Sweden

Ana Maria Durán
Dept. of Information Science, University of Uppsala

Börje Justrell ICT Department, National Archives

The responsibility for carrying out policies, strategies and activities on the digitisation of the Swedish cultural and scientific heritage is a task for public agencies and companies in the governmental and municipal fields. The Government supervises the operations of the governmental agencies by issuing appropriation directions and ordinances that contain instructions about their activities. However, the Government may not determine how the agencies should act in individual cases or apply legislation. Certain decisions taken by government agencies may be appealed to the Government.

After the Parliament election in September 2006, a new Government was formed in late autumn. The former Ministry of Education and Culture was divided in two separate Ministries, one for educational and one for cultural matters. The new Government is now examining the cultural sector in order to make priorities, find new opportunities and seek new means of financing cultural activities. A more detailed culture policy and strategy programme is yet to be presented.

A. Users and content

Ancient Monument Search - FMIS Fornsök

Fornsök is a new e-service on ancient monuments provided by the Swedish National Heritage Board. It contains information about ancient burial-grounds, settlements and working sites, runic stones and rock-carvings as well as mines, crofts, and places of execution. The time span covered by this service is from the Old Stone (Palaeolithic) Age to the 19th and 20th centuries. Using Fornsök is free of charge. The database behind Fornsök contains information about 1.5 million remains from approximately 560,000 places. The information comes mainly from field inventories in different places of the country and from professionally performed archaeological

surveys and prospecting. The development of Fornsök has functioned as an experimental service for the Board when trying out new web techniques and working methods. To involve the opinions of the end users at an early stage in this process, the staff at Board communicated with a test group using a discussion forum on the web. With the help of Google Earth, Fornsök has opened for a visualisation of ancient monuments in the landscape, making it possible for users to combine the information from Fornsök with data from other sources like geological data, such as the elevation of land.

<http://www.kms.raa.se/cocoon/fmis-public/
index.info>

<http://www.arkeologiforum.se>

Culture environment search - Kulturmiljösök

In early 2007 the Swedish National Heritage Board will launch *Kulturmiljösök*, which is a cross search and metadata one-stop-service for information within the field of cultural environment: burial-grounds, settlements, working sites, buildings, historical information, maps, photos and publications. The search interface of *Kulturmiljösök* makes it possible to cross search several resources at the same time. Later in 2007 an integrated interactive map will be included. http://www.kms.raa.se/cocoon/kulturmiljosok/enkel_sok.html

Materials guide - Materialguiden

The idea behind the on-line service *Materialguiden* is to support professionals and amateur restorers on how to preserve traditional building materials as well as information about the history of the materials and their qualities. *Materialguiden* covers buildings and environments of all types and from all periods in all of Sweden. It provides an on-line tool for identifying, dating, estimating the condition and preserving and maintaining old materials that may occur in a building.

It is also possible to make a constructing description with the help of *Materialguiden* by searching for materials in the Swedish BSAB 96 system, which is a conceptual framework for classification of construction works. The system is a means to facilitate communication among actors in a field of practice and is owned by the Swedish Building Centre (Svensk Byggtjänst) in collaboration with the construction sector. The BSAB system is used with the permission of the Centre.

<http://hildebrand.raa.se/materialguiden>

Cross search - Samsök

The National Library (Royal Library) has, together with several university libraries in Sweden, developed a one-stop service that enables users to search and find full text or references in the libraries' numerous electronic resources. More than 50 percent of acquisitions at a university library nowadays are electronic and can be accessed from the university's computer network. Samsök/CrossSearch/QuickSearch or MetaLib as it is known internationally - makes information retrieval easier by allowing cross searching of several resources at the same time. During 2006 it opened up for students and researchers to get direct access to reliable research findings, such as legal texts, mass media archives, e-books, pictures, diagrams etc. If the information is not available in electronic form, the system helps the user to continue the search by offering alternatives. The service is available in English. <http://samsok.kb.libris.se/>

Ongoing digitisation at the National Library (Royal Library)

The overall goal of the digitisation at the National Library (Royal Library) is to give the citizens right to access the collections whenever they want and to present the collections on a global scale. The digitisation also contributes to the protection of the collections, which enables also future generations to benefit from them. The National Library (Royal Library) runs several digitisation projects, of which only three will be mentioned here. The Open collections project started in 2006 and implements new technologies and working routines. The project includes a number of activities, such as building up an image library and a digital photography studio, establishing procedures for OCR

text processing and long-term digital preservation, and developing a digital library website. The new working routines deal with selection criteria, cataloguing methods, image naming principles, image capture, metadata entry, quality and security control and statistics, and evaluation. The project creates new skills and positions for digital photographers, documentation specialists, IT specialists, web communicators, project management, OCR and e-text. The Open collections project has a theme called Travelling through the Ages and aims to present the diversity of the National Library (Royal Library) collections. The project showcases selected travel material of manuscripts, diaries, maps, illustrations, posters, tickets, brochures and books. A special website will be launched in the autumn of 2007. Another digitisation project is Codex Gigas ("the Giant Book"), or the Devil's Bible. The book is 89.5 x 49 cm and weighs 75 kg, and for this project a special studio has been built. The book contains the Old and New Testaments in pre-Vulgate Latin translations, Isidore of Seville's Etymologiae, Josephus' History of the Jews in a Latin translation, the Chronicle of Bohemia, written by Cosmas of Prague, etc. The manuscript was written in the early 13th century in the Benedictine monastery of Podlažice in Bohemia. It is called the Devil's Bible after the impressive picture of that potentate on one of the folios. In 1594 the manuscript was acquired by the Imperial Treasury in Prague. When the Swedish army conquered the city in 1648, it was brought to Sweden and presented to the Royal Library the following year. Continuous updates of the digitisation will be posted at the National Library (Royal Library) website. A special Codex Gigas website will be launched in the autumn of 2007, when the book will be lent to Prague for an exhibition. Codex Gigas will there be represented page by page on the scale of 1:1. It will be possible to read Codex Gigas in Swedish and English. Selected texts will also be available in Latin and Czech. Weekly magazines from the 20th century are very popular and frequently studied at the National Library (Royal Library) by citizens in general as well as by researchers. Publications of this kind are rare

in other libraries and are, unfortunately, often printed

fragile. The National Library (Royal Library) will start

digitising the mid-1960 issues of the magazine Vecko-

on paper of very poor quality and, therefore, very

Revyn in a project called *Weekly publications*, which can be regarded as a digital experiment. For the time being it is very uncertain how the material can be accessed and distributed and whether it can be published on the Internet. Publishers, authors and artists still uphold intellectual property rights to the contents of these magazines.

<http://www.kb.se/digi_exempel/resor/default.htm>
<http://www.kb.se/HS/Eng/djavueng.htm>
<http://www.kb.se/digi_exempel/veckopress
/default.htm>

Invite - open collections

The National Historical Museums (SHMM) in Sweden is a central museums agency comprising the Museum of National Antiquities, the Royal Coin Cabinet and Tumba Papermill Museum. The task of SHMM is to preserve and promote Sweden's cultural heritage and provide perspectives on social development and the present. Its collections are among the most valuable historical treasures in northern Europe, comprising more than 20 million individual objects, catalogued under around 34,000 inventory numbers. With the help of grants from the Access programme SHMM started the Invite - open collections project. This is a very ambitious project that involves all departments of SHMM and aims at giving access to the collections on a broad scale. The goal is to digitise all the 20 million objects. The digitised information is saved in a collection database at SHMM and accessible on the Internet immediately after it has been captured. It is possible to follow the digitisation process on-line minute by minute and artefact by artefact.

<http://mis.historiska.se/mis/sok/invite.
asp?sm=9_0>

Recorded sound and moving images

The collections of the Swedish National Archive of Recorded Sound and Moving Images consist mainly of radio, TV, film, video, gramophone records and multimedia. Its holdings are among the largest in Europe and contain about 5 million hours stored on tapes, discs and cassettes. According to Swedish Legal Deposit law one copy of all audiovisual productions must be sent to the archive. The long-term goal is to collect, preserve and disseminate the complete Swedish production of recorded sound

and moving images. The greater part of the archived material is because of intellectual property rights only available for research purposes on site in Stockholm or as an interlibrary loan service at approximately 30 places in the country. Some of the databases are available on the Internet.

The SESAM Media Archive contains radio and TV programmes, records, tape cassettes and talking books, interactive multimedia, films and videos, and Swedish 78-rpm records. The Phonograph cylinders in the collection are accessed separately. The Folk Music Discography gives access to 2,298 Swedish folk music recordings made 1904-2005. Songs, artists and groups are easily accessed, and to every song is added additional information about other participants, record label, and song title etc.

<http://www.slba.se/arkiv/index.jsp
<http://www.slba.se/SLBA/FONOGRAF/index2.htm>
<http://www.ljudochbildarkivet.se/netahtml/
vaxosok.htm>

<http://www.ljudochbildarkivet.se/netahtml/
folkhome.htm>

Flat object's story telling

Flat object's story telling – Platta föremål berättar is a conservation and digitisation project that aims to make the collections at the Kalmar County Museum available to everybody in a number of ways. The museum started out with its wallpaper collection. Every week a new wallpaper from the collection is digitised, described and made visible on the museums web site. The collections at the Kalmar County Museum are mainly of a cultural and historical nature. The items date from the Early Stone Age (Neolithic) to modern times. Over the years, the Kalmar County Museum has collected a variety of items, including costumes and textiles, household objects from both the peasantry and the upper classes, as well as items related to navigation, trade, handicraft and the military sector. Most of the museum's collections reflect everyday life in the Kalmar County, but also activities of special importance to the region. Two examples of special collections are the marine archaeological collection from the marine excavation of the wreck of the Royal ship Kronan, and the artist Jenny Nyström's collection.

<http://www.kalmarlansmuseum.se/default.asp>

Art Database and My collection

The Museum of Modern Art (Moderna Museet)
Database, The Museum System (TMS), has been
developed by Gallery Systems, New York, and is used
by many museums around the world. Gallery Systems
has also developed the interface eMuseum,
which enables the museum to present the database
on the Internet and adapt its graphic profile
to the museum's web site.

The Art Database is the museum's most important information resource for researchers, teachers, students and others. It is also a useful tool for museum staff in their daily work. The digital archive contains data regarding the collection - acquisitions, exhibitions, long-term loans and lent-out works, etc. More than 50,000 works are currently included in the Art Database, and you can search among paintings and sculptures, films and videos, drawings, graphic art and photography. A special service allows you to create your own collection, My collection, choosing works from the collections of the Museum of Modern Art (Moderna Museet). By registering as a user, you can save your own personal collection of works chosen from the museum collections, accessed only by you. You can have several collections on different themes: a school project, material for a lesson, term paper material, or just your favourites - works that simply mean something to yourself or that you wish to find out more about. The search interface is available also in English. <http://www.modernamuseet.se/emuseum/code/</pre> emuseum.asp>

WebArt

TheWebArt database contains information about art objects in the National Museum collections, which consist of paintings, sculptures, drawings, prints, applied art, furniture, design, and much more.

The museum has a total of more than 600,000 objects, and the database has currently information on more than 92,000 of them. Some of the objects in the database may be viewed on location at the museum or in other places where the museum's collections are exhibited. However, the database contains more objects than what is possible to exhibit at the same time. Title, artist, date signature, materials and techniques, measurements, inventory number and acquisition data are given for each object. About 24,000

of the objects are supplied with images. Information about the objects comes from the museum's internal database d.ART, in daily use by the museum staff. New records are continuously entered and existing information successively updated. The main source for registration is the museum's inventories. All objects registered in d.ART are also available. This means that some of the information shown may not yet have been entirely checked and may contain incorrect details. The images in the database are from different periods, created with various methods. Some images have been digitised from colour slides, provided by the museum's own photographers; others have been scanned from microfiches. The search interface is available also in English.

<http://www.nationalmuseum.se/NMTemplates/
NMPage_3141.aspx>
<http://webart.nationalmuseum.se/search/
search.aspx>

National Archives

The digitisation strategy of the National Archives focuses on large-scale scanning of basic archival material like parish records, land survey files and court records, used by a broad variety of academics as well as by the public looking for their family roots. In Fränsta, located in the middle of Sweden, the National Archives has a department called MKC (Media Converting Centre) that provides large-scale scanning of all kinds of paper documents for internal and external customers. The production capacity today is 90,000 images per day. Other departments at the National Archives are digitising microfilm, providing on-line scanning and executing digitisation projects that produce over 3 million images per year. In total, the National Archives and the regional state archives in 2006 produced about 29 million digitised images, including those ordered by external customers. The National Archives has on top of that an agreement with the Genealogical Society of Utah regarding production of images scanned from microfilm, that will result in roughly 15 million images during the coming year. Almost all images produced for internal use are converted and stored in a user friendly format. For the moment, only a minor part (about 15-20 percent) of these images can be accessed over the Internet, due to regulations on confidentiality and personal integrity. To balance the demands

of different user groups, an advisory board of scholars and other users supports the state archives in selecting the holdings and collections that ought to be digitised.

<http://www.ra.se>
<http://www.svar.ra.se>
<http://www.mkc.ra.se>

Emigrant Letters

The EMILE project, Early EMIgrant LEtter stories, focuses on letters as a historical resource. The letters were written to the people that the emigrants left behind in their home countries. These letters are a vital part of Europe's common history and can shed light upon an era of great importance for both Europe and the Americas. The participating countries in the project are the Czech Republic, Ireland, Italy, Poland and Sweden, with Sweden as the leading partner. The participants have together produced a web site, five touring exhibitions, and a catalogue. The Swedish contribution in the project is to provide material based on a collection consisting of 2,500 letters from the Kinda region in the county of Östergötland, covering the period from mid-19th century until around 1920. The letters tell how the Kinda emigrants experienced their travel, why they emigrated, how they spent their first time in the new country and how their new life turned out.

The presentation of the letters on the web site is supplemented with other materials, such as photos, songs etc. In order to put the Kinda material into a wider Swedish context, the web site also contains articles about the emigration from a national and regional perspective. The Swedish partner in the project is the Cultural Heritage Östergötland. The Cultural Heritage Östergötland is run as an independent project, which gathers and coordinates all the actors engaged in the history and cultural heritage of the region of Östergötland. The network includes local museums, archives, local folklore societies, cultural institutions, authorities and projects.

<http://www.emigrantletters.com>
<http://www.kulturarvostergotland.se/>

B. Technologies for digitisation

In 2006, the following educational and diffusion activity can be singled out as the most important national initiative, targeted at enhancing accessibility and usability of cultural and scientific content through digitisation:

Future in Access - Framtid i Access

In 2006 MLA secretariat (ABM-centrum) in Sweden, continued the work according to its objectives; promoting understanding and collaboration between cultural heritage institutions in Sweden, stimulating coordination of digitisation and promoting use of new technology and skills development activities across institutional boarders. The ABM-centrum is run as a project and has now the following partners: The National Library (Royal Library) of Sweden, The National Museum, The National Heritage Board, The National Archives, The Swedish National Council for Cultural Affairs, The Swedish Museum of Natural History, The Swedish National Archive of Recorded Sound and Moving Images and The Nordiska Museet. The project extends over a period of three years, from May 2004 through December 2007, and operates with limited financial resources from the institutions involved. During the year of 2006, ABM-centrum received funding from the Government's employment stimulation program, the Access project. This enabled ABM-centrum, besides disseminating the best practices and new methods, to offer a special educational programme designed to improve knowledge of and skills in digitisation. The programme runs 2006-2007 and is called Future in Access - Framtid i Access (FIA). It is targeted at all employees involved in the different Access projects in Sweden. The program offered long and short courses, seminars and practical work in, for example, conservation and restoration, and different aspects of selection criteria for digitisation. The focus of the courses is the overall view of digitisation, i.e. the whole process including project planning, selection, preservation measures, description, image capture, long term preservation, accessibility and and intellectual property rights issues. Deeper studies of certain aspects of the digitisation process were arranged as separate courses in Moving Images and Sound, Image Capture, Video Recording, Digitisation of Moving images, Digitisation of Sound,

Management and Maintenance of Photographic Material, Image Description – Motive, Context and Data Elements. In all, 18 different courses were arranged with 600 people participating. To support the courses, two of the MINERVA handbooks, the *Good Practices Handbook* and *Quality Principles for Cultural Websites*, have been translated into Swedish. They have also been edited and adjusted to Swedish conditions and will be accessible on the web early in 2007. The handbooks will constitute the basic literature in the courses of the educational program in 2007. http://www.abm-centrum.se

NRG and MINERVA results on the national level and their impact on institutions

The NRG and MINERVA results are on the national level distributed mainly through:

- reports by Swedish NRG representatives to the Ministry of Education and Culture and the top management at national cultural heritage institutions (political level)
- conferences, seminars, hearings and work shops organised by national institutions and state commissions in the cultural field (general level)
- · the above mentioned ABM-centrum
- to central, regional and local institutions (practical level)
- an overall information and promotion through Culturenet Sweden

As experts appointed by the Ministry of Education and Culture, the NRG representatives frequently report back to the Ministry. The NRG representatives provide and present background information to the Swedish representatives in CAC (Culture Affairs Committee) in matters concerning digitisation.

The NRG representatives also participated in a sub-group on Culture in the Government Strategy Group on ICT Policy, 2004–2006. In the final report the sub group devised a large number of recommendations for a national strategy in the field of ICT and culture. It was pointed out that for ICT to be able to make culture more accessible by using new methods as well as current technique, the organisational boundaries must boldly be transgressed. The group suggested several initiatives in order to support this development. The most important

were centres of excellence for the integration of culture, digital technology and entrepreneurship, improving young people's participation in social development through innovative forms of interaction and dialogue, national strategies for the digital preservation of and accessibility to the cultural heritage, and better conditions for new business opportunities based on culture content and resources.

Over the years, the national cultural institutions have increasingly started to collaborate in the field of digitisation and digital preservation. Swedish institutions in the cultural heritage field will and have already joined several MINERVA spin-off projects and initiatives, such as the MINERVA Plus and the thematic network MINERVA eC.

C. Sustainability of content

There is consensus among Swedish cultural heritage institutions that some basic conditions are to be fulfilled to make their holdings more accessible and available to users. The digital information should:

- be easy to find and easy to retrieve, also across sectors
- · be possible for the user to understand, accept and use
- be retrievable, accessible and usable not only on short term but also for future generations.

With these elements in mind, the government decided to rise funding for the fiscal years 2006 and 2007 of in total 550 million SEK (about 61 million EURO) for increased accessibility to and for the preservation of the cultural heritage. The aim is to make it possible for cultural institutions to hire people short-term for labour intensive activities (disposal, conservation, restoration, inventory, digitisation etc). An important objective is to enable access to collections, archives and other cultural information and artefacts, either virtually through Internet or presented publicly in exhibitions, publications and other forms. The Swedish National Council of Cultural Affairs was commissioned by the Government to handle a programme called Access. During 2006, the Council supported in total 349 projects within institutions and organisations with public funding, and at the end of the year nearly one thousand persons were hired

short-term to do the work. The cost was in total 271 million SEK (about 30 million EURO). A bit over 50% was given to museums cultural environmental projects, 10% to the local history projects, 10% to projects in stage art, and 14% each to projects in archives and the libraries. The grant applications exceeded far beyond the assigned funding resources, which made it necessary for the Council to make allocation priorities. An important basis for allocation was projects focusing on accessibility. Other important criteria were quality and long term perspectives, cooperation across institutional boarders, and the aim to attain an equal geographical distribution of the allocations.

In the library field grants have been allocated for the accessibility of old and valuable collections. Among the receivers in the library field are the National Library (Royal Library) in Stockholm and university and public libraries all over the country. The National Archives and several regional state archives have been funded to digitise archival records but also other parts of their holdings, such as older photographic glass-plates. The Access programme has supported both central and regional projects in the Swedish local heritage movement in finding ways to a better use of their collections and to increase accessibility. In the field of performing arts, several institutions have been funded to take care of and make accessible old and historically important collections. The theme of these collections has been about photos, costumes, video documentaries, stage design sketches, scores etc. Money from the Access programme has also been allocated to document the history and culture of immigrants and minority groups in Sweden. Sustainability of content is of top priority within the archival community. The National Archives digitisation plant organised a department called MKC (Media Converting Centre) that has now become the main national competence centre in digitisation. Its services are requested also by other content holders than the archival institutions, for example the Swedish land survey. MKC was identified by the MINERVA Plus project as a model for cost reduction. The activity at MKC is organised as a large scale production of digital images from paper originals and microfilm for different customers. The MKC operate three flexible shift teams that enable 20 hour working per day giving

an output of 15 million images per year. The working units are arranged by the various types of originals: maps, bound books, loose leaf, microfilms and the necessary equipment. The purpose is to achieve an effective utilisation of resources and to maximise the throughput to reduce cost per unit.

D. Digital preservation

In 2006, the following national initiatives and projects were identified as the main undertakings in digital preservation:

Swedish National Archives of Recorded Sound and Moving Images (SLBA)

For long-term preservation a state inquiry recommended a migration of SLBAs audiovisual content from analogue to digital form. Based on that recommendation the Parliament decided to allocate SLBA extra money for the migration of the public service material during 2006 and 2007. This material consists of local radio programmes, including local commercial radio, and local cable television.

Centre of Competence for Long Term Digital Preservation (LDB-centrum)

In 2003 the Swedish National Archives started a joint research and development project with Luleå University of Technology and the municipality of Boden. The objectives for this project were, on short-term, to develop methods and tools for long-term preservation of digital information in the public sector. The Swedish social welfare administration has been used as the main pilot for both development activities and scientific research. The first results were published in the end of 2006 when the project period was completed. On long-term, the goal for the project was to create a national competence centre in Sweden on long-term digital preservation and access. This was fulfilled in January 2006 when Luleå University of Technology established a centre for long-term preservation as a department of the university. Partners in this centre, besides the university, are the Swedish National Archives, the National Library (Royal Library), the Swedish National Archive for Sound and Moving Images, and the municipality of Boden, where

the centre is also situated. Three main areas of activity have so far been identified in the field of long-term preservation: scientific research, development of models, methods and tools, and knowledge enhancement. On a more practical level two main questions will probably dominate the agenda:

(1) the availability and accessibility of multi-sourced and multi-formatted digital resources and (2) the preservation of complex, dynamic and very high volume digital objects, including those with high levels of interactivity.

Digital Library

As a national library the Royal Library has acquired, described, preserved and made available all Swedish printed publications since the 17th century and has also made the information about the publications available digitally since the 1980s, in digital catalogues and other digital formats. However, many documents of today are born digital and published in digital form only, and the number of items increases rapidly. To avoid losses in the Swedish cultural heritage, the National Library (Royal Library) started in the 1990s to collect, preserve and make available Swedish documents from the Internet. The collection today contains about 3 million files from 280,000 web sites, mainly with the suffixes .se, .nu, .org, .net and .edu. Due to the Swedish regulations on personal integrity this material can be publicly accessed only within the premises of the Royal Library.

E. Monitoring progress

Swedish National Council for Cultural Affairs

The Swedish National Council for Cultural Affairs is a government agency with the primary task to allocate state funding to cultural activities like theatre, dance, music, literature, arts periodicals, public libraries, fine arts, museums, and exhibitions. The council also provides the Swedish government with basic data for cultural policy decisions, evaluates state spending in the cultural sphere, and provides information about culture and cultural policy. The Council for Cultural Affairs supports and initiates interaction between the state, the regions, municipalities and representatives for cultural life in Sweden, e.g. libraries, museums and performing arts centres. The aim is to safeguard and develop Swedish national cultural policy, and to promote cultural diversity and an even geographical spread in cultural provision. No overall surveys on the digitisation

activities in 2006 have yet been made. The Council's most important Governmental commission in this field has been the Access programme. The goals and outcomes of the Access programme will be presented in a report to the Government in June 2007.

The first year of the Access programme

The National Council of Cultural Affairs has made a report based on the preliminary outputs of the first year of the Access programme.

Images/imagefiles

Digitisation/scanning - 5 247 345
Documentation - 437 833
Out sorting/thinning - 50 359
-
Registering and indexing - 971 098
Restoring and conserving - 13 900

Running metres

Digitisation/scanning - 12 939	
Documentation - 2 874	
Out sorting/thinning - 7 304	
Storing - 13 109	
Registering and indexing - 14 302	
Restoring and conserving - 10	

Objects

(film, microfiche, artefacts, registry entries, documents,	
volumes, photographs and negatives)	
Digitisation/scanning - 321 587	
Documentation - 230 758	
Out sorting/thinning - 117 373	
Storing - 153 289	
Registering and indexing - 1 295 788	
Restoring and conserving - 66 464	

To get a better view of the results, the Swedish National Heritage Board is used as a detailed example: During 2006 the Access project at the Swedish National Heritage Board has digitised/scanned 500 images/image files of conservator's images (30% of total plan), registered and indexed 3,500 images/image files of conservator's images (30% of total plan), registered and indexed 9,500 buildings (25% of total plan), digitised/scanned/ and made georeference of 8,455 (2,5 Tb) of older maps (61% of total plan), restrospect cataloguing by 350 entries/month, registered and indexed recent archaeological surveys and prospectings (20% of total plan), registered and indexed final reports of older archaeological surveys and prospectings (65% of total plan),

documented 16 volumes of images/image files on parish churches (20% of total plan), thinning 16 volumes of images/image files on parish churches (20% of total plan), digital registration of archival listings from 88 private archives (45% of total plan), digital registration of 7,500 maps and plans (35% of total plan), registered and scanned 3,000 entries of church images (20% of total plan), sorted, registered and made access to 500 slides from the famous photographer Pål-Nils Nilsson's collection of images.