



# Guiding principles

for working with digital cultural heritage

The following guiding principles for working with digital cultural heritage were developed in consultation with Digisam's participating authorities and institutions.

The principles were decided by Digisam's steering group the 3<sup>rd</sup> of April 2014.

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# Guiding principles for working with digital cultural heritage

## Introduction

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To enable effective cooperation between a large number of stakeholders, a set of agreed upon core principles is required. The principles<sup>1</sup> are meant to be used to support the direction of decision-making and contribute to the coordination of digital information management in an efficient and appropriate manner.

The principles are divided based on the areas of govern, produce, use and preserve. The principles will not contain or reference any specific techniques, as they will be used over an extended period of time. The way to adapt to the principles will vary over time.

## Govern

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### **P1. Digitisation activities shall be governed by the management of each institution**

**Statement:** Digitisation activities shall be based on plans and strategies decided by the institution.

**Rationale:** Digitisation activities that do not have support from management are at risk of not gaining the resources needed to implement effective production or for accessibility and long-term management of produced or collected data.

#### **Implications:**

- A defined strategy and plan for digitisation, accessibility, and preservation are required at each institution.
- Each institution needs to decide on the planned digitisation activities.
- Plans and strategies are formulated based on national recommendations.

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<sup>1</sup> The principles are based on the TOGAF-model: <http://pubs.opengroup.org/architecture/togaf9-doc/arch/chap23.html>

**P2. Each institution shall be responsible for the metadata (analogue and digital) relating to the institution's collections, as well as for the objects that are digitally created**

**Statement:** Information gathered about both analogue and digital collections shall be managed in a stable and responsible manner, and improving the quality of metadata shall be prioritised.

**Rationale:** High-quality and up-to-date metadata about managed collections is essential for developed usability and increased use with larger societal benefit as a result.

**Implications:**

- Each institution needs to allocate resources for active management of their digital collections.

**P3. Digitisation projects shall be monitored and evaluated by the respective institutions**

**Statement:** Approved digitisation efforts and projects shall be monitored and evaluated based on common criteria. The outcome of monitoring and evaluation shall be documented and shared with others for exchange of experience and collaborative learning.

**Rationale:** Insight into digitisation projects through follow-ups and sharing counteracts repetition of earlier mistakes. This provides an efficient use of resources and contributes to continued professional development. It also contributes to the dissemination of best practice cases.

**Implications:**

- Each institution needs to plan for monitoring and evaluation reviews before the implementation of digitisation efforts.
- Each institution needs to publish the results of these evaluations, including less successful projects. Monitoring and evaluations are completed based on national recommendations.

## **Produce**

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**P4. Digitisation shall be performed so that resources and expertise are used efficiently and effectively**

**Statement:** In conjunction with the planning and implementation of digitisation projects, an assessment shall be conducted to decide where and how the digitisation efforts can be implemented in the most effective and efficient way based on defined specifications. Large-scale digitisation should always be considered.

**Rationale:** Prior investments are better utilised by using existing digitisation equipment. It leads to higher quality, lower costs, and better use of the competence available at each institution. By concentrating production to fewer and larger-scale production plants, the total equipment and maintenance cost for society and the development of skills can be optimised.

**Implications:**

- Each institution needs to examine the options available (within and outside the public sector) before procuring its own equipment or initiating in-house production.
- Any institution that has made investments in equipment and skills ought to facilitate sharing of these resources with other institutions.

**P5. Open standards and specifications suitable for accessibility and long-term preservation shall be used.**

**Statement:** Recommended open standards<sup>2</sup> shall be used in all digitisation activities.

**Rationale:** The use of open standards provides conditions for long-term preservation, interoperability<sup>3</sup> and widespread use and reuse of digitised material.

**Implications:**

- Each institution, as well as each administrator of aggregation services, needs to apply recommended standards.
- Each institution, as well as each administrator of aggregation services, needs to ensure in procurement procedures that equipment and software can handle these standards.

## Use

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**P6. Public accessibility shall be a part of every digitisation effort**

**Statement:** The digitised material shall be made available to the public as soon as possible and in a form that enables its use as widely as possible.

**Rationale:** Digitised information is of great value to society. Prompt delivery of materials to the public enables stakeholders outside the institution to apply it in other areas, at the same time as the wear of records and objects is reduced and citizens will have greater access regardless of physical location.

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<sup>2</sup> Open standard refers to the definition provided in European Interoperability Framework version 1.0 p.9.

<sup>3</sup> Interoperability is the ability of different systems to work together and communicate with each other. Examples of this may be that systems can use the same protocol or read and write the same file formats. Interoperability is achieved through coordination and (international) standardisation processes.

**Implications:**

- Planning the digitisation efforts needs to include a plan for making the results available.
- Digitised material should continuously be made available to the public throughout the digitisation project.

**P7. Digitised text resources shall be made available as machine-readable text**

**Statement:** To reach its full potential of utility and usability for a variety of user groups, digitised text must be made available in such a way that it can be processed by machines.

**Rationale:** Text resources that are machine-readable enable broad and high-quality use for many groups who have limited use of text that can only be read by the human eye. Here, many researchers have the same basic needs as non-Swedish speakers or people with disabilities.

**Implications:**

- Each institution needs to plan ahead of digitisation of text resources for how the information content can be made machine-readable.

**P8. Digital files and metadata shall be as simple as possible for others to use and reuse**

**Statement:** The institution shall endeavour to make files and metadata easy to find and use. The digital objects shall be clearly copyright licensed/marked and metadata can generally be licensed openly, even if it refers to protected objects.

**Rationale:** The value is in the use of information. Maximum benefit for society is created by making it as easy as possible for the widest range of stakeholders as possible to use the results of digitisation. By clarifying rights and using open licenses, the institution is contributing to knowledge sharing and new creation.

**Implications:**

- Rights labelling needs to be specified in a machine-readable way.
- In unclear cases (orphan works) the institution is required to assess the case so it balances possible violation of an individual's rights against the broad public interest of open licensing.
- The institution needs to establish a single point of contact for feedback on accessibility, and set up routines to make it possible to hide or unpublish material.

See also: P5.

## **P9. Digitisation of materials for which the protection term has expired shall not result in the creation of new rights**

**Statement:** Material with extinct rights that have been reproduced in new media does not generate new pieces of work, with new terms of protection. These resources shall not be licensed but rights labelled in a machine-readable way.

**Rationale:** The value is in the use of information. By providing free resources without conditions, the institution is contributing to knowledge sharing, innovation and new creation.

### **Implications:**

- Rights labelling needs to be indicated in a machine-readable way.
- Materials with extinct copyright are provided for reuse without restriction. Indication of author/source should be encouraged but cannot be required.

## **P10. Interconnections between stakeholders' information shall be pursued**

**Statement:** Information shall be contextualised in a standardised way by linking it to information outside of the institution.

**Rationale:** Heritage information has natural links to many places, events, time periods, persons and objects. By linking digital information with other sources, the opportunities for reusing this material increases. When the linkage is done in a standardised way, the threshold for users of the information lowers, and new opportunities are opened for research, among other things.

### **Implications:**

- Digital objects need to be provided with persistent identifiers in accordance with common guidelines.
- The institution strives towards semantic linking to external information resources.
- The institution needs to make it easy for others to semantically link to information managed by their own institution.

## **P11. Semantic descriptions shall be designed in a standardised way**

**Statement:** Methods for the semantic<sup>4</sup> description used in the information shall be documented in a standardised way, and published on the web with an open license.

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<sup>4</sup> While the World Wide Web is a standard way of presenting (linked) documents, the semantic web goes further and also standardises how to express data and knowledge. For example, references to objects that you want to describe are standardised. They are identified by unique identifiers, known as URIs, which are technically web addresses. Data and knowledge are then expressed via so-called triplets composed of subject, predicate and object, each of which is identified in a standardised way. To describe the semantics in a standardised way involves declaring how the semantification of the data content is done.

Established vocabularies shall be used to promote a gradually emerging semantic interoperability.

**Rationale:** Semantic descriptions make it easier for users to integrate the information in their own solutions. Without such a description there is a risk that users may draw incorrect conclusions based on the information. Describing semantics in a standardised way enables reuse, and the risk of unclear interpretation of terms and definitions is minimised.

**Implications:**

- In order to promote interoperability on multiple levels, established semantic descriptions for intersectoral heritage data should be re-used.
- If such descriptions are missing, it is important to formulate supplements in open processes and in harmony with established standards.

## **P12. Collaboration around information shall be made possible**

**Statement:** The institution shall encourage the public to contribute knowledge to the common information bank and make it easy for anyone to contribute information.

**Rationale:** A lot of knowledge about the collection exists outside the institution, which should therefore make it as easy as possible for external forces to contribute. Usage increases if quality is improved, and there are many who can correct, complement and link information from different administrators.

**Implications:**

- Platforms for user-generated content need to be established.
- Procedures and tools need to be implemented so that valuable information can be received and related to the institution's own metadata in a collection management system or equivalent.

## **Preserve**

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### **P13. Each institution shall have a strategy for preservation of digital information**

**Statement:** In digital long-term preservation, in addition to technical preservation, preservation of authenticity and context must be taken into account to ensure that information in the future can be retrieved and understood.

**Rationale:** Digital preservation involves interoperability over time, i.e. that the information is useful and accessible in the long term. For digital information to be accessible and usable in the future, the use of appropriate standards, packaging of information and technical measures is required.

**Implications:**

- Information generated by digitising has to be designed so that the context is secured in order for the information to be retrievable and understandable in the future.

See also: P5.

**P14. Current digitisation efforts shall be described on the institution's website**

**Statement:** Each institution shall list current and planned digitisation projects on their website. For each project, a brief description shall be given of the scope, schedule and any related documentation.

**Rationale:** A large number of digitisation projects are planned and implemented in parallel. To avoid duplication of work and to facilitate collaboration, information on projects should be published openly for transparency.

**Implications:**

- The organisation needs to establish procedures to publish information about planned, ongoing and completed digitisation projects.

Digisam is a secretariat for National coordination of digitisation,  
digital preservation and digital access to cultural heritage.

The secretariat is a government-established activity at the Swedish  
National Archives.

<http://www.digisam.se>