

# UC Office of the President

## iPRES 2009: the Sixth International Conference on Preservation of Digital Objects

### Title

Lessons Learned: Moving a Digital Preservation Network from Project Organization to Sustainability

### Permalink

<https://escholarship.org/uc/item/2f77s5bk>

### Author

Schrimpf, Sabine

### Publication Date

2009-10-05

### Supplemental Material

<https://escholarship.org/uc/item/2f77s5bk#supplemental>

Peer reviewed

# iPRES 2009

THE SIXTH INTERNATIONAL CONFERENCE ON THE PRESERVATION OF DIGITAL OBJECTS

## Proceedings

October 5-6, 2009  
Mission Bay Conference Center  
San Francisco, California

---



California Digital Library

# Lessons Learned: Moving a Digital Preservation Network from Project Organization to Sustainability

**Sabine Schrimpf**

Deutsche Nationalbibliothek  
Adickesallee 1  
60322 Frankfurt am Main

## **Abstract**

Since 2003, nestor is known in the international digital preservation community as the German network of expertise in digital preservation. It is often referred to as a model interdisciplinary network that interconnects approaches from the library, archival, and museum community. Less people know that nestor has not been a sustainable organization all this time, but a time-limited project. Besides the goals to establish a network of expertise with an information platform, working groups, and training opportunities, an important aspect of the nestor project phase was to find a sustainable organization model for the network's services. These goals are mostly met. With six of the seven project partners and two additional organizations entering into a consortium agreement in June 2009, nestor transforms to a sustainable partner consortium and can continue its work.

The preparation of the sustainable organization was a valuable experience for the project partners because vision and mission of the network were critically discussed and refined for the future organization, which won't have any more project funds at its disposal but should be as self-sustaining as possible. Some more aspects were identified that also need further refinement in order to make nestor fit for the future. These aspects shall be discussed in this paper.

## **Mission and vision of nestor**

The aim of the nestor project phases was to build a network of expertise in digital long term preservation and to find a sustainable form of organization that allows maintaining the network.

The ultimate goal envisaged for the network throughout the project phases was "to secure the preservation of digital resources in Germany and to work with others internationally to secure our global digital memory and knowledge base". It was, however, not intended for nestor to be a preservation organization itself, nor to build or to plan a digital archive for Germany or the like. Most of the initial nestor partners were planning or implementing digital archives for their respective organizations at the time they entered into the cooperation, and nestor should help to exchange knowledge, distribute best practices and avoid isolated applications. The nestor structures should foster communication between the partners and other relevant stakeholders and facilitate the development and

implementation of a national cooperative digital preservation strategy.

Other important missions of nestor have been to advance standardization in the area of digital preservation and to develop a concept for training, education and instruction together with academic partners. Synergies between Grid technology and digital preservation should be explored and targeted outreach activities for the archival community and the museum community should be organized.

When the second project phase came to an end, it was time to ask which of these missions were still valid in the post project time and if there were new ones to be adopted. These questions were closely related to the planning for a sustainable, self-funded form of organization.

On the one hand, each of the partners who decided to invest their own funds in nestor expects that the investment pays back somehow. Each of the involved institutions wants to gain something from participating in the network. Information exchange, common technology watch, sharing of best practices and short lines of communication between the partners are important aspects here. On the other hand, the partners have to make clear what they as a consortium have to offer to new partners. Consulting and guidance are important aspects there.

It has become clear that nestor with its focus on information and communication cannot on its own "secure the preservation of digital resources in Germany". With its network structures it can, however, contribute to securing digital resources.

In the end, the partners did not arrive at a completely new mission statement. The project goal of building a network of expertise has been met. The cooperation agreement is an important step towards a sustainable organization. The mission remains to sustain and enlarge the network and its services and to continually integrate more expertise in order to help securing digital resources in Germany.

## **Organizational model**

During the project phase, several organizational models have been evaluated. The creation of an "eingetragener Verein" (registered association;

membership corporation) and joining of an existing organization were intensely debated. The problem with “eingetragener Verein” was that the number of members should have been relatively high from the beginning in order to cope with the organization and with the assigned tasks. Additionally, since there are already quite a number of “Vereine” in the German memory institution landscape, and most nestor partners were already member of one or another, it wouldn’t have been easy to justify the creation and funding of yet another “Verein” and the effort which has to be invested.

The nestor partners also decided not to join an existing organization. nestor had quickly made a name for itself nationally and internationally and the partners considered it advisable for nestor to maintain independent.

Alternatively, the creation of a network on the basis of a cooperation agreement was discussed and finally prepared. The advantage of a cooperation agreement is that it allows for some planning reliability without forcing partners into inflexible, expensive affiliations. Through the agreement, the partners commit themselves to sustain and even extend nestor.

The cooperation agreement does not provide nestor with legal competency on its own. nestor cannot contract, hire people, or administer funds, only the individual nestor partners can do so. However, the partners are still aspiring for nestor to reach the status of legal competency in the medium term. For the time being, the network relies on the willingness of its partners to assume tasks and responsibilities. The partners allocate staff resources to nestor in order to maintain the core activities (website, qualification, standardization, and networking). The tasks and the responsibilities of individual partners are described in detail in an appendix to the cooperation agreement.

New partners can enter the cooperation at any time, provided they assume one or more tasks. New partners can apply for full partnership or for associated partnership, depending on how much effort they are willing and able to contribute. It is estimated that organizations, which are planning, implementing or running digital archives and are concerned with all aspects of digital preservation become full partners. Organizations, which are not actively preserving digital material (yet) can contribute specialized knowledge to a certain work area and are thus ideally suited as associated partners.

The directors of the partners compose the board of directors, which makes strategic decisions and approves new members. A coordinator, based at the German National Library, is in charge of the day-to-day management of the network.

Although the cooperation agreement secures the immediate existence of nestor, the partners are aware that it won’t be easy to maintain an effective organization without legal competency over years. Especially the fact that nestor cannot administer funds is cumbersome. It

means that the network cannot charge for its services and has little to no funds at its disposal for extra activities (like e.g. studies). For that reason, the idea to create a national committee, consisting of the nestor partners and representatives of the German Federal and Laender Governments, is still on the agenda.

## **Management of the consortium**

Until 2009, nestor followed a project organization. All activities were specified in a project plan and organized in work packages with milestones and with work package leaders. Responsibilities were clearly distributed amongst the partners and all partners were together responsible to the project sponsor (German Ministry for Education and Research).

In the post project phase, there is no such external authority. The cooperation partners are only responsible towards one another. In order to facilitate collaboration, a detailed description of work including individual tasks was added to the cooperation agreement. With each new partner entering the cooperation agreement, this annex can be updated (in accordance with the tasks the new partner assumes). It is the task of the coordinator to keep an eye on the fulfillment of the description of work.

As in any cooperation, the management of a geographically and institutionally dispersed consortium poses a particular challenge. The coordinator sustains the flow of information between all partners, on the operational as well as on the executive level. In the everyday business, mailing-lists, telephone conferences and a wiki must substitute face to face meetings. All partners meet at least twice a year in order to review the progress of activities.

## **Core services (“products”?) of nestor**

On the one hand, it is the aim of the nestor consortium to maintain and even expand the services developed in the project phase. On the other hand, it is a reality that the sustainable nestor has fewer resources at its disposal than the project nestor. Consequently, there is a need to prioritize services. Although all services are for free (except for small fees for the nestor schools), the nestor partners think of them as products. It underlines the understanding of nestor as a service provider to dedicated customer groups. Three areas were identified as key priorities: Networking, education, and standardization. All of them are represented and embedded in the information and communication platform “digitalpreservation.de”.

## **Information and communication platform**

The information and communication platform brings together existing activities related to the long-term preservation of digital resources and provides an overview of projects and other digital preservation related activities in Germany and abroad. A calendar informs

about events relevant to the community. The nestor subject gateway collects information and guidelines to technical, organizational and legal aspects of the long-term storage of digital resources. In an expert database, people occupied with digital preservation can register themselves and such make their expertise available to others.

During the project phase, the nestor platform has established itself as the first place to search for information on digital preservation in Germany. This status shall be maintained in the post project phase. Because the maintenance of the platform is relatively time-consuming, it is essential that all nestor partners keep an eye out for relevant information.

To make the platform more user friendly, it was slightly restructured and the layout was relaunched after the end of the project phase. The goal was to make relevant materials easier detectable for those users that are looking for specific information on the one hand and to allow a more comfortable browsing through the site for those who want a general overview on the other hand.



Figure 1: nestor homepage before...



Figure 2: ... and after the relaunch.

Another goal of the relaunch of the website was to spotlight the three key priorities networking, education, and standardization.

## Networking

nestor constitutes a contact point for institutions, individual, and the media, for all kinds of questions concerning digital preservation. It intermediates questions to the right contact persons. It helps institutions that are planning digital preservation activities to get an overview of what's there already and to make contact with potential partners. All these networking activities can be classified punctified/ad-hoc, because they react on individual queries coming from outside.

In addition, nestor provides structural networking opportunities: nestor partners currently offer four working groups (WG), in which experts from different institutions collaborate on specific topics: WG Media, WG Cooperative preservation, WG Law, and WG Preservation Planning. The establishment of further working groups is possible. An experts' database on the nestor homepage allows experts to self-register and to make contacts with others engaged in digital preservation.

Networking is not limited on the national level. nestor is in touch with several national and international digital preservation projects and initiatives. It is present at the relevant international conferences and it closely monitors international developments in the area of digital preservation to intermediate them to the German audience.

## Education

The nestor partners consider training and education in the field of digital preservation a crucial issue. During the project phase, nestor has identified an extensive necessity for training and education in digital preservation, but a lack of qualified training opportunities in Germany.

Therefore, nestor, in collaboration with academic partners, has taken lead to develop adequate training offers. On the one hand, nestor provides a range of basic training offers itself. On the other hand, nestor serves as a platform for the development of a digital preservation curriculum to Higher Education Institutions in the field of Library-, Information- and Archival Science.

The nestor training materials include publications ("nestor Handbook – An Encyclopaedia in digital Preservation") and targeted training programs in digital preservation, e.g. one day seminars, specialized workshops, and the annual nestor School. The training offers are targeted at college students, professionals from archives, libraries, museums, and other institutions with an interest in digital preservation.

For the development of a digital preservation curriculum, two nestor partners (SUB Göttingen and Humboldt University Berlin) have signed a Memorandum of Understanding (MoU) with six Library-, Information-, and Archive Schools during the project phase. The MoU partners have jointly developed a range of e-Learning tutorials that are used and evaluated in lectures. They maintain their cooperation with nestor beyond the project

phase and are actively extending their circle in the post project time.

The MoU partners have also set their eyes on the European and international developments. The DigCCurr project<sup>1</sup> is expected to yield important results. In Europe, the Bologna process with the purpose to create a European higher education area by making academic standards and more comparable and compatible throughout Europe, provides an opportunity to set out for a cooperative European degree program in digital preservation.

## Standardization

nestor provides an overview of existing standards in the field of digital preservation and related technologies, and it initiates and bundles standardization activities in and for Germany. Through cooperation with the German Institute for Standardization (DIN), users' interests can be represented on a national and international level.

During the project phase, two nestor working groups dealt with standardization issues: the working group "Trusted Repositories" developed the nestor Catalog of criteria for trusted digital repositories and engaged in national and international standardization of criteria for audit and certification of digital repositories. The working group "long-term Preservation Standards" drafted guidelines for Ingest processes and for the interoperability of Persistent Identifiers systems.

nestor has in time made contact with the appropriate DIN committee and has helped to establish digital preservation as a new dedicated work priority of the committee.<sup>2</sup> By the end of the project run time, the nestor standardization projects were turned over to the DIN committee, where they can be advanced to national/international standards. A significant number of experts involved in the nestor working groups followed the standardization projects into the DIN committee and maintain their engagement to advance them to formal standards there.

As contact point for European and international standardization bodies (namely CEN and ISO), the DIN committee also forms a focus point for collaboration in international standardization projects in the area of digital preservation, such as DRAMBORA or OAIS.

---

<sup>1</sup> see <http://ils.unc.edu/digccurr/>

<sup>2</sup> The new work priority is also reflected in the name of the committee (NA 009-00-15 AA: Schriftgutverwaltung und Langzeitverfügbarkeit digitaler Informationsobjekte), which in English translates to "Records management and long term availability of digital information objects". For more information, see <http://www.nabd.din.de/gremien/NA+009-00-15+AA/en/54774796.html>

## Target groups ("customers"?) of nestor

A stakeholder analysis has been conducted at the beginning of the second project phase. Three broad target groups were identified as nestor's main stakeholders: a specialist audience consisting of practitioners from heritage institutions, policy and decision makers, and the general audience.

The specialist audience is the most important stakeholder group for nestor and most activities during the project time were oriented towards them. With its working groups, workshops, and a public expert database, the network was explicitly shaped to integrate specialists. For practitioners, nestor serves as a platform to exchange knowledge and network with other experts in the field. Most of nestor's publications were tailored to the needs of practitioners with little to profound precognition. Naturally, they remain a central stakeholder group for the network also in the future.

Policy and decision makers were only selectively in the focus of nestor during the project phases. Although there was an awareness of the importance of that stakeholder group, there were no systematic approaches towards them. Since this stakeholder group is key for the sustainable organization, nestor will re-emphasize its communication with them.

The general public was addressed in a number of media appearances. With support of a press agency, nestor tailored a number of press activities with the aim to sensitize the general public for the complexity of digital preservation. Popular magazines like "Computerbild" and "C't" reported about nestor activities. As one of the most successful examples, a campaign that explained how to archive personal holiday photos can be mentioned. After the end of the project, there is no capacity to actively address the general audience via press activities. Of course, the nestor partners will still be available for press inquiries.

During the project phase, it showed that a more detailed analysis of stakeholder needs and interests was necessary. Foremost, the important group of specialized audience needs some differentiation. Small organizations have different information needs than large ones, and there are large differences in the precognition of individual practitioners. To that end, nestor compiled different leveled publications. A "guidebook on digital preservation" provides an initial introduction to digital preservation; the nestor handbook provides an overview of the whole spectrum of digital preservation, and the nestor expert's reports contribute to the scientific discourse in Germany. This differentiation is important for the planning of future activities.

Researchers, both explicitly digital preservation researchers as well as researchers with requirement to preserve their data, are important stakeholders for nestor, both with different needs. nestor's concern is to be the

focal point for digital preservation research in Germany. nestor partners are involved in cutting edge research in the field of preservation and keep in touch with the important digital preservation research centers. New research projects can be triggered via nestor – one of the aims of the nestor expert's reports was to identify and demonstrate research questions.

Research data pose an ever increasing challenge to digital preservation. During the second project phase, nestor has invested some work in this area. It will still have to show if nestor can establish itself as the competency to advise researchers how to keep their data safe.

Last but not least, there was no straight line on how to deal with commercial stakeholders. In the transition period from project organization to sustainability, nestor has made some cautious advances towards industry, but questions arise like: Does nestor offer them a forum to present or even advertise their products? Can this even be avoided when commercial parties join the network's activities? Can and does nestor want to attract commercial enterprises as sponsors of certain activities? Such answers have still to be answered.

### **Create and promote a nestor brand**

The partner organizations of nestor are well established organizations, but nestor is a relatively new organization. Although established in the digital preservation community, by far not all members of the target groups know what nestor is and those who do know it don't necessarily know who is behind nestor and why it exists. With a growing network and an increasing number of partners representing nestor, it is ever more important to have a consistent understanding within the consortium of what the essence of nestor is. Otherwise it will be too hard to spread the word amongst the target groups. To focus on the three key priorities named above (networking, education, and standardization) were one step in that direction.

The services that the network offers should follow a clear concept as well. The events organized and materials compiled during the project phase were by funding and by project plan nestor events and nestor materials. It is not that easy in the post-project phase. What makes an event a nestor event and not "just" that of one or more individual partners? At the moment, it is still decided on a by-case basis by the respective partners and the nestor office. Some criteria that could be consulted are: Does the event present nestor results? Does it generally trigger resp. advance dialogue or cooperation in the area of digital preservation? Does it address community specific digital preservation needs? Does it serve basic training and education purposes?

The same holds true for nestor publications. At the moment, there are three different types of nestor

publications: Training materials like the nestor Handbook and the nestor guidebook, the series "nestor-studies", which includes experts' reports and standards drafts, and the new "nestor-edition" for PhD theses and other selected works that make a special contribution to the digital preservation discourse.

All services under the nestor brand are promoted by the responsible partner(s) or by the nestor office via the nestor homepage, presentations at workshops and conferences, notice to related initiatives, mailing-lists, and in particular cases press releases.

### **Strategic Planning**

The network in its current form is a product of the two preparatory project phases and an analysis process in the transformation period from project organization to the post project phase. The described organization model, the key priorities, core services, and target groups are well thought through but not fixed forever.

All future activities have to be considered against the background of the overall goal to contribute to ensuring the long-term preservation of digital resources in Germany by networking expertise and making knowledge available. Questions that the nestor partners will have to address are: In which areas does nestor want to reinforce its engagement? With regard to new partners: Which areas of competencies are needed to add most value to the network? And how fast is the network supposed to grow? The first two content driven questions have to be considered in connection with the evolving state of the art in digital preservation. As technical opportunities enhance and legal and organizational framework conditions concerning digital preservation change, existing priorities and services may have to be revised and new ones may be identified for adoption. Consultancy in legal and technical questions is one example for an area of interest here, coordination of research activities is another.

The third questions must be considered in an organizational context. The management and communication structures in nestor are tailored to a little consortium. In the first weeks after the cooperation agreement came into effect, a couple of organizations expressed their interest to join the nestor partners by formally entering into the cooperation agreement. Already, three partners entered into the cooperative agreement with the original nestor project partners. As the network grows, management and communication structures may have to be adapted. One possibility could be the creation of sub-networks – the MoU partners engaged in the development of education offers constitute a successful model for that.

With solid structures implemented in the project phases and consolidated in the post project phase on the basis of a cooperation agreement, nestor is in a good position to enter the next phase of its life.