

Full English translation of Dutch [strategy document](#), published June 2010

Netherlands Coalition for Digital Preservation

A Future for our Digital Memory (2): Strategic Agenda 2010-2013 for Long-Term Access to Digital Resources

The problem

Printed documents can be locked away in some closet for tens or even hundreds of years without their usefulness being in any way affected. Digital information is another matter altogether. Digital media (cd's, dvd's) have limited life spans, hardware and software become obsolescent in a matter of years, internet links disappear almost as quickly as they appear, and software such as Photoshop makes it increasingly difficult to determine what is authentic and what is not. Digital objects consist of machine-readable rows of ones and zeros, and even a slight change in this bitstream can seriously jeopardise the original purpose.

Digital information is *fragile* – and at the same time we have grown extremely dependent on it. Who can imagine daily life anymore without mobile phones and internet? In any case, short-term fragility seems to be the least of our problems. It is in the long term that the effects of rapid technological developments grow much more serious – on scientific data which are essential for longitudinal research, on public records which ensure the government's accountability, on television programmes which become more interesting and precious over time.

The Netherlands Coalition for Digital Preservation (NCDD)

The fragility of digital information especially affects public sector organisations with long-term remits: archives, libraries, museums and research institutions. In the past decades they discovered that ensuring long-term access to digital resources requires vast resources, state-of-the-art technical storage facilities and special expertise. Ten of such organisations decided to join forces and in 2008 established the Netherlands Coalition for Digital Preservation (NCDD). The aim of the Coalition is to ensure that those digital objects which the public sector deems worthy of safekeeping indeed retain their usability well into the future.

The Dutch national digital preservation survey

In 2009 the NCDD conducted a national digital preservation survey in order to gain a better understanding of the present status of digital information in the Netherlands. The study was funded by the Dutch Ministry of Education, Culture and Science. An [English-language summary](#) of the report *A Future for our Digital Memory (1)* is available from our website. In brief, the report concluded that long-term access to digital objects is impeded particularly by:

- Lack of awareness of the risks digital objects run
- Lack of knowledge and expertise to address the risks
- Inadequate data management at the point of creation
- Short-term project funding runs out before long-term issues are addressed

- Roles and responsibilities are not clearly defined; at the point of creation short-term interests prevail
- Limited supply of trustworthy storage capacity; a digital repository is often beyond the means of smaller institutions
- Limited supply of specialised manpower, ICT capacity
- Inadequate supply of practical tools and services
- Institutions have not yet adapted to the digital age; their strategies do not yet address digital issues (e.g., selection criteria).

The NCDD's strategic agenda: a dual-axis approach to cooperation

The NCDD has decided that these impediments can be best addressed by developing a distributed national network for managing digital resources in the public sector. This infrastructure is understood to include not just storage facilities (hardware, software), but also a whole range of organisational measures: a clear definition of roles and responsibilities, including transition work flows between producers and custodians of digital information, selection criteria, quality criteria, shared services, knowledge and expertise.

The network will be based on *cooperation and collaboration* between stakeholders, because the resources required by long-term digital preservation exceed the means of most individual institutions. By pooling the resources, these can be applied as efficiently as possible and benefit more institutions. At the same time the proposed network must allow for diversity and solutions that are tailored specifically to local circumstances and needs. Time and again, a careful balance must be struck between all interests involved.

The NCDD's strategic agenda is based on four closely related basic principles:

1. Each individual organisation that produces or archives digital objects is, in principle, responsible for organising long-term access

As self-evident as this principle may seem to be, experience shows that it is not as deeply rooted as one would wish. Outsourcing certain activities may very well become part of institutions' strategies, but national organisations or network leaders (see # 2) will never assume overall responsibility. Rather to the contrary, active participation by *all* producers and custodians of digital objects, be they small or large, local or national, is required to implement the national network.

2. Strengthening collaboration *within* domains: the network leaders

The NCDD report identified four public domains with distinct dynamics: scholarly communications, public records and archives, media, and (other) cultural heritage. As lack of alignment between producers and custodians of digital objects constitute one of the prime impediments to permanent access, collaboration within so-called information chains must be strengthened. In three domains national institutions have made substantial progress in securing long-term access to digital objects. The NCDD intends to build upon their scale, their expertise and their network by assigning to them explicit *network responsibilities*. They will take a leading role in developing sustainable infrastructures within their domains. It must be emphasized that they will not themselves act as (single) repositories for their domains; such concentrations would be neither advisable nor feasible. Rather, the network leaders will rally the stakeholders in their domains to jointly develop the

necessary facilities, services and other arrangements to secure long-term access. The leaders assume the role of facilitators.

The network leaders for two out of four domains are self-evident: the National Archives for public records and archives, and the Netherlands Institute for Sound and Vision for media. Within scholarly communications two network leaders were identified: the Koninklijke Bibliotheek, National Library of the Netherlands (KB), for publications, and Data Archiving and Networked Services (DANS) for research data. The cultural heritage domain is the most diffuse of all domains. Some cultural heritage collections have found their way to the repositories in other domains, but a natural network leader has not yet surfaced. The NCDD hopes to fill this gap soon, in consultation with the domain and with the Ministry of Education, Culture and Science.

Table 1. Domains and network leaders for long-term access

Domain	Network leader	Present remit	Proposed network remit
Public records	National Archives	Public records at national level	Public records at local and provincial level; private archives
Scholarly communications - <i>publications</i>	Koninklijke Bibliotheek	All Dutch publications	--
- <i>research data</i>	Data Archiving and Networked Services	Humanities and social sciences	All other disciplines (making use of international infrastructures)
Media	Netherlands Institute for Sound and Vision	Output public broadcasting companies	Knowledge & expertise for all audiovisual objects
Cultural heritage	To be decided upon	Present practice: Publications: KB Audiovisual: Sound and Vision Archaeology: DANS	Other cultural heritage collections (museums, etc.)

2. Strengthening collaboration *between* domains: the NCDD

Digital objects are known to transcend traditional boundaries. New types of objects emerge for which long-term access must be arranged. Or information is produced in one domain and consumed in another domain. The NCDD is the national gateway where cross-domain questions and problems are dealt with and where consultations between all stakeholders lead to sensible solutions.

Sharing knowledge and expertise has been a focal point of NCDD activities from the start. By means of publications, presentations, events and, e.g., the first weblog on long-term access, the NCDD shares knowledge and information, and brings organisations, individuals and domains together. In the years to come, the NCDD will continue and intensify its knowledge-sharing activities.

3. Strengthening administrative collaboration

A strategy such as the one proposed by the NCDD can only succeed if administrative authorities join forces as well to support the initiative with laws and regulations as well as funding. Because the issues transcend the boundaries between administrative levels and authorities, the NCDD has already discussed its plans with the Directors responsible for research and science, cultural heritage, and media, literature and libraries within the Ministry of Education, Culture and Science. The directors indicated that they acknowledge the importance of the issues raised by the NCDD, that they support the NCDD's approach, and that they are willing to discuss the necessary investments. Other organisations consulted by the NCDD include the Ministry of Interior Affairs, the Interprovincial Board, the Association of Netherlands Municipalities, and the Dutch Association of Regional Water Authorities

Conclusion

The NCDD is convinced that cooperation and collaboration are the key to realising long-term access to digital information. In order to maximise the benefits of cooperation, the NCDD advocates a dual-axis approach: custom-made measures within specific domains will be combined with broad, cross-domain cooperation. In this way, one national network will emerge in which issues of long-term access are fundamentally addressed and a Future for Our Digital Memory can be ensured.

NCDD member organisations as of June 2010:

- 3TU.Datacentre (universities of technology of Delft, Eindhoven, Twente)
- Data Archiving and Networked Services (DANS), the national digital archive for research data in the humanities and social sciences
- Koninklijke Bibliotheek, National Library of the Netherlands (KB)
- Ministry of the Interior and Kingdom Relations (BZK)
- Nationaal Archief, National Archives of the Netherlands (NA)
- Netherlands Institute for Sound and Vision (BenG)
- Netherlands Organisation for Scientific Research (NWO)
- Royal Netherlands Academy of Arts and Sciences (KNAW)
- SURFfoundation (innovation in higher education and research)
- Digital Heritage Netherlands (DEN), associate member
- Statistics Netherlands (CBS), associate member.

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