

# Preservation Policy



## Table of Contents

1	The purpose and guidelines of the preservation policy .....	1
2	Legislation and recommendations.....	2
2.1	Legislation.....	2
2.2	Documents of the National Library of Finland.....	2
2.3	International standards and guidelines .....	2
3	Goals for the Preservation Policy.....	3
3.1	Permanently preserved collections .....	3
3.2	Other collections .....	3
3.3	Internal responsibilities of the Library .....	3
4	Acquisitions and accessibility .....	4
5	Facilities and preservation methods.....	5
5.1	Storage facilities.....	5
5.2	Preservation methods for physical material .....	6
5.3	Preservation methods for digital material .....	7
6	Using the collections.....	9
7	Security and responsibilities.....	10
7.1	Physical material.....	10
7.2	Digital material .....	10
8	Training and information.....	12
9	Research and development.....	13
	Appendix 1. Glossary.....	14

## **1 The purpose and guidelines of the preservation policy**

The purpose of the National Library of Finland is to preserve and provide its users access to our unique and irreplaceable national cultural heritage. The collection is threatened by many things, such as paper acidification and everyday wear and tear.

The National Library of Finland has compiled the following preservation policy guidelines:

1. The task of the National Library of Finland is to preserve its collections and allow researchers access to this authentic source of information.
2. The original appearance of the publication is a significant conveyor of information.
3. The conservation of the collections is an essential part of the preservation policy.
4. The National Library of Finland will mainly use preventative methods to protect its collections from damage. The identification and management of risks are part of the core of the conservation activities.
5. The collections will be stored in appropriate conditions.
6. Users will be allowed controlled access to the collections without compromising the preservation of the materials.
7. The National Library of Finland will make digital or microfilm surrogates for the daily use of the most frequently used physical items and items in danger of being destroyed. Users will not be allowed access to material of which surrogates are available.

The National Library of Finland gathers digital materials both as legal deposit copies and through the digitisation of the collections. Digital collections are particularly vulnerable and dependent on technology, which is why their conservation demands active measures from the date of manufacture onwards.

The preservation policy requires commitment from the part of the management and staff of the Library. The goals will be reached by distributing information on the importance and requirements of preservation, as well as on good preservation practices and staff training. The preservation policy will be realised by continuously developing conservation processes and launching appropriately targeted measures.

The collections, preservation and digitisation policies of the Library will form a mutually complementary whole.

## 2 Legislation and recommendations

The core task of the National Library of Finland is to preserve national publications, especially printed materials, recordings and web content, for future generations and to allow researchers and others in need of information access to them. The preservation obligation also covers other cultural historical collections of the Library.

The preservation policy is governed by the following legislation and recommendations:

### 2.1 Legislation

- Act on the Preservation and Storage of Cultural Materials (1433/2007)
- Copyright Act (404/1961) and Decree (574/1995) and their amendments (821/2005)
- Universities Act (645/1997; amended Section 25 and 25 a 586/2006)

### 2.2 Documents of the National Library of Finland

- Regulations (14 February 2007) and Rules of Procedure of the National Library of Finland
- The Strategy of the National Library of Finland 2006–2015
- The Collections Policy of the National Library of Finland
- The Digitisation Policy of the National Library of Finland (to be completed in 2009)
- Security and Rescue Plan (22 May 2007)
- The Conditions of Use of the National Library of Finland (1 March 2007)

### 2.3 International standards and guidelines

- UNESCO Guidelines for Legal Deposit Legislation
- OAIS Reference Model for an Open Archival Information System (ISO 14721:2003)
- OCLC & CRL Trustworthy Repository Audit & Certification: Criteria and Checklist
- UNESCO Guidelines for the Preservation of Digital Heritage
- IFLA Principles for the Care and Handling of Library Material
- ISO 11799:2003 Information and documentation -- Document storage requirements for archive and library materials
- Other national and international preservation standards

### 3 Goals for the Preservation Policy

The preservation aims for the different collections of the National Library of Finland stem from legislation and the Library's Collections Policy.

#### 3.1 Permanently preserved collections

**The National Collection** is the archive repository of Finnish publications. New materials are obtained as provided by the Act on the Collecting and Preservation of Cultural Materials (1433/2007). The Act provides that the legal deposit copies, recordings and web content must be preserved in their entirety. The National Collection is supplemented by purchased and donated items as well.

The **historical collections** of the National Library include the oldest materials of the Humanities Collection and the Slavonic Library, numerous special collections, and the manuscript and private library collections. The historical collections are a part of the international cultural heritage.

#### 3.2 Other collections

**The expanding science collection** is mainly comprised of foreign research and reference literature from the field of the humanities and will be protected as appropriate regarding the extent to which it is used.

The collections of **The National Electronic Library** (FinELib) are a nationally significant information repository and infrastructure, and their long-term preservation will be defined separately in each agreement.

#### 3.3 Internal responsibilities of the Library

The preservation activities will be based on collaboration between the function areas. Work is distributed among them as follows: the National Centre for Preservation and Digitisation will be responsible for conservation methods and participate in the practical implementation thereof, and the Research Library Services and the Accumulation and Description of Cultural Heritage profit areas will be responsible for the collections and participate in the implementation of related practical measures. Administration and Development services will be responsible for the facilities.

## **4 Acquisitions and accessibility**

The acquisition of the legal deposit copies will be monitored by the Legal Deposit Office, whose task is to ensure that the materials arrive undamaged, complete and in the form in which they were originally distributed. Primary depositors include the manufacturers of the publications, which in practice usually refers to printing houses and recording manufacturers. The depositor is required to replace an incomplete or damaged copy.

Before the material is included in the collection, it will be protected as appropriate to the type of the publication. Preservation Services and Research Library Services will be responsible for guidelines and material acquisitions.

Material available in open information networks will be collected with automated harvesting software. Material can also be accepted in formats other than in which it was originally distributed, if the preservation or usability of the material so requires. As pertains to materials that cannot be harvested automatically, the Library will collaborate with publishing houses and publishers to have them deposited separately. Library Network Services and Research Library Services will be responsible for the harvesting and preservation of web content.

## 5 Facilities and preservation methods

The National Library of Finland will store its collections in controlled and appropriate conditions.

### 5.1 Storage facilities

The most important preventative preservation method for large amounts of material is to ensure that the conditions in the storage facilities are suitable. This includes ensuring an appropriate temperature and relative humidity of the room air, the purity of recirculated air as well as appropriate fixtures and other equipment.

The national and historical collections with the most cultural and historical value will be kept in a restricted underground book repository. The latest additions to the science collection will mainly be placed in the general collection and made available with appropriate protective measures and anti-theft tags. The most rarely used materials and materials of which surrogates have been made will also be placed in the University of Helsinki Deposit Library in Urajärvi.

The University of Helsinki manages and is responsible for the facilities of the National Library of Finland. The University will also be responsible for monitoring the below limit values.

	Paper materials	Microfilm negatives
Temperature	18°C +/- 1°	10°C +/- 1°
Relative air humidity	45% +/- 5%	35% +/- 5%
Air circulation	1.5 times per hour	
<b>Air pollutants: Limits</b>		
Overall dust (particles)	75µg/m <sup>3</sup>	
Sulphur dioxide (SO <sub>2</sub> )	1 µg/m <sup>3</sup>	
Nitrogen oxides (Nox)	5µg/m <sup>3</sup>	
Nitrogen dioxide (NO <sub>2</sub> )	5µg/m <sup>3</sup>	
Ozone	25µg/m <sup>3</sup>	
		<b>In addition:</b> hydrogen sulphide, sulphur trioxide, ammonia and peroxide concentrations as low as possible
<b>Light</b>		
UV	75µW/Lm	

Table 1. Limit values for storage facilities

Digital materials will be recorded to a reliable storage facility or medium in which back-up copying has been organised efficiently. Digital materials can also be recorded into hardware administered by parties other than the National Library of Finland.

## 5.2 Preservation methods for physical material

### 5.2.1 Preventative preservation

The Library will reduce the need for technical conservation in the future by protecting its collections appropriately. Such preservation methods include, e.g., placing original newspapers in boxes after microfilming and binding frequently used journals in the reference library into books. Old items included in the collections will be protected retroactively by renewing outdated protective materials and having the books cleaned regularly.

### 5.2.2 Condition surveys

The National Library of Finland will survey the condition of entire collections systematically at agreed upon intervals. Different material groups will be surveyed using internationally comparable methods. The use of materials in very poor condition can be prohibited if necessary. Condition surveying will affect the conservation and digitisation programmes of the Library.

### 5.2.3 Conservation of large entities

The collections will be conserved systematically. For example, manuscripts or ephemera will be cleaned, repaired and protected consistently. When necessary, the Library will utilise mass deacidification methods suitable for the conservation of large collections of material.

### 5.2.4 Conservation of single items

Rare or particularly valuable materials are conserved individually with conservation methods based on research on the history of books and binding. The National Library of Finland will try and acquire support for this activity from external collaborators as well (e.g., the Save a Book campaign).

The bindings of books in poor condition are repaired if necessary. For exhibition purposes, the material will be repaired to the extent deemed appropriate by a collection specialist and a conservator.

### 5.2.5 Manufacture of surrogates: Microfilming and digitisation

The Library will preserve the original materials from wear and tear by manufacturing surrogates. Once surrogates have been made, customers will no longer be allowed access to the originals.

Domestic newspapers printed on badly preservable paper will be microfilmed in their entirety.

The digitisation programme of the Library is mainly focused on the old, frequently used and badly worn material in the National Collection. When large amounts of material are digitised, a conservator will evaluate the condition of the material before the process begins. Digitising equipment best suited for the material will be selected.

Sound recordings are a special collection that is in particularly great danger of being destroyed. The lifespan of many types of tape, such as compact cassettes, is estimated to be only some decades. The National Library of Finland will ensure the preservation of such material by digitising the recordings into a preservable format.

### 5.3 Preservation methods for digital material

The National Library will store and manage its digital material so that it remains usable and as unchanged as possible in terms of information and visual and aural content.

#### 5.3.1 Ensuring the integrity of the material

The National Library of Finland will ensure that the material is not damaged. Even the slightest alteration in the bit format of the material may render it unusable. This is prevented through extensive back-up copying and using checksums appended to the material files to monitor changes. If the original document has sustained damage, the original file can be restored from the back-up copy.

#### 5.3.2 Compilation of information

The material will be compiled into as complete entities as possible. This means that all parts of the material and related data will be stored together. At best, comprehensive metadata, i.e., information about the origin, audit trail, structure and technical nature of the material, as well as its bibliographical descriptions, will be appended to the original.

The highest quality material that contains comprehensive metadata is acquired through digitisation and cataloguing conducted by the National Library of Finland itself. Websites harvested by the automated harvesting software yields the least amount of metadata. Such metadata includes, among other things, the original location of the material on the Internet and the date of harvesting.

#### 5.3.3 Ensuring usability

The technical structure of the material will be altered if it is necessary to ensure the usability of the material. The material can also be migrated into a better supported format if the original technological environment of the material is becoming obsolete or the material can be preserved more efficiently in the new format. The conversion can affect the content of the material, which is why any conversions will only be made through careful planning and testing. The Library will ensure that the alterations to the preservation formats do not affect the information, visual or aural content of the material in any essential way.

### **5.3.4 Version control**

Alterations to the material will be controlled, i.e., the material will be saved as a new copy. Version control helps to keep a record of the lifespan of the material. Version control allows for restoring or recalling an earlier version of the material.

Version control is an important part of migrations as well. If a tool is eventually created that allows better preservation of the characteristics of the original material in the migrated copy, it can be used on the original version of the material. Although emulation is not one of the primary preservation methods of the Library, it can be used as well as long as the original copy and subsequent versions are kept safe.

### **5.3.5 Documentation of actions**

The National Library of Finland will document all alterations and other actions affecting the material in such a way that all the information on the alterations (reason, object, author and date of the alterations) is recorded. Comprehensive documentation of all alterations is embedded into the operation of the preservation system. The relevant standard is the PREMIS (Preservation Metadata: Implementation Strategies) data dictionary dealing with digital preservation metadata.

### **5.3.6 Descriptive information**

All preserved digital material will include descriptive information. Descriptive information facilitates content definition and the search for materials. An example of this is the MARC standard related to bibliographical descriptions.

### **5.3.7 Material-related restrictions to preservation methods**

Due to the characteristics of certain materials, the preservation methods mentioned above cannot be applied to all materials. Such exceptional material types include, among other things, material harvested automatically from the Internet, software and databases.

The most extensive and varied type of digital material is Finnish web content. For now, it will be saved as it is and protected with checksums.

When data recordings, e.g. optical media, are saved, the data is extracted from its physical storage device and transferred to the preservation system. If the data in question is software, information concerning its technical operating environment will be gathered. Since software cannot be converted, the National Library of Finland will preserve it as it is. For the moment it is not certain that all the preserved software will be usable in the future as well.

Besides automatically harvested material, databases are challenging in terms of preservation as well. Suitable preservation solutions are being sought for them.

## 6 Using the collections

The National Library of Finland will provide its users appropriate, controlled facilities for using both traditional library and archive material and digital materials.

The use of the archives and related reprographic services must not damage the materials or compromise their preservation. In exceptional circumstances, researchers and other users can be allowed access even to fragile and deteriorated materials, as long as due caution is observed and the users are instructed on the proper handling of the material. The Library can restrict the use of original materials if necessary in order to ensure their preservation.

Surrogates, i.e., microfilms and digital copies, will be utilised when studying rarities included in the National and Historical Collections. If the research so requires, the users can be allowed to use the original documents as well. As for sound and other recordings, users will only be allowed access to digital surrogates.

Users will be advised on reading room work practices and the appropriate handling of library materials with the help of user instructions and regulations, as well as personal guidance.

The transportation of material within the library and between its different offices will be logistically practical; optimal protective equipment will be used and security risks minimised.

Special attention will be paid to security issues during exhibitions. The practical construction of all exhibitions will be conducted in collaboration with collection specialists and a conservator.

Special, secure workstations will be prepared for the customer use of digital legal deposit copies. The material servers can only be accessed from the National Library of Finland and special workstations in other legal deposit copy libraries and institutions defined in the relevant Decree. The index of the Finnish web archive will be freely accessible. Other digital collections of the Library will be freely accessible in accordance with the conditions laid down in the Copyright Act and other agreements.

The professional competence of the staff of the Library in the careful and appreciative handling of the materials is essential to the preservation of the collections. The Library will support the efforts of its staff to educate themselves on the fundamental aspects of preservation (book history and conservation, long-term digital preservation).

## 7 Security and responsibilities

The National Library of Finland will prepare against threats and dangers to its collections by identifying and minimising risks.

### 7.1 Physical material

The collections of the National Library of Finland will be divided into three main classes based on security measures and the location where they can be used. The first security class includes collections that can only be studied in controlled circumstances in a special reading room. This class also includes collections that require special monitoring. The second security class includes collections that cannot be checked out of the Library and can only be studied in Library reading rooms. The third security class includes material that can be checked out.

The National Library of Finland has a separate safety and rescue plan, and it has defined the order in which the collections will be saved. The saving order has been compiled for each storage room separately and will be updated as collections are transferred. The saving order is based on how rare the material is and how difficult it would be to replace.

In the different collection facilities the saving order is as follows:

1. The Manuscript Collection
2. The National Collection
3. Special collections
4. The oldest items in the Humanities Collection and the Slavonic Library

The National Centre for Preservation and Digitisation will, together with other function areas, be responsible for the preservation of the physical collections of the National Library of Finland. Research Library Services will, for its part, be responsible for the maintenance of the National Collection and other collections. Administration and Development services will be responsible for the security of the Library.

All library employees are responsible for the accessibility and security of the collections. In the Research Library Services function area, the preservation of the collections is the responsibility of the Head of Collections, superiors and the director of the department. The responsible person in security and facility issues will be the head of the administration.

### 7.2 Digital material

In practice, digital material cannot exist without the technology sustaining it, which is why digital material is particularly vulnerable to technological hazards. The items at risk can be

- the hardware/medium on which the material has been saved,

- the long-term preservation software processing the material and
- the preservation format.

It is easiest to prepare against threats to the hardware. The simplest method is to copy the material to another physical location. The long-term preservation system that contains the material may not itself be long term, let alone everlasting. The Library will ensure that the material and its audit trail can be transferred from the long-term preservation system into another system in its entirety by using open interfaces and standards.

All types of materials face the threat of their preservation formats becoming obsolete. The Library will therefore keep record of the formats in which its materials have been saved. This registry can, on the levels of collections or materials, include information on the issues that affect the preservation of the materials. These include, among other things, the software dependence, openness and complexity of the file format.

The Library Network Services and the National Centre for Preservation and Digitisation will be jointly responsible for the preservation of digital material.

## **8 Training and information**

Both the staff and users of the National Library of Finland will commit to and receive guidance on the appropriate and appreciative handling of the collections.

The Library will act as the foremost expert on long-term preservation and supervise communities and all others in need of information.

The Library will encourage all citizens to participate in the preservation of the cultural heritage by providing information and the possibility to financially support the preservation of endangered material.

## **9 Research and development**

The National Centre for Preservation and Digitisation, which studies and follows the international developments of the field, operates at the National Library of Finland.

In the future, the National Library of Finland will be one of the largest single entities in need of digital storage facilities in the country. For this reason, the Library will maintain and develop its expertise in all phases of digital data preservation.

The Library will participate in both national and international collaboration related to digital preservation. Special focus will be placed on the development and testing of preservation and user accessibility methods for web material and software.

The Library will evaluate the adequacy of its preservation methods through international audits.

## Appendix 1. Glossary

The definitions for the terms used in this document have been compiled from the point of view of the National Library of Finland.

Term	Definition
digital material	Material in digital, i.e., numerical format. The opposite of analog material
digitisation	Converting sound or image to digital format
emulation	The imitation of an original software or hardware environment in a new environment
physical material	Printed material, manuscripts and other materials and recordings in analog format
index of the Finnish web archive	A public service with which the user can check whether a page has been saved in the Finnish web archive
conservation (in English version the term used is preservation)	Ensuring the preservation of cultural heritage: this encompasses all aspects of the care and preservation of single objects and collections, such as condition surveys, protective measures, the minimisation of risks, technical conservation, issues related to use and security, the manufacturing of surrogates, as well as decision-making related to all of the above. - <i>Preventative, i.e., preservative</i> conservation includes all protective measures that ensure conditions that prevent damages and are favourable to the preservation of an object or a collection. - <i>Technical conservation</i> refers to measures with which a damaged item is repaired in order to ensure its preservation.
surrogate	A digital or microfilm copy of the original that corresponds to the original in terms of information content
condition surveying	Gathering information on the extent and amount of damage to the collections with statistical tools. The goal is to define measures necessary for improving the preservation of the material.
audit trail	Evidence on alterations to and actions related to digital materials in chronological order
mass deacidification	Deacidification of acidic paper materials conducted in factory-like conditions
microfilming	Methods related to the preparation of microfilms. A microfilm is a special film for long-term preservation of information, text or images. The material has been photographed on this film using such a great scale of reduction that the material cannot be viewed without special equipment.
conversion	Altering the saving format of the material
long-term	Preserving information content in an errorless and understandable

preservation	format for long periods of time
recording	Material containing sound, images or characters that has been recorded with the help of a technical method to a medium that can only be viewed or heard with the help of a technical device.
legal deposit copy	Material deposited under legal deposit copy legislation or harvested from data networks. It will be preserved permanently.
web content	Digital material harvested from publicly viewable websites under legal deposit copy legislation
version control	Saving the material as a new version after it has undergone alterations