Total Digital Access to the League of Nations Archives Project

2017

2022
The League of Nations Archives

- 2.7 linear kilometers (15 million pages) of unique documents dating 1919-1946
- International importance recognized by UNESCO, with their inscription on the Memory of the World Register in 2009
- Extremely fragile and heterogeneous material
History of Digitization of LON Archives

How did we get here?

• Early digitization projects
• LON Official Documents
• Collaborative Projects

• Interest from researchers and partners

• Interest and involvement of Director-General

2016

Private Swiss Foundation
Grant for LON Archives
State-of-the-art Digital Access

2017 • 2022


- Catalogue
- Portal – Discovery Tool
Standard-compliant Digital Preservation

2017 → 2022

- Storage on servers - NOT digital preservation
- No proper digital preservation system in place

- A standard-compliant Digital Preservation System to ensure:
  - sustainability of digital masters over time (format obsolescence)
  - authenticity

Source image: STATSBIBLIOTEKET website
### Standard-Compliant Physical Preservation

<table>
<thead>
<tr>
<th>2017</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Storage space not compliant with preservation standards</td>
<td>• Fire protection (SHP) and climate control (project) installed</td>
</tr>
<tr>
<td>• Boxes and folders dating back to the League of Nations</td>
<td>• Boxes and folders systematically replaced by permanent material</td>
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<tr>
<td>• Maps stored in bad conditions</td>
<td>• Maps stored properly</td>
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</tbody>
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- **Image:**
  - Storage space not compliant with preservation standards
  - Boxes and folders dating back to the League of Nations
  - Maps stored in bad conditions
  - Fire protection (SHP) and climate control (project) installed
  - Boxes and folders systematically replaced by permanent material
  - Maps stored properly
Project Structure

UNOG

Project Management
- Project Director
- Project Manager
- Digital Access and Preservation Coordinator
- Project Management Assistant

Pre-Digitization Team
- 7 Staff

Scanning Team
- Arkhênum

Post-Digitization Team
- 9 Staff

Through UNOPS (UN Office for Project Services)
Project Operations

2018

Pre-digitization  Started 15-02-18
• Physical preparation and preservation treatment
• Sorting, ordering of materials (expert decisions)
• Inventory management

Scanning : On-site  Started 02-05-18
• External specialized company : Arkhênum
• Equipment : i2S CopiBook OS (Open System) + Digibook A0 + Océ TC4

Post-digitization  Starts 01-06-18
• Quality control
• Metadata creation (archival description and indexing)
• Online publishing to Digital Access System
• Ingest to Digital Preservation System

Implementation of:
• Digital Access Management System
• Digital Preservation System
• Climate Control and Fire Protection

2022

• 12,000 boxes of archives files
• 270 linear meters of official documents
• 30,000 maps
• 250,000 registry index cards

• 500,000+ units of descriptive metadata
• 500,000 digital files
• 200 TB
1 - Expected outputs

The expected outputs of the consultancy services shall result in conversion historical records into digital images including metadata services. The following results shall be guaranteed by the Consultant as a consequence of its activities which are necessary to accomplish the immediate objectives and the project scope:

- a. Creation of One “Master” image file shall be produced for each scanned page.
- b. Creation of One “Access” PDF file shall be produced per file (for League Registry and Section/Commission files), volume (for Official Documents) or map; these PDF files may be multipage files.
- c. Services Optical Character Recognition (Minimum 97.50% per page), with OCR text rendered on the Access file, for both French and English languages. Consultant shall specify all software and methodologies to be used for this process.
- d. Conversion of files into digital images as per following specification

<table>
<thead>
<tr>
<th>File</th>
<th>File Format</th>
<th>Resolution</th>
<th>Tonal Resolution</th>
<th>Delivery Media</th>
<th>File structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master; 1 file per page</td>
<td>JPEG-2000 (visually lossless compression)</td>
<td>300 ppi at 100%</td>
<td>24-bit colour or 8-bit grayscale (for official documents only)</td>
<td>FTP and HDD/DVD or other storage</td>
<td>See example below</td>
</tr>
<tr>
<td>Access; 1 file per file or volume</td>
<td>PDF</td>
<td>200 ppi</td>
<td>8-bit grayscale</td>
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Challenges/Lessons

- **Scale of the project** (decisions take on greater significance: larger impact)
- **Competing priorities** (preservation vs production, etc.)
- **Timeline** (digitization starts before we have implemented Digital Access and Preservation Systems)
- **Physical space for digitization**
- **Impact on permanent team**

- **Time needed upfront** (institutional support; bureaucratic obstacles; best practices, etc.)
- **Budget estimations** (include administrative costs: UNOG and UNOPS %)
- Importance of **knowing what other institutions** are doing
- Importance of **engaging research/user community** to establish future use, which can impact decisions taken early on
Opportunities

• **Mobilization of knowledge and its transmission to future generations**

• **Digital humanities, data analytics:** to reveal as yet unknown aspects of history

• **Innovation: Crowdsourcing, Artificial Intelligence** (Zooniverse)

• **Partnerships**
Questions

Discussion