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Guidelines for the creation of an institutional policy on digital preservation

authored and edited by the nestor working group Policy

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nestor - Kompetenznetzwerk Langzeitarchivierung und Langzeit verfügbarkeit Digitaler Ressourcen für Deutschland

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1 Introduction

1.1 Aim of the guidelines

Digital preservation of digital information is a task to which libraries, archives, museums and research institutions, as well as companies and service providers in the private sector, have for some years increasingly had to turn their attention. All digital archives are faced with the question of what concrete organisational and technical measures are necessary and advisable to allow digital information to be kept beyond the generally short-term development cycles of hardware and software. They must be prepared to actively evaluate work processes and structures on an ongoing basis, in both organisational and conceptual terms, and to repeatedly redesign them, since all current solutions can only be used for a limited period.

It is important for the credibility and thus the acceptance of any digital archive that its tasks and the organisational structures and technical/methodological principles on which it is based are transparent. Only thus can customers, cooperation partners and financial backers make a realistic assessment of the quality of the digital archive's operations and its overall credibility. Only this can give the archive a dependable yardstick by which to judge its own development.

In recent years the publication of institutional preservation policies has emerged as a good way to increase transparency. A policy document helps an institution to understand the challenges and to commit to a task. It sets out lastingly effective basic strategic and organisational elements of a digital archive and helps to increase confidence overall. In this way policies help to preserve the digital information of yesterday and today in a reliable manner and to safeguard it for tomorrow's users.

These guidelines are intended to provide digital archives, irrespective of their particular organisational set-up or range of tasks, with assistance in creating their own institutional policy on digital preservation. They include the main areas that such a policy can cover. As regards their application in practice, each institution must of course decide which aspects to transpose into its own policy.

The aim of this publication is to present the broadest possible overview for an institution's work in practice on its own policy, also pointing out "blind spots" that could sometimes be overlooked.

1.2 Definition of terms

An institutional preservation policy in the context of this document is a guideline that describes the essential setting, principles, structures and objectives of a digital archive. It can be aimed at both internal and external parties and furthers understanding (partly its own understanding) of the mission, methods and credibility of the institution. It is intended to be binding for practice over a long period of time and offers a fixed point of reference for daily work as well as for further strategic developments. Moreover, documents of the digital archive that cover related topics (e.g. technical specifications, strategy papers, etc.) should be in line with the preservation policy.

1.3 Structure and use of the guidelines

These guidelines are structured around three central questions that must be answered when drawing up an institutional policy for digital preservation. Each chapter then lists a series of key questions that must be answered, when creating a policy, in relation to the individual institution.

Chapter 1 introduces the guidelines.

Chapter 2 discusses the question of what the purpose of a policy is for knowledge institutions in general.

Chapter 3 shows the range of topics that can be covered by a policy. This includes consideration of objectives and user orientation, organisation and resources, the principles applied and individual aspects of preservation as well as technical infrastructure.

Chapter 4 looks at the process of drawing up a policy for a digital archive. Topics include factors that might lead to a policy being drawn up, organisation of the process and release. The chapter also discusses how the quality and relevance of a policy can be secured over the long term.

Chapter 5 focuses on policies in situations where long-term preservation is the subject of cooperation and looks at interdisciplinary as well as interinstitutional scenarios.

Chapter 6 gives a generic example of an institutional policy to summarise the main points of the guidelines and serve as a checklist and structuring aid for policy drafting.

The **annex** contains literature and a list of existing policies.

2 What is the purpose of a policy?

An institutional policy on digital preservation can be drawn up on a forward-looking basis, i.e. before preservation activities begin, or can systematically accompany these activities. However, the decision to draw up a policy generally has a specific trigger. Examples are an external audit, a planned certification, the start of services provided to external parties or deadlines for meeting legal requirements. Technological improvements or organisational changes at an institution can also make it necessary to establish a policy.

In all cases the policy helps to create transparency as regards the tasks, organisational structures and the basic technical/methodological principles with which an institution approaches the challenges of digital preservation. A policy for digital preservation can be aimed at internal and external parties. It can serve, for example, to help those inside an organisation to understand what they do or as a recommendation for external stakeholders.

A well-formulated policy can have a promotional effect, as it demonstrates that data are held in the organisation over the long term in a secure and sustainable manner. A policy that is publically accessible can also help to bring in financial support from outside sources.

External stakeholders are, depending on the nature and mandate of the institution, on the one hand data providers or suppliers, and on the other users of the digital archive. For those giving their digital objects to the institution, the policy shows that the preserving institution has dealt with the challenges of digital preservation in a conscious and structured manner, and takes active responsibility for ensuring the optimal, and in the context of its mandate necessary, availability of the objects over the long term.

For users of a digital archive, a policy makes it clear that the institution treats the data they use in accordance with defined, well-founded rules and thus ensures optimal availability and authenticity, and correct interpretability.

If the institution offers services in digital preservation to third parties, a policy can be an important basis for potential clients. And other stakeholders, such as sponsors and advisory committees etc., can see from a policy that the institution takes its mandate seriously and carries it out with the necessary care.

A preservation policy can also play an important role in the internal development of an institution. It ensures that there is a common understanding of long-term preservation activities within an institution and that a framework is thus created to support day-to-day business as well as decisions on the further development of the preservation infrastructure. In budget negotiations it can be helpful to refer to a policy to secure the human and financial resources required to carry out the tasks set.

Key questions

- What are the purposes of the policy? Which of these are especially important?
- Which external stakeholders is the policy aimed at? Have all stakeholders been taken into account?
- Which internal stakeholders is the policy aimed at?

3 What must a policy cover?

This chapter discusses the most important things that a policy must cover, without imposing a necessary structure. The aims of digital preservation (Chapter 3.4), the preservation strategies (Chapter 3.5) and translation into actual technical infrastructure (Chapter 3.6) do not have, for example, to be covered separately in a policy but can be organically integrated. A suggested structure for a policy is given in the summary (Chapter 6).

3.1 Objectives and status

A policy for digital preservation is subordinate to the mandate and aims of the institution and must be aligned with, and possibly drafted with reference to, a series of other institutional guidelines. Mission statements, strategic objectives or a legal mandate and other existing guidelines create the parameters for the policy; adjustments and harmonisations may be necessary.

The policy may under no circumstances contradict legal provisions or internal regulations. If changes are made to these rules, it can be necessary to adjust the policy. This is explained in greater detail in Chapter 4.3.

With reference to these senior guidelines and to distinguish itself from them, the policy starts by setting out its scope and objective. The relationship with digital preservation is thus established on the basis of the higher-ranking documents.

A policy can also refer to other related documents, for example the technical/methodological documentation of the preservation system. Changes in the technical set-up can then be followed there and not take place at the generally applicable policy level.

There is a danger, when a policy is drawn up, that the situation as it stands becomes confused with the situation as it should be. Institutions often find themselves in processes in which some aspects are fixed while others are still being developed. This can lead to objectives being portrayed as the current state of play. To avoid this, a dedicated section outlining medium-term plans or a separate document such as a strategy paper, can be used. It is legitimate in a policy to make it clear which objectives are still to be achieved. This can also emphasise the long-term nature of the policy.

Key questions:

- What are the aims of the policy within the organisation?
- To which higher and lower-ranking documents can the policy refer?
- Are future objectives distinguished from the situation as it stands?

3.2 User orientation

Digital preservation is not an end in itself; it is always aimed at a "designated community". In addition to the current scenarios for use, future scenarios should be enabled. Working with the designated community, it is possible to gain at least an idea of how digital data may be used in the future. Institutions with a highly specialised group of users, e.g. the archives of research institutes, will generally find it easier to define their designated community, as the latter is defined by the specific aims or the mandate of the institution. Institutional repositories, for example in large academic libraries, must take many different user groups into account.

A digital archive tailors its activities to the needs of its designated community and should clearly list them in its policy. It should also explain what it does to properly meet these needs. This is not just a matter of providing a general justification for the resources invested in digital preservation but, more specifically, to also show how the archived units and related metadata are made available to the designated community. Details do not need to be given in the policy, but it can be helpful to address the topic at the abstract level and make clear within the document that the institution is familiar with the basic concepts of the OAIS model and takes them into account.¹

Key questions:

- Which user groups are significant for the institution?
- How is the digital archive set up to meet the needs of its user groups and how does it ensure that user needs can be met over the long term?
- How does the digital archive ensure that it is possible to use the archived data?
- How, ideally, are scenarios for future use made possible?

3.3 Organisation und resources

In general, digital preservation necessitates an organisational structure that is appropriate to its objectives, commensurate human and technical resources, and long-term financing.

Since digital preservation can only be provided if financing is certain, an indication that the funds are ensured by a regular item in the budget is of considerable, in some institutions of central, importance. At this point it is worth mentioning the possibilities for cooperation and outsourcing, as such solutions can help in particular small institutions

¹ The reference model for an open archival information system (OAIS) has become ISO standard 14721:2012 (see annex).

to keep their budgets under control. It should also be mentioned in this context that there are advantages of retaining some flexibility so as to be able to, if need be, align the nature and level of the resources to changing requirements: the amount and complexity of the data will tend, for example, to increase further, while the cost of data storage capacity will probably continue to fall.

The policy can name the specific IT and other resources committed to the tasks of digital preservation. This includes human, technical and other physical resources (e.g. rooms) needed for preparation, accessioning, preservation, maintenance, processing and release for use, quality control, crisis planning, staff training, organisational work, and internal and external communications.

An important topic for a policy is the expertise and functional requirements to be met by staff. These are the basis for recruitment as well as staff training. Here are some suggestions for competencies which could be focused on:

- knowledge of digital preservation in general
- expertise in specific formats (text, images, audio, objects that were originally three-dimensional...)
- IT skills
- communication and organisational skills for cooperation both between internal functional entities and with external bodies and individuals from which/whom objects are received, as well as users and external service providers
- organisational and management skills for overall planning (strategy, resources)
 and the coordination of the different functional entities

Irrespective of the actual organisational structure, a clear and binding definition and delineation of tasks, responsibilities, aims and processes is essential for the success of digital preservation.

These factors are ideally defined and documented under a central management responsible for digital preservation. It is also advisable that the policy states how content-related and technical responsibilities can be defined and, on that basis, clearly delineated.

The content-related and legal responsibility for the selection, treatment and use of objects generally lies, for example, with the relevant experts (librarians, archivists, museum curators...), while the resultant technical implementation is a matter for those responsible for IT. This is another area where the preservation management can play a guiding role between the different functional entities.

Key questions:

- What organisational structures are needed for digital preservation and how do they relate to the organisational structure of the institution?
- Is the long-term funding of the digital archive secure and has it been ensured that available and required resources will be checked on an ongoing basis?

- Is the necessary expertise on hand in the areas of object formats, IT, management and organisation?
- Is there a central preservation management? How big is the team?
- Are tasks, responsibilities, aims and processes clearly defined and known to all?

3.4 Aims of digital preservation

The crux of a policy is the institutional commitment to the aims of digital preservation. The main aims of a digital archive consist in the preservation of the data and information stored, specifically in relation to the following aspects:

- integrity of data
- authenticity
- completeness
- readability
- locatability
- if applicable, confidentiality

Proper measures to **preserve data integrity**, i.e. to ensure the archived data are protected against unauthorised alteration, must be taken. These include bitstream preservation measures to protect data against corruption due to technical problems as well as technical/organisational security precautions against intentional or accidental manipulation by staff or third parties. Proof of data integrity can normally be ensured via automated procedures (checksums, hash values, signatures). Preserving data integrity is a matter of protection against unplanned changes. Deliberate changes as part of a planned migration are excluded.

Preserving authenticity means ensuring that the digital objects come from the documented originator and that they are what they purport to be. Is, for example, the ".jpg" recorded really a .jpg? Are all significant properties that are relevant for the institution shown? These can be defined very comprehensively – far beyond the digital object itself. The interplay of (the right) hardware, software and operating systems ("look and feel", in the broadest sense, for example in art) and a wide range of parameters can play a role in the interpretation of a digital object.

Completeness has been preserved if it is clear that no parts of the digital object are missing.

Preserving readability is a clear prerequisite for the use of digital objects. It should be possible to show and interpret at least the most recent version of a digital information object at any time. In this context it is important to know which formats occur for which version, how frequently and in what record group? Which formats are or threaten to become obsolete? What are the current standard formats? Are there compatibility problems?

Preserving locatability ensures that the objects in the long-term digital archive can be found. To ensure long-term locatability, persistent identifiers (PID) and entries in relevant directories and search engines can be used.

The **preservation of confidentiality** is essential for information that can only be released for use after the expiry of certain periods, in order to comply with legal rules and other agreements.

Meeting the above objectives makes a very considerable contribution to the credibility of the institution.

Another factor for credibility is the perception of the institution by the designated community. In this context, the policy also has the task of creating external transparency as regards the core aims of the archive. The policy should also make clear to its designated community what strategies, principles and basic structures are applied in the archive to meet these aims.

Key questions:

- What are the core aims of the digital archive?
- What steps have been taken to achieve these aims?
- Are these steps made transparent, and to whom are they made transparent?

3.5 Preservation strategies and monitoring

Another component of a preservation policy can be a discussion of measures to preserve digital information. Owing to the heterogeneity of digital data in terms of format, purpose, origin, legal status and data management, there are a whole range of applicable measures, which have to be methodically and sustainably organised and reviewed. Those in charge of the digital archive must basically decide which overall preservation strategies they want to pursue (such as emulation or migration) and how they want to safeguard the significant properties of the digital objects. On this basis the structures and processes for the entire preservation life cycle must be defined. Preservation measures begin with the origination of digital data and are not a one-off matter or a short-term project. They can only be effective in the long term when they become, as a process, a natural and integral part of business operations.

A matter still surrounded by considerable uncertainty is the question of how an institution can best implement the OAIS functional entity "preservation planning". Although there are as yet no obvious answers to this, a policy should mention this problem and commit the institution to efforts to ensure permanent monitoring of technological and conceptual developments in digital preservation (technology/community watch). Since an institution can hardly achieve this with the necessary level of detail alone, it is

worth mentioning cooperation arrangements.²

Key questions

- Which overall preservation strategy has been chosen for the archive (migration? emulation? a hybrid form?)?
- What measures are planned to preserve the significant properties of the archived information?
- What preservation strategies and processes follow the archived information through the various archival phases?
- How is preservation planning organized?

3.6 Technical infrastructure

A digital archive needs a systematically developed and generally complex technical infrastructure. This infrastructure is determined by the professional, legal and economic requirements of the archiving institution, as well as its technical possibilities. The construction of the technical infrastructure is thus dependent on the overall strategic and tactical planning of the institution as a whole, which ought to remain stable and as independent as possible from the rapid technological changes in the digital world. Accordingly, any policy that endeavours to be reliable over the long term should be clearly separated from the detailed documentation and specifications, which are also needed for business and knowledge management. Whereas such technical documentation is used primarily as an aid to use, maintenance and further development of the technical systems and for the information transfer necessitated by this, the presentation of the basic technical infrastructure in a policy is aimed above all at explaining, as far as possible independently of the system in place, how professional requirements and technical implementation have be made to dovetail. The presentation of the technical infrastructure should thus be confined to the aspects that can be retained beyond any technological changes. Technical documents in the narrower sense can be attached to the policy as annexes with a shorter lifespan or cited in cross-references.

Potential topics for the presentation of the technical infrastructure to be set up may include:

- basic technical architecture (e.g. planned location redundancies, setting up of productive and test environments)
- basic decisions on hard and software (e.g. required performance of storage media, use of open source or proprietary products)
- security concepts (e.g. physical access rules, redundant system architecture, distributed data storage)

² The concepts discussed in this paragraph are described in the *Guideline for preservation planning* (nestor materials 15) and condensed into a model for action: http://files.d-nb.de/nestor/materialien/nestor mat 15-eng.pdf .

- treatment of data losses (e.g. planned strategies for data recovery)
- technical measures to prepare for future arrangements (e.g. use of open archive formats, system documentation)
- bitstream preservation measures (e.g. media migration, refreshing)
- technical implementation and supporting of professional and organisational processes
- technical implementation of the data model (primary data, metadata)
- technical standards applied
- technical implementation of data delivery

Which actual areas of technical infrastructure an institution addresses in drawing up a policy is a matter for the institution itself to decide. In doing so it should consider not just its general aims and possibilities but also, and above all, its professional standards, professional priorities and the interests of its policy's designated community. More here than in other areas, the authors of a policy should bear in mind the differences between the purposes and possibilities of a (strategic) policy and the aims and modes of expression of technical documentation.

Key questions:

- What aspects of the technical infrastructure have long-term significance, and are they formulated in accordance with the strategic aims of the institution?
- In what form can technical aspects be included in the policy (difference versus other documentation)? What cross-references would be helpful?
- Is the technical infrastructure in line with the professional, legal and economic requirements of the institution as well as with its technical possibilities?

3.7 Contact and general data

A policy is a form of communication with the designated community of the digital archive. It is therefore important to establish:

- who is responsible for the current policy document and for its further development
- who is available for queries and suggestions, to be transmitted by which means

This does not necessarily need to be included in the document itself but can be done through, for example, a link on the homepage.

Other important general data are the date of the policy's coming into effect and dates of later versions. It is advisable to give the title, issue number and year of the policy in the document's metadata and in the introduction.

Key questions:

- Who has responsibility for the current document and who for the further development of the policy? Who can be given as the contact person?
- What other general data are needed? Where can these best be included?

4 How is a policy produced?

4.1 Responsibilities in drawing up a policy

When a preservation policy is drawn up, various different interested parties with different functions and responsibilities must be considered. Active communication and early involvement of important players are therefore crucial for success. In most cases the participants will be as follows, even though this can vary considerably from institution to institution.

- A small editorial team or an individual is responsible for drawing up the policy, combining various contributions, and the final editing. This party also generally has responsibility for the organisation and communication of the project.
- Individual authors make contributions to the policy, both on overarching topics and individual aspects. They can also comment or participate in an editorial capacity. Such authors generally have specialist, e.g. technical, communications, content-related or legal, knowledge. Their involvement is highly important. They can participate from the beginning or be brought in as required.
- All staff who will in future be affected by the policy should be informed at the drafting stage and involved in the process. This can enable important feedback to be obtained on the drafts and also increases later acceptance of the policy.
- External parties may also be involved, e.g. specialists from other institutions, representatives of financial backers and interest groups, or legal/management consultants.
- The senior management of an institution is generally not responsible for the detailed drafting, but must enable the process to be carried out and support it. It commissions the policy and will comment before it is adopted, put queries if need be and bring the policy into force. Ultimately, the senior management is responsible for the policy.

Although keeping the drafting team as small as possible is helpful on account of the amount of coordination needed, it is important to involve the above-mentioned parties for specific aspects at appropriate stages in the process. This ensures that all points are covered and increases the degree to which the policy is accepted in the future.

Key questions:

- Has senior management issued instructions for the creation of a policy?
- Who is responsible for drawing up the policy and the related coordination process?
- Which authors should be involved for which aspects of the policy?

- Which staff are affected by the introduction of a policy and in what way? Have they been involved in the process to the appropriate extent?
- Are there other, perhaps external, stakeholders with whom the introduction of a policy needs to be coordinated?

4.2 Release

Policy documents support communication. The language used should be balanced between general understandability and the need to employ specialist terms. Internationally active organisations may require different language versions.

The channels for publication must be selected according to the designated community. Depending on the type and mandate of the digital archive, publication can be restricted to relevant stakeholders, but policies are usually made accessible to the general public. It can be helpful, for a new policy or an updated version, to provide a short introduction for target users, including contact data for queries and feedback (see Chapter 3.7).

Key questions:

- In drawing up the policy, have the groups for who it is published been adequately considered? Is the language used appropriate? Are there sufficient ways of obtaining feedback?
- Through what channels is the policy to be released? Are form and content of the policy appropriate for these channels?

4.3 Updating and quality control

In principle, a policy should form the basis for the work of an institution and not be changed too frequently. On the other hand, a policy is not a static document but must be able to be adjusted to fundamental developments and changes in the organisation in question.

While day-to-day work should be based on the policy and not the other way round, it is nonetheless always possible that gaps or problems will be discovered in the policy. Particularly when the policy is drawn up, when little experience has been accumulated, it can happen that an important area is not adequately represented in the first draft. To enable an update or adjustment process to be then initiated, it must have been established who is responsible for the policy document. It is not necessary for names to be given in the document; this can be done outside the document.

It is advisable that the document contain the obligation to regularly check and, if necessary, adjust it. A set period, e.g. every two years, can but does not have to be given.

Ideally, periodical checks combined with updates form a sort of control system which has a favourable influence on the quality of the digital archive and from which stems, over a longer period, a continuous improvement.

An important tool for quality control in digital preservation is certification. Certificates awarded, or even just the intention to acquire certification at a future date, can be included in the policy. Since both certification and the creation or review of a policy require the critical examination of the entire digital archive, the two processes can be related to and benefit from one another.³

Changes and updates constitute new releases and must be communicated to the designated community. The communication should explain the reasons for the changes, so that the financial backers or customers are not confused. This can be done via a covering explanation.

Key questions:

- How are necessary changes and updates to the policy organised?
- Who is responsible for the evaluation and rewording?
- How can regular checking of the policy be ensured? Should evaluations be carried out according to a set timetable, or as and when required?
- Does the long-term archive intend to apply for certification? If yes: should the processes of certification and policy maintenance be linked?

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³ Two initiatives are of relevance here: the Data Seal of Approval (http://datasealofapproval.org/) and the nestor Siegel (http://www.langzeitarchivierung.de/Subsites/nestor/DE/nestor-Siegel/siegel_node.html).

5 Policies in cooperative long-term preservation

This chapter focuses on the observation that in the area of cooperative digital preservation, beyond conceptual considerations and initial cooperation projects, more and more large joint projects are being carried out by knowledge institutions. This trend can be seen both in Germany and internationally, and can in some cases reach as far as the creation of new knowledge institutions with broader tasks in the field of digital preservation.⁴

5.1 Preservation policies and areas for joint action

Chapter 3.3 of these guidelines mentioned the benefits of cooperative digital preservation. Along with the advantage of allowing smaller institutions the chance to carry out any preservation at all, a more efficient use of financial and other resources is a key factor for institutions wanting or having to archive digital data on a cooperative basis. There are two basic scenarios for cooperation:

- digital preservation for more than one institution in the same field
- digital preservation for different fields

The establishment of preservation policies can, under both scenarios, make a significant contribution to clarity in relation to the areas for joint action, differences, opportunities and risks that can be created. The nestor working group on cooperative digital preservation has in its preparatory work created strategic planning instruments, of which preservation policies are a logical extension.

5.2 Long-term preservation for more than one institution in the same field

Cooperative digital preservation projects require a high level of responsibility on the part of those involved in relation to their own institutions. A basic requirement for all participating institutions is the development of their own policies. The preservation policy, as an instrument of transparency, goes in this instance beyond the aspects of self-understanding and external presentation, as it lays down a binding definition of the scope and limits of an institution's own activities for its partners.

In digital preservation involving more than one institution in the same field, structured preservation policies (cf. Chapter 6) make it easier to compare policies. Institution-specific aspects must be brought out more strongly and actively communicated externally, for which it is advisable to establish a permanent preservation management with clearly defined responsibilities, working closely with senior management. Its tasks include, in addition to the regular revision of the institutional policy, following the cooperation project at the strategic level.

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⁴ The nestor working group on cooperative digital preservation has since 2007 been looking at aspects of cooperation in the area of the preservation of digital knowledge.

Key questions:

- Does the institution's preservation policy adequately cover institution-specific aspects?
- Have those responsible for the project, over its duration, in each participating institution been identified?

5.3 Digital preservation for more than one field

In interdisciplinary projects, mission statements, strategic aims, legal mandates and specialist procedures of the participating institutions can differ considerably from or contradict one another. In this form of cooperation it is advisable, in addition to publishing the institutional preservation policies, to develop a preservation policy for the whole project.

The latter can follow the same structural principles as formulated in these guidelines for institutional preservation policies. Here too, common features of the institutional commitments as well as common core aims for digital preservation (see Chapter 3.4) should first be given.

In the technical/organisational annexes to the project-specific preservation policy, a comparison of the ways the terminology specific to the fields are used can help to identify actual overlaps. Divergences in the basic technical/specialist concepts should also be specified here. Third parties, such as software providers, can use the project-specific preservation policy as a bridge to a technical specifications document and thus form a basis for requirements management.

In both scenarios, the senior management of the institutions is, owing to the nature of a strategic partnership, more closely involved than for institutional preservation policies (cf. Chapter 4.1).

Key questions:

- What common features and differences exist between the fields in terms of mission, procedures and legal situation?
- What instruments are needed to specify the technical/organisational areas for action?
- Have those who will be responsible in each participating field, for the duration of the project, been identified?

6 Summary: generic example of an institutional policy

The following example of the content and structure of a policy is intended as an indicative suggestion. By its nature it is not final, nor are all the potential components mandatory. Any policy should always be aligned with the specific needs of the institution in question.

Introduction

The introduction contains information on the authors and those responsible for the policy and gives their contact details. If periodical reviews are planned for the policy, this is mentioned here, giving the number and the date of the current version, as well as mentioning older versions and any related documents.

Part 1: Description of the digital archive and aims of the policy

This should incorporate a short description of the institution as needed to understand the policy. The legal mandate, task, mission and collection profile as well as information on the selection and acquisition of the archived documents can be discussed in detail.

Responsibilities are also laid down. It is advisable here to give roles within the institution and not the names of individual staff, as the latter are likely to change more often than the job titles or names of divisions.

Part 2: Principles and objectives of digital preservation

After detailing the the general challenges facing digital preservation a summary of the central aspects of the institution's digital preservation should be given:

- list and definition of the designated community
- monitoring of the designated community and resultant adjustments to meet their needs ("community watch")
- safeguarding of access and locatability for future users
- preservation of integrity, authenticity, readability and completeness
- clear identifiability (use of persistent identifiers)
- metadata and metadata standards used
- care, credibility and transparency
- adherence to standards, e.g. conformity with DIN 31644
- documentation and traceability of processes

- active further development and optimisation of the workflow
- strategy and planning
- roles and responsibilities
- technical infrastructure
- human, technical and other material resources used
- information on cooperation arrangements that the institution uses to optimise its processes
- confidential treatment of the archived information
- equal treatment for contents

It is also possible to put some of these points in a separate document, referred to in the policy.

Part 3: Durability of the policy

- organisational unit responsible
- information on (regular) reviews of the policy to check it is up to date
- information on higher-ranking and subordinate documents
- binding nature of the policy in the institution
- future plans, if applicabl

Annex

(all links checked in April 2014)

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