The pages below contain the main initiatives in the field of digitisation policy, programmes and projects, as well as inventories, good practice and co-operation in The Netherlands. However, no claims can be made to be exhaustive.

**Policy**

**Policy scenario for digitisation**

In the Netherlands, the national government as well as the main nationally funded bodies such as the National Archives, the Koninklijke Bibliotheek, Nation Library of the Netherlands, and the Netherlands Digital Heritage Association, create the guiding policies on the digitisation of cultural heritage. Although local authorities may propose slightly deviating policy scenarios, many of these stem directly from the national policy directions and programmes. See for detailed policy profile and main initiatives at [http://www.cultuurtechnologie.net](http://www.cultuurtechnologie.net).

One and a half-year on since the formation of the NRG and the adoption of the Lund Principles by the Ministry of Culture, considerable progress has been made on several fronts, national as well as regional. Many digitisation projects have started up with funding from the 2001-2004 National Policy Document on Culture, the Mondriaan Foundation, the Knowledge Network, the Electronic Superhighway Action Plan and other sources. Together they represent a first step towards an integrated system of electronic access to the Dutch cultural heritage.

For the year 2003 and on, heritage institutions involved in digitisation are expected to shift their focus from the individual use of digitised collections to the idea of flexible applications in new knowledge conglomerates. In any event, current trends in archives, libraries, museums and the historic site sector all point in this direction. Technological innovation in particular is radically changing the way work is organised in and between institutions and impacting on traditional working methods and structures. The position of heritage institutions in the non-profit sector is also changing, as are communication structures and expectations. And this extends beyond the boundaries of institutions. Heritage institutions have become part of wider knowledge networks and networks for knowledge transfer, and it is the Ministry of Culture’s task to enable the institutions to secure a prominent place within these networks. At present only few heritage institutions have yet the expertise to offer larger-scale, content-driven digital access to their collections and information. Heritage institutions are not yet sufficiently equipped to improve access to their electronic systems. Many of them are unable to recognise or identify the place of digitisation within their institution as a whole. To improve matters, digitisation should be integrated more closely into the information management within institutions. Only then will they be able to offer high quality electronic access to their collections and expertise. Digitisation determines the service that an archive, museum or library offers the public and therefore, ideally, digitisation is an integral part of the institution’s internal management.
**Policy goals**

- To assure investments in digital heritage resources make a real contribution to the knowledge infrastructure.
- To offer more efficient support so that institutions can streamline their digitisation projects and integrate them into other work processes.
- To enable institutions to apply appropriate procedures and standards. Therefore, clearer frameworks and appropriate conditions are needed.
- Institutes applying for grants will in the near future be required to apply prescribed procedures and standards.
- Obliging institutes to apply standards and procedures will initially entail extra expense. More structural budget is a necessary foundation to achieve this the proper application.
- To address the question of copyright where digitisation leads to new uses and more frequent reuse.
- To promote digital preservation philosophy and practice
- To take account of what is happening internationally and tie in with similar projects.
- To promote best practice examples in the Netherlands to any audience nationally and internationally by presentation through the Web (http://www.cultuurtechnologie.net).

All of these goals were brought together and well founded in a policy document on the Digitisation of Cultural Heritage Information that was sent to the parliament on May 27, 2002 (see for full text at http://www.cultuurtechnologie.net/policy27may2002.htm).

**Adoption of terms of reference**

The Ministry of Culture formally endorsed the Terms of Reference (see http://www.cordis.lu/ist/ka3/digicult/t_reference.htm). In effect, it has committed itself to the Lund principles and the mission of the NRG to monitor progress regarding the objectives stated therein.

**Co-operation activities**

A National Steering Group for implementing the Lund-principles was established end 2001. Participants are the National Archives, the Koninklijke Bibliotheek, the Netherlands Digital Heritage Association, and the Ministry of Culture (chair).

Within the Ministry of Culture, a working group responsible for eCulture, is the main co-ordinating body for all policy concerning ICT and culture, digitisation of heritage, eCulture & education, &c.

**Examples of national co-operation**

**Standard creation**

Dutch digitisation policy states that the consistency of digitisation efforts should be enhanced by the adherence to clearly defined standards. The definition and dissemination of these standards is the responsibility of the major heritage institutions in the Netherlands (National Archives, Koninklijke Bibliotheek, major museums, National Institute for Cultural Heritage (ICN), Institute for Image and Sound (NIIG), National Archaeological Service (ROB), National Service for the Monuments (RdMz) and the Netherlands Digital Heritage Association (DEN)).

A working group of these institutions and of other leading heritage organisations in the Netherlands established an XML-scheme, based on the Dublin Core, for the exchange of contextual cultural heritage information. At present this working group is occupied with a pilot project investigating the possibilities of the Open Archives Initiative Protocol combined with the XML-standard in an information service providing access to different Dutch heritage resources on the Web.

Another working group introduces the Encoded Archival Description standard into the Dutch heritage community. In this working group, participants are the organisations mentioned above as well as the major university libraries.

**Examples of international co-operation**

The National Archives is one of the four co-ordinating institutions of ERPANET, a European project (funded by the European Commission) to improve and disseminate knowledge about the digital storage of cultural heritage and scientific and academic material. Other institutions are The Humanities Technology and Information Institute (HATII, University of Glasgow, the main contractor), the Institute for Archival and Library Science (Universität degli Studi di Urbino) and the Schweizerisches Bundesarchiv. Activities are training seminars, workshops (most recently in Urbino, Oct. 2002), publications and special tools and other products.


The TANAP programme (Towards A New Age of Partnership) intends to create better access to the Dutch East India Company (VOC) archives held around the world. The programme contains a research programme and an archives project. The archives project is conducted by the National Archives. Part of the project is the digitisation of finding-tools. Already 9 finding-tools, encoded in EAD, are available. Co-operation includes national and other archival institutions in Indonesia, Sri Lanka, India and South Africa. See for details http://www.tanap.net.

See more examples of co-operation activities at http://www.cultuurtechnologie.net.

**Benchmarking**

The implementation of a framework (as prepared by the NRG and adopted by the Minerva Network) for the qualitative analysis of digitisation initiatives through benchmarking, is being supported by a Web-tool for self-assessment and a Website for the publication of cumulative benchmark results and European comparison (see: http://www.cultuurtechnologie.net/benchmarking). The website targets an international audience by providing all information in English. Up till now (December 2002) 6 projects have been analysed. Extending the effort towards a quantitative analysis will be a next step.

The Ministry of Culture recognises the importance of a benchmark, at the onset of initiatives as well as after completion. Benchmark indicators can be used as a point of reference for institutions confronted with the task of proposing, defining, or planning a digitisation initiative. It can be used
Participants: International Institute for Social History, the International Information Centre and Archives for the Women's Movement, the Municipal Archives of Amsterdam and Dordrecht, and the National Archives.

The Living Environment
Funding: Government.
Co-ordination: Association for records management and the archives (DIVA).
Goals: based on the Land Registry maps of 1832 a lot of information on any place which in the Netherlands can be found with the nowadays zip code, will be made available on Internet: building plans, maps, photographs, &c.
Audience: general; secondary education; researchers.
Participants: about 40 institutions for cultural heritage in the Netherlands.

Access to persons (TOP)
Funding: Government.
Co-ordination: Association for records management and the archives (DIVA).
Goals: the development of a digital "shell" for uniform access to genealogical and other data on persons in archives. Will be active in September 2003.
Audience: General.
Participants: Municipal Archive Delft, Regional Centre for History Bergen op Zoom, the Netherlands Central Office for Genealogy, National Archives, State Archives Agency.

Integral Digital List of Archives (IDA)
Funding: Government.
Co-ordination: Association for records management and the archives (DIVA).
Goals: creating a common "list of archives" of as many archival institutions in the Netherlands as possible. A prototype for a pilot is available, but still under discussion.
Audience: general.

Main national inventories and theme-related projects

Inventories and resource discovery

Main national inventories and theme-related projects

Web guide to culture
Funding: Government.
Co-ordination: Netherlands Digital Heritage Association (DEN).
Goals: a general guide and a cultural agenda for heritage institutions in co-operation with Netherlands tourist organisations;
• an informative intermediate layer with short introductions and presentations and information about parts of collections;
• a metadatabase, to open up information on heritage on the level of digitised sources.
Audience: education, cultural tourism, professional specialists and also a broad public.
Participants: archives, libraries, museums, built heritage, visual artist, theatres, orchestras, theatre, dance and opera companies, tourism, schools, research institutes.

Memory of the Netherlands
Funding: Government, Koninklijke Bibliotheek.
Participants (museums, archives, and monuments).
Goals: large-scale digitisation of cultural heritage collections and providing access to them;
• building applications for secondary education on at least 16 collections;
• guaranteeing the possible re-use of images in all kind of applications and publications;
• building of a robust infrastructure for access;
• promoting co-operation between heritage organisations;
• dissemination of acquired knowledge between the participating institutions;
Audience: general.
Participants: International Institute for Social History, the International Information Centre and Archives for the Women's Movement, the Municipal Archives of Amsterdam and Dordrecht, and the National Archives.

The Living Environment
Funding: Government.
Co-ordination: Association for records management and the archives (DIVA).
Goals: based on the Land Registry maps of 1832 a lot of information on any place which in the Netherlands can be found with the nowadays zip code, will be made available on Internet: building plans, maps, photographs, &c.
Audience: general; secondary education; researchers.
Participants: National Archives, the regional state archives and regional centres for history.

Study: Napster-service for historical information
A feasibility study funded by the government will make clear the technical possibilities and the organisational and economic conditions in an Internet environment for the conversion and peer-to-peer exchange between historical information from non-professional historians to professional cultural heritage institutions. The results will be published in spring 2003.

Good practice and skills

Main examples
A range of institutions is involved in the dissemination of good practice and skills in ICT and the digitisation process. Involved are the major heritage institutions in the Netherlands (National Archives, Koninklijke Bibliothek, major museums, National Collections Institute, Institute for Images and Sound, National Archaeological Service, National Service for the Monuments and the Netherlands Digital Heritage Association. Main sites for help en support already available in The Netherlands:
http://www.geheugenvannederland.nl
the site of a major project of the Koninklijke Bibliotheek, offers guidelines for digitisation projects;
http://www.den.nl
the site of DEN, some info on standards and technologies;
http://www.sim.nl
the site of the official ICT-section of the Dutch Museum Association (NMV), offers a wide range of information on ICT-related topics in the museum sector;
http://www.digitalduurzaamheid.nl
the site where a special competence centre of the National Archives and the Ministry for Internal Affairs offers information on digital preservation issues.

EAD
The National Archives plays an active role in the further development of EAD as an international standard. Besides that, it will actively promote the knowledge and the use of EAD in the Netherlands by 2003. The "best practices guidelines" for the use of EAD version 2002 were made available. In 2003 part of the Website of the National Archives will serve as knowledge centre for the use of EAD in the Netherlands.

Memory of the Netherlands
This programme delivers published (hardcopy and Website) guidelines on all aspects of the digitisation
process: digital quality, metadata, project management, planning and control. Workshops will be organised. Dissemination of acquired knowledge between the participating institutions is one of the main goals.

**Competence centres for the digitisation of heritage**

There are no formal criteria for evaluating competence centres and therefore no criteria on which to nominate such centres. However, a number of advisory centres do exist, and these include:

- **Digitisation of museum collections**
  - Netherlands Institute for Cultural Heritage - ICN (http://www.icn.nl)
  - Netherlands Institute for Art History - RKD (http://www.rkd.nl)

- **Digitisation of audio-visual heritage**
  - Netherlands Institute for Image and Sound - NIBG (http://www.nibg.nl)

- **Digitisation of library collections**
  - Koninklijke Bibliotheek - KB (http://www.kb.nl)
  - Netherlands Association of Public Libraries - NBLC (http://www.nblc.nl)

- **Digitisation of information on built & archaeological monuments**
  - Netherlands Dept. for Conservation - RdMz (http://www.monumentenzorg.nl)
  - National Service for Archaeological Research - ROB (http://www.archis.nl)

- **Digitisation of heritage in general**
  - Netherlands Association for Digital Heritage - DEN (http://www.den.nl)

- **Digitisation training initiatives for cultural heritage institutions**
  - ICT / digitisation training courses are run by a number of largely University-based organisations and umbrella organisations like the Netherlands Museum Association (http://www.museumvereniging.nl), and the Netherlands Association for Digital Heritage (http://www.den.nl).

**European added value and content framework**

**Quality**

There is a need to rethink the Brussels Quality Framework. It should be made more suitable for appropriate and recognisable use in the cultural sector. Therefore, a clearer reference should be made to the specific character of cultural Websites and their contents. Present strategies and actions to promote the Brussels Quality Framework and to stimulate its application are:

1) Dissemination and publicity of the framework to encourage the redevelopment and upgrading of Websites throughout the cultural sector.
2) Introduction in the preparatory and evaluatory phases of government sponsored digitisation initiatives.
Digital preservation
Dutch heritage institutions in general lack procedures to prevent digital information from becoming inaccessible in the course of time. This often happens when intermediate products (the individual objects catalogued in the system) become inaccessible or, even worse, when they are destroyed and therefore unavailable for new projects once the end product (the Website, for instance) has disappeared. But information can also become inaccessible or unusable if the medium carrying it deteriorates or the technology on which it depends becomes obsolete. A protocol was recently introduced to protect digital originals covered by the Public Records Act. It prescribes a number of general procedures and standards for preserving digital records and ensuring that they remain accessible. Its purpose is similar to that of the Koninklijke Bibliotheek’s Dutch Electronic Publications Archive, which fulfils the Koninklijke Bibliotheek’s statutory obligation to preserve electronic publications. Although neither the protocol nor the Electronic Publications Archive is concerned with digitised heritage sources, they might serve as examples of ways of prolonging the accessibility of digital copies without having to keep digitising the originals.

Good practice
In the context of the Dutch Electronic Publications Archive, official agreement was made between the Royal Library and Elsevier Science Publishers concerning the storage and preservation of Elsevier’s electronic publications. The Koninklijke Bibliotheek offers customers (libraries, etc) a guaranteed access to the (international) electronic publications, even after an unexpected demise of the publisher. The Koninklijke Bibliotheek contracted IBM-Holland for a close research and development co-operation in relation to the system and technology required. For more info (in Dutch) see http://www.kb.nl/kb/resources/frameset_kb.html?/kb/menu/ken-arch.html.

Research activities on digitisation
A consortium of heritage institutions, businesses and computer science research departments at major universities is currently defining a large R&D investment programme. This programme, called “A Production Line for the Digitisation of Cultural Heritage”, will be submitted in a colossal national investment initiative that is designed to boost the competitiveness and harness the strength of the national knowledge infrastructure. The aim of this programme is to develop know-how and tools to facilitate digitisation on a large scale, access and preservation of cultural heritage, and to develop a suitable business-model that guarantees co-ordinated and standardised procedures, now and in the future. In the the programme some key components of the digitisation process from enrichment to delivery of information to the user are identified and targeted as problematic and in need of fundamental research. These components are:

• semantic enrichment
• semantic interoperability
• context awareness
• indexing and searching
• multimedial presentation and visualisation
• digital durability

The central metaphor, “Production Line”, is an excellent visualisation and organising principle of the many interdependencies of the constituent parts. Different conglomerates of institutions and enterprises will be grouped around these topics. The Netherlands Organisation for Scientific Research NWO acts as organising and co-ordinating partner of this programme; this eminent organisation has put the first step to enter the national investment initiative with a programme that largely revolves around the humanities. The initial consortium will design a programme that will give opportunities of collaboration to a core-group of institutions and business partners, but will also be open for tenders with partners outside the initial group. The Expression of Interest, proposed by the consortium to the Ministry of Economic Affairs of the Netherlands, was met with interest and enthusiasm. The consortium is now in the stage of developing a final proposal.

Priorities for future strategies
Suggestions for future developments include:

Inventories, discovery of digitised content:
providing exchange between and central access to distributed national memory-databases, like Memory of the Netherlands, to create a European Memory Database.

Quality, IPR en DRM:
there is a need for exploitation based on digital information, offering flexible and personalised services to individual users. Besides a well-functioning payment mechanism, proper attention should be given to the protection and exploitation of the right to use this digital information.

International benchmarking:
digitisation in the Netherlands is strongly linked to contextualisation. As digitisation hardly ever occurs in its own right, indicators to identify and quantify the amount of effort and funds spent on contextualisation are needed.

NL-presidency 2004 (tentative):
Preparing EU-wide agreement between the main national libraries on establishing certified deposit systems for the preservation and access of the born-digital scientific information of publishers.