# ECP 2005 CULT 038097/Bernstein

### Bernstein

# **Progress Report**

01 March 2007 – 31 August 2007

Deliverable number/name	No. 12, D 7.2 Half-year progress report
Dissemination level	Confidential
Delivery date	7 September 2007
Status	Final
Author(s)	The Bernstein Consortium



### *e*Content*plus*

This project is funded under the eContentplus programme<sup>1</sup>, a multiannual Community programme to make digital content in Europe more accessible, usable and exploitable.

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

### 1 Table of Contents

1	TAB	BLE OF CONTENTS	2
2	SUM	IMARY	3
3	STA	TUS	3
	3.1	RESOURCES EMPLOYED	7
	3.2	Work Package Overview	
	3.3	Deliverables Status	19
	3.4	Performance Indicators	20
4	AW	ARENESS AND DISSEMINATION	21
	4.1	OVERVIEW OF AWARENESS AND DISSEMINATION ACTIVITIES	21
	4.2	Events and meetings	21
5	CON	NCLUSIONS	23

### 2 Summary

The work done in first half year of the project focused principally on detailing all the issues that have to be addressed, identifying the use cases that the final product has to support and agreeing on the integration model to be used for the databases to be integrated. The second part of the year saw the first reseases of products generated by the project: the textual watermark description standard, the Historical Geographical Information System, the integrated bibliography, the integrated workspace, the component model, the travelling exhibition and other dissemination activities.

1. A first version of the textual watermark description standard has been presented as Deliverable no. 8 (D2.1 Watermarks standard v.1). The standard is a trilingual (English, French, German) thesaurus based on the terminology used in the Bernstein databases (Piccard Online, WZMA, WILC). It includes a classification scheme for the hierarchically organized watermark types and a nomenclature giving a name to each type.

2. The goal of the Historical Geographical Information System of Project Bernstein (BH-GIS) is the representation across space and time of the distribution of watermarks and other paper features stored in the Bernstein databases. 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). The first batch of this list has been published as Deliverable no. 10 (D2.2 GIS data batch no. 1).

3. The first operational version of the integrated bibliography with bibliographical data from the German National Library (DNB) in Leipzig has been implemented. The bibliography is stored as a Cheshire3 database in a separate module of the Bernstein workspace. The first version of the Leipzig bibliographic database allows the user the ability to input a query to search either "General Keyword", "Title Keyword" and "Identifier Indexes".

4. The core piece of Bernstein is the integrated workspace, i. e. the portal to the access of the databases, bibliography, cartography, and paper expertise. The first proposal for the design of the integrated workspace in form of mock-ups of the user interface is available online under <a href="http://bernstein.iicm.tugraz.at/bernstein">http://bernstein.iicm.tugraz.at/bernstein</a> for evaluation. This proposal will be the basis for the discussion about the final functionality and design of the integrated workspace.

5. The traditional way to search for watermarks is done by a hierarchical watermark type classification system and measurements. An alternative way for the search of watermarks, the component model, has been proposed. This method complements the hierarchial method by allowing additional search strategies, such as on partially visible watermarks, functions as a historical research tool for the geospatial distribution of watermarks, and responds to particular needs of various user groups, such as art historians and musicologists. After a lively and serious discussion it was decided in Fabriano at the general meeting that the development of the component model will be continued with a subset of around 2500 samples of the "bull's head" watermark motif. The first component model search prototype was implemented with three motifs in the integrated workspace.

6. The focus of the dissemination activities was put on a series of exhibitions (see chapter 4.1).

These first versions of Bernstein products are important milestones. They are the basis for further developments. Furthermore, they demonstrate the first visible results of the activities in the project and allow to include exterior partners for evaluation and discussion.

### 3 Status

The results of the entire reporting period are presented in detail in the four deliverables which were due to month 10 (July 2007): <u>no. 8, D2.1 Watermark standard</u>, <u>no. 9, D4.2 Integrated</u> <u>bibliography</u>, <u>no. 10, D2.2 GIS data batch</u>, and <u>no. 11 D1.2 Workspace demonstration v. 1</u>.

The main discussions and decisions took place in four meetings: 2007.04.02 Leipzig, Germany – Bibliographical database administrative and technical meeting. 2007.04.04 Liverpool, United Kingdom – Integration technical meeting. 2007.05.10-11 Vienna, Austria – Components model meeting. 2007.07.09-10 Fabriano, Italy – General meeting (GM). The meeting in Fabriano was attended by the full consortium.

An essential step for the integration of the four watermark databases (Piccard-Online, WILC, WZMA, NIKI) is the adoption of a first version watermark standard which is conform to our databases. The major work to do was the remaining comparison of the two databases Piccard-Online (http://www.piccard-online.de) and WILC (http://watermark.kb.nl). The result is a trilingual (English, French, German) thesaurus now based on the terminology used in the Bernstein databases. The standard includes a classification scheme for the hierarchically organized watermark types and a nomenclature giving a name to each type. On the basis of this textual watermark description standard a unified model will be produced to better match the content of the existing digital watermark databases. The future potential of this watermark standard is obvious for it is useful and extensible to other collections of watermarks beyond this project's lifetime.

Watermarks of the same type can now be described trilingually by the same names and data interoperability and search across all databases is now prepared. As a by-product a concordance between the motives represented in Piccard-Online and those corresponding in Briquet's watermark collection was produced. This concordance could help to complete the future linking of a digitized Briquet to the other data-bases within the portal.

A change occurred in the case of the integrated bibliography due to an administrative reorganization of the DNB. The DNB was created only in late 2006, as a merging between the former principal libraries of the Federal Republic of Germany (located in Frankfurt/Main) and the former German Democratic Republic (located in Leipzig, and being our project partner). More than a change of name, the new DNB has to restructure its functioning both at administrative and technical levels.

The originally intended way to bring bibliographical data to the web for integration in the Bernstein workspace via the library's central server system and Z39.50 was not possible within the given time limit. Hence another way was found with the help of LU. The consequence of this solution was a shift of budget from DNB and TUG to LU. The DNB exports their existing Allegro database into a standardized XML version for interoperability and transfers the data to LU. The bibliography is stored in the centralized located Bernstein services as a Cheshire3 database (www.cheshire3.org). This is the third generation of the Cheshire system started more than 10 years ago at UC Berkeley and more recently developed in a partnership between Berkeley and the University of Liverpool. The Cheshire platforms are used by several national services in both the UK and Europe, as well as by several services and projects in the US.

The first version of the Leipzig bibliographic database allows the user to input a query to search either "General Keyword", "Title Keyword" and "Identifier indexes". The general keyword search will return all records that contain the query word somewhere in the record, the title keyword will return records which have the query word in the title, and the identifier will search for and identical copy of the query term encoded in the identifier tag within the record. The interface is available on-line at <a href="http://dnb.cheshire3.org">http://dnb.cheshire3.org</a>.

The goal of the Bernstein Historical Geographical Information System (BH-GIS) is the representation across space and time of the distribution of watermarks and other paper features stored in the Bernstein databases. Additionally, Bernstein should be able to provide bibliographical data incorporated in the maps. The focus on this task is in the second project year. 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). The work accomplished so far consists in a matched list of place names, coordinates and additional metadata. The processed geographical data belong to Piccard-Online, Briquet printed catalog of watermarks (ISTC, http://www.bl.uk/catalogues/istc/), and paper, Incunabula Short-Title Catalog Gesamtkatalog der Wiegendrücke (GW, http://www.gesamtkatalogderwiegendrucke.de/) and the International Paper Bibliography (IPB, http://www.ddb.de/sammlungen/pdf/ibp.pdf). This represents 8.000 records, equivalent to approximate 3.000 individual localities. First contacts with CERL – The Consortium of European Research Libraries (http://www.cerl.org) were established in order to investigate cooperation possibilities. CERL maintains a database of historical variants of place names. Discussions are underway on providing CERL with the place coordinates in exchange for variants of place names.

The integrated workspace is the backbone of the project that provides the digital environment necessary for the integration of resources. Specifically this is an internet application that allows the access to all resources. It was a milestone of Bernstein when the first version of the integrated workspace was presented in Fabriano (Italy) in July 2007. The first proposal for the design of the integrated workspace (mock-ups of user interface) is available online under <u>http://bernstein.iicm.tugraz.at/bernstein</u>. This proposal will be the basis for the discussion about the final functionality and design of the integrated workspace. The main structure of the workspace consists of the navigation panel on top of the page and the search overview section on the top left of the workspace. These main parts are always present guaranteeing simple navigation through the different sections of the page. The navigation panel consists of the seven main parts of the site: Startpage ("About Bernstein"), "Advanced Search", "Specific Search", "Component Search", "Browse Motif", "Bibliographic Search" and "Help section". Above the panel there are three language change buttons for English, French and German symbolised by flags. In the following figures we assume that the user has selected 'English' as language.

A new approach for describing watermarks (componenet model) was heavily discussed and suggested within the consortium. A watermark can be described in terms of one or more distinct objects (henceforth 'components') and their spatial inter-relationships; for example, a cross above a bull's head both being enclosed within a circle. That would be a different methodology to the existing mechanisms for description which rely on the hierarchy to capture those relationships. By capturing the watermark descriptions in this manner, access to the components can be implemented via different semantic hierarchies as appropriate to the user in terms of skill, background and language. The component model requires new descriptions of all watermarks. At the general meeting in Fabriano the consortium decided that the development of the component model will be continued and tested with one group in bull's head of about 2500 watermarks.

The component model should provide additional search features (incomplete watermarks, complex watermarks,  $\dots$ ) and serve the needs of new user groups like art historians, musicologists, and so on.

In order to improve the quality of images, software for automatic enhancement of both paper features and watermarks enabling more efficient semi-automatic detection and search as well as for visual enhancement has been developed. A lot of work has been done for automatic watermark extraction in greyscale imagery. These are first steps into the development of automatic matching and authentication and identification tools.

The focus of the dissemination activities was put on the exhibition "Ochsenkopf und Meerjungfrau – Wassserzeichen des Mittelalters" (see chapter 4.1).

### 3.1 Resources employed

<b>Resources</b>	employee	d for the	reporting	period (p	erson-mo	nths)		
Beneficiary	WP 01	WP 02	WP 03	WP 04	WP 05	WP 06	WP 07	TOTAL
short name								
COO (OEAW)	2.0	6.0	-	3.0	-	5.0	6.0	22.0
LABW	3.5	10.5	_	1.0	-	1.0	_	16.0
TUG	20.5							20.5
LAMOP	3.0	5.0	0.5	8.5	-	-	-	17.0
DNB	-	-	-	2.5	-	-	-	2.5
NIKI	1.0	1.5	1.0		2.5	2.5		8.0
DUT	1.0	1.5	4.0					6.5
KB	2.0	0.5	-	1.0	-	-	-	3.5
LU	1.0	0.5	-	3.0	-	-	-	4.5
TOTAL	34.0	25.0	5.5	19.0	2.5	8.5	6.0	100.5

#### 3.2 Work Package Overview

#### Work package description

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

#### **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: M1.2 / m11 – Demonstration version of the integrated workspace is presented

Deliverables: No. 11, D1.2 Workspace demonstration v.1

#### **Description of work carried out and achievements**

#### T1.1 – Integration models:

- Gathering information (4 DBs + bibliography DNB), comparing 4 databases, studying integration models, investigating XML databases and evaluation of use cases
- Discussion of integration architecture identification of several conceptual models
- Identification of functions and core features of the workspace and interfaces through the formulation of detailed use cases
- Inventory of software available for the automatic identification and matching of both paper structures (laid and chain line features) and watermarks (work in progress)
- Researching possibilities to convert the MS Access (LABW) structure to XML
- mapping the fields of the different databases; preparing WILC for conversion into XML
- Meeting in Liverpool 04.04.2007: preparation, participation and minutes (decision about the linking of the databases, mapping of fields Piccard-Online, WZMA, WILC)
- Meeting in Vienna 10.-11.05.2007: Discussion of the component model, minutes
- Model for content-based watermark detection
- Model for automatic detection of paper features (chain, laid lines) in grayscale imagery
- T1.2 Workspace architecture & Implementation:
  - Spreadsheet with mapping of fields
  - Discussion of integration strategies
  - Investigating IPH standard 2.0
  - Investigations regarding architecture
  - Investigation of protocols
  - Bernstein Integration Architecture (distributedly hosted)
  - Interoperability protocol (SRU with DCX)
  - Work on D1.2 (Implementation-related investigations, Component model structure, Specification of server infrastructure, Generation of mock-ups for integrated workspace)
  - Implementation WZMA with Piccard-Online by means of ID-classification completed

- Gathering and providing information for surface linking with Stuttgart and WZMA
- Requesting information for Piccard-Online and WILC harmonization (as Id, motifgroups, etc.)
- Implementation of WILC with Piccard-Online by means of ID-classification (work in progress)
- Testing and making suggestions for the improvement of integrated Bernsteinworkspace including the component model

T1.3 – Upgrading of databases & tools:

- Adjustment of the main groups of watermarks Piccard-Online WZMA: implemented in the new version of WZMA <u>http://www.OEAW.oeaw.ac.at/wz/wzma.php</u>
- Meeting Vienna 10.-11.05.2007: discussion about the component model, possibilities of implementation in WZMA, decision to prepare special types of watermark for a demo version
- In cooperation with LU definition of a database schema for bibliographical data (xml).
- Planning and commissioning by subcontracting (Th. Berger, Bonn) transformation of the existing database (flat structure) in a new relational schema which allows preparation of multilingual access.
- Prototype of an xslt application for transforming data to xml format
- "Component model" based on description of the morphological properties of watermarks in separated fields: 1. Morphological analysis of three watermark motifs: bull's head, triple mounts and letter P. 2. Creation of three "descriptions forms" with samples of images for the developers of a user interface. 3. Coding of 750 watermarks to test the model capabilities (Piccard online)
- "Landmarking method", based on comparison between the coordinates of several "key points" (different for each watermark motif) measured on watermark images (by mark2file program): 1. Selection of "key points" for three motifs (bull's head, triple mount, letter P). 2. Coding of 750 watermarks to test the capabilities of the method (Piccard online)
- Working on a programme for creating PDF-files where images are containing metadata (LABW)
- Investigation of NIKI; evaluation and listing of various functionalities in NIKI.
- Evaluation of ,WatermarkScissors' (software for the segmentation of watermarks) for scanned pages
- Data evaluation (Excel-Sheet of Paola Munafo) and spot-checking comparison with printed version of Piccard; usability-check of implementation in Piccard-Online
- Further development of Piccard-Online: Integration of keyword index, proposal for changing query form, fewer search results (especially: bull's head) (work in progress)
- Preparation of data collection in printed Piccard for data enrichment of Piccard-Online
- Adaptation of NIKI database (db modulation)
- Implementation of component model search prototype
- Leipzig bibliographic database (demo-version)

# Deviation from work plan & remedial action

None

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

O2.1 / Develop standards for paper description

O2.2 / Provide multi-lingual access

O2.3 / Complete metadata coverage

**Milestones**: M2.3 / m11 – First version of the numerical standards

 $M2.4\,/\,m11-$  First version of the watermark standard and consultations with project external collaborators

M2.5 / m11 – Incorporation and test of the first batch of geo-chronological metadata in the databases

M2.6 / m11 – First batch of concordance metadata incorporated

Deliverables: No. 8, D2.1 Watermarks standard v.1 No. 10, D2.2 GIS data batch no.1

#### Description of work carried out and achievements

T2.1 – Standards for paper description:

T2.1a - Textual watermark description standard:

- Adjustment of the main groups of watermarks Piccard-Online WZMA: implemented in the new version of WZMA <a href="http://www.OEAW.oeaw.ac.at/wz/wzma.php">http://www.OEAW.oeaw.ac.at/wz/wzma.php</a>
- Continuing comparison of WILC and Piccard-Online: each single motive group of WILC was checked for a corresponding counterpart in Piccard-Online
- Gathering similarities and linking Piccard-Online and WILC
- Mapping of WILC and Piccard-Online; Harmonization of WILC vocabulary with the English thesaurus of Piccard-Online
- Composing detailed report 'Comparison of Piccard-Online and WILC'
- Identification of watermark motif "coats of arms of towns" and composing detailed report in Piccard-Online
- Expressions that regulary recur within the motive groups of the respective watermark databases can now be homogeneously named
- Developing terminology for precise watermark description referring to established terminological usage within paper historical research, heraldics, codicology
- Composing Deliverable D2.1 Watermark standard v. 1
- Collaboration between LABW abd KB on an list of English terms for watermark descriptions and multilingual terms

#### T2.1b – Numerical paper description standards:

- Research for other paper features and discussions
- Identification of both paper and watermark features to be measured

T2.2 – Multi-lingual access:

- Trilingual thesaurus (English, French, German) based on the terminology used in all three relevant databases Piccard-Online, WZMA and WILC

- First version of a watermark standard represents a terminology that easily can be translated into other languages
- Translation work from German into Italian for exhibition and catalogue
- T2.3 Metadata for integration:
- T2.3a Geographical & chronological metadata (**OEAW**, **LAMOP**, LABW, KB, LU):
  - Development and control of tables for geographical and chronological metadata concerning the printed repertories of Briquet and Piccard

T2.3b – Repertories concordances (**OEAW**, LAMOP, LABW):

- Preparation of the already digitised images of watermarks of printed repertories for further use
- Proofreading of the metadata of the printed repertories transferred to tables
- Creating of new web pages: <u>http://www.OEAW.oeaw.ac.at/wzrep/briquet.htm</u>, <u>http://www.OEAW.oeaw.ac.at/wz/lit/rep.htm</u>
- Watermark databases integration on the Web: methods to quickly retrieve one watermark or specific groups of watermarks in a huge database Analysis of motif "bull's head"

**Deviation from work plan & remedial action** None

Work package number :	03	Start date:	Sept. 2006	End date:	Jan. 2009
Work package title:	Infrastructure for	paper expert	ise		

O3.1 – Authentication & identification capability

O3.2 – Multi-feature expertise

Milestones: M3.1 /m11 – First on-line version of enhancement tools

M3.2 / m11 - First on-line version of measurement tools.

M3.3 / m11 – First version of the integrated AIE environment

**Deliverables**: none

**Description of work carried out and achievements** 

- T3.1 Features enhancement:
  - Development of software for automatic enhancement of both paper features and the watermarks enabling more efficient semi-automatic detection and search as well as for visual enhancement
  - Development of software for enhancement of backlight imagery
- T3.2 Features measurement:
  - Software for the measurement of laid line density, local laid line density, chain line distances, average chain line distance, local chain line distances

#### T3.3 – Authentication & identification module:

- Watermark-research for potential users
- Methods for automatic watermark extraction in greyscale imagery. First steps into the development of automatic matching and authentication and identification

Deviation from work plan & remedial action

None

Work package number :	04	Start date:	Sept. 2006	End date:	Feb. 2009
Work package title:	Contextual resour	ces for paper	history		

O4.1 – Paper-incunabula integration

O4.2 - Statistical capability

O4.3 - Cartographic visualization

O4.4 - Data-references interlinking

**Milestones**: M4.1 / m8 – First version of the integrated bibliography, providing the textual search of cross-references.

M4.2 / m11 – First, stand-alone, version of cartography tool

Deliverables: No. 9, D4.2 Integrated bibliography v.1

#### Description of work carried out and achievements

- T4.1 Paper-incunabula integration:
  - Cross linking of the new created webpage <a href="http://www.OEAW.oeaw.ac.at/wies/">http://www.OEAW.oeaw.ac.at/wies/</a> and ISTC
  - The link between ISTC and WILC has been established and tested
- T4.2 Numerical & graphical statistics:
  - Statistical evaluation of database comparison between WILC and Piccard-Online
- T4.3 Historical cartography of paper:
  - Atlas of European populated places. Raw data coming from: GW and ISTC (incunabula databases); Piccard on line (Piccard's watermark cards on the Web); Piccard Findbuch (partial printed form of Piccard's cards with several changes); Briquet "Les filigranes" (repertory of watermarks); bibliography on paper history (DDB, Leipzig). Tasks: identification and disambiguation of populated places; normalization of place names; adding of geographical coordinates + first and second order administrative references.
  - Creation of a complete incunabula database for statistical purpose mixing data from GW and ISTC repertories, which could be linked to watermark databases: a) Creation of a short biographical database of authors of works printed in incunabula (letters A-I achieved); b) Scanning and OCR of locations of the surviving copies listed on printed pages of GW. Manual correction of OCR mistakes (vol. I-V achieved)
  - Foster collaboration between CERL and BERNSTEIN and

T4.4 – Bibliographical referencing of data:

- Designing and implementing the DNB bibliographic databases version 1.0
- Meeting in Leipzig

**Deviation from work plan & remedial action** 

T4.4 "bibliographical referencing of data" is a task of the German National Library (DNB). Due to an administrative reorganization of DNB, the IT Department of DNB is not able to deliver the task assigned to it in project Bernstein in time. Therefore, a part of task T4.4 was shifted to LU. The work is done as follows:

a) an employee of Allegro exports the bibliographic data from the Allegro database of DNB to XML records financed through a subcontracting.

b) LU implements the integration of the XML records into the Bernstein workspace.

The financing of this extra job of LU is be done by a budget transfer from DNB and TUG to LU.

This guarantees that there is no delay in T4.4. The first version of the bibliographic database is already operating.

There are no other deviations from work plan.

Work package number :	05	Start date:	Sept. 2006	End date:	Feb. 2009
Work package title:	Assessment and ev	aluation			

O5.1 – Progress monitoring

O5.1 – Quality certification

O5.2 – Impact evaluation

Milestones: M5.1 / m8, m11 – Periodical monitoring M5.2 / m8, m11 – Periodical evaluation-feed-back cycles

Deliverables: D5.1 (included in D7.3) – Assessment & evaluation report #1

Description of work carried out and achievements

T5.1 – Monitoring:

- Different software tests for DUT (software for automatically image substraction and for comparing images)
- T5.2 Validation:
  - Evaluation for first 3 month and first year (evaluation-form, contacting of Bernstein partners and controlling

T5.3 – Evaluation:

#### **Deviation from work plan & remedial action** None

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

O6.1 – Accessibility

O6.2 - Dissemination

O6.3 – Sustainability

Milestones: M6.2 / m11 - Design of periodical reports and dissemination materials

Deliverables: No. 7, D6.4 Dissemination plan

#### Description of work carried out and achievements

T6.1 – Accessibility:

- Documentation of transformation processes
- Assisting in the production of publications and advertising material especially in response to English language queries

#### T6.2 – Awareness, dissemination & exploitation:

- Creation of new web pages: <u>http://www.OEAW.oeaw.ac.at/wzrep/briquet.htm</u>, <u>http://www.OEAW.oeaw.ac.at/wz/lit/rep.htm</u>, <u>http://www.OEAW.oeaw.ac.at/wies/</u>
- Tutorial at the "Egyptian National Library", Cairo, 23.-24.06.2007: Tutorial for creation of a paper catalogue
- Maintainance and update of the website Bernstein: <u>www.bernstein.oeaw.ac.at</u> and Bernstein Twiki: <u>www.bernstein.oeaw.ac.at/twiki</u>
- Presentation of the Bernstein-project and image subtraction method in the museums of Frankfurt, Darmstadt, Düsseldorf, Basel, Leiden
- First collaboration in images-subtraction and watermark research with, Hessisches Landesmuseum Darmstadt, Städelmuseum Frankfurt, Prentenkabinet Leiden
- First meetings for an Bernstein exhibition in SLUB Dresden and Prentenkabinet Leiden in 2008/09
- Website update LABW: <u>www.landesarchiv-bw.de/bernstein</u>
- Preparation of exhibition "Ochsenkopf and Meerjungfrau" (bull's head and mermaid). The exhibition was transferred from Stuttgart (Germany) to Vienna (Austria) and Fabriano (Italy) and will then take place in Rome (Italy), Florence (Italy), Liverpool (UK), Dresden (Germany), Leiden (Netherlands), a.s.o.
- Preparation of Italian catalogue: "Testa di bue e sirena", Stuttgart, Germany, 2007; Starting to compose English version
- Bernstein flyer and Poster

The scheduled tutorial in Fabriano in July 2007 was cancelled and transformed into a public exhibition in the paper and watermarks museum there. It appeared that it is too early in the project to present the results of what we're doing, especially digital tools. The exhibition "testa di bue e sirena" was shown at the "Museo della carta et della filigrana" in Fabriano in July and August 2007. The number of visitors was 5765. No further deviations.

Work package number :	07	Start date:	Sept. 2006	End date:	Feb. 2009
Work package title:	Project manageme	ent			

O7.1 – Keep the project on track

**Milestones**: M7.1 / m11 – General meeting at the project's start and end of each project's year

M7.2 / m12 - Yearly and final reports of activity

**Deliverables**: D7.2 Half-year progress-report

D7.3 (includes D5.1) First annual report to the European Commission

**Description of work carried out and achievements** 

T7.1 – EU coordination:

T7.2 – Administrative affairs:

- Organisation of the tutorial
- Organisation of Integration technical meeting in Liverpool
- Organisation of the Integration and component model meeting in Vienna
- Organisation of second Bernstein general meeting in Fabriano (contacting the local staff, visiting of local, preparation of tasklist)
- T7.3 Financial matters:
- T7.4 Intellectual propriety rights:

#### T4.5 – Information flow:

- Organisation of several workpackage meetings (integration, expertise)
- Administration of the TWiki and project website

T7.6 – Public relations:

#### **Deviation from work plan & remedial action**

None

#### 3.3 Deliverables Status

#### **Deliverables List**

Deliverable No <sup>1</sup>	Deliverable title	Delivery due date <sup>2</sup>	Actual date of delivery <sup>3</sup>
No. 7	D6.4 Dissemination plan	9	June 30 <sup>th</sup> , 2007
No. 8	D2.1 Watermarks standard v.1	10	July 31 <sup>st</sup> , 2007
No. 9	D4.2 Integrated bibliography v.1	10	July 31 <sup>st</sup> , 2007
No. 10	D2.2 GIS data batch no. 1	10	July 31 <sup>st</sup> , 2007
No. 11	D1.2 Workspace demonstration v.1	10	July 31 <sup>st</sup> , 2007
No. 12	D7.2 Half-year progress-report	11	Sep. 7 <sup>th</sup> , 2007
No. 13	D7.3 First annual report to the European Commission	12	Sep. 27 <sup>th</sup> , 2007

<sup>&</sup>lt;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>&</sup>lt;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.

### Performance Indicators

	Expected vs Actual					
Indicators	Year 1	Year 1	Year 2	Year 2	Year 3	Year 3
Resources integration	(exp.) 33%	(act.) 33%	(exp.)	(act.)	(exp.)	(act.)
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)	с	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

Dissemination is considered as one of the most important activities and parts of the Bernstein Consortium. As we have already mentioned in the previous report, a project like Bernstein makes sense only if it grows steadily, attracts new users and data providers, lives beyond the end of the development phase, and is continuously maintained. The strategy of the Bernstein dissemination activities as well as all actions done so far have been described in <u>Deliverable</u> no. 7, ref. D6.4, Dissemination plan (June 2007).

One focus concerning dissemination in the reporting period was put on exhibitions. It turned out that exhibitions generate much more response from the media than other activities. Furthermore, exhibitions allow reaching a wide range public.

Our series of exhibitions started in Stuttgart focusing on a bi-national project between the LABW in Stuttgart (Germany) and the OEAW in Vienna (Austria) which belongs to the previous history of Bernstein. The title of the exhibition was "*Ochsenkopf und Meerjungfrau* – *Wasserzeichen des Mittelalters*" and an accompanying 70-page German catalogue illustrates the aims, the value, the advantage and the importance of paper and watermark research. After Stuttgart (Dec. 14<sup>th</sup>, 2006-Feb. 2<sup>nd</sup>, 2007) this exhibition continued in Vienna at the Schottenstift (March 22<sup>nd</sup> -June 9<sup>th</sup>, 2007).

Step by step the exhibition will be enlarged and transformed into a Bernstein exhibition. The first revision has been done for exhibitions in Italy. Chapters about the role of Fabriano in paper production, watermarks in art history (NIKI), methods for reproduction of watermarks (NIKI, KB), the watermark collection in Leipzig and the online databases WILC, WIES, NIKI and CCI have been added. All boards for the Italian exhibition have been redesigned and two new boards were created. The Italian catalogue has grown up to 98 pages.

The first Italian exhibition took place in Fabriano at the Museo della Carta e della Filigrana (July 9<sup>th</sup> -Aug. 27<sup>th</sup>, 2007) under the title "*Testa di bue e sirena – La memoria della carta e delle filigrane dal medioeco al seicento*". The next step is an exhibition in Rome at the Istituto Centrale della Patologia del Libro (Sept 8<sup>th</sup>-Sept 29<sup>th</sup>, 2007). Further planned Italian venues are Florence, Torino and Milano. Besides this, revised and enlarged German exhibitions in Dresden, Leipzig, and Vienna are in discussion. Finally, we will also produce an English version with intended exhibitions in Liverpool, Glasgow, London, and Leiden (The Netherlands).

The Bernstein website (<u>www.bernstein.oeaw.ac.at</u>) and a wiki-based collaboration platform, knowledge and document management system (<u>www.bernstein.oeaw.ac.at/twiki</u>) are updated regularly and inform about the progress of the work The project folder has been translated into Italian and all together 6000 copies of the German, English and Italian folder were printed.

A series of tutorials implicating potential users in our objectives accompanies the project during its runtime. The number of tutorials will increase in the second half of the project when already first results can be demonstrated. So far two tutorials took place (Cambridge, UK; Cairo, Egypt).

### 4.2 Events and meetings

## List of Events & Meetings

Name	Location	Date
Exhibitions & Catalogues		
Italian catalogue of the exhibition: Peter Rückert (Ed.), Catalogo della mostra "Testa di bue e sirena. La memoria della carta e delle filigrane dal medioevo al seicento"	Stuttgart, Germany	07.2007
"Testa die bue e la sirena. Filigrane del Medioevo"	Museo della Carta e della Filigrana, Fabriano, Italy	09.07.2007- 31.07.2007
"Ochsenkopf und Meerjungfrau. Wasserzeichen des Mittelalters"	Museum im Schottenstift, Vienna, Austria	22.03.2007- 09.06.2007
Lectures / Public Meetings		
Presentation by Jeanette Godau (LABW): Europäische Perspektiven: Wasserzeichen europaweit und mehrsprachig recherchieren: Piccard-Online/Bernstein. Conference: Quo vadis Digitalisierung? Nationale und europäische Plattformen von Wissen im Landesmuseum für Technik und Arbeit, Mannheim, Germany	Landesmuseum für Technik und Arbeit, Mannheim, Germany	2829.06.2007
Poster presentation at International Conference: Knowledge by Networking Digitising Culture in Germany and Europe	Staatsbibliothek zu Berlin, Germany	2122.06.2007
Bernstein/Bildsubtraktionspräsentation (by Georg Dietz)	Kunstmuseum Basel, Swiss	11.04.2007
Scientific Articles		
Peter Rückert, Jeanette Godau, Gerald Maier, Piccard-Online: Digitale Präsentationen von Wasserzeichen und ihre Nutzung, Kohlhammer, Stuttgart, 2007, 180 p. <b>Press Articles</b>	Stuttgart, Germany	2007
Posterpräsentation von Bernstein auf der Tagung Knowledge by Networking. Digitising Culture in Germany and Europe	Staatsbibliothek zu Berlin, Germany	06.2007
Peter Rückert, Ochsenkopf und Meerjungfrau. Wasserzeichen des Mittelalters im Hauptstaatsarchiv Stuttgart, in: Archivnachrichten Nr. 34, S. 8	Stuttgart, Germany	06.2007
Peter Rückert: Ochsenkopf und Meerjungfrau. Wasserzeichen des Mittelalters im Hauptstaatsarchiv Stuttgart, in: Der Archivar. Mitteilungsblatt für deutsches Archivwesen. Heft 2, 60. Jg. (2007), S. 155-156.	Stuttgart, Germany	05.2007

Article about the exhibition "Ochsenkopf und Meerjungfrau" in Museum im Schottenstift at <u>www.wienweb.at</u>	Vienna, Austria	04.2007
Newspaper-article (Piccard-Collection): "Der Herr der Ochsenköpfe", in: Frankfurter Allgemeine Sonntagszeitung	Germany	18.03.2007
Article about the exhibition "Ochsenkopf und Meerjungfrau" in Museum im Schottenstift at APA-ZukunftWissen	Vienna, Austria	03.2007
Article about the exhibition "Ochsenkopf und Meerjungfrau" in Museum im Schottenstift at Österreich Journal Online	Vienna, Austria	27.03.2007
Helmgard Holle, Papiere und Wasserzeichen, Parnass Kunstmagazin, Heft 1/2007, März/April, p. 14	Austria	03/04.2007
Tutorials / Workshops		
Tutorial for creation of a paper catalogue at the Egyptian National Library, Manuscripts department (Vlad Atanasiu, Martin Haltrich)	Cairo, Egypt	2324.06.2007
Meetings		
Bibliographical database administrative and technical meeting	Leipzig, Germany	02.04.2007
Integration technical meeting	Liverpool, United Kingdom	04.04.2007
Components model meeting	Vienna, Austria	1011.05.2007
General Meeting	Fabriano, Italy	0910-07.2007

### 5 Conclusions

The work is in good progress and there are only small deviations from the "*Description of Work*". The major deviation concerns the bibliography integration (T4.4). The work for T4.4 was taken over by LU and so the first version of the integrated bibliography could be presented in time.

The three most important milestones were

- 1. first version of the textual watermark description standard,
- 2. first operational version of the integrated bibliography,
- 3. demonstration version of the integrated workspace.

The exhibitions "Ochsenkopf und Meerjungfrau" (German) in Stuttgart and Vienna and its Italian version "Testa di bue e sirena" turned out to be a big success concerning dissemination. The series of exhibitions will be continued in Italy, Great Britain, Germany and the Netherlands.