

**ECP 2005 CULT 038097/Bernstein**

**Bernstein**

# **Progress Report**

**01 September 2007 – 29 February 2008**

<b>Deliverable number/name</b>	<i>No. 16, D7.4 Half-year progress report</i>
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<b>Author(s)</b>	<i>The Bernstein Consortium</i>



***eContentplus***

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<sup>1</sup> OJ L 79, 24.3.2005, p. 1.

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## 2 Summary

The first year focused on the user requirements, the analyses of the existing databases, the harmonization of the data, the design of the workspace, and the building of the foundation for the bibliography and the geographical information system. The focus of the work done in the third half year was on evaluation and implementation of the components developed so far, i.e. the Bernstein workspace, the component model, the Leipzig paper bibliography, and the GIS system.

1. The workspace mock-ups (<http://bernstein.iicm.tugraz.at/bernstein/mockups/index.html>) were tested intensively, evaluated thoroughly, and redesigned accordingly. The search module provides four types of search methods:
  - Simple Search
  - Advanced Search
  - Component Search
  - Browse Motif

The further modules for statistics, geographical maps, bibliography, and expertise are still under development.

2. The information stored in the databases was harmonized and standardized. The first version of the watermark description standard presented as Deliverable no. 8: ([D2.1 Watermarks standard v.1](#)) was revised and is published as a trilingual (English, French, German) thesaurus on [Twiki](#). It includes a classification scheme for the hierarchically organized watermark types and a nomenclature assigning a name to every type. An Italian and a Russian version of the thesaurus are under progress. The databases were updated according to the thesaurus and are ready for integration into the Bernstein workspace.
3. The component model, an alternative way for watermark classification, was implemented for a subset of motifs for testing and evaluation. The database holders redefined a subset of watermarks containing the motifs *bull's head*, *letter P*, and *triple mountain* according to the component model. There are 1500 component descriptions stored on the Bernstein server presently.
4. The second version of the integrated bibliography comprising bibliographical data from the German National Library (DNB) in Leipzig was implemented and can be inspected (<http://dnb.cheshire3.org/dnb/index.html>). The bibliography is stored as a Cheshire3 database in a separate module of the Bernstein workspace. The current version of the Leipzig bibliographical database provides the user with the possibilities to search for a query in all fields or to browse the indices.
5. The database of geographical references especially created for GIS (August 2007) was revised and augmented to 13000 references corresponding to 8000 different existing European cities. A supplementary lot of old medieval sites were identified or disambiguated and all region names were changed and normalized according to recent European norms (NUTS).

### 3 Status

The entire reporting period had stipulated two deliverables no. 14, D4.3 – Integrated bibliography, and no. 15, D4.4 – Statistical functionalities.

The main discussions and decisions took place in three meetings:

2007.10.22 Stuttgart, Germany – Piccard-Online comparison with printed version of Piccard.

2007.11.22 Vienna, Austria – Workspace design.

2008.02.05 Graz, Austria – statistics.

The meeting in Vienna was attended by all beneficiaries.

The most important step was done on the meeting concerning the integrated workspace. A first proposal in form of mock-ups of the integrated workspace was presented in Fabriano (Italy) in July 2007. This first proposal for the design of the integrated workspace was tested and evaluated carefully by all beneficiaries. At the meeting in Vienna in November 2007 the design was simplified and a decision on a redesign taken. Now, the third version of the workspace concentrating on the search module is available online at <http://bernstein.iicm.tugraz.at/bernstein>.

An access to Piccard-Online (LABW) by the Bernstein workspace was established in order to replace the mock-ups. A solution concerning the access to Piccard-Online was worked out together with BSZ Constance, the service provider of LABW. The major issues are data security problems. A virtual machine environment as a possibility for access to Piccard-Online without data security risks is under development.

A first version of a watermark standard for the integration of the four watermark databases (Piccard-Online, WILC, WZMA, NIKI) was adopted during the previous period. This standard was revised and the databases were changed to make them conform to the standard. The standard includes a classification scheme for the hierarchically organized watermark types and a trilingual nomenclature assigning a name to each type. Further languages (Italian, Spanish, and Russian) will follow. This thesaurus is an important preliminary for the multilinguality, data interoperability, and search across all databases. Databases which are under way like WIGB (Watermarks in English Incunabula) or WIES use already this standard.

The team in Liverpool (LU) took over the task of generating the online access to the bibliography of the German National Library (DNB). The Bernstein Deliverable no. 14, D4.3 – Integrated Bibliography (due January 31<sup>st</sup>, 2008) presents a scheme allowing web access to existing data and a possibility for continuous work in the field of translation and harmonization – harmonization in particular with other parts of the Bernstein Workspace (GIS module, statistics, dissemination). Some of these modules are not yet developed far enough to bring that harmonization and integration to fruition, therefore WP 4.3 is not at an end as of January 31<sup>st</sup>, 2008 but is still work in progress – this should improve the harmonization and result therefore in a better end product.

Each of the records in the bibliographic database contains the information, as listed in the XML schema, for fields as required to define the holding. These records contain codes for information about authors, controlled subjects, classification, and institutions. The codes are resolved using information contained in separate databases and therefore provide the multilinguality desired for the Bernstein Workspace. These records will be searched through

a separate Bibliographic Interface (as described in the prototype of the search tool) and through the Bernstein integrated workspace as described in Deliverable no. 11, D1.2 – The Workspace Integration.

The bibliography is stored as a Cheshire3 database ([www.cheshire3.org](http://www.cheshire3.org)). Cheshire3 extracts data from the given set of XML records into indexes. It pre-processes these records by configurable work-flows to add normalization. Once the indexes have been constructed, it supports operations such as search, retrieve, browse, and sort (for screen shots see the interface sections). Using Apache handlers, an interface is provided directly to this database, so it is accessible to the Bernstein Integrated Workspace via SRU ([www.loc.gov/standards/sru/](http://www.loc.gov/standards/sru/)).

The goal of the Bernstein Historical Geographical Information System (BH-GIS) is the representation of the watermarks distribution and of other paper features stored in the Bernstein databases across space and time. The first step towards the GIS is the generation of a list of places occurring in the Bernstein databases matched to geographical coordinates (geo-list). This work began in the previous period and is finished now with 13000 references, corresponding to 8000 different existing European cities. The result is a matched list of place names, coordinates and additional meta-data. The processed geographical data belong to Piccard-Online, Briquet printed catalogue of watermarks and paper, Incunabula Short-Title Catalogue (ISTC, <http://www.bl.uk/catalogues/istc/>), Gesamtkatalog der Wiegendrucke (GW, <http://www.gesamtkatalogderwiegendrucke.de/>), and the International Paper Bibliography (IPB, <http://www.ddb.de/sammlungen/pdf/ibp.pdf>). A supplementary lot of old medieval sites were identified or disambiguated and all region names were changed and normalized according to recent European norms (NUTS).

A new approach for describing watermarks (component model) was extensively discussed and proposed within the consortium. A watermark can be described in terms of one or more distinct objects (henceforth 'components') and their spatial inter-relationships. In order to evaluate this approach, the consortium decided to make a test with watermarks from the four databases amounting to approx. 2500 watermarks. An online tool for the description of watermarks in the component model was implemented and is used for the description of the test set. So far, about 1500 watermarks were processed.

Software tools are an important part of Bernstein. They improve the quality of pictures, enable paper expertise and help the user in many aspects. One example are sieve feature measurements in greyscale or binary images. For this needs existing software was modified and adapted to the needs of Bernstein for:

- measurements of laid lines density and chain lines distance,
- finding identical pieces of paper based on the chain lines distance. (Demo version <http://rembrandt.ewi.tudelft.nl/>),
- detection of watermarks in greyscale images. (Currently improving the first software version),
- measurements of watermark height and width in the Piccard-Online database and in the printed Piccard collection,
- isolation of watermarks in the Piccard-Online database and in the printed Piccard collection,
- finding identical watermarks in the printed Piccard collection and in the Piccard-Online database,
- extraction of the paper structure from the reflected and transmitted image of a piece of paper.

In order to improve the paper-incunabula integration the following was done or is in progress:

a) Piccard-Online has more than 4000 watermarks recorded from printed books. Unfortunately, Piccard did not provide an accurate identification of the editions. Now, all watermarks belonging to the same edition are grouped and 564 editions are identified by their serial number in the ISTC database. A direct link with incunabula reproduced online is also provided.

b) The current location of the surviving copies of incunabula in European libraries allows a partial reconstitution of the production and spread of printed books in European countries during the XV<sup>th</sup> century. Since the GW online database gives a complete set of locations only for 2000 editions, the locations for the editions formerly described in printed vol. I-VIII (about 10000) were scanned and textualized.

c) More than 3500 authors are represented in about 28000 editions printed in the XV<sup>th</sup> century. The most relevant biographical data concerning their works are collected in a specific database which will be linked to the main incunabula database.

d) The capacities of GIS will be largely increased if the software comes with its own data, the majority of which consist of situations or events related to book history or paper history. Plague was an endemic calamity which heavily perturbed all activities in European countries, especially the production of paper and books. The creation of a database including a complete geo-chronological list of plague epidemics (1348-1600) is currently under way.

The statistical functionality is one of the two fundamental ways in which users can apprehend the data on paper history made available through Bernstein: either at the object level of individual paper descriptions, or at the group level of selected papers according to the user's criteria. A quantitative description of the user's selection provides an insight into the structure of the data and allows its interpretation. The quantitative approach is essential for the historical research, expertise, and cartography of papers. As the functionality of the statistical component was not specified in time and some integration issues were not discussed enough the implementation of the statistics tools has fallen behind by three months. The Deliverable no. 15, D4.4 Statistical functionalities was postponed until the end of April 2008. This does not influence any other work and deliverables.

**3.1 Resources employed****3.2**

<b>Resources employed for the reporting period (person-months)</b>								
<b>Beneficiary short name</b>	<b>WP 01</b>	<b>WP 02</b>	<b>WP 03</b>	<b>WP 04</b>	<b>WP 05</b>	<b>WP 06</b>	<b>WP 07</b>	<b>TOTAL</b>
<b>COO (OEAW)</b>	4.00	9.00	1.00	6.00	-	2.25	6.00	28.25
<b>LABW</b>	5.00	7.00	-	-	-	-	-	12.00
<b>TUG</b>	20.75	0.50	-	0.25	-	-	-	21.50
<b>LAMOP</b>	-	6.00	-	12.00	-	-	-	18.00
<b>DNB</b>	1.00	-	-	3.00	-	-	-	4.00
<b>NIKI</b>	1.00	-	7.75	-	1.25	5.75	-	15.75
<b>DUT</b>	-	-	7.00	-	-	1.00	-	8.00
<b>KB</b>	1.00	0.25	-	0.25	-	0.25	-	1.75
<b>LU</b>	1.00	-	-	5.00	-	-	-	6.00
<b>TOTAL</b>	33.75	22.75	15.75	26.50	1.25	9.25	6.00	115.25

### 3.3 Work Package Overview

#### Work package description

Work package number :	01	Start date:	Sept. 2006	End date:	Feb. 2009
Work package title:	Integrated workspace				

#### Objectives for the period

- O1.1 Integrate resources
- O1.2 Connect components
- O1.3 Interpret content
- O1.4 Emerging knowledge
- O1.5 Assist users

#### Milestones:

No milestones during this evaluation period.

#### Deliverables:

No deliverables during this evaluation period.

#### Description of work carried out and achievements

##### T1.2: Workspace architecture & implementation:

- Work and programming on workspace architecture and implementation
- Mapping WILC to the proposed XML-data
- Testing the workspace mock-ups and the component model
  - Evaluation of the `retrieval-tool` in the Bernstein workspace
- Redesign of the Bernstein workspace
  - Change of the query form `simple search` and `advanced search`
  - Improvement of result-display
  - Redesign of the Bernstein web-page
- Workspace meeting 22.11.2007, Vienna, Austria: preparation, participation, minutes
- Establishing access to Piccard-Online (LABW) by the Bernstein workspace:
  - contacting BSZ Constance, service provider of LABW, concerning access of Piccard-Online
  - Discussing and solving data security problems
  - Planning to employ a virtual machine environment for access of Piccard-Online without data security risks
  - Permitting read access to Piccard-Online for testing SRU-gateway
- Work on component model :
  - Evaluation of component model description tool (work in progress)
  - Identification & preparation of watermarks motif `bull's head` for component model
  - Description of elected motifs in component model prototype
  - Describing watermarks of Piccard-Online, WILC, and WZMA according to the component model
  - Usability-check of component model prototype (frontend / backend)



- Solving technical problems (e.g. uploading images)

#### T1.3 Upgrading of databases & tools:

- Delivering main motives list for the Bernstein workspace (Browse Motif)
- Meeting Stuttgart 22.10.2007, E. Frauenknecht, A. Haidinger, van der Lubbe, H. Moreau, C. Partes, P. Rückert (discussion about the mapping of Piccard-Online – printed Piccard, about Hector Moreu Otal’s tool)
- Meeting “scissor model” at KSBM 21.11. 2007
- Meeting Paris 8.12.2007 – Subject: Meeting Briquet – The archive and the printed.
- Working with Software delivered by TUD Printed Piccard Scissors resp. Online Piccard Scissors. Extracting ca. 40.000 watermarks of the printed Piccard.
- Preparing data and images of Likhachev’s watermarks,
- Permanent upgrading of databases and tools
- Co-operation of DNB and LU: definition and development of a database schema for bibliographic data (xml) with a special focus on supporting multi-language user requests
- Bug-fixing NIKI-database
- Software test and – analysis together with DUT

#### Deviation from work plan & remedial action

None

<b>Work package number :</b>	<b>02</b>	<b>Start date:</b>	<b>Sept. 2006</b>	<b>End date:</b>	<b>Jan. 2009</b>
<b>Work package title:</b>	<b>Enhancing content usability</b>				

### Objectives for the period

- O2.1 Develop standards for paper description
- O2.2 Provide multi-lingual access
- O2.3 Complete metadata coverage

#### Milestones:

No milestones during this evaluation period.

#### Deliverables:

No deliverables during this evaluation period.

### Description of work carried out and achievements

#### T2.1: Standards for paper description

##### T2.1a: Textual watermark description standard:

- Comparison of WILC and Piccard-Online:
  - Arranging with WILC about changing in terminology
  - Checking the changes of each single motif group on effects in Piccard-Online
  - Listing these changes and carrying out changes in Piccard databases
  - Improvements in Piccard-Online: Enter data in database, essentially smaller corrections
- Further elaboration of the terminology list considering consequences for WILC

#### T2.2: Multi-lingual access

- Translation of motives Briquet, Les filigranes, into English and German
- Final version of the Thesaurus (English, French, German) based on the terminology used in all three relevant databases. Now available in Twiki.
- Work and programming on multi-lingual access in the Bernstein workspace
- First version of the Russian Thesaurus

#### T2.3: Metadata for integration

- Geographical references for GIS:
  - 13 000 references, corresponding to 8000 different European existing cities
  - A supplementary lot of old medieval sites were identified or disambiguated
  - All region names were changed and normalized according to recent European norms (NUTS)
- Optimization of watermarks databases for statistical purposes
- Classification of Piccard-Online's `bull's head`

##### T2.3a: Geographical & chronological metadata:

- Delivering a list of places mentioned in WZMA (ÖAW)
- Delivering a list of places mentioned in Likhachev's watermarks, ed. J.S.G.Simmons, Bé van Ginneken-van de Kastele (Monumenta Chartae Papyraceae Historiam Illustrantia XV), Amsterdam 1994.
- Providing LAMOP with Piccard-Online data for developing GIS

- Introduction of using cutting-tool for watermarks in printed publications, based on Matlab, as basis for evaluation this tool (not working yet, will be improved)

T2.3b: Repertories concordances:

- Preparing data and images of printed Piccard for Piccard-Online.
- Evaluation of mapping on the printed Piccard version with Piccard-Online. Discussion of technical methods (image processing, meeting in Stuttgart 22.10.2007) and terminological problems with WZMA for practical using.
- Bernstein General Meeting 2008 in Stuttgart (LABW), Germany, 01.-02.07.2008: Starting organisation

**Deviation from work plan & remedial action**

None

<b>Work package number :</b>	<b>03</b>	<b>Start date:</b>	<b>Sept. 2006</b>	<b>End date:</b>	<b>Jan. 2009</b>
<b>Work package title:</b>	<b>Infrastructure for paper expertise</b>				

### Objectives for the period

O3.1 Authentication & identification capability

O3.2 Multi-feature expertise

#### Milestones:

No milestones during this evaluation period.

#### Deliverables:

No deliverables during this evaluation period.

### Description of work carried out and achievements

T3.1: Features enhancement

- Software that enhances the watermarks in greyscale images

T3.2: Features measurement

- Sieve feature measurements in greyscale images
- Software that measures the laid lines density and chain lines distance.
- Software that finds identical pieces of paper based on the chain lines distance. (Demo version <http://rembrandt.ewi.tudelft.nl/> ).
- Software that detects watermarks in grayscale images. (Currently improving the first software version)
- Sieve feature measurements in binary images
- software that measures watermark height and width in the Piccard-Online database and Printed Piccard collection
- Development of software that finds identical watermarks in both the printed Piccard collection and Piccard-Online database.
- Watermark imaging by black light subtraction
- Software that extracts the paper structure from the reflected and transmitted image of the piece of paper.

T3.3: Authentication & identification module

- Paper and watermark research for exhibition and potential new partners (Uffizi, Darmstadt, ...)

### Deviation from work plan & remedial action

None

<b>Work package number :</b>	<b>04</b>	<b>Start date:</b>	<b>Sept. 2006</b>	<b>End date:</b>	<b>Jan. 2009</b>
<b>Work package title:</b>	<b>Contextual resources for paper history</b>				

### Objectives for the period

- O4.1 Paper-incunabula integration
- O4.2 Statistical capability
- O4.3 Cartographic visualization
- O4.4 Data-references interlinking

#### Milestones: none

- M4.3 / m16 – Second version of the integrated bibliography, with graphical search of cross-references
- M4.4 / m 16 – Statistics are integrated with the cartography tool and the workspace

#### Deliverables:

- D4.3 / m17 – Integrated bibliography
- D4.4 / m17 – Statistical functionalities – **POSTPONED (due April 30<sup>th</sup>, 2008)**

### Description of work carried out and achievements

#### T4.1: Paper-incunabula integration

- Paper-Incunabula integration in Piccard-Online
- The location of Incunabula copies in GW (Berlin) from editions formerly described in printed vol. I-VIII (about 10000)
- Authors in incunabula: 3500 authors are represented in about 28000 editions printed in the XV<sup>th</sup> century, biographical data concerning their works are collected in a specific database which will be linked to the main incunabula database.
- Other databases included in GIS: e.g. a “plague” database

#### T4.2: Numerical & graphical statistics

- Work and programming on numerical and graphical statistics

#### T4.3: Historical cartography of paper

- Meeting between CERL and BERNSTEIN at KB (The Hague, 4 October 2007)

#### T4.4: Bibliographical referencing of data

- New version of a xslt application for transforming data to xml format => Addition of subject headings in English etc. => Deliverable no. 14, D4.3 – Integrated bibliography
- Production of the integrated bibliography v.2 Integrated bibliography fully searchable in multiple languages available to integrate into the workspace when appropriate

### Deviation from work plan & remedial action

The Deliverable no. 15, D4.4 – Statistical functionalities has been **POSTPONED (due April 30<sup>th</sup>, 2008)**

<b>Work package number :</b>	<b>05</b>	<b>Start date:</b>	<b>Sept. 2006</b>	<b>End date:</b>	<b>Feb. 2009</b>
<b>Work package title:</b>	<b>Assessment and evaluation</b>				

### Objectives for the period

O5.1 Progress monitoring / Quality certification

O5.2 Impact evaluation

**Milestones:** none

No milestones during this evaluation period.

**Deliverables:** none

No deliverables during this evaluation period.

### Description of work carried out and achievements

T5.1: Monitoring

- Evaluation, annual report

### Deviation from work plan & remedial action

None

<b>Work package number :</b>	<b>06</b>	<b>Start date:</b>	<b>Sept. 2006</b>	<b>End date:</b>	<b>Feb. 2009</b>
<b>Work package title:</b>	<b>Accessibility, dissemination and sustainability</b>				

### Objectives for the period

O6.1 Accessibility  
O6.2 Dissemination  
O6.3 Sustainability

#### Milestones:

No milestones during this evaluation period.

#### Deliverables:

No deliverables during this evaluation period.

### Description of work carried out and achievements

T6.2: Awareness, dissemination & exploitation ([1] Awareness, [2] Dissemination, [3] Exploitation):

- Dissemination-meetings: SGS-Munich, Uffizi, Biblioteca Marucelliana, Amsterdam Historical Museum, Institute for Paper engineering, board of directors of Academic Paper engineers (APV)
- Concept and research for exhibition and congress in Dresden (spring 2009)
- Meetings about interlinking between the database of Biblioteca Marucelliana and NIKI-database
- Explanation about how to use the software developed to isolate the watermarks in the Piccard-Online database and Printed Piccard collection. In Vienna, Nov. 2007. Demo version <http://rembrandt.ewi.tudelft.nl/>
- Offering WILC software for use in WIGB and WIES and preparing the software for transmission
- Participation in the WIGB meeting, London, UK, 28.01.2008
- Researching the possibilities for a Bernstein exhibition in the Netherlands and organising a meeting for all possible partners
- Chairing the meeting about the Bernstein exhibition (The Hague, 30.10.2007)
- Catalogue-meetings in Vienna, Leipzig, The Hague, Florence and Stuttgart
- Developing ideas for new contributions to the Bernstein catalogue
- Developing of the preliminary version of the paper studies dissemination kit.

### Deviation from work plan & remedial action

None

<b>Work package number :</b>	<b>07</b>	<b>Start date:</b>	<b>Sept. 2006</b>	<b>End date:</b>	<b>Feb. 2009</b>
<b>Work package title:</b>	<b>Project management</b>				

### Objectives for the period

O7.1 Keep the project on track

**Milestones:**

No milestones during this evaluation period.

**Deliverables:**

D7.4 / m18 – Half-year progress report

### Description of work carried out and achievements

T7.2: Administrative affairs:

- Preparing reports, deliverables, timesheets, proofreading of articles, reports (VISKOM)
- Preparation of exhibitions (Rome, Oct. 2007)
- Preparation of and taking part in meetings (Workspace Meeting, 22.11.2007, Vienna, Austria; 05.02.2008, TU Graz, Austria; 08.02.2008, Vienna, Austria)
- General co-ordination

T7.6: Public relations

- See list of events, meetings, etc.

### Deviation from work plan & remedial action

None



### 3.4 Deliverables Status

#### Deliverables List

Deliverable No <sup>1</sup>	Deliverable title	Delivery due date <sup>2</sup>	Actual date of delivery
No. 14, D4.3	Integrated bibliography	17	Jan. 2008
No. 15, D4.4	Statistical functionalities - <b>POSTPONED</b> due April 30 <sup>th</sup> , 2008	17	
No. 16, D7.4	Half-year progress report	18	March 2008

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<sup>1</sup> Deliverable numbers in order of delivery dates: D1 – Dn. Deliverable numbers must indicate which workpackage they relate to, e.g. D2.1 for the first deliverable from workpackage 2).

<sup>2</sup> Month in which the deliverables will be available. Month 0 marking the start of the project, and all delivery dates being relative to this start date.

**3.5 Performance Indicators**

Indicators	Expected vs Actual					
	Year 1 (exp.)	Year 1 (act.)	Year 2 (exp.)	Year 2 (act.)	Year 3 (exp.)	Year 3 (act.)
Resources integration	33%	33%				
Description standards	33%	50%				
Multi-lingual support	33%	33%				
Paper expertise	33%	20%				
Statistics	33%	20%				
Cartography	33%	20%				
Bibliography	50%	50%				
Dissemination kit	-	-				
Work progress notices	33%	33%				
Software and documentation	33%	33%				
Annual reports	33%	33%				
Website hits (w)	w	500,000				
Citations and user feed-back (c)	c	10				
Participation in workshops (persons)	20 pers.	22				
Exhibition visitors (persons)	-	8000				
New networked collections (n)	-	1				
Reuse of outputs (r)	r	2				

## 4 Awareness and Dissemination

### 4.1 Overview of awareness and dissemination activities

As we have already mentioned in the previous reports, dissemination is considered as a very important activity and part of the Bernstein project. The strategy of the Bernstein dissemination activities as well as all actions done so far were described in [Deliverable no. 7, ref. D6.4, Dissemination plan](#) (June 2007).

The project Bernstein was presented at several conferences and published in special journals (see list of events, meetings and publications below).

As already in the previous periods, a special focus was put on exhibitions because exhibitions generate much more response from the media than other activities and allow reaching a wide range public.

The series of exhibitions was continued in Rome at the Istituto Centrale della Patologia del Libro under the title “*Testa di bue e sirena – La memoria della carta e delle filigrane dal medioevo al seicento*” (Sept. 8<sup>th</sup>-Oct. 10<sup>th</sup>, 2007). Further Italian exhibitions will take place in Florence (National Library), Milano (Sala del Tesoro della Trivulziana), and Torino (Biblioteca Nazionale). A revised and enlarged concept for the German catalogue was elaborated (see <http://www.bernstein.oew.ac.at/twiki/bin/view/>) and an exhibition concept for Dresden, made. An English version of the catalogue is work in progress as well as exhibitions in Great Britain.

The Bernstein website ([www.bernstein.oew.ac.at](http://www.bernstein.oew.ac.at)) and a Twiki-based collaboration platform, knowledge and document management system ([www.bernstein.oew.ac.at/twiki](http://www.bernstein.oew.ac.at/twiki)) are updated regularly and inform about the progress of the work. The English, German, and Italian project folders have been distributed widely.

A preliminary version of the paper studies dissemination kit was developed. The current version is implemented only in one language: English. As soon as the dissemination kit is ready in its first version, further languages will follow. The kit uses the first version of the watermark standard which was developed and adopted by the Bernstein consortium. Watermark classification is based on the Bernstein thesaurus selected and refined by LABW-WILC-ÖAW.

Bernstein is in cooperation with EDL and Europeana (<http://www.europeana.eu>) the future European digital library connecting cultural heritage.

A tutorial for potential users explaining the motivation for paper research, selection and digitalization of watermarks, database usage and paper expertise is in preparation for the EVA 2008 conference in Vienna in August 2008.

## 4.2 Events and meetings

### List of Events & Meetings

Name	Location	Date
<b>EXHIBITIONS:</b>		
La testa di bue e la sirena. Filigrane del medioevo.	Institute for the Pathology of Books, Rome, Italy	Sept. 8 <sup>th</sup> , 2007- Oct. 10 <sup>th</sup> , 2007
<b>LECTURES / PRESENTATIONS / PUBLIC MEETINGS:</b>		
Poster presentation at Liverpool University	Liverpool, UK	2008
Presentation of the “Bernstein-project” by Marieke van Delft	The Hague, Netherlands	Feb. 8 <sup>th</sup> , 2008
Presentation of the “Bernstein-project” by Marieke van Delft	London, UK	Jan. 28 <sup>th</sup> , 2008
Presentation of the “Bernstein-project” by Marieke van Delft	The Hague, Netherlands	Jan. 24 <sup>th</sup> , 2008
eContentPlus Project BERNSTEIN – THE MEMORY OF PAPERS Open platform for watermark and paper data (by Emanuel Wenger)	EVA 2007, Moscow, Russia	Dec. 3, 2007
Bernstein and Piccard-Online (by Carmen Partes)	Bayerische Staatsbibliothek, Munich, Germany	Nov. 14 <sup>th</sup> , 2007
Bernstein and Piccard-Online, Presentation for Swiss students	Stuttgart, Germany	Oct. 19 <sup>th</sup> , 2007
Testa di bue e sirena: una mostra europea dall’archivio Piccard di Stoccarda (by Peter Rückert)	Istituto centrale per la patologia del libro, Rome, Italy	Sept. 29 <sup>th</sup> , 2007
La carta tra archivi e biblioteche”. International Conference at Istituto centrale per la patologia del libro (Rückert)	Istituto centrale per la patologia del libro, Rome, Italy	Sept. 29 <sup>th</sup> , 2007
La memoria digitale: l’attivit� del progetto Bernstein (by Emanuel Wenger)	Istituto centrale per la patologia del libro, Rome, Italy	Sept. 29 <sup>th</sup> , 2007
Bernstein-poster presentation at General German Archive Meeting (by LABW)	Mannheim, Germany	Sept. 25 <sup>th</sup> -27 <sup>th</sup> , 2007
<b>MEETINGS:</b>		
Project meeting (Piccard-Online – printed version of Piccard)	LABW, Stuttgart, Germany	Oct. 22 <sup>nd</sup> , 2007
Project meeting (workspace)	Austrian Academy of Sciences, Vienna, Austria	Nov. 22 <sup>nd</sup> , 2007

Project meeting (statistics)	IICM, TU Graz, Graz, Austria	Feb. 5 <sup>th</sup> , 2008
<b>PRESS ARTICLES / SCIENTIFIC ARTICLES:</b>		
H. Moreu Otal, M. van Staalduinen, P. Paclik, J.C.A. van der Lubbe, <i>Watermark detection in x-ray images from paper for dating artworks</i> , Proceedings SPPRA 2008, Innsbruck (Austria) (in print).		
Gerard van Thienen, <i>Bookreview: Catalogue of books printed in the XVth century now in the British Library. BMC Part XI: England, ed. Lotte Hellinga ('t Goy-Houten, Hes &amp; De Graaf, 2007, 38 x 28 cm, x + 507 pp., illus., ISBN 978 90 6194 379 2, € 1,250)</i> , in: <i>Quaerendo</i> 37 (2007), p. 325-332.	The Hague, Netherlands	2007
Carmen Kämmerer, <i>Städtewappen in der Piccard-Wasserzeichensammlung</i> , in: <i>Herold-Jahrbuch N.F.</i> 12 (2007), p. 123-142.	Stuttgart, Germany	2007
Peter Rückert, <i>PICCARD-ONLINE. Die digitale Präsentation von Wasserzeichen als neue Forschungsperspektive</i> , in: <i>Gazette du livre médiéval</i> 50 (2007), p. 40-50.	Stuttgart, Germany	2007
Frieder Schmidt, <i>eContentPlus Projekt BERNSTEIN – Das Gedächtnis der Papiere</i> , in: <i>Dialog mit Bibliotheken</i> , 19. Jahrgang 2007, 2, p. 59-62 (DNB periodical).	Leipzig, Germany	2007
Peter Rückert, Jeannette Godau, Gerald Maier, <i>Piccard-Online: Digitale Präsentationen von Wasserzeichen und ihre Nutzung</i> , Kohlhammer, Stuttgart, 2007, 180 p.	Stuttgart, Germany	2007
Frieder Schmidt, <i>Das Gedächtnis der Papiere – Das eContentPlus-Projekt BERNSTEIN und seine Grundlagen</i> , in: <i>Museum Aktuell</i> 142 (2007), p. 18-19.	Leipzig, Germany	Nov. 2007

## 5 Conclusions

The work is in good progress. The major deviation concerns Deliverable no. 15, D4.4 – Statistical functionalities. It has been postponed until the end of April 2008. This does not influence any other work and deliverables. The reason is that the functionality of the statistical component has not been specified in time and some integration issues were not discussed enough.

The exhibitions ‘Ochsenkopf und Meerjungfrau’ and ‘Testa di bue e sirena’ turned out to be a big success concerning dissemination. The series of exhibitions will be continued in Italy, Slovenia, Great Britain, and Germany.