The SCAPE Preservation Policy Framework

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The European project SCAPE Scalable Preservation Environments (running from 2010-2014) was dedicated to the digital preservation challenges of large scale, heterogeneous collections of complex digital objects. The project focused on digital objects held in the collections of various participating content holders, with a focus on libraries, web archives and data centers. The scale of these digital collections limits the possibility of manual involvement when performing preservation activities. Instead, such large scale collections will require more automation through the use of workflows and high-performance systems. As preservation activities need to be guided by preservation policies, these policies will need to be formulated in such a way that they are machine readable (e.g. right level of granularity), in order to be usable in such automated processes.

There is a shared recognition that the existence of preservation policies for long term digital preservation is important. Not only because it is for example stated in the ISO standard 16363 Audit and Certification of Trustworthy Digital Repositories, but also because digital preservation needs a well-defined underlying basis.

A Digital Preservation Policy is an essential document in which an organization summarizes its approaches to achieve the goals and objectives for the long term preservation of the collections in the digital archive. Phrases like "*Without a policy framework a digital library is little more than a container for content*" and "*A policy forms the pillar of a programme for digital preservation*" are underpinning this notion and show that the importance of preservation policies is a generally accepted one in the digital preservation community. This community also is no longer restricted to the cultural heritage sector.

Preservation policies, together with the explicitly formulated strategy of an organization, play various roles. One of them is informing the stakeholders of the digital archives about the activities. Stakeholders including staff, depositors and the users of the digital archives as well as the general public and the designated communities for which these organizations preserve their collections for the long term. Another role of preservation policies is that they will guide preservation actions. A preservation action will often be preceded by an identified risk, based on monitoring several areas of interest – called preservation watch - , and a combination of outcomes will lead to a decision to act. The identification of the most appropriate action is done in the preservation planning process, which produces a preservation plan. Enacting the preservation plan will result in the preservation action.

In SCAPE preservation watch activity was enriched by the SCOUT tool [9]. SCOUT is an automatic preservation watch system that will detect preservation risks and opportunities. The preservation planning was extended by an improved version of the Preservation Planning tool PLATO. In both cases, a detailed level of preservation policies will be needed to enable the planning and watch services to act according to a specific set of institutional preservation policies.

But what is a good preservation policy, and what should be described in it? Are there rules and guidelines? In an attempt to answer these questions the requirements for preservation policies, as defined in the two most important standards for the digital preservation community are analyzed. One standard is the Open Archival Information System (OAIS) **¡Error! No se encuentra el origen de la referencia.**. The other is the ISO 16363 standard for Audit and Certification of Trustworthy Digital Repositories (TDR).
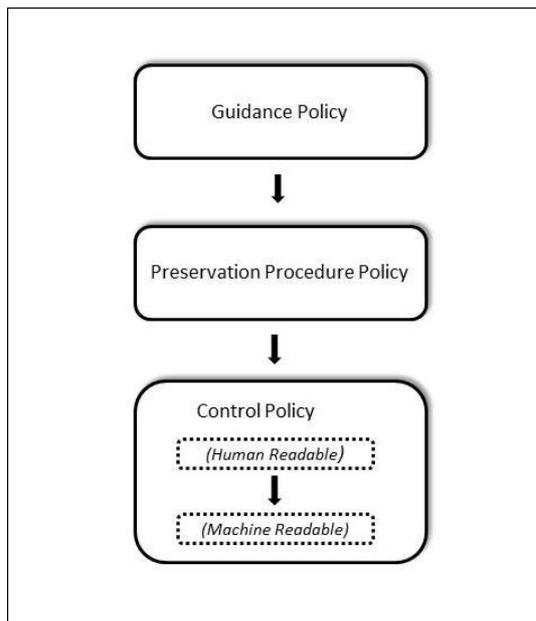
Figure 1 Scape Policy Framework

The SCAPE Policy Framework (see Figure 1) was developed during the project, consisting of three levels:

1. **Guidance Policies**, a high level representation that describes in a broad sense the goals of the organization in relation to long term preservation of their collections. These Guidance policies can be derived from a strategy document or the mission of an organization.

2. **Preservation Procedure Policies** in which the approach to be taken to achieve the high level goals is described.

3. **Control policies**. On this level the policies formulate the requirements for a specific collection, a specific preservation action and/or for a specific designated community. This level can be human readable, but should also be machine readable and thus can be used in automated planning and watch tools to ensure that the chosen preservation actions and workflows meet the specific requirements identified for that digital collection. These are likely to be kept internally within the organization.

The set of high level topics from the standards and other literature, was input for the development of the SCAPE Catalogue of Policy Elements in which the second level, the Preservation Procedure Policies, are worked out. Each policy element is described on the basis of a template. In this template the details of each policy element will give information about the need for the specific policy element and the risk of not having such a policy, the relationship with the strategic level, as well as the relationship with the lowest level, the Control Policy. A suggestion is made for the stage in the DCC Preservation Life Cycle in which the policy will be created and who in the organization could be responsible for the description of the policy. These suggestions intend to connect the policy to the daily environment in which it should operate. Whenever relevant, elements are illustrated with an example of a real life policy.

This SCAPE Catalogue of Policy Elements is publicly available, both as a report as well as a wiki.

By putting this overview of preservation policies on the Open Preservation Foundation website, a central place is created where every organization, planning to develop or updating its preservation

policies, can do so. The related overview of [Published Preservation Policies](#) offers everyone the opportunity to have a look at the policies of colleagues.

More information can be found at:

Maturity and preservation policies. Barbara Sierman. Proceedings ipRES 2014 . Proceedings of the 11th International Conference on Digital Preservation p 259-266 http://ipres2014.org/sites/default/files/upload/iPres2014-Proceedings-version%201.pdf

Preservation Policy Levels in SCAPE. Barbara Sierman, Catherine Jones, Sean Bechhofer, Gry Elstroem. In: iPRES 2013: proceedings of the 10th International Conference on Preservation of Digital Objects . Ed. José Borbinha, Michael Nelson, Steve Knight

http://purl.pt/24107/1/iPres2013_PDF/Preservation%20Policy%20Levels%20in%20SCAPE.pdf