Deposit at the National Library of Chile

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Meeting:

193 — *e-Legal deposit: from legislation to implementation; from ingest to access* — Bibliography Section with IFLA-CDNL Alliance for Digital Strategies Programme (ICADS), Information Technology, National Libraries and Knowledge Management

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Abstract:

The National Library of Chile is the main institution which collects and preserves the nation's documentary memory, due to its legal mandate given by the 19,773 Chilean Law in Title II, Article 14 of the, which includes all printed, audio or audiovisual and electronic productions of the country.

In recent decades, electronic journals, as well as the digital television and radio broadcasting had become key elements for the collective memory registry. Since 2009, the National Library has held a series of meetings with producers of electronic information such as directors and representatives of TV channels and radio stations, urging them to comply with the Legal Deposit Law, sending their production at the National Library to make it available for public access.

Due to the large volume of information expected, and the complexity of the storage and cataloguing, the first step was to design a pilot program which included one e-journal, one television channel and one radio station, all of them representative within a national scope.

It started with a collaborative working system between the Digital Collections Department staff and the people from each producing company in order to establish principles, processes, formats, and standards for electronic production to ensure an effective and satisfactory deposit for both parties.

According to its mission statement the National Library has the obligation to preserve and give access to the community within the intellectual property legislation. In that context, a series of preservation and access strategies were carried out starting with the creation of a special Department of Digital Collections which has developed an electronic legal deposit policy with its own manual of procedure, the implementation of a management of digital collections software, the construction of a digital resources special room, and the definition of storage and preservation policies. During this process a number of problems had happened because of the constant change of the technological environment, there has been external and internal resistance and because it requires a high investment of human and technical resources, mostly to ensure accessibility and permanent storage.

Therefore the National Library of Chile is taking on the challenge that will consolidate our mission within the digital environment to collect, preserve and provide access to collections representing the country's memory for present and future generations.

GENERAL SCOPE

The National Library of Chile is the main institution which collects and preserves the nation's documentary memory. With its almost two hundred years, is one of the most oldest within Latin America and is considered one of the most republican institutions of all times. Since its foundation in August 1813, has been constantly collecting items which are connected to the intellectual and cultural production of the country in different periods.

During the 19th century, the National Library became one of the most relevant centers for intellectual and cultural development of the country, collecting actively through purchase and donations of important private collections belonging to relevant intellectual people at the time. It is worth to mention the Andres Bello's valuable personal library which comprises books on philosophy, science, law, literature, linguistics and the selected works of the French naturalist Claudio Gay, those with a scientific and historical interest.

On the first decades of the 20th century, the National Library's collections continued to grow, mostly because of donation, such as Diego Barros Arana's American collection in 1920 and the one owned by the eminent bibliophile and historian Jose Toribio Medina who donated in 1925 the most extensive and precious collection of 22.000 rare books and over 500 manuscripts, including first editions and American Incunabula, maps, stamps and photographs.

Since its creation on 1925, the Legal Deposit Law has been the central instrument to increase the collections of the National Library, and which ensures the institution to encompass the Chilean bibliography and all publications produced within the country in all formats.

LEGAL DEPOSIT

The Legal Deposit Law was created in October of 1925 and today this is a normative that has been included within [19.733](#) Law about Freedom of Opinion, Information and Journalism, published on *Diario Oficial* on June, 6th 2001.

According with Acuña (2007 p.15) on the Chilean Law “The Legal Deposit is defined as the obligation of very editor of printed materials, audiovisual, electronic and/or phonographic works producer, within the country and meant to be commercialized, to deposit the work at the National Library a number of copied of each piece, with the aim of preserving the memory and increase the cultural heritage of the country”.

Since 1929 the National Library has a specialized office to control the law’s mandate called *Unidad Visitación de Imprentas* (Printing press visitation office), which has the ability to request the deposit all material published in Chile, moreover this department has established a good relationship with the printing companies to ensure the fulfillment of the law. If there are still companies not sending the material, this department has the duty of asking the court for penalties.

In relation to the application and scope of the law 19.733, in Article 13 ° mandates that "all **print, sound recording or audiovisual or electronic production** made in the country and intended for sale should include the name of the person responsible or establishment that produced the printing or production, and the place and date thereof, without prejudice to comply, where appropriate, with other conditions specified by law. In the case of books, will be clearly indicated the number of copies required.

Article 14 ° persons or organizations referred to in the preceding article, shall deposit to the National Library, at the time of publication, fifteen copies of every work printed, whatever their nature.

In the case of periodicals, the Director of the National Library is authorized to sign agreements with the producers to establish joint agreements for legal deposit, reducing the number of paper copies, **replacing the rest by reproductions of them in microfilm and / or electronic media**.

The National Library may reject and demand a new copy, if any of the specimens deposited in any medium, showing deficiencies or any deterioration that prevents its conservation and access.

In the case of **sound recordings or audiovisual and electronic productions** for selling, those persons or establishments deposited two copies of each.

AGREEMENT WITH PRODUCERS: THE TRUE SPIRIT OF THE LAW

Since 2009, the National Library launched a series of meetings with directors and representatives of TV channels and radio stations, so that, in their capacity as producers of

audiovisual materials, audio or electronic, start fulfilling with the legal provision deposit its domestic production in the National Library to make it available to the public access.

The strategy used was based on the cooperation agreements between the institution and producers of electronic information aimed for facilitating the delivery process established by law based on the need to preserve the memory of the country for future generations, starting from the premise that in recent decades, the programming of TV channels and radio stations have become key contributor in the collective memory registry. Just as the press is an essential source of knowledge and understanding of historical processes since the dawn of the republic. Nowadays, radio like television are key factors to understand the different processes of Chilean society development.

To implement the process of trial run, it became necessary to form teams of collaborative work between staff of the Department of Digital Collections of the National Library and the respective producers, in order to establish principles, processes, formats and standards so that production can be deposited in an effective and satisfactory way to both parties. The agreements are specified in section 2 of the "Manual of Procedure for the Legal Deposit of Electronic Resources."

TRIAL PROJECT: COLLECTING THE ELECTRONIC LEGAL DEPOSIT

As TV channels must deposit their production, the National Library has the obligation to have effective means that this material is accessible to the community while protecting intellectual property rights according with the law, thereby helping increase public access, and strengthen national identity and the production of new knowledge. This created the need to establish a set of strategies for preservation and access, such as the creation of a Department of Digital Collections, the definition and development of an electronic legal deposit policy with its own manual of procedure, the implementation of a software management and management of digital collections, and the construction of a special reading room of digital resources. The definition of back-up information policies, among others, had produced complications because the new processes are constantly changing, some of them create external and internal resistance and require a high investment of human and technical resources, mainly in the accessibility and storage areas.

To implement the project a pilot trial run was designed, with three representative producers of digital information of different features and formats:

Televisión Nacional de Chile: It is the National Television Network who deposits all the programming broadcasted on a publication copy quality, which are handed in four DVDs per day properly labeled (broadcast date and time). The information is stored to the institutional computer server which represents an average of 10 TB per year.

Radio Cooperativa: It is a national radio broadcast private company, which deposits all the transmitted programming on a publication copy quality. Additionally this radio station deposited historical transmissions from 2002 to date. The monthly deposit comprises four labeled DVDs which are stored in the institutional servers which represents 350 GB per year.

Diario El Mostrador: Electronic periodical publication (e-newspaper) deposits every day in Text format in a DVD. Additionally the company deposited their database which helps accessing the collection; this tool is currently not available for the general public. This publication uses 1.7 TB per year, which is stored in the institutional computer server for its preservation and access.

ORGANIZATIONAL REORGANIZATION: DIGITAL COLLECTIONS DEPARTMENT

The Digital Collections Department was created in 2008, with the aim of develop and coordinate a preservation and dissemination of digital heritage resources policy, ensuring their collecting, preservation and access, and creating spaces and opportunities for the cultural identification of the community with its own heritage.

Among its main strategic objectives are:

- Collect, preserve and disseminate heritage and cultural digital resources important for the country.
- Establish digital resources collecting policies for the institution.
- Develop and implement digital preservation strategies for valuable digital resources.
- Establish standardized conversion, description and preservation processes for heritage digital resources.
- Promote the development of the integrated use of the information technologies and communication within the National Library.
- Define, implement and use specific tools of digital collections management.

ELECTRONIC LEGAL DEPOSIT POLICY

Although the current law about legal deposit includes the digital resources, does not explain or give guidelines about how this could be implemented from the preservation perspective. This situation motivated the study carried out by the Digital Committee of the National Library entitled “Digital Resources Legal Deposit Policy of the National Library” and its “Manual of procedures for the digital resources legal deposit”, where all definitions, procedures and standards about format and metadata for each kind of electronic resource is detailed.

The document includes the following chapters:

Management context

1. Records

2. Protocol agreement

2.1 General agreements

- Overview of the Legal Deposit Law
- Overview of the Intellectual Property Law
- General description of the deposited material
- Agreement of the person in charge of the deposited information
- Agreement of the National Library
- Publications conditions of the deposited resources

2.2 Specific agreements

- Publication information (ISSN, ISBN)
- Publication typology (book, periodicals, etc.)
- Periodicity (daily, weekly, monthly, etc.)
- Deposit periodicity (daily, weekly, monthly, etc.)
- Typology of the deposited material (audiovisual, image, text, audio, etc.)
- Folders and files names.

Technical Framework

1. Organization

The material to be deposited must be sent to the National Library according with the following:

- Producer entity: Institution or entity which produced the digital resource.
- General subject: main content subject of the digital resource.
- Title: Name of the publication or program.
- Date: Publication or broadcasting date.

2. Delivery forms

According with the type of material deposited, must be delivered to the National Library as it follows:

- Preservation copies (Masters): Two separated copies on back-up tapes LT04, classified as it was explained on the previous section, respecting the correlative order of the files. No fragmented files or incomplete be received.
- Publication copies: These could be delivered according with the previously mentioned organization, using an On-line tool which will be available in the National Library Website shortly.

The National Library may modify the form of delivery of both copies of preservation and the publication, in consideration of special cases that merit by virtue of their size and frequency of publication, which will be established in the individual contract.

La Biblioteca Nacional podrá modificar la forma de entrega tanto de las copias de preservación como las de publicación, en consideración a casos especiales que así lo ameriten por sus características de tamaño y periodicidad de publicación, lo que quedará establecido en el contrato individual.

3. Folders and files name assignation

Folders and files labeling must follow the proposed organization logic, in lowercase

The labeling of the folders and files should be made following the logic of the proposed organization, in lowercase, can be used only alphanumeric characters without accents and using underscores to represent spaces gaps.

- First folder: producer entity
- Second folder: general subject
- File: yyyy_mm_dd_title

4. Format and file extension

Deposited electronic resources must meet the formats and extensions approved by the National Library which are based on international standards for long-term preservation, is recommended to use open formats and non-commercial. These vary for each type of work and are detailed in the following graph:

Resource	Type	Recommended format
Documents: E-publications, e-books, e-journals.	Preservation copy Master:	PDF (Image with text search engine)
	Publication copies:	PDF (Image with text search engine)
Images: photographs, drawings, prints, paintings, digitized manuscripts.	Preservation copy Master:	TIFF (No compression)
	Publication copies:	JPEG Medium Compression
Videos: Cartoons, movies, TV shows.	Preservation copy Master:	MPEG2000
	Publication copies:	MOV Quick Time
Audio	Preservation copy Master:	BWF (WAV)
	Publication copies:	MP3
Maps: Maps, plans, geographic charts.	Preservation copy Master:	TIFF (No compression)
	Publication copies:	JPEG Medium Compression

MANAGEMENT SOFTWARE OF DIGITAL COLLECTIONS

Also relevant was the definition of a tool for the management of digital collections, which was made through a thorough study of available software both free and proprietary nature to meet the identified needs of Library Digital Repository and electronic legal deposit, facilitating access management and digital asset management. This tool is now in process of implementation and will allow us in the coming months, having a test of 15000 digital objects in a trial, and after the evaluation to start the definitive production.

In the study, we analyzed the following programs: Fedora, DSpace, Greenstone, Content DM and DigiTool, which was selected since it was fitted to the needs identified by the institution in terms of digital object repository, management rules and international metadata standards. Moreover, the digital library and the module for electronic legal deposit was compatible with the Aleph Software used by the National Library for the general library catalog and the existence of support in the Chilean market and enable interoperability through OAI protocols .

DIGITAL RESOURCES READING ROOM

A very important step in improving the quality of digital services was the opening in 2009 of the Digital Resources reading room, located in a central space on the first floor of the National Library. This new facility allows users the access in one place to all the available digital resources of different collections, at the same time of protecting the intellectual property of the works, the material can be seen only in this space, where is not permitted to reproduce or download.

The reading room is located in one of the most attractive spaces of the National Library building, on the first floor of the Alameda area (main entrance), has 12 computers for accessing information and it can refer to the legal deposit material received by mail, in addition to digitized collections from different departments of the National Library such as the Word's Archive "with the voices of writers", also films, documentaries, books, magazines, newspapers, digital formats. It has four computers specifically designed to be used by blind users.

BACK-UP POLICY

The Digital Committee of the National Library defined different back-up strategies according to the different types of critical information existing at the National Library, where electronic legal deposit was included, these strategies are: full, incremental or differential according with the kind of information of data bases, settings, files (images, audio, video). The back-up process is made on LT04 tapes.

Example:

Strategy 1: Weekly full backup, daily incremental.

Strategy 2: Monthly full backup.

Strategy 3: Trimester full backup, weekly incremental.

Strategy	Critical Systems	Data Bases	Settings	Files
Strategy 1	X	X		
Strategy 2			X	
Strategy 3				X

CONCLUSIONS

The National Library of Chile is the main center for the collection and preservation of the nation's memory, being the legal deposit law the keystone of the National Library to increase their heritage collections.

Today, an important part of the culture is produced digital, being key pieces to study and understand the collective memory, its collection and preservation has become as a priority for the National Library.

Chilean law, although covers the legal deposit of electronic resources does not provide guidelines on how this should be addressed from the technical point of view to their preservation. The implementation of strategies to effectively collect this material has been a constant concern within the institution.

Agreements and collaborative work with producers of digital information have proved an effective strategy, because they have allowed flexibility in the processes that will be of benefit to both institutions.

The implementation of a trial run with a channel of national television, a radio station and an electronic journal have permitted to gather the information about needs and requirements for the final system which would need both from technical and human aspects

Thus, the National Library of Chile is taking on the challenge within the digital environment, to collect, preserve and provide access to these collections for the safeguarding of the country's memory for present and future generations.