MINERVA eC

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Introduction

MINERVA is the ministerial network for valorising activities in digitisation of cultural heritage that is running in Europe since April 2002. The first edition of the MINERVA project was a support action granted by the IST Programme within the 5th Framework Programme (FP5) for the research and the technological development. The MINERVA project run during the period 2002-2005 with the participation of 7 European countries. This nucleus of the network was enlarged in 2004 to include the participation of the new Member States who joined the European Union in that year. The new project was called MINERVA Plus and was a support action granted by the IST Programme within the FP6. The MINERVA Plus project run during the period 2004-2006 with the participation of 14 EU countries. The work done by MINERVA and MINERVA Plus is documented in the previous editions of this Report and had a rather important impact on the actual work of the European cultural institutions that continued (and still continue now) to receive the MINERVA newsletter, to download the MINERVA publications, to participate to hundreds of events organised by the MINERVA partners all over Europe and internationally.

A new edition of MINERVA has been launched in October 2006. The title of this last edition is MINERVA eC; this is a Thematic Network granted by the eContent Plus Programme. The MINERVA eC project will last until the end of September 2008 and it includes the participation of experts from 25 EU countries. MINERVA has been the creative "place" where several successful products have been developed through the joint work of hundreds of experts from cultural and research institutions all over Europe and beyond. In addition to publications, software tools, seminars and conferences, MINERVA has been the space to design and develop cooperation projects, namely MICHAEL and MICHAEL Plus (eTEN), MEDCULT (Unesco-Information for All Programme), IMAGINATION (IST FP6), EURIDICE (eTEN) and last but not least ATHENA (eContent Plus).

The present report provides a general overview of the results achieved so far by the MINERVA initiatives. It focuses then on the activities carried out within the MINERVA eC project specifically referring to the period from October 2006 until September 2008.

For a full and detailed description of the projects and the results of the whole MINERVA network, please consult the MINERVA website at <http://www.minervaeurope.org>.

The European framework

The European framework of MINERVA in general and the MINERVA eC project in particular, is constituted by the following points of reference:

• eEurope
• Lund Action Plan
• i2010 strategy for a European information Society for growth and employment / i2010 Digital Libraries

The strategic objective of MINERVA eC is to support the development of the European Digital Library and improve the accessibility and visibility of European digital cultural resources.
In this sense the project has worked to implement the priorities set by the Recommendation of the European Commission of 24 August 2006 (OJ 2006/L 236/28), the Conclusions of the Council of 13 November 2006 (OJ 2006/C 297/01) and the successive Resolution of the Parliament of 27 September 2007 about "i2010: digital libraries" (2006/2040 (INI)) and the Communication of the Commission of 11 August 2008.

The objectives of MINERVA eC

MINERVA eC project is based on a network of policy makers and professionals from cultural ministries and national institutions in Europe, whose core concern is harmonising the digitisation of cultural and scientific content across Europe, avoiding fragmentation, minimising duplication and enabling long-term accessibility, quality of digital cultural content.
The main expected outcome is a set of agreed European common recommendations and guidelines addressing a wide variety of themes related to digitization. Namely, the MINERVA eC workplan includes activities related to the following subjects: digitization techniques, project management, interoperability, quality, accessibility and usability of resources, IPR, inventories, multilingualism, good practice and competence centres.

The operative objectives of MINERVA eC are:

• to improve accessibility to and visibility of European digital cultural resources
• to contribute to increasing interoperability between existing networks and services, in a multilingual context
• to improve the quality of digital cultural content and services
• to promote the use of digital cultural resources by citizens and business, education and research
• to facilitate exploitation of cultural digital resources, providing a clear framework of the rules for their use and re-use, respecting and protecting the creators' rights.

In practical terms MINERVA eC project has worked towards the following specific targets:

• to mobilise the users, creating national and transnational communities of stakeholders sharing common interests, supporting their acceptance of standardised tools and facilitating the exchange of information among them
• to organise awareness activities addressing the different user communities, presenting and underlining the benefits of best practices identifying and assessed
• to create web resources and to stimulate the media to disseminate the project achievements and other information material, to reach a large number of users in an effective way
• to identify the enriching and enabling factors for use and re-use of contents to facilitate the creation of new ones
• to stimulate small scale experiments to be further implemented in specific content enrichment projects
• to define criteria to evaluate and assess "enrichment" of the content: legal and technical issues, multilingual and multicultural metadata and ontologies, semantic description and taxonomies, etc.
• to identify, assess, stimulate and promote the adoption of best practices
• to contribute to the definition of the interoperability framework to promote the adoption of standards constituting the European Digital Library
• to coordinate existing and new projects for content enrichment, at national and trans-European level, with a special attention to the other projects supported by the eContentplus Programme

and in particular the EDLnet Thematic Network supported by eContent+ programme.

In synthesis, the scope of MINERVA eC is to develop a set of practical products through the cooperation of the experts involved and to make available these results to Europeana and to the national portals. In this framework, the final aims of MINERVA in general and of MINERVA eC in particular are:

- to promote the use of international standards
- to agree at European level upon guidelines and recommendations to be shared and adopted by the cultural institutions
- to enhance interoperability of and accessibility to digital content
- to create the conditions to improve the quality of content and services.

The legacy of MINERVA and MINERVA Plus projects

The following list presents shortly the major results of the previous MINERVA and MINERVA Plus coordination projects which constitute both the starting point and the exploitable assets of the work that is currently carried out by the MINERVA partners in the frame of the MINERVA eC project. In particular, the following achievements (which are non-exhaustive) represented the basis for the construction of MINERVA eC and had been continued to be exploited along the last years:

- National Policy Profiles (NPP) have been created on the basis of an initial common questionnaire and all Member States have undertaken to publish these on an appropriate national site
- a collection of good practices in digitisation was carried out and it represented the basis for the development of the next MINERVA publications
- advisory centres and associated practical competence in different areas of digitisation have been identified in the Member States
- a list of guidelines for digitisation of manuscripts, printed books and photographs of libraries, archives and museums has been developed. Toolbox and tutorial have been included too, as learning resources and guidelines
- a set of tools to improve the quality of cultural websites has been developed.

Further, several publications have been issued, most of them translated into different languages, namely:

- Dynamic Action Plan for the EU co-ordination of digitisation of cultural and scientific content
- Guide to Intellectual Property Rights and Other Legal Issues
- Quality Principles for cultural websites: a handbook
- MINERVA: Digitising content together: Ministerial NEtwork for Valorising Activities in Digitisation: Activities
- Coordinating digitisation in Europe - Progress report of the National Representatives Group: coordination mechanisms for digitisation policies and programmes
- Charter of Parma
- Technical Guidelines for Digital Cultural Content Creation Programmes.
- Cultural Website Quality Principles
- Handbook for quality in cultural websites: improving quality for citizens
- Good practice handbook
- Multilingual access to the European Cultural Heritage - Multilingual websites and thesauri
- Cost reduction in digitization
- Museo&Web tools

All these products are accessible on the MINERVA website and can be downloaded. Paper copies of some of the publications are also available on demand.

MICHAEL
The joint efforts of the MINERVA working groups active on interoperability and inventories originated the MICHAEL and MICHAEL Plus projects (Multilingual Inventory of Cultural Heritage in Europe). See *infra*, p. XV.

The approach of MINERVA
MINERVA eC has based its approach on the successful experience of the previous MINERVA and MINERVA Plus projects. In particular, the following aspects have been taken in strong consideration.
First of all, the MINERVA initiatives are targeted to all the Cultural Heritage sectors. Hundreds of representatives of all the sectors, museums, national and public libraries, archives, audiovisual, archaeology,

central institutes, etc. are involved in its working groups and other activities. For this reason, while carrying out its concrete actions, MINERVA eC has worked in practical terms towards the integration of libraries, museums, archives and other research and cultural institutions. Another important point is the sharing of good practices among the participants to the network. This means to gather feedbacks from the participants, via the web (with questionnaires and surveys), via encounters (seminars, workshops, conferences) and via personal contacts (e-mailing, meetings, etc.). The good practices gathered are then analysed and offered with comments to the whole network through the publication of reports, newsletters, handbooks and presentations.

The cooperation with other networks and projects is also very important. The actual capability to establish links with other initiatives is considered as a major component for the success of MINERVA and along the last year several new cooperations have been indentified and developed in more depth, such as with R&D projects (MultiMatch and Imagination), other eContent projects (EDL and EDL net in particular), international conferences (the last is VMSS in Cyprus).

Finally, MINERVA approach is based on a tight liaison with the national digitisation programmes as well as on the coordination among and within Member States. The natural liaisons of the ministerial network with the concerned policy links is a fundamental component for reinforcing the impact of the initiative. It is in fact known by everybody that the real success of the European digital library consists on the actual availability of a largest amount of digital content and this can be achieved only if there is a direct and concrete commitment of the Member States. MINERVA can definitely contribute to achieve results in this direction. As a background for all the above mentioned approaches, there is the monitoring of the progresses. This has meant for MINERVA eC to check the internal progresses of the project against its plans by reporting regularly to the European Commission and by the annual review organised by the European Commission with the participation of independent experts who successfully reviewed the results of the first year of project execution. In addition, progress monitor has meant for MINERVA eC also to follow the progresses of the Member States

towards the actual digitization efforts (amount of digitized content, amount of digital collections created, amount of access services operated, amount of economic resources allocated to digitization of cultural heritage, etc.). In this sense, the contribution of the present report is expected to be valuable for everybody who is concerned with the actual success of Europeana.

List of practical outcomes of MINERVA eC
The outcomes of MINERVA eC during the last year can be grouped under two main categories:

• Events
• Publications

As for as the events are concerned, an intensive program of workshops and seminars has been carried out all over Europe. In particular, fifteen national workshops have been organised directly by MINERVA eC from October 2006:

Brussels, 24/4/2007
Santiago de Compostela, 11/5/2007
Poprad, 2/10/2007
Vilnius, 4/10/2007
Tallinn, 18-19/10/2007
Riga, 30/10/2007
Bratislava, 12-13/11/2007
Jerusalem, 20-21/11/2007
Sofia, 26/02/2008
Warsaw, 20/5/2008
Belfast, 22/5/2008
Athens, 29/5/2008
Ljubljana, 6/6/2008
Vienna, 25/8/2008
Brussels, 19/9/2008

Four international conferences were held respectively in:
Helsinki (October 2006)
Berlin (June 2007)
Ljubljana (June 2008)
Leipzig (September 2008).

In addition, many presentations were delivered all over Europe and beyond, within workshops, seminars and conferences where MINERVA eC was invited.

All together, presentations and events talking about MINERVA reached thousands of managers and experts of cultural digitisation.

The following new publications have been realised specifically in the frame of the MINERVA eC project:

- Intellectual Property Guidelines
- Technical Guidelines for Digitisation (version 2)
- Handbook on cultural web user interaction
- European directory of the websites regulatory framework (version 2, covering the legislation in the new Member States)
- Initial study on the map of cultural heritage sector in Europe
- The present book, Annual Report on digitisation, in cooperation with the European Commission, following the last edition released in 2007.

Some of these publications are distributed also on paper; all of them are available in digital format on the MINERVA website (<http://www.minervaeurope.org>). In particular, the MINERVA website, that is constantly updated and regularly maintained, represents the main source of information about products and activities of MINERVA and the associated initiatives. Thousands of downloads of the MINERVA products have been counted in these years, demonstrating interest and appreciation by the users.

Intellectual Property Guidelines
This publication is intended for the use of cultural heritage institutions which are digitising cultural material and publishing it online, or are considering doing so. Its objective is to provide a pragmatic and concise advice to cultural heritage institutions on the topic of intellectual property rights, as it impacts on digitisation projects. The document summarizes, updates and re-organizes materials produced by the previous MINERVA and MINERVA Plus projects on IPR. A number of sources have been used as the starting point for the development of this guide, and they are:

- N. Korn, *Guide to intellectual property rights and other legal issues*
- *MINERVAplus Interim Draft Report 4.1: Inspection of the European legislation regarding Intellectual Property Rights*

- MINERVA Plus National IPR legislation reports (Greece, Hungary, Russia)
- *Report on interoperability, IPR and service provision: Business models and sustainable approaches* (MINERVAplus D. 7, intranet)
- Hamber, N. Garnett*, A report for MINERVA on the issues surrounding the exploitation of MLA digital content, within wide ranging "learning" contexts, both formal and informal*
- WP4-IPR Italy, *Tutela dei dati e dei diritti di proprietà intellettuale in relazione all'accesso in rete al patrimonio culturale. Prime considerazioni*

The document is composed by two main sections, corresponding to the two key points where Intellectual Property Rights impact on digitisation projects:

- Rights clearance; this means that a permission must be obtained from rights holders to digitise and publish and the guide provides indication on this important phase
- Publication; at the time of the online publication of the digitised material, the rights of rights holders and of the cultural heritage institution must be protected and the guidelines provide advice on this.

For each section, a range of background information is provided. Then, guidelines on how a digitisation project should respond to this background information are then provided. Information is complemented by reference to relevant web resources. The guidelines are available online on the MINERVA website.

Technical Guidelines for Digital Cultural Content Creation Programmes
The first edition of the Technical Guidelines was released in 2004 and it has been since the beginning a MINERVA "best-seller". The document is conceived for policy-makers and managers of funding programmes for the creation of digital cultural content. The guidelines propose the adoption of standards as the foundation for interoperability of resources and the creation of services for integrated access. In this sense, technical standards are intended to support:

- Interoperability
- Access

- Preservation
- Security.

The creation of the guidelines started from the identification of the areas where there is broad agreement in order to provide a common shared platform for the managers all over Europe.
In general, the document provides a set of advices and not a single prescriptive set of requirements to which all projects must conform. The advices are intended to be used flexibly by Programme Managers as well as for self-assessment by projects. The structure of the guidelines reflect a "life cycle" approach to the digitisation process, as it has been used in the MINERVA Good Practice Handbook. The document is divided into 10 sections matching the life cycle stages, i.e.:

- Digitisation project planning
- Selection of material and preparation for digitisation
- Handling of originals
- HW, SW, digitisation process
- Digital master: storage and management
- Metadata
- Publication
- Disclosure/Use of resources
- IPR, re-use, re-purposing

The version 2 that has been re-issued in 2008 starts from the 2004 edition and answers to the following demands that were raised meanwhile:

- Coverage of new and updated standards
- Identification and possibly exclusion of standards which have failed
- Impact of Web 2.0.

Handbook on cultural web user interaction

There are several new definitions of the users of cultural websites and portals, such as:

- hybrid individual
- transceiver (transmitter + receiver)?
- prosumer (producer + consumer) = information recipient and provider of its own contents

and different terms characterize the many user's activities and behaviours on the web:
consumer / client / audience / user / surfer / viewer /
player / clicker / downloader / streamer;
in addition, non human users/agents play on the web: robots, spiders, crawlers, harvesters…
This variety of definitions, typologies of users and associated activities reflects an articulated offer of contents and applications in the new media environment. They are investigated and discussed in the Handbook.
The Handbook is conceived as a practical instrument to help the designer of a cultural web site to answers to some questions such as:

- What do users want?
- How do users behave?
- How can we understand the use they make of our web applications?
- Do effective methods exist to ask users about their expectations (before) and their degree of satisfaction (after)?

The following key messages are at the core of the Handbook:

- quality must be planned into a website from the start of the project
- the user is critical and it is therefore important to involve him at every stage
- relationships with other resources must be considered, both in terms of online interoperability and of future long term preservation of the digital cultural content and services.

Conclusions

The number of people targeted by MINERVA is extremely high and spread among the different cultural sectors and all over Europe.
They are reached by electronic communications, by personal contacts and via the products of MINERVA.
The results of the work done during the past years received positive comments and the products are still requested both by individuals and by institutions.
The concrete deployment of the MINERVA guidelines into the MICHAEL service demonstrated the actual applicability of MINERVA into concrete realizations.
At the same time, the analysis of the results achieved so far demonstrated that there is still a lot to be done to enhance knowledge and harmonization

of the cultural sector while moving to the digital
dimension to implement the European Digital Library.
Just to mention a few examples, the following actions
need to be continued and completed: the work
on the best practices to share knowledge and solutions,
the networking at a cross-domain dimension to integrate
and harmonise the access to the digital content coming
from the different sectors of the cultural heritage,
the coordination between European and national access
points and integrators, etc.
The summing up of the positive feedbacks received
so far together with the awareness of the amount
of work that is still needed are demonstrating
that the continuation of the MINERVA network is necessary.
MINERVA remains an up-to-date instrument that can
well contribute to the successful implementation
of Europeana.
The start of the new ATHENA Best Practice Network
is very much welcome as the place where the legacy
of MINERVA can be better exploited; further, possible
new initiatives are under discussion among the partners
and will be prepared for the near future.